EXPLAINING CHILD MALNUTRITION IN TWO VILLAGES

IN SOUTH WEST ETHIOPIA:

LOCAL VIEWS AND LOCAL OPPORTUNITIES

Anna Szava
BSc (Architecture), MSc (International Development)

A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy

Menzies School of Health Research

Charles Darwin University

April 2015
PRELIMINARIES
ABSTRACT

This thesis describes how families in two villages in remote rural Ethiopia feed their young children, how they explain their practice and decisions, and how they see their role in the possibility for positive change.

Though severe food shortages have decreased, stunting in young children, a consequence of chronic malnutrition, is a common problem in this region. Stunting is persistent in spite of the ongoing health education and intervention programmes focussing on the health and nutrition of children under five years of age, and is considered a significant risk factor for diminished childhood and adult health, learning capacity and productivity.

Within the disciplinary tradition of qualitative research my study is positioned in nutritional anthropology. I used ethnographic methods during a 12-month period spent in the field. Household observations, semi-structured interviews and group discussions were the main sources of primary data, which was collected in 51 households and from 24 informants, selected through criteria sampling, in multiple engagements with most participants.

The study found a food culture rich in culinary traditions and social meaning. Nonetheless, the young children’s, and indeed the families’ dietary diversity was low, and above all animal-source foods were scarce. Regular periodic food shortages in most years resulted in reduced quantity of food and a further deterioration of its diversity. In addition to the limitations of smallholder farming livelihoods, which formed the
economic foundation of the vast majority of local families, cultural priorities drew on the constrained resources of the households. In general the children’s caregivers were aware of the nutritional inadequacy of the diet and had adequate knowledge of how it could be improved. While they maintained that poverty was the main reason for the shortcomings in the quality and quantity of food, they also recognised that amending or changing some customs and behaviours, which impacted on children’s nutritional security, was within the domain of their decisions.

I argue that caregivers have reasonable understanding of the connection between health and nutrition, and that changes in livelihood and cultural practices could lead to improved nutritional outcomes. Beside the large-scale programmes of the Government of Ethiopia and international and local NGOs aimed at agricultural productivity and population health, there are opportunities for small projects, tailored to the context, to support local and innovative solutions in the realms of food culture and livelihoods.
DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy (with the exceptions of the CD containing the photographs) of my thesis, when deposited in the University Library, being made available for loan and photocopying online via the University’s Open Access repository eSpace.

Signature

Date

29 April 2015
ACKNOWLEDGEMENTS

First of all, I am grateful to my supervisory panel, Dr Suzanne Belton, Dr Andre Renzaho, Dr Lisa Schubert and Dr Sisay Sinamo, for accompanying me on this journey of learning; for their conviction that I can complete this work; for their knowing persistence and gentle advice that helped shaping it; and their patience with my long chapters and long silences.

I express my thanks to World Vision Australia for supporting my field work with significant funding and organisational network, and in particular to Tony Rinaudo for his ongoing interest in my work.

I thank the leadership of World Vision Ethiopia for organisational support throughout my field work; to Tsegaye for facilitating the recruitment of the field team and much of the logistics of field work; to Kebede, Demmes, Selam and Dereje for assistance and guidance, friendship and insights; and to Work’inesh, Alemitu and Atnafu for looking after me.

Without my brilliant field team the work would have been impossible; I wish to thank Endale, Almaz, Tsehay, Zinash, Mikael and Abebech for their intellectual contribution, loyalty, good humour and wonderful friendship.

I would like to acknowledge the long-term support, extensions and advice I received from Menzies School of Health Research and Charles Darwin University, in particular their student support staff: Caroline Walsh, Catherine Richardson, and the many others.
My friends contributed so many different and invaluable ways: with encouragement and companionship; with readiness to discuss or read parts of my work; with generosity that put a roof over my head, and with wisdom to distract me when that was what I needed most. I am thankful for the blessings of the friendship of Louise, Annemarie and Graham, Peter, Ruth, Jocelyn and Tom, and of many others.

I am most grateful to Paul and Zack, for their belief and pride in me, and to Jasper, whose arrival helped me through the finish line.

And finally, I would like to dedicate this work to Mignot and Tsinat, twin daughters of Zinash and Endale, whose names mean Desire and Perseverance in Amharic.
## ACRONYMS AND ABBREVIATIONS

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<td>Area Development Programme</td>
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<tr>
<td>CTC</td>
<td>Community-based Therapeutic Care</td>
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<td>EHNRI</td>
<td>Ethiopian Health and Nutrition Research Institute</td>
</tr>
<tr>
<td>EPRDF</td>
<td>Ethiopian Peoples’ Revolutionary Democratic Front</td>
</tr>
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<td>ETB</td>
<td>Ethiopian Birr (currency)</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>GD</td>
<td>Group discussion</td>
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<td>HEW</td>
<td>Health Extension Worker</td>
</tr>
<tr>
<td>HH</td>
<td>Household</td>
</tr>
<tr>
<td>HREC</td>
<td>Human Research Ethics Committee</td>
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<tr>
<td>ITCZ</td>
<td>Intertropical Convergence Zone</td>
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<tr>
<td>IYCF</td>
<td>Infant and Young Child Feeding</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government Organisation</td>
</tr>
<tr>
<td>OTP</td>
<td>Outpatient Therapeutic Care Programme</td>
</tr>
<tr>
<td>PADETES</td>
<td>Participatory Demonstration and Training Extension System</td>
</tr>
<tr>
<td>PEM</td>
<td>Protein Energy Malnutrition</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>---------</td>
<td>-----------</td>
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<tr>
<td>PSNP</td>
<td>Productive Safety Net Programme</td>
</tr>
<tr>
<td>SNNPRS</td>
<td>Southern Nations Nationalities and Peoples Regional State</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WVA</td>
<td>World Vision Australia</td>
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<td>WVE</td>
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AMHARIC AND WOLAITTA WORDS

N.B.: All words are Amharic unless marked (Wol).

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<th>Meaning</th>
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<td>አበሻ</td>
<td>Ethiopian</td>
</tr>
<tr>
<td>alich’a</td>
<td>አልጫ</td>
<td>mild, yellow coloured stew</td>
</tr>
<tr>
<td>arera</td>
<td>እረራ</td>
<td>skim sour milk</td>
</tr>
<tr>
<td>ayib</td>
<td>ወይብ</td>
<td>cheese</td>
</tr>
<tr>
<td>Belg</td>
<td>እልጫ</td>
<td>short rains</td>
</tr>
<tr>
<td>berbere</td>
<td>በርበሬ</td>
<td>chilli, or spice powder made with chilli</td>
</tr>
<tr>
<td>beso</td>
<td>ቃሮ</td>
<td>a kind of liquid porridge</td>
</tr>
<tr>
<td>beyt</td>
<td>ቤት</td>
<td>house</td>
</tr>
<tr>
<td>Birr</td>
<td>ቤር</td>
<td>Ethiopian currency, officially ETB</td>
</tr>
<tr>
<td>bono (Wol)</td>
<td>ዋኖ</td>
<td>stand pipe, water point</td>
</tr>
<tr>
<td>bulla</td>
<td>ዓለ</td>
<td>food stuff extracted from enset plant</td>
</tr>
<tr>
<td>buna</td>
<td>ዓና</td>
<td>coffee</td>
</tr>
<tr>
<td>dat’a (Wol)</td>
<td>ወላ</td>
<td>chilli paste</td>
</tr>
<tr>
<td>Derg</td>
<td>ዐርጭ</td>
<td>committee; term used for the socialist regime in power from 1974 to 1991</td>
</tr>
<tr>
<td>difo dabo</td>
<td>ዓሮ ውና</td>
<td>special wheat bread</td>
</tr>
<tr>
<td>dinich</td>
<td>ይናርች</td>
<td>potato</td>
</tr>
<tr>
<td>doro</td>
<td>ዥር</td>
<td>chicken</td>
</tr>
<tr>
<td>dulet</td>
<td>ወለት</td>
<td>meal made of meat and offal</td>
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<td>----------------------------</td>
</tr>
<tr>
<td>ekub</td>
<td>እክብ</td>
<td>a type of traditional cooperative</td>
</tr>
<tr>
<td>Enk’ut’a’ash</td>
<td>዆ንሱትአሽ</td>
<td>New Year</td>
</tr>
<tr>
<td>enset</td>
<td>ይስት</td>
<td>plant, latin name: <em>Ensete ventricosum</em></td>
</tr>
<tr>
<td>erat</td>
<td>ይረት</td>
<td>evening meal</td>
</tr>
<tr>
<td>ereta (Wol)</td>
<td>ይረታ</td>
<td>a type of liquid porridge</td>
</tr>
<tr>
<td>ergo</td>
<td>ያርጋ</td>
<td>yoghurt</td>
</tr>
<tr>
<td>eshet</td>
<td>ይካት</td>
<td>tender kernels</td>
</tr>
<tr>
<td>Fasika</td>
<td>ይስካ</td>
<td>Easter</td>
</tr>
<tr>
<td>ferenj</td>
<td>ይረንጆች</td>
<td>non-Ethiopian</td>
</tr>
<tr>
<td>ffrr</td>
<td>ይርቶር</td>
<td>small pieces of <em>injera</em> mixed with spicy butter</td>
</tr>
<tr>
<td>genedi (Wol)</td>
<td>ገንደ ይት</td>
<td>Trypanosomiasis, or sleeping sickness</td>
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<td>Genna</td>
<td>ውንካ</td>
<td>Christmas</td>
</tr>
<tr>
<td>gomen</td>
<td>ይመን እለ</td>
<td>kale</td>
</tr>
<tr>
<td>gotara</td>
<td>ይጎተራ</td>
<td>storehouse; traditional grain silo</td>
</tr>
<tr>
<td>halakuwa (Wol)</td>
<td>ከላቻው-ፉ</td>
<td>moringa</td>
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<tr>
<td>iddir</td>
<td>የድር</td>
<td>a type of traditional cooperative</td>
</tr>
<tr>
<td>injera</td>
<td>ይንጀራ</td>
<td>traditional Ethiopian flat bread made of <em>t’ef</em> flour</td>
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<tr>
<td>k’ariya</td>
<td>ይታሪያ</td>
<td>green chilli</td>
</tr>
<tr>
<td>k’ey</td>
<td>ይታይ</td>
<td>red; also red coloured spicy stew</td>
</tr>
<tr>
<td>k’ebele</td>
<td>ይበበለ እለ</td>
<td>municipality, size of a large village</td>
</tr>
<tr>
<td>Term</td>
<td>Amharic</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>-------------------------------------------------</td>
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<tr>
<td>keneto</td>
<td>ከንተ'o</td>
<td>sweet drink made of barley and honey</td>
</tr>
<tr>
<td>k'ibe</td>
<td>ንብ'e</td>
<td>butter</td>
</tr>
<tr>
<td>k'ik'il</td>
<td>ኪኳል</td>
<td>soup with meaty bone</td>
</tr>
<tr>
<td>k'ita</td>
<td>እጆ</td>
<td>unleavened bread</td>
</tr>
<tr>
<td>k'och'o</td>
<td>ኪኹ'o</td>
<td>food stuff extracted from enset plant</td>
</tr>
<tr>
<td>k'olo</td>
<td>ካሎ'o</td>
<td>roasted kernels</td>
</tr>
<tr>
<td>k'urs</td>
<td>ካርስ</td>
<td>breakfast</td>
</tr>
<tr>
<td>k'urt'</td>
<td>ካርጥ</td>
<td>chunks of raw meat</td>
</tr>
<tr>
<td>k'want'a</td>
<td>ካንጣ</td>
<td>dried meat</td>
</tr>
<tr>
<td>Meher</td>
<td>መሃር</td>
<td>long rains</td>
</tr>
<tr>
<td>mekses</td>
<td>መክሰስ</td>
<td>afternoon snack</td>
</tr>
<tr>
<td>Mesk'el</td>
<td>መስቀል</td>
<td>holiday: Finding of the True Cross</td>
</tr>
<tr>
<td>miten</td>
<td>መት</td>
<td>liquid porridge made with a mixture of grains</td>
</tr>
<tr>
<td>misa</td>
<td>መሳ</td>
<td>lunch</td>
</tr>
<tr>
<td>mitmita</td>
<td>መም</td>
<td>spice mix made with African Birdseye chilli</td>
</tr>
<tr>
<td>mit'ad</td>
<td>መጣድ</td>
<td>clay griddle</td>
</tr>
<tr>
<td>muk'</td>
<td>መpatrick</td>
<td>warm liquid porridge</td>
</tr>
<tr>
<td>nifro</td>
<td>የፍሬ</td>
<td>boiled kernels</td>
</tr>
<tr>
<td>poridjit (Wol)</td>
<td>የምሪጂት</td>
<td>fortified porridge mix, therapeutic infant food</td>
</tr>
<tr>
<td>poshamu (Wol)</td>
<td>የፖሃምቡ</td>
<td>type of porridge</td>
</tr>
<tr>
<td>quintal</td>
<td>እንትላል</td>
<td>weight measure, equals 100 kg</td>
</tr>
<tr>
<td>rakabot</td>
<td>ውካባቶት</td>
<td>small chest for coffee ceremony</td>
</tr>
<tr>
<td>English</td>
<td>Amharic</td>
<td>Meaning</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>onion, shallot</td>
<td>የስንኩርት</td>
<td>shnkurt</td>
</tr>
<tr>
<td>soup</td>
<td>መርባ</td>
<td>shorba</td>
</tr>
<tr>
<td>pea flour</td>
<td>የርወ</td>
<td>shro</td>
</tr>
<tr>
<td>sweet potato</td>
<td>የስኳር ደንች</td>
<td>sikwar dinich</td>
</tr>
<tr>
<td>Good Friday</td>
<td>የስቅለተ ዋርብ</td>
<td>Silk'lete Arb</td>
</tr>
<tr>
<td>native Ethiopian grain</td>
<td>የሮጆቸው ጥቶ</td>
<td>t'ef</td>
</tr>
<tr>
<td>honey wine</td>
<td>የሮጊ ብወት</td>
<td>t'ej</td>
</tr>
<tr>
<td>beer made of local grains</td>
<td>የሮጊ ብወት</td>
<td>t'ela</td>
</tr>
<tr>
<td>roasted meat</td>
<td>የሮጊ ብወት</td>
<td>t'ibs</td>
</tr>
<tr>
<td>holiday: Epiphany</td>
<td>የሮጊ ብወት</td>
<td>Timk'at</td>
</tr>
<tr>
<td>round, rolled up, bundled</td>
<td>የሮጊ ብወት</td>
<td>t'k'il</td>
</tr>
<tr>
<td>unit of land area</td>
<td>የሮጊ ብወት</td>
<td>t'imad</td>
</tr>
<tr>
<td>municipal unit, similar to shire</td>
<td>የሮጊ ብወት</td>
<td>wereda</td>
</tr>
<tr>
<td>stew</td>
<td>ብወት</td>
<td>wet</td>
</tr>
<tr>
<td>milk</td>
<td>ብወት</td>
<td>wetet</td>
</tr>
</tbody>
</table>
NOTE ABOUT LANGUAGE

Written Amharic uses the ancient script of the Ge’ez alphabet. In this writing each symbol represents a syllable. Although there is some convergence in the conventions of Romanisation of Amharic letters, there is no consensus; I chose to use the system devised by the United States Board on Geographic Names (U.S. Board on Geographic Names Foreign Names Committee Staff, 1994).

Amharic words, printed in italics, throughout the text are explained in the Glossary; Wolaitta words are also italicised and identified as such by (Wol).

The quotes included in the text of the thesis are virtually verbatim of the English translation I was given during the interactions with study participants (my interpreters were not professionals); I only inserted some words or changed their order if it was unavoidable for understanding. This was done with the purpose to ensure that the reader remains mindful of the linguistic and cultural distance these quotes travelled. I hope they stand in contrast to the professional language of the main body of the text, and with their idiosyncratic rhythm and direct translation of some local turns of phrase they help conjure up some features of the world they came from.

The main body of the text of this thesis follows the conventions of Australian English.
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### CHAPTER 1 INTRODUCTION

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CHAPTER 1

INTRODUCTION
1.1 Introduction

This study set out to describe how families in two villages in remote rural Ethiopia fed their young children, how they explained their practice and decisions, and how they saw their role in the possibility for positive change.

Though severe food shortages have decreased, stunting in young children, a consequence of chronic malnutrition, was a common problem in this region. Stunting was persistent in spite of the ongoing health education and intervention programmes focussing on the health and nutrition of children under five years of age. It is considered a significant risk factor for diminished childhood and adult health, learning capacity and productivity. Therefore, it is important to interrogate the factors that impact on the availability of, access to and utilisation of food and nutrients for young children, and to explore avenues that may bring improvements in feeding practices. This study investigated these issues at the scale of household and community.
1.2 Research objectives and research question

The importance of the issues outlined in the Review of Literature below is substantiated by the scale and severity of malnutrition among children in the poor regions of the developing world. Finding sustainable ways to improve children’s nutritional status is not only a humanitarian objective but a development goal as well, recognised in two of the eight Millennium Development Goals of the United Nations (United Nations Development Programme, 2014).

Investigating the factors that impact on children’s nutritional outcomes, including local perceptions on the role of family food and the social norms and customs surrounding it, yields information essential for change strategies that foster wide-ranging and lasting improvement. The following section outlines the rationale for this study and presents the questions it endeavoured to find answers to.

The issues of interest

Childhood malnutrition is a severe burden impacting the capacity of children. Its effects also reach into adulthood and often to the next generation. In statistical terms, children’s nutritional status remains unchanged in many poor countries, in spite of ongoing large-scale efforts to eradicate malnutrition. Therapeutic feeding programmes have fundamental weaknesses: they are not sustainable in terms of cost; they target crisis situations; they do not respond to community or household priorities, and they do not
promote long-term household food and nutrition security. Essentially, these programs save many lives, but do not have the capacity to prevent the next emergency.

Preventative programmes are considered more efficient in terms of cost and more effective in regards to the extent of benefit. Strategies involving local economies and livelihoods are better placed to reduce food insecurity in the households. In most scenarios, this improves nutrition security for young children, although women’s status is a useful indicator of how increase in food availability translates to better child nutrition. Priorities and values that govern the households’ risk management strategies and decisions can be very different from those that guide aid and development programmes.

The significance of the study

Research suggests that family food has much potential in preventing and rehabilitating malnutrition in the poor world (Ashworth & Ferguson, 2009; de Pee & Bloem, 2009). Yet, we have only a general understanding of what is on the family’s plates (Grivetti & Ogle, 2000; Oniang'o, Mutuku, & Malaba, 2003), and what factors influence its quality and quantity on an everyday level. This study endeavours to describe in detail what is available and accessible for households at the research site.

Households follow an intricate pattern of social norms, rules, customs and practices regarding food and meals, much of which is unique to the household, location, or culture. Traditional explanatory models of health and illness, and non-traditional
knowledge, operate side-by-side guiding child feeding behaviour and decisions (Blum, Pelto, & Pelto, 2004; Müller & Krawinkel, 2005). Pressing demand for resources requires strategic thinking and risk management, and not enough is known about the emic perspectives on those. A better understanding of how caregivers consider the connection between food, nutrition and illness, and how they manage risk as well as social obligations, is an essential piece of the puzzle in the exploration of the factors of malnutrition (Leach, Fairhead, Millimouno, & Diallo, 2008). In-depth studies of this subject (Hampshire, Panter-Brick, Kilpatrick, & Casiday, 2009; Scheper-Hughes, 1989) have significantly contributed to our understanding of the thinking and experience of parents in some parts of the developing world, however, no similar study has been conducted to find the unique characteristics of the proposed research location.

State and NGO-funded health, nutrition and food security programmes have been working in the study area for long time. These programmes have their own evaluation mechanisms, generally focussing on quantitative measurements (Reij & Smaling, 2008; Reij, Tappan, & Smale, 2009). However, a better understanding of how people utilise and assess externally funded development programmes in order to improve food security for their children is an important element of the inquiry, as it connects household food resources and child nutrition.

**Research questions and objectives**

Beyond breast milk, a young child’s access to and utilisation of family food, and its quality and quantity, determine how well the child thrives or, indeed, whether it
survives. This study maps the elemental factors for food and nutrition security of young children, and probes change processes, barriers and aspirations associated with them. It gives voice to the experiences and interpretations of people raising young children, as well as to those leading the community and providing services.

The main research question my study explored was:

How is child malnutrition explained in two southern villages in Ethiopia, according to local perceptions?

The complexity of the main research question required a set of sub-questions:

- What constitutes family food?

  What is in the pots and on the plates in the households on a daily basis? What foods do household members access outside the home? Where does their food come from and how is it prepared? How diverse is the food and what are the limitations? How is food distributed and eaten and what social and cultural meanings do meals have?

- What and how do young children eat?

  Are there special foods made for infants and young children? If so, what are these? How do customs and rules guide what children eat? How are they fed: by, and in the company of, whom, when and how many times a day? How effectively are the nutrients in the food utilised?
• How are health and illness, and their links with food and nutrition, perceived?

What are the ideals and norms of feeding young children? What knowledge and beliefs guide them? How far is the practice from the ideal? How is the deviance explained?

• How do caregivers see possible paths of improvement?

What are the opportunities and what are the barriers according to their views? How do they think about their role and agency in improving child nutrition?

The overarching goal of the study was to contribute to knowledge on which well-planned and well-implemented food and nutrition security programmes, targeting young children and their families, can be built.

Exploring and documenting previously less-known perspectives and descriptions to theory and practice, the objectives of this study included:

• describe the determinants and characteristics of the dimensions of children’s food and nutrition security;

• expand understanding of the emic viewpoints on the connection between food culture and child well-being;

• explore parents’ and other community members’ perceptions and attitudes about their agency in relation to their children’s well-being and future;
• identify appropriate and accessible local strategies for the improvement of aspects of child nutrition.

Site and methodology

The study site chosen for this study is, in many ways, typical for the region. It is a rural area with high population growth, inhabited by a poor farming population predominantly dependent on rainfed agriculture, thereby exposed to increasingly unpredictable weather patterns, and experiencing regular periodic food shortages and high rates of stunting in children. The research questions and objectives were approached with ethnographic methods and the principles of qualitative research methodology. Accordingly, data was generated through household observations, interviews and group discussions during 12 months of field work, and was interrogated in an iterative process of thematic and contextual analysis and informant feedback, also known as member check.
1.3 The review of literature

1.3.1 Introduction

In many regions of Sub-Saharan Africa, chronic malnutrition of children is a permanent “silent emergency” regardless of the ongoing food relief and agricultural extension programmes of the last decades Eilerts (2006, p. 154). Lack of appropriate nutrition for growth and development in childhood is more than hunger: its impacts reach into adulthood (Ahmed, Hossain, & Sanin, 2012; Renzaho, 2010).

The various food aid programmes vary in effectiveness and have unintended consequences, such as entrenching dependency and marginalising local enterprise and solutions (Young & Jaspars, 1995). Researchers agree that not enough attention is paid to the use of family food in the rehabilitation and prevention of malnutrition in children under five years of age (Ashworth & Ferguson, 2009; de Pee & Bloem, 2009).

This study endeavours to contribute to the understanding of the opportunities in family food for improving the nutrition of children under five years of age in poor households in the developing world, in particular in Sub-Saharan Africa. The study explores the factors affecting what and how children eat, and the local perspectives on whether, and how, child nutrition can be improved. It records what guides the infant and young child feeding practices of people in the local community, how they reflect on the outcomes of their actions, what they perceive as reasons of the short-comings, and how they see their own agency.
The food on the families’ table is defined by what is available in the given setting, and what food they are able to secure access to: in other words what their food entitlements are. Sen’s (1981, p. 45) description of ‘food entitlements’ focuses on “the ability of people to command food through the legal means available in the society, including the use of production possibilities, trade opportunities, entitlements vis-à-vis the state, and other methods of acquiring food”. Food entitlements thus include command over the household’s own direct production of food, capability to earn cash, and food relief accessed by the family.

What food is available in the given context largely depends on what is produced by the local agricultural systems, what can be purchased in the local markets, and how food is prepared, distributed and utilised in the local social and cultural paradigms. With the intention of approaching these issues from diverse angles, the key areas of interest for the review of the literature include child malnutrition, the rural food production system and livelihoods, gender and household power relations, food customs and dietary diversity, infants and young child feeding practices and, finally, food security and nutrition interventions.

A review of the literature to examine the context and to aid the research design yielded the following main points:
The ‘child survival revolution’ has saved many lives in the under-five population, with much less success in terms of enhancing the surviving children’s quality of life (Neumann, Gewa, & Bwibo, 2004).

According to many authors family foods offer a potential to be in the foreground in the prevention of malnutrition (Ashworth & Ferguson, 2009; Collins, 2001; de Pee & Bloem, 2009).

Greater dietary diversity is likely to lead to better nutrition (Ruel, 2003; Tontisirin, Nantel, & Bhattacharjee, 2002).

Infant and young child feeding practices often reflect priorities that are not focused on the particular child but on the larger group (Hampshire, Panter-Brick, et al., 2009).

Household wealth is a less decisive determinant of nutritional status than the degree of women’s command over resources (Cooper, 2009; Simon, Adams, & Madhavan, 2002; Smith, Ruel, & Ndiaye, 2005).

1.3.2 Child malnutrition

Child malnutrition is a deeply entrenched problem in much of Africa, particularly in areas where chronic food insecurity exists (Tectonidis, 2006). For long years many relief programmes backed by the goodwill and money of private and public Western

---

1 The child survival revolution was an initiative of the UNICEF launched in 1982, focussing on growth monitoring, the treatment of diarrhoea, breastfeeding and immunisation.
donors made great efforts to improve the situation and achieved significant results. However, in the decades between 1970 and 2000 the prevalence of child malnutrition declined the slowest in Sub-Saharan Africa among all the regions of the developing world (Smith & Haddad, 2000). Analysis by the World Health Organization (WHO) reveals that while chronic malnutrition trends predict a minor improvement in the percentage of stunted children under five years of age, the actual number of affected children increased because of population growth (de Onis & Blossner, 2003).

The term malnutrition describes a condition of poor nutrition and is related to food intake that is inadequate, excessive or unbalanced, or to an impaired ability to absorb food. Undernutrition is a category of malnutrition and is caused by a deficiency of essential nutrients, generally as a result of “poor quality or insufficient quantity of nutrient intake, absorption, or utilization” (London School of Hygiene and Tropical Medicine, 2010, p. 115). In this thesis ‘malnutrition’ refers to ‘undernutrition’, in line with much of the literature on the nutritional status of people living in poverty.

One of the two main types of malnutrition is protein-energy malnutrition, which results from inadequate intake of any or all nutrients; the other is a range of micronutrient deficiency diseases, due to the deficiencies of specific micronutrients (London School of Hygiene and Tropical Medicine, 2010). Protein-energy malnutrition in children is further divided into three categories, summarised in Table 1. Of the three categories, my study mainly focuses on chronic malnutrition, where it is most likely that changes in caregiver behaviour and the characteristics of family food could have impact.
Table 1  Protein malnutrition in children

<table>
<thead>
<tr>
<th>Category</th>
<th>Appearance</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute malnutrition</td>
<td>Wasting or thinness</td>
<td>Acute inadequate nutrition leading to rapid weight loss or failure to gain weight normally</td>
</tr>
<tr>
<td>Chronic malnutrition</td>
<td>Stunting or shortness</td>
<td>Inadequate nutrition over long period of time leading to failure of linear growth</td>
</tr>
<tr>
<td>Acute and chronic malnutrition</td>
<td>Underweight</td>
<td>A combination measure, therefore, it could occur as a result of wasting, stunting, or both</td>
</tr>
</tbody>
</table>

(Source: London School of Hygiene and Tropical Medicine, 2010, p. 115)

Malnutrition impacts on the growth of bones and muscles and brain development, as well as the health of body composition and metabolic programming. These effects in turn create the risk for impaired cognitive capacity, a weakened immune system and reduced work capacity (Murphy & Allen, 2003; Renzaho, 2010; Sigman, 1995). There is strong evidence that malnutrition is associated with a higher burden of chronic disease and disability in adulthood (Ahmed et al., 2012; Ashworth & Ferguson, 2009; Smith & Haddad, 2000).

The nutritional status of children needs to be considered in a continuum, including intrauterine growth and the pre-conception nutritional status of women. Adolescent mothers whose body is not fully grown, and pregnant women with a poor diet are at risk for having low birth-weight infants (Neumann et al., 2004). Intrauterine-growth retarded infants may be born with impaired immunity, diminishing their defence against severe infections and have increased risk for cognitive deficit, low body height and small head circumference and pelvic size as adults (Neumann et al., 2004). Furthermore, the
research community agrees that all degrees of child malnutrition contribute substantially to child mortality (de Onis & Blossner, 2003).

Many poor populations subsist on cereal or tuber-based diets. These diets provide energy and protein, albeit imbalanced in terms of amino acid profiles, and are often deficient in fats and fatty acids and in critical micronutrients.

**Fats**

It is recommended that dietary fats provide a major percentage of energy for children, starting between 40% and 60% for infants under six months of age, with a gradual reduction to 35% by the age of 24 months and remaining between 25% and 35% until the age of 18 years. Dietary energy density and nutrient density positively correlate with growth, although the total energy intake has the greatest impact. Nevertheless low-fat diets are shown to adversely affect weight gain and longitudinal growth in young children (Food and Agriculture Organization, 2008). The importance of fats, however, reaches well beyond being merely an energy source.

Fats and fatty acids are key nutrients affecting early growth and development: as structural components they are essential for the development of the brain, the retina and the central nervous system. As well, they have substantial role in neonatal and infant mental development and are essential in the absorption of fat-soluble vitamins. Specific fatty acids are beneficial for the development of the immune system, the maintenance of
long-term health and in the prevention of some chronic diseases (Food and Agriculture Organization, 2008).

Protein

Dietary protein provides for maintenance and special needs, producing and replacing those amino acids that are used or lost in the processes of the body’s healthy functioning and growth. Linear growth, increase in weight, and the development and maturation of parts of the body and their functions in infancy and childhood require amino acid supply that is different from that in adulthood. In the past, stunting and kwashiorkor in young children, the population segment believed to be most vulnerable to dietary deficiencies, were associated with protein deficiency. More recently it is recognised that these symptoms are the results of “complex interactions between multiple nutritional deficiencies and other adverse environmental factors” (Food and Agriculture Organization, World Health Organization, & United Nations University, 2002, p. 47).

Meeting the amino acid needs of the body is dependent on the adequacy of micronutrient intake and therefore the sufficiency of the amount and quality of food consumed (Food and Agriculture Organization et al., 2002). For appropriate amino acid profile balance, animal-source foods have particular nutritional importance (Murphy & Allen, 2003).
Micronutrients

Young children have greater micronutrient needs relative to their energy needs, therefore they require increased micronutrient density (World Health Organization & Food and Agriculture Organization of the United Nations, 2004). Multiple micronutrient deficiencies are simultaneous with diets which lack energy or diversity. Poor diets often consist of staples which inhibit the bioavailability of even those micronutrients that are present in substantial quantities (Gibson & Hotz, 2000; Mitchikpe et al., 2008). Table 2 outlines the effects of micronutrient deficiencies in children.

<table>
<thead>
<tr>
<th>Effects present</th>
<th>PEM</th>
<th>Iron</th>
<th>Iodine</th>
<th>Vitamin A</th>
<th>Zinc</th>
<th>Vitamin B₁₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Underweight</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired CMI</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Anaemia</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Low birth weight</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality increase</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired cognitive development</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased activity</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease work capacity</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased social-economic</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If anaemia is present

(Source: Neumann et al., 2004, p. 662)

Food preparation methods that minimise the intake of inhibitors and maximise the consumption of enhancers improve the absorption of essential micronutrients.
Traditional food preparation methods, such as soaking, germinating and fermentation, are shown to reduce the antinutrient content of many staple foods, and improve the availability of important macro and micro nutrients (Abd El-Hady & Habiba, 2003; Fageer, Babiker, & El Tinay, 2004; Ghavidel & Prakash, 2007; Gibson & Hotz, 2001). Food and nutrient synergies are equally important, especially the inclusion of animal protein, in particular flesh foods, which enhance micronutrient absorption (Perlas & Gibson, 2005).

### 1.3.3 Food customs

Food customs are among the most fundamental and ancient aspects of many cultures and are strongly associated with family and social values. Change of food habits may therefore be slow and difficult in places where the food culture and customs have strong continuity. In Sub-Saharan Africa, in the last three generations, the introduction of non-traditional foods have lead to changes in what families eat, and they have slowly become dominant in some urban areas (Oniang’o et al., 2003). In rural populations, however, traditional domestic foodstuff is still the principal source of nutrition.

**Dietary diversity**

Although the specifics of dietary intake and diversity, the patterns of meal times, meal frequency, and the intra-household distribution of food vary by ecological regions and between cultural groups, some features of the customary rural African diet can be generalised. As Oniang’o and her co-authors (2003) observe, the cuisine of most Sub-
Saharan ethnic groups is based on two main components: a starchy food and a sauce, soup or relish to accompany it.

Staple cereals contribute the bulk of dietary energy. The population of most African regions rely on one or two staple crops, with some of the most common grains being millet, sorghum, maize, rice and t’ef\textsuperscript{2} (Oniang’o et al., 2003). Many types of roots and tubers, such as cassava, cocoyam\textsuperscript{3}, yams and enset\textsuperscript{4}, are also important sources of energy foods. Depending on the region, the accompaniment to the staple may be a vegetable dish, made of green leaves of kale, baobab, cassava, cowpea, pumpkin, amaranth or sweet potato; or of gourds, squash, okra, eggplant, pumpkin, tomato and various capsicums. When available, in some areas, the accompanying dish is made with legumes, seeds, meat or fish (Oniang'o et al., 2003).

The typical African diet draws a large proportion of protein needs from plant foods, and is low in fat. Consumption of animal-source foods is minimal, mostly due to cost. However, food beliefs and taboos, which often relate to foods of animal origin, also have great impact (Oniang'o et al., 2003).

Kifleyesus (2002) describes in detail the foods consumed in the group of communities he observed in Ethiopia, depicting a diet dominated by carbohydrates. In poor

\textsuperscript{2} T’ef (\textit{Eragrostis abyssinica}) is a traditional cereal crop in Ethiopia and Northern Kenya, with high iron content (Kaluski, Ophir, & Amede, 2002).

\textsuperscript{3} Either of two food plants of West Africa, the taro or the yantia, both of which have edible underground stems ("The Free Dictionary,").

\textsuperscript{4} Enset (\textit{Ensete ventricosum}), also known as false banana, is a staple starchy crop in Southern Ethiopia.
households sorghum, millet and maize are the staples, which consumed with lentil stew provide a monotonous diet. The wealthier families eat wheat and barley – both of which need to be purchased – as well as t’ef, prepared as porridge with butter and spicy berbere\(^5\) (chilli-like capsicum variety). An assortment of squash, peas, beans and some kale is consumed in most households. The diet of the population is predominantly plant-based and rarely includes milk and milk products or flesh foods, in spite of the presence of a large number of chickens. Flesh foods are consumed only on special occasions, such as religious holidays, rites and ceremonies (Kifleyesus, 2002).

Another Ethiopian group, part of the Oromo people, is the centre of a study by Selinus and her co-authors (Selinus, Gobezie, Knutsson, & Vahlquist, 1971). Originally pastoralists, they have settled only few generations before and have inadequate agricultural traditions. The group experiences great seasonal variations in the availability of grains and milk. Their main staple grains are maize, sorghum and millet, while t’ef is of less importance. Meals are based on bread, mainly injera\(^6\), accompanied by buttermilk and spicy sauce. The authors found that insignificant amounts of vegetables or fruits are consumed. The limited amount of milk produced is mainly used in the form of soured milk and soured butter, and meat is only eaten on important occasions.

The categories of staple food and condiments do not cover a whole cluster of food resources. These people access by collecting from the wild or from the fields, although

\(^5\) Amharic name for a type of local chilli

\(^6\) Injera is the traditional thin leavened bread, known throughout Ethiopia.
they are not specifically cultivated. Often these foods fall into the classification of ‘famine foods’, a term poorly defined and often overlapping with ‘traditional’ or ‘local’ vegetables (Muller & Almedom, 2008). Wild foods and edible weeds provide important nutrients and compliment the otherwise monotonous diet of many communities. Grivetti and Ogle’s (2000) review of the related literature shows that a broad variety of African wild vegetables are used in many regions, and are regular and often essential contributors of nutrients. For example, in the Eastern part of Niger, over 80 wild species are consumed, which provide significant amounts of iron, magnesium and zinc, and in The Gambia, pregnant and lactating women rely on wild vegetables for Vitamin A. A study in Burkina Faso found that 20% of all food items were wild species, while in Tanzania, 49% of all vegetables consumed were from wild sources (Grivetti & Ogle, 2000).

Poverty-driven undernourishment is characterised by food deficit and low dietary diversity (Johns & Eyzaguirre, 2007). Food deficit and deficiencies of various micronutrients hardly ever occur in isolation and positive association has been shown between nutritional health and dietary diversity (Frison, Smith, Johns, Cherfas, & Eyzaguirre, 2006). Demographic and health surveys in three regions of the developing world found a significant association between the dietary diversity and the nutritional status of children, independent of socioeconomic factors (Arimond & Ruel, 2004). Many researchers agree that although food variety and diversity are not precise measuring tools for nutrient intake, they are good indicators of the nutritional adequacy of the diet (Hatloy, Torheim, & Oshaug, 1998; Onyango, 2003; Steyn, Nel, Nantel, Kennedy, & Labadarios, 2006).
It has been suggested that dietary diversification is the best option for long-term sustainable nutrition security, although scientific evidence to support this claim is not direct (Frison et al., 2006). Notwithstanding, Frison and his co-authors (2006) emphasise the need to enhance awareness of food resources available through making good use of the local biodiversity, utilising traditional knowledge and socio-cultural values to empower communities. There is emerging data which shows the enormous nutritional potential of indigenous and traditional foods in Africa, as well as other parts of the developing world (Frison et al., 2006), and the importance of edible wild plant species as sources of energy and micronutrients (Grivetti & Ogle, 2000).

A global study of nutritional diversity found that while the species diversity in food production and food supply is not considered extremely low in Ethiopia, the number of food types delivering a diversity of nutrients, and the proportion of energy produced and consumed as non-staple foods, are in the lowest bracket when compared to other countries in the world (Remans, Wood, Saha, Anderman, & DeFries, 2014). A particular strategy for increasing the availability of essential nutrients in the diet is biofortification 7 (Johns & Eyzaguirre, 2007). Although biofortification requires increasing investment in research and infrastructure, the authors suggest that through participatory selection of plants, and by embedding the technology in an overall strategy of sustainable food-based approaches, it could compliment other strategies towards dietary diversity.

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7 Biofortification is the process of generating genetically improved food crops that are rich in bioavailable micronutrients, either through conventional breeding or genetic modification.
Many studies support the importance of energy-rich and nutrient-dense animal-source foods in the diet of young children (Arimond & Ruel, 2004). These foods are more costly than plant foods in terms of access, as well as the environmental cost their production involves. Nevertheless, even small increases in animal-source foods can produce benefits due to their density of available nutrients (Johns & Eyzaguirre, 2007).

Strong seasonality, regular food shortages and a pattern of the annual return of the ‘hungry months’ characterise family food in many parts of Ethiopia and of Sub-Saharan Africa (Ajayi, Akinnifesi, Sileshi, Chakeredza, & Mng'omba, 2009; Sutherland, Irungu, Kang'ara, Muthamia, & Ouma, 1999). This pattern affects not only the nutritional status of children but also of adults, as shortages usually fall in the time of year of arduous agricultural activity. Croppenstedt and Muller assert that the impact of food shortages on the rural workforce is higher in Ethiopia than in many other developing countries, and that there exists “a large scope for productivity improvement through better nutrition” (2000, p. 495).

The social side of meals

The tradition of sharing meals, a fundamental aspect of family food that goes beyond biological nutrition, is not merely a result of economic necessity. Eating may be seen, as it has been by some of the early anthropologists like Emile Durkheim, “as the lowliest, most basic, biological function involving bodily aspects of the human condition” (Fischler, 2011, p. 530). However, commensality “counteracts the essential, basic,
biological, ‘exclusive selfishness of eating’ and turns it into, at the very least, a collective, social experience” (Fischler, 2011, p. 531).

Meals form a frame, or indeed provide an excuse, for many of the social processes that are necessary for the functioning and survival of societies and communities. Discussing the significance and practices of commensality in a southern-Ethiopian ethnic group, the Sidama, Hamer writes: “In African societies in general, and among the Sadāma [spelling by author] in particular, the ideal of cohesiveness is expressed through the rituals associated with consensual debate” (1994, p. 126), framed by the ceremonial meals of the council of the elders. While his study focuses on the sharing of food by the council, he also examines the rituals of food distribution in general, arguing that granting or denying commensality privileges is a tool to implement social norms.

In the development of cultures food does not only become a vehicle for social linkages, as discussed above; it also “assumes symbolic functions and takes on moral significance” (Rozin, 2005, p. S108) expressed through rules, values and attitudes. Food avoidances and prohibitions, similar to the denial of commensality privileges, draw lines between the different groups of populations, and one group often considers the other ‘Barbarians’, “who consume foods which are considered despicable and against whom prejudice is the rule” (de Garine, 2001, p. 488). De Garine claims that food choices often provide a stance from which group identity is demonstrated and ethnocentric judgements are made.

Taboos regarding foods of animal origin, often involving wild animals, vary in parts of Africa, and tend to affect women and children more than men (Oniang'o et al., 2003)
(Colding & Folke, 2001; Shipton, 1990). These taboos are strong and are followed even during times of severe food shortage, although food avoidance rules change, and some may be weaker than others (Bentley et al., 1999; Shipton, 1990). Food taboos in the Oromo traditions, for example, include eggs and most wild animals, while the fish taboo was slowly weakening at the time of the study of Selinus et al. (1971).

Food prohibitions expressly for pregnant women exist in many cultures. Demissie and co-authors (1995) found food avoidances prescribed for pregnant women in the Hadiya people, predominantly Protestant, in the South West of Ethiopia, just north of the study site. During pregnancy the women avoid milk, cheese, fatty meat and linseed because of the fear of difficult delivery and the “discoloration of the fetus” (Demissie et al., 1995, p. 2). In many regions of the developing world, for pregnant women “meat taboos are more frequent than non-meat taboos, and, with the exception of Southeast Asia, this difference is quite marked” (Fessler & Navarrete, 2003, p. 3).

**Gendered food sharing**

Socio-cultural beliefs and practices influence how food is consumed, distributed and shared by families. Intra-household sharing of food is related more to a person’s hierarchical position than to need, with the head of the family – in fact the men – given priority concerning both quantity and quality (Oniang’o et al., 2003). Regardless of how the meal times are organised in terms of frequency, timing or participation, this bias is a characteristic of household food consumption all throughout rural Africa.
In many areas men and women eat separately and therefore have quite different nutritional intakes. In West Africa, children older than about 12 months, often eat apart from the adults, sharing a common plate, and with very little parental supervision (Hampshire, Panter-Brick, et al., 2009). Kifleyesus (2002) studied the food customs of an Ethiopian Muslim population North East of Addis Ababa. According to his findings, during the three highly ritualised daily meals families usually eat together, although women eat separately on formal occasions or when men they are unfamiliar with are present. Nevertheless, the gender bias is present in these communities as well: during the meals men are served first, while children and women eat what is left, therefore more exposed to food scarcity. Women try to make sure that children eat well, serving themselves last and the least. Having better access to cash, men are able to buy street food, often grilled meat, which augments the asymmetry of nutritional distribution even further (Cooper, 2009).

Feeding the children

Throughout Sub-Saharan Africa exclusive breastfeeding in the first six months after birth – a generally accepted recommendation – is rarely carried out. Studies found that withholding colostrum, a custom which deprives newborns of essential nutritional and protective benefits, is widely practised in some regions, for example, by the Hausa in West Africa (Cooper, 2009). In many regions infants are fed inappropriate foods, such as herbal teas, water and porridge often as early as the first month of life and, by the age of 10 months, they are eating family food (Grivetti & Ogle, 2000; Hampshire, Casiday, Kilpatrick, & Panter-Brick, 2009; Oniang'o et al., 2003; Selinus et al., 1971; Vaahtera et
Butter is given to infants from the first day, and small amounts of unboiled cow’s milk is given to 2-3 months old infants in some communities of Ethiopia (Selinus et al., 1971). Goat milk is given even to younger infants in West Africa (personal communication, birth attendants, Dogon Baushe, Niger, 2009).

Common weaning foods are varieties of plain porridge, made of a cereal or tuber, and are low in energy, protein and essential vitamins (Oniang'o et al., 2003). A Malawi study found not only that complementary foods were introduced very early, but that the diet of older infants lacked diversity as well (Vaahtera et al., 2001). Although the gradual introduction of complementary foods may take months, the final weaning in many African regions is decisive, taking place in one day, often involving the child being placed with a grandmother or other senior relative for a short period (Cooper, 2009; Selinus et al., 1971). Subsequent pregnancy causes immediate and complete weaning due to widely held beliefs that pregnancy ‘spoils’ the mother’s milk (Cooper, 2009), or even renders it poisonous (Selinus et al., 1971).

It is not only what and when children eat that affects their nutritional status. Research shows that caregivers’ feeding behaviour and the environment children eat in have impact on their dietary intake. As well, lack of parental supervision during meals is associated with poor growth (Nti & Lartey, 2007). In their study carried out in Ghana, Nti and Lartey found that positive - active and non-confrontational - feeding behaviour, especially for children with poor appetite due to illness, was associated with healthier or improving appetite. On the other hand, lack of parental supervision during meals was associated with poor growth. The most important factors, however, were the frequency
and regularity of feeding, and whether the setting was protected and clean (Nti & Lartey, 2007).

Cooper (2009) warns that caregivers’ behaviour should not be interpreted simply. Cultural beliefs in many parts of Africa about the agency of children regarding their own well-being, and the parents’ attentiveness to what, according to their understanding, is the will and desire of the child, often produces parental acceptance of the child’s rejection of food. Another important observation is about the parents’ “failure to direct high quality foods toward young children” (Hampshire, Casiday, et al., 2009, p. 141), which are as likely explained by cultural beliefs as by pragmatic strategies of spreading risks (Hampshire, Panter-Brick, et al., 2009).

1.3.4 Rural food systems and livelihoods

Food systems are broadly defined as activities and interactions ranging from food production to consumption, together with those taking place between human society and the physical environment, and outcomes of these activities and interactions (Ericksen, 2008). In rural areas where agriculture is the dominant livelihood activity, food systems and livelihoods tightly interconnect.

The main livelihood of the majority of the population in Sub-Saharan Africa is agricultural (Food and Agriculture Organization, 2010), and most rural households engage in subsistence agriculture (Azam-Ali, 2007). In 2010, 83% of Ethiopia’s total population depended on agriculture (Davis et al., 2010). In communities that rely on subsistence agriculture as their primary source of livelihood the link between
agricultural production and food consumption is direct and a main source of food for the households is what they grow themselves.

Agriculture and food production

Agricultural livelihoods in Sub-Saharan Africa are typically based on subsistence smallholder farming (Dixon, Gulliver, & Gibbon, 2001, p. 545). These farms are structurally complex productive systems and are dependent on a diverse set of interconnected components. Climate, biodiversity, basic natural resources such as types of land and soil and access to water, as well as human, social and financial capital, determine the essential characteristics of the farming systems⁸ of a given region. Bioclimatic changes, hand-in-hand with the growing population pressure, challenge agricultural systems, which in the past provided more than just mere survival to people living in these places.

Semi-arid Africa, the geographical location of this study, is characterised by large year-to-year variations in rainfall, compounded by periods of drought. The dominance of rainfed agriculture in this region, as elsewhere in the poor countries of the developing world, is predicted to persist in the foreseeable future, even though rainfall is “the most prominent random parameter beyond farmers’ control” (Cooper et al., 2008; Rockström et al., 2010, p. 545).

⁸‘Farming systems’ are defined as collections of individual farms with “broadly similar resource bases, enterprise patterns, household livelihoods and constraints, and for which similar development strategies and interventions would be appropriate” (Dixon et al., 2001, p. 9).
Low natural soil fertility is typical in much of this region. Inorganic fertiliser use is restricted by cost: it is considered an expensive investment for a questionable return (Garrity, 2010), and even in areas where farmers do use fertilisers, a vast majority of the fields receive less than half of the recommended amount (Vanlauwe & Giller, 2006). Soil fertility declines with distance from the homestead: most organic resources are used in gardens and infields, due to their limited availability and to the additional labour their application requires (Vanlauwe & Giller, 2006).

A traditional soil fertility management practice, the use of fallow, allows natural vegetation to re-establish on lands left uncultivated through several seasons or years. Fallow is considered to be one of the most important agro-ecosystem management practices in dryland and semi-arid Africa. However, this cultivation system is now increasingly abandoned; due to population growth fallow periods have been reduced and, in many places, even replaced by permanent cultivation (Ramaswamy & Sanders, 1992).

The main crops comprise a selection of staple grains – mostly varieties of millet, sorghum (also known as guinea corn) and maize – as well as leguminous plants, such as ground nuts, beans and cowpeas. In smaller scale, often for commercial use, sugar cane, wheat, sweet potatoes, cocoyam and vegetables, for example, tomato, eggplant,

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9 Indigenous African leguminous plant often intercropped with millet or sorghum, widely grown in Africa (Sprent, Odee, & Dakora, 2010).
okra, are grown in the river flood plains, while on rain-fed land cassava, *bambara* nut\(^{10}\) and some vegetable crops are produced (Mortimore, 1989).

In many areas of Africa farming technologies are exclusively based on human and animal labour. Mechanisation is beyond the means of smallholders; for cultivation work men and women use hand-held hoes and cutting tools, and in some regions animal traction is utilised (Doss, 2001). Traditional technologies are used for soil preparation, weeding, harvesting and the storage and processing of crops. The utilisation of crop residue such as stalks and leaves, for fodder and cooking fuel, for making household goods, or for sale, is common. There are clear gender differences in agricultural labour. In many regions of Sub-Saharan Africa women’s work is more focussed on producing food required by their families, taking responsibility for staple or subsistence crops, while men’s priority is in cash crops or earning income outside the farm (Cromwell, 1999; Gladwin, Thomson, Peterson, & Anderson, 2001).

Farmers of the semi-arid regions have been employing various strategies to increase food security. One such strategy, intercropping\(^{11}\), has been successful in various agricultural systems in the world for millennia. Beyond providing better soil management these systems offer a potential for wider nutritional diversity and for overall greater resilience for farmers struggling with unpredictable meteorological and

\(^{10}\)Important indigenous African leguminous crop, which tolerates poor soils and drought conditions (Doku & Karikari, 1971).

\(^{11}\)Intercropping is the agricultural practice of cultivating two or more crops at the same time. It aims to produce greater yield by better utilising the resources of a given field than a single crop would. Intercropping practices consider the soil, climate, crops, and varieties so crops do not compete with each other for space, nutrients, water, or sunlight. (Andrews & Kassam, 1976).
social conditions (Jackson, Pascual, & Hodgkin, 2007; Rao & Mathuva, 2000). The most common examples of semi-arid intercropping are legumes and grains (Connolly, Goma, & Rahim, 2001), and legumes mixed with tubers (Pottier, 1999).

**Markets**

Rural markets are usually outlets for local produce and home-made snacks as well as non-local food and household goods. Village markets offer a limited diversity of food, essentially not very different from what local households grow on their own farms. The availability of animal products such as dairy, fish and meat is extremely limited.

Farmers of the sell more than the surplus they harvested, without which the family can go throughout the year. However, selling crop helps paying for debt and investing into less liquid assets such as large livestock or roof iron. Investment into such assets is a form of risk management, as it “shelters wealth from daily demands for sharing or sales” and diminishes the possibility of complaints or accusations - the ‘squawk factor’ - among family members (Shipton, 1990, p. 367; Smith & Chavas, 2003). In many areas researchers found resistance to cash cropping, explained by the farmers’ risk-averse decision making and desire for self-sufficiency. They also wish to avoid the threat of household conflict, which often increases as market prices change (Smith & Chavas, 2003).

Throughout the world, farming systems are subject to weather and environmental conditions, and to the unpredictability of markets. Moreover, the vulnerability of poor
farming communities in the developing world is compounded by their lack of reserves. Poor farmers’ resilience can easily erode when more than one of the risk factors converge, or occur repeatedly, such as poor rainfall or illness, forcing them to implement coping strategies which undermine long-term productive security (Young & Jaspars, 1995). Cash income, most often generated by cash cropping and petty trade, augments food production for domestic use (Ellis, 2000). Cash-producing activities are also an important part of ‘modern’ drought response coping strategies through diversifying livelihood opportunities (Curry, 1989).

Livelihood diversity

People living in rural agricultural areas have limited livelihood diversity. While much of policy focuses on agricultural production (Carswell, 2002), the significance of the diversification of livelihoods for risk management, food security and asset creation has been increasingly recognised in the research literature (Ellis, 1998; Niehof, 2004). The determinants of diversification include the seasonality of farm work, existence of labour markets, risk management and coping strategies at household level, and the availability of credit (Ellis, 1998).

Women in particular have few means to earn income of their own. This is a significant issue considering that, according to research carried out in West Africa, the “variable most positively associated with higher nutritional status for children was not the household's agricultural holdings or even the husband's occupation, but whether the mother took part in trade” (Simon et al., 2002, p. 200). The most frequent opportunities
to generate independent income for women are trading – much of which is selling food
and condiments prepared in their homes - or hand crafts such as weaving fabric or mats,
or working as agricultural labourers. However, women are limited in their movements
by their children's needs and, in some areas, by seclusion (Cooper, 2009; Hampshire,
Casiday, et al., 2009).

1.3.5 Command over resources: household, gender and power

‘Family’ and ‘household’ are complex notions that have attracted a range of definitions
throughout the literature. ‘Family’ is mostly described as a loose concept of kinship or
of commitment to act as a social-domestic unit, usually one with a historic dimension,
composed of people bound by biological, emotional or legal ties (McDaniel, Campbell,
Hepworth, & Lorenz, 2005; Noble et al., 1994).

Haviland and his co-authors differentiate between family and household, the latter being
the organisational basis of the functions of a residential unit (Haviland, Prins, Walrath,
& McBride, 2005). In food security literature, households have been defined as “an
aggregate of persons who either live together under the same roof or in different units in
the same compound, but eat together or share the household food” (Renzaho, 2006, p.
28).

Households are often seen by development agencies as units within which decisions are
negotiated and resources are allocated according to agreed priorities. However, this is
often not the case: households are by no means unitary decision-making bodies
(Haddad, Hoddinott, & Alderman, 1998); they “embody both separate and shared well-
being and interests” (Jackson, 2008, p. 107). The often contrasting interests or preferences of household members are negotiated through conflict and co-operation, with different strengths in bargaining position, determined by power and status (Ellis, 2000; Niehof, 2001). Gendered asymmetry in decision-making and power over household resources in Sub-Saharan Africa is observed in many studies and is discussed below.

**Command over household resources**

In the context of rural livelihoods, women are often responsible for staple or subsistence crops and men for cash crops (Cromwell, 1999). However, in many parts of the region, for example, in Ethiopia, women either have no access to productive land, or they have access to farmland only through marriage. In such households it is the husbands' obligation to meet their wives’ and children’s food needs (Thorsen, 2002), providing women with a portion of the harvested crop either in the form of grain or the cash received for it. However, this often falls short of their year-around needs (Cooper, 2009), and it is the women’s task to maximise the benefits of the available resources to sustain the well-being of the household members. This includes essential necessities for feeding the family and resources for accessing services such as education or health (Cooper, 2009; Weisner, Bradley, & Kilbride, 1997).

Jackson argues that describing women as more risk averse than men is based on generalisations that do not stand for the whole for Sub-Saharan Africa (Jackson, 2008). According to these generalisations women’s agricultural practices focus on food crops
for the household, and men’s on cash crops. Jackson questions the orthodoxy of women doing the majority of farm work and that women use incomes to best advantage on nutrition and education of children. She maintains that the expenditure pattern is explained by the difference in income flow, which is “smaller and more frequent for women, larger and more infrequent for men” (Jackson, 2008, p. 106).

The gendered nature of poverty has been argued in academic literature for decades. Cooper, in her work about the Nigerien food crisis, suggests that in Sub-Saharan Africa the position of husbands and wives within a single household may radically differ in terms of the flows and distribution of wealth, labour, property and productive assets. She goes on to say that “given all that we now know about intrahousehold dynamics and the separation of male and female budgets in Africa it seems peculiar in the extreme to assume in advance that husbands and wives occupy the same economic stratum” (2009, p. 8). Furthermore, access to food resources within the household is not determined simply by gender-specific household wealth. Quisumbing and Maluccio (2003) found large variations in what influences intrahousehold allocation of food, noting that site-specific characteristics, ethnicity and religious differences may often have stronger effect than the assets husbands or wives actually hold.

Analysis of data from 36 developing countries across three regions found ample evidence of the close relationship between women’s status and child nutrition, noting that until recently little attention was paid to how the capabilities and well-being of children’s caretakers, usually their mothers, affect children's nutritional well-being (Smith, Ramakrishnan, Ndiaye, Haddad, & Martorell, 2003). The authors found that this
connection is particularly strong in Sub-Saharan Africa in relation to both long-term and short-term nutritional status of children.

It is evident from the literature that children's nutritional status has a stronger association with women's command over food resources within the household, than with overall food entitlements. Linking gender and nutritional strategies is essential (Mehra & Hill Rojas, 2009) and therefore, in the exploration of opportunities in family food for preventing child malnutrition, women’s status and power need to be considered as fundamental elements that shape how mothers perceive their agency in regards their children's food and nutrition security.

There is an aspect of parental decision-making that acutely intersects with the interventions of health and humanitarian agencies. In their analysis of data collected in Niger, Hampshire and her co-authors (2009) describe parents’ perceptions and priorities when facing chronic livelihood insecurities and its consequences on the well-being of their children. They argue that parents see their children’s lives as “inherently vulnerable”, and therefore are “unwilling to invest disproportionately in any one child, particularly a failing child, when there are other pressing demands on resources” (Hampshire, Panter-Brick, et al., 2009, p. 762). This emic view of risk management conflicts with the focus of agencies. The conflict has several aspects: interventions relate to the proximate and immediate causes of child mortality, indeed aiming at saving

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12 Emic knowledge and interpretations are those existing within a culture; “the emic approach in anthropology seeks to examine the native principles of classification and conceptualization from within each cultural system” (Xia, 2011, p. 77). Conversely, etic viewpoints represent a cross-cultural, outsider approach or interpretation (Xia, 2011).
lives, while the community’s priority is to manage crisis in a way which does not impede on long-term livelihood security. While the agencies focus on the failing child, parents balance risk to all of their children. Essentially, while the agencies’ resources are directed at the most vulnerable child, “parents take the opposite view: that because of the life of any child is so precarious, it does not make sense to invest excessively in any one child”, using up resources and therefore exposing the whole family to potential risk (Hampshire, Panter-Brick, et al., 2009, pp. 763-764).

1.3.6 Food security and nutrition interventions

For this study, which focuses on family food and child nutrition, it is essential to broadly survey the range of programmes that intend to address acute and chronic food insecurity and to improve child nutrition outcomes in Sub-Saharan Africa. Many initiatives exist in the region, implemented by state governments and NGOs, and this review is far from being complete. Rather than providing a full and detailed account of the various interventions, the point that needs to be made is that while the achievements of these programmes are unquestionable, there are populations they do not reach and issues they do not address. This is where the usefulness of a study such as this is positioned.

Food security interventions and social transfers

Sen (1981) argues that in most societies, entitlements are a set of alternative commodity bundles a person can choose from, using his or her endowments (ownership bundles). Utilising endowments is negotiated through a process of exchanges which take place in
market transactions, in production and entrepreneurship, and in social security functions.

In the context of food security in Sub-Saharan Africa, the social policy dimension of food entitlements is mostly evident in the states taking action to improve the food security safety net at times of disasters. While to a large extent this involves loans and aid from donor countries and organisations, there is growing interest in food sovereignty and livelihoods (Hussein, 2002; D. Maxwell, 1996). Beyond responding to crises through regulative measures, for example, reducing taxes on food grain and regulating prices, many Sub-Saharan African countries have policies and strategies in place to address the long-term food insecurity of their population. These safety net strategies include food and cash transfer, food rationing and school feeding programmes (Wodon & Zaman, 2010). Although food for work programmes are more common, cash transfer programmes involving public infrastructure are implemented in about one third of the African countries.

The Ethiopian Productive Safety Net Programme (PSNP) is a cash transfer programme. It was launched in January 2005 and it is the second largest-scale social transfer programme in Africa outside South Africa (Sabates-Wheeler & Devereux, 2010). It was created by the Ethiopian Government and a consortium of donors and its main objective is to assist households in chronically food insecure districts, preventing household asset depletion while building up community assets (Gilligan, Hoddinott, & Taffesse, 2009). In its first 18 months, the PSNP reached 8.3 million people, or 11% of the nation’s population (Sabates-Wheeler & Devereux, 2010).
Agricultural extension programmes represent a different but complimentary approach to food security. The early goals and models of agricultural extension in food production and food security have been criticised for creating a rigid hierarchy which treats farmers as “empty vessels to be filled with knowledge and expertise” (Belay & Abebaw, 2004, p. 142). In recent years a participatory extension approach has been introduced, which aims to integrate modern scientific and traditional indigenous knowledge. In the light of reduced public sector funding over the last decades as part of the structural adjustment efforts, this approach proved to be robust and achieved good results, for example, in soil conservation, pasture management, integrated soil fertility management, and irrigation and water use, in a range of Sub-Saharan African countries (Belay & Abebaw, 2004).

In Ethiopia a succession of extension programmes followed each other. The Participatory Demonstration and Training Extension System (PADETES) programme started in 1995 and, although it had many weaknesses, it “saw a massive increase in the number of farmers adopting improved agricultural technology” (Davis et al., 2010, p. 9). As a result, grain production increased and, in some areas, agricultural productivity improved. The 2005 evaluation that the programme had a narrow focus on cereal crop production, was driven from the federal level and lacked regional strategies. The evaluation also reported a high drop-out rate and limited uptake by female farmers (Davis et al., 2010; Mogues et al., 2009; Spielman, Kelemework, & Alemu, 2012).
Nutrition interventions

Conventional therapeutic nutritional interventions aim to provide high quality individual patient care in therapeutic feeding centres, and generally comply with institutional and medical guidelines requiring high levels of resource-intensity and imported therapeutic products. The expense involved in providing medical and nursing staff, medical and laboratory equipment, pharmaceutical supplies, and therapeutic and supplementary food supplies make these operations highly dependent on external funding (Collins, 2001). This medical model removes a carer, most commonly a parent, from the everyday functioning of the household for a significant length of time, usually for weeks. This is a potentially damaging absence, particularly in relation to the care of other children, to seasonal agricultural labour, and to other income earning activities. It therefore increases the risk of future nutritional insecurity for the entire family. Pressure to return home results in high default rates from the programmes (Chaiken, Deconinck, & Degefie, 2006). A further significant problem is that many feeding centres are unable to control the increased cross-infection risk suffered by children with compromised immune system due to malnutrition (Young & Jaspars, 1995).

In recognition of the problematic nature of therapeutic feeding centres, in terms of their sustainability and effectiveness, a new strategy emerged: community-based therapeutic care (CTC). The CTC programmes use therapeutic food and supplementary rations and involve trained (paid or volunteer) community health workers. In spite of the initial scepticism, they have achieved high success rates (Amthor, Cole, & Manary, 2009; Chaiken et al., 2006). Care is still supported by external resources, and participation in a
CTC programme requires engagement with the medical establishment; the burden of accessing distant health centres have not diminished, and neither have the costs of supporting medical, nursing and laboratory staff. However, it is a step in the direction of children rehabilitated in their homes.

Collins (2001, p. 498) argues for a “continuum between emergency and developmental approaches”. A further step in the 'continuum' would be a focus on family food as a tool in the rehabilitation and prevention of child malnutrition – a largely overlooked opportunity (Ashworth & Ferguson, 2009; de Pee & Bloem, 2009). Other authors state that emergency measures, such as food aid, have their social costs and are often ineffective (Barrett & Maxwell, 2006), and suggest that investments in improving nutrition through food obtained and prepared within the household food system could bring better and more sustainable results (Ashworth & Ferguson, 2009; de Pee & Bloem, 2009).

In many developing countries, home and family food-based prevention of malnutrition in young children is supported by community health and nutrition strategies operated by the state. In countries with poorly developed health care systems much of the work, ranging from antenatal care to child immunisation and treatment of minor illnesses, and nutrition to environmental health education, is carried out by trained community health care workers or health extension workers (Haines et al., 2007). Authors agree that, however effective, community health workers should be considered only one component of the health system and that they do not replace facility-based and highly trained health care (Bhutta, Ali, et al., 2008; Haines et al., 2007). With regards to
complementary feeding, a review of interventions for maternal and child undernutrition and survival found that nutrition education alone benefitted mostly those populations that had sufficient means to access appropriate food and, in food-insecure areas, nutrition education needed to be complemented by food supplementation and cash transfers (Bhutta, Ahmed, et al., 2008).

As ”people eat food, not nutrients” (World Health Organization & Food and Agriculture Organization of the United Nations, 2004, p. 319), dietary guidelines and advice on food choices and food preparation, are more meaningful than talking about recommended nutrient intake. The Alive and Thrive initiative, funded by the Bill and Melinda Gates Foundation, is a “multicountry, multiyear initiative aimed at developing large-scale program models for reducing child mortality and stunting through improved infant and young child feeding practices” (Piwoz, Baker, & Frongillo, 2013, p. S143). It operates in Ethiopia, Bangladesh and Vietnam. During a scheduled set of counselling contacts, Alive and Thrive delivers advice on infant and young child feeding and preventative health practices. In Ethiopia it relies on health extension workers and trained volunteers, none of whom are receiving any financial incentives (Sanghvi, Martin, et al., 2013).

1.3.7 Conclusion

Childhood malnutrition has a long-lasting, indeed lifelong, impact on people’s capacity to fulfil their potential and on the burden of disease in adulthood. Even the next generation is affected through the compromised health status of women. Food deficit as
well as lack of nutritional diversity is accountable for the low nutritional status of children in Sub-Saharan Africa.

Food culture in Africa is made up of a large variety of customs; yet the main components of family food show remarkable consistency: a starchy food representing the bulk of energy-intake accompanied by condiments made with spices, generally small amount of vegetables Animal-source foods are rarely available in many households. There is a strong tradition of reliance on wild plant foods and edible weeds, which can provide the nutrient diversity the staple foods lack.

Households obtain food in rural Africa predominantly through agricultural activities. Rural livelihoods are highly vulnerable to climatic, political and economic conditions and are characterised by the low diversification of livelihood portfolios, exacerbating the households’ exposure to events beyond their control.

The degree of household food security, although defines the parameters, does not directly translate to the degree of nutritional security for children. Mitigating factors, such as cultural beliefs and practices, family hierarchy and the understanding of illness, have a great impact on children’s nutritional status. The research literature shows that one of the most significant of these factors is women’s command over resources which are invested in their children’s health. Nonetheless, their access to and command over resources is problematic because of the generally low socio-economic status of women in African communities, and due to cultural and religious rules.
Feeding practices of infants consistently differ from the universally recommended guidelines; while it is clearly not the case of ‘only if they knew’, our understanding of the reasons for these behaviours is limited (Vaahtera et al., 2001).

One type of response by local and international NGOs and aid organisations to malnutrition is nutritional interventions. The literature stresses the short-term and incomplete nature of the success of these initiatives, and points to the conflict between their focus on the immediate, and the families’ needs for enduring strategies for risk-management. Agricultural programmes promoting diversification and conservation farming have shown remarkable success, although their coverage is limited.

The review of literature suggests that the potentially key importance family food could play in addressing and preventing child malnutrition is largely overlooked. Holding this as the main thread of inquiry, my research will explore the strategic associations, as seen by the local community, between children’s nutritional status and the determinants of food availability, access and utilisation, and the opportunities for change in achieving better food and nutrition security for infants and young children.
1.4 Personal and professional motivation

This study set out the ambitious goal of reaching a better understanding of the factors of child undernutrition in poor households, with the aspiration that within some of these factors opportunities could be found for positive change, with small adjustments that would work within the constraints of poverty, within the given historic, climatic and cultural environment.

The research idea was fed by many small and larger experiences: witnessing how people, including myself, make decisions about caring for young children, and interrogating and reflecting on what is behind these decisions. I grew up and gave birth to my first child in socialist Hungary, and, while living in the United States, my second child was born in New York City. These two experiences of the medical and lay culture around how to feed and look after infants and young children were in almost complete opposition that could not be explained merely by the time that had passed. I also had opportunity to observe the range of my (mostly professional) friends’ attitude and practices, and marvelled at the differences in principles and priorities. Working in very remote Central Australian communities I encountered yet another fundamentally different child rearing paradigm.

What was first curiosity became a deeper intellectual interest and inspired me to take a further step on the path consisting of series of choices in how I engaged with the world as a professional woman, privileged in education, secure in livelihood, grown up with ideals of community interest and confronted by the contrasts in what was, often
uncritically, seen as an acceptable, a desirable, or a rightfully sanctioned reality by people around me.

The second half of the year 2009 found me in Maradi, a large regional town in the middle of the West African country of the Republic of Niger, working as a volunteer with a group of local women and Australian development workers on a project to create a porridge mix that could improve the complementary and weaning food infants were receiving. Then and there the nebulous research idea gained definition and by enrolling into a Higher Degree by Research programme, the journey of exploration took on a structure with a plan, funding, equipment and expected outcomes.

My background is neither in nutrition nor in anthropology, and before this study I had little experience working in Africa, or in less developed countries in general. I pursued a career in architecture for many years before I decided to follow my interest in community and international development. But I believe that as an experienced architect I brought skills to the field in building personal relationships and in project management. Another skill set I brought into this investigation was the result of 12 years of working with Australian Aboriginal people, mostly in remote locations, in community development roles. The lessons learnt through this vastly cross-cultural engagement were enormous and, although I cannot claim that I understand that world, I learnt to respect it and to be comfortable with this ‘not-understanding’.

Literature review filled huge holes in my knowledge, proposal writing tamed the unruly and broad interest to focussed and practical research questions, and I was exceedingly fortunate to find support for my field work through an international NGO in Australia
and in Ethiopia. The following pages describe many of the details of this journey, every moment of which was intellectually and emotionally enriching, more than I hoped for.
1.5 The structure of the thesis

The thesis is divided to three parts.

The first part describes the starting points of the journey and consists of two chapters and it establishes the issues and questions in the centre of the study, and then describes how the answers were sought.

Chapter 1 Introduction

The chapter starts with outlining the significance this research and describes the study objectives and research questions. This is followed by a review of the literature, which focuses on the subjects of child malnutrition, food customs, rural food systems and livelihoods, and food security and nutrition-related interventions. The chapter concludes with the professional and personal interests that motivated me to complete this study.

Chapter 2 Methodology

This chapter introduces the philosophical orientation and methodological approach of the study, and presents the conceptual framework that underpins the analysis and discussion of the findings. Description of the details of the study design, including strategies for sampling, data generation and analysis is followed by a discussion of trustworthiness and transferability, and research ethics.
The second part of the thesis consists of five chapters, each presenting my findings. Based on observation, interview, group discussion and secondary data these chapters describe aspects of the historic, physical, social, cultural and economic environment that impacted on the food and nutrition security of young children.

Chapter 3  Context: The people and the place

In this contextual chapter an overview of the climate and topography of the study site is followed by an outline of the history of the Wolayta people. The settlement history and the institutions and facilities of the community are portrayed. The chapter concludes with the description of the households participating in the study.

Chapter 4  Context: Livelihoods, society and development

This chapter introduces further contextual elements. It starts with describing the livelihoods in the villages at the study site, proceeds to the portrayal of the social and cultural fabric households exist, and ends with brief introduction of the development programmes operating in the study area.

Chapter 5  What did families eat? Food ingredients and technology

This is the first of the two chapters dedicated to the description of aspects of family food. It is an account of the sources and preparation of food families eat on ordinary
days during the year, and includes issues of seasonality, food shortages and dietary diversity.

Chapter 6  How did families eat? Cultural and social ingredients

This chapter investigates the social and cultural aspects of family food. It describes the customs of meal sharing and the cultural explanations of food choices and avoidances. The chapter concludes with an account of food used in exceptional circumstances.

Chapter 7  Children’s food: the social and economic factors contributing to infant and child feeding practices

This chapter begins with the description of infants and young child feeding practices. This is followed by an account of the knowledge and cultural norms that underpin these practices, and of the place designated to children and their well-being in the hierarchy of priorities within the household.

The final part of the thesis consists of two chapters, which discuss and draw conclusions based on the findings.

Chapter 8  Discussion

This chapter discusses the implications of the study’s findings in the context of the academic and professional literature. Utilising the conceptual framework developed for
the study, this chapter focuses on the three dimensions of young children’s food and nutrition security: availability, access and utilisation.

Chapter 9  Conclusions and recommendations

Reviewing the research question and the objectives of the study, this chapter summarises the key points of findings, and presents some recommendation for practice and further research.
CHAPTER 2

METHODOLOGY
The following chapter outlines the development of the research design of this study and describes how it was carried out. I introduce the theoretical background of methodology decisions and the conceptual framework that developed in synergy with the design and emergence of findings. Methods and practice of generating and analysing data, working with the field research team and participants, and the subjects of trustworthiness, transferability and research ethics are also discussed.

2.1 The philosophical orientation of the study and its links to theoretical traditions

My philosophical orientation marked out my affinity to certain theoretical traditions and simultaneously, as I studied them, these traditions influenced my philosophical stance. “Inquiry is always political and moral” writes Denzin (2009, p. 155). The choices of theory and methodology social researchers make are informed and inspired by their worldview (Corbin & Strauss, 2008, p. 89). Central to the worldview I brought to this research was my awareness of, and concern for issues of social structure, gender and environment. I was also aware that in the focus of this study was a population and place where social structure, gender roles and power, and political and physical environment represented constraints and opportunities fundamentally different from those I have encountered before.
Gilgun writes that researchers who study social problems, regardless whether they work in the qualitative or quantitative paradigm, “for the most part want to contribute to their solutions” (2012, p. 89). This philosophical stance, which Nicholls (2009a) describes as the radical or critical perspective, underlies the aspiration that this research not only furthers the understanding of the phenomenon it investigates, but it also contributes to the change process. Critical social theory also recognises that culture and society are products of a constructive process, that the viewpoints are divergent, and that the research dialogue is not one-way: the researcher-participant relationship is collaborative and the participants are not ‘subjects’ (Angrosino, 2007). This study interrogated the social and cultural processes that shaped infant and young child feeding practices at the study site, with methods that allowed for the emergence of differing perspectives and shared discoveries.

Citing the example of Rajendra Singh, a well-known Indian water conservationist, Poonamallee argues that research that aims to foster collective action for social change should not assume that participants have “nothing to offer to help themselves”. The approach of affirmative assumption opens the way for discovering wisdom and capacity that may be hiding, for example, under “decades or centuries of dust from colonial influence” (Poonamallee, 2009, p. 75). In their paper on social representations theory, Flick and Foster argue a similar point regarding the construction of knowledge: “[social representations theory] maintains that common sense or lay understandings are all too often denigrated and seen as inferior to other forms of knowledge such as scientific or expert knowledge” (2008, p. 196). My assumption was that the millennia-old
knowledge underpinning the local food culture and child rearing practices was valuable and that this knowledge needed to be acknowledged and utilised.

“Development and feminism share philosophies of transformation”, write Cornwall, Harrison and Whitehead (2008). This study relates to feminist research in its change agenda and the awareness of gender issues, which guided much of the study design, data collection and analysis. While it is not focused on “uncover[ing] the pervasiveness of gendered thinking”, it intends to “uncover the ways in which women negotiate the world and the wisdom inherent in such negotiation” (Seibold, 2000, p. 152). The assumption underpinning the focus on women was that it was their role to prepare food for the family and look after the young children; therefore their experiences are central to this inquiry. While this assumption proved to be fundamentally correct, the particular gendered reality of the study site was in many ways different from my assumptions and from examples described in academic and development literature.

“Feminism has long concerned itself with the conditions under which knowledge is produced” states Southgate (2012, p. 135). While acknowledging research as a political process with direct links to activism, the feminist perspective supports a scientifically valid approach (Gatenby & Humphries, 2000). The stance of feminist research, which “requires that we re-think the validity of research as process and knowledge-creator” (p. 90), challenging the claim of neutrality of science and its ‘gender blindness’, resonated with my views about the legitimacy and mandate of knowledge creation, the power of the researcher and the use of research outcomes. The asymmetry of power between the participants and researcher is described succinctly by Benatar: “[w]hile researchers are
generally privileged people many research subjects are among the most vulnerable in our world, living under the worst conditions of deprivation and exploitation” (Benatar, 2002, p. 1131).

This asymmetry applied to my study in many ways: I was setting the research agenda; I was authorised to allocate the resources; I could decide about timeline and planning and, if it became too difficult, I could have withdrawn from the project with no more injury than to my career and self-esteem. More importantly I, the researcher, adopted a position of ‘knowing’ and set out to give voice to the researched (Angrosino, 2007), and by stating that I would represent their voices I assumed “the power to tell their story and to have the last word on how they will be represented” (Madison, 2005, p. 33).

Gilgun warns that, as positioning research in a change agenda may bias their work, in order to produce credible findings researchers must “separate any desires they have for social reform from the standards they follow”, and have to reflect on their own beliefs and ideologies (Gilgun, 2012, p. 89). Reflexivity is indispensable for gaining “insight and crucial scrutiny of the research process”, including the acknowledgement of the transformative impact of the research on the researcher herself (Liamputtong, 2009, p. 9). This interplay is inherent in social research, considering that the researcher plays a significant part in the process, during which an exploration of “both the social construction of the research encounter and the research process as a lived experience” take place (Seibold, 2000, p. 148).

The theories brought into this discussion are some of the stepping stones on the path I walked contemplating the theoretical traditions my research needed to draw from and
build upon. Nicholls maintains that theories in research are ways “of thinking about a problem” (2009a, p. 531): they are systems or means by which observations can be classified, phenomena linked and people’s thinking and behaviour explained. The philosophical orientation of this study, at the beginning no more than a set of intentions underpinned by personal values, gained definition from the purposeful consideration of the theories linked to its main elements. My reflections about the change agenda were supported by radical perspective and critical social theory and I considered inclusivity and collaboration in knowledge creation with its links to affirmative inquiry and social representations theory. Feminist and critical social theory approaches informed my understanding of the socially and culturally constructed gendered viewpoints and experiences of the study participants and myself as researcher.

2.2 Research approach and methodology

The research questions involved probing perceptions and attitudes; therefore required methodologies that allowed the individual experience and the subjective voice to be the main source of data. A qualitative approach was deemed appropriate, with its focus on process and its reliance on “local analysis of particular individuals, events, or settings ... establishing general conclusions and address[ing] ‘how’ and ‘why’ questions, rather than simply ‘whether’ and ‘to what extent’” (Maxwell, 2010, p. 477). Qualitative research methodologies challenge the concept of a singular and objective reality and maintain that truth can be represented from a range of points, from the
subjective experience of an individual, to exploring how social structures guide our behaviour, and to our collective ways of giving meaning to phenomena in our lives (Nicholls, 2009a). My investigation of profoundly cultural, often unquestioned and personal aspects and experiences of everyday life, required inquiry processes well suited for the examination of the complex array of factors. Qualitative inquiry met this need with methodologies that support the development of a better understanding of the interpretations communities and individuals attach to intricate concepts (Liamputtong, 2009).

Within the disciplinary traditions of qualitative research, this study is placed in the field of nutritional anthropology. Although anthropologists have a long history of interest in health and illness, as well as in food culture, nutritional anthropology has only developed into a discrete area of inquiry in the 1970s (Dufour, Goodman, & Pelto, 2013; Mintz & Du Bois, 2002). There has been an increasing presence of anthropological expertise in health development programmes, mainly due to the recognition that more attention needs to be paid to health education and behavioural change, necessitating better understanding of the social and cultural dimensions of disease and health (Manderson, 1998). Expanding anthropological perspectives on nutrition, and their application for particular contemporary nutrition problems, reflect the growing interest in understanding the complex human experience of food (Dufour et al., 2013).

“[N]utritional anthropology is fundamentally concerned with understanding the interrelationships of biological and social forces in shaping human food use and the
nutritional status of individuals and populations” (Pelto, Dufour, & Goodman, 2013, p. 1). Its interest in how culture and biology intersect, specifically how a “meal is transformed to nutrients” (Dufour et al., 2013, p. vii), is congruent with my research objectives. Ethnographic methods are often applied in studies in the field of nutritional anthropology (Pelto et al., 2013).

Ethnography documents “people’s idea systems (knowledge, mores, values, emotions)”, as well as their behaviours and actions (Pelto, 2013, p. 23), describing their perspective from within the context of their culture (Liamputtong, 2009). Angrosino (2007) maintains that the particular benefits of ethnographic methods stem from their utility in studying social issues and behaviours that are not well understood, and in giving voice to people’s own perspective. As this study explored how people thought about, took action and reflected on the outcomes of their actions in regard to a specific health issue in a particular population, the choice of ethnography as methodology appeared appropriate.

Morse (cited in Pelto, 2013) argues that qualitative health research should be considered a discipline in its own right, and that ethnography is a means to access and document the health-related beliefs and practices of a culture. What gives significance to qualitative health research and health ethnography is that neither the traditional approach to ethnomedicine, with its inquiry into the “abstract system of cultural ideas … generally without regard to actual behaviours”, nor quantitative surveys which produce information that is unfit to represent an ”integrated system of thought and decision making” (Pelto & Pelto, 1997, p. 154), are adequate for research aimed at understanding
the cultural models of health-seeking and its main elements of knowledge, beliefs and attitude. My study was concerned with health issues that are not generally perceived as illness: stunting and chronic malnutrition, and the exploration of the local construction of well-being and illness contributed significant information.

This research took place in a culture distant from my own; however, it explored a distinctly common domestic topic: everyday family food. Approaching it from various points of views, the study’s ultimate focus is chronic malnutrition in young children. The research design for this study considered several principles of focussed ethnography, outlined by Pelto and Pelto (1997). At the centre of this study was a specific health issue in a well-defined population and setting and the research questions were specific and focussed for theoretical modelling. The initial steps of data gathering involved establishing an understanding of the local terminology of related concepts, and I engaged and trained local field workers for structured data gathering, both of which Pelto and Pelto consider critical to the collecting emic data. Finally, data included observed everyday phenomena, so cultural statements and behaviours could be compared and connected.

2.3 Research design

The design of this ethnographic study provided for a range of strategies for generating data throughout 12 months spent in the field. Field work was carried out in two phases; in the ten months of the first phase, between April 2011 and February 2012, I obtained
local research approval, learnt basic Amharic and Wolaitta, and collected the main body of the data. In March and April 2013, I returned to the field for further data, credibility checks and reciprocal community feedback. Details of the methods and strategies used for these activities are described in subsequent sections.

The research design was shaped to enable the collection of *emic* data: it allowed for extensive time spent in the field and placed a special focus on understanding local culturally-based perceptions, attitudes and explanations concerning the broad topic of food and nutrition of families and children. Engagement with a team of cultural mentors and field assistants ensured the collection and interpretation of information from various local sources. The rich fabric of data included observed and reported behaviour, as well as accounts of social norms and values, history and change, and specific knowledge relating to food and health. Considerations of the local cultural values and the context of the physical and socio-economic environment were essential aspect of the investigation.

Triangulation is an important strategy for ensuring rigour (Liampittong, 2009; Tracy, 2010). The study design allowed for methodological triangulation through multiple methods of data generation (Liampittong, 2009; Pelto, 2013). Data came from a variety of sources and was generated by a diverse range of methods including observation, interviews, group discussions, food recall and secondary data. Information was documented in a variety of forms, for example, photographs, voice recordings, field notes, reports and statistics. This strategy of data triangulation ensured a “broader and more secure understanding of the issues” under investigation (Maxwell, 2005, p. 94).
The combination of thematic and contextual methods of data analysis provided another triangulation process. Concerns of validity and quality are discussed in a later section.

Figure 1 represents the main steps in the study development and process.

![Diagram of the research process]

Figure 1 The research process

### 2.4 Conceptual framework

The following section introduces the conceptual framework that was developed for this study. Maxwell considers conceptual frameworks as fundamental in qualitative research design, giving them a broad definition of “the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs” research (2005, p. 33). The conceptual framework for this study evolved throughout the research process; the theoretical scaffolding metamorphosed more than once and it gained its fully-formed shape during the final analysis and writing stages. Before I present the conceptual
framework I start with the definition of the ways some key concepts are used in its development, as well as throughout this thesis.

2.4.1 Definitions of family food, food systems, food and nutrition security

The term of ‘family food’ in this study covers all food items members of a household consume regardless of age, season or the function of the meal. This definition allows for the inclusion of all meals in the exploration of the links between food for children and for all other household members.

In the context of family food, food system is a recurring concept. Food systems include all aspects of the processes and infrastructure that are involved with providing food for a population, such as food production, processing and storage, transport, marketing and consumption, food-related waste management, as well as research and education. Food systems are influenced by the social, political, economic and environmental context they operate in (Ericksen, 2008; Renzaho & Mellor, 2010).

Food systems, household food security and the nutrition security of individuals and families are intimately connected. Until recently the food security literature focussed primarily on caloric intake, assuming that suitable energy intake would amount to an adequate supply of all other nutrients. The Rome Declaration of the 1996 World Food Summit introduced additional measures to food security: “food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food, which meets their dietary needs and food preferences for an active and healthy life” (World Food Summit, 1996). Food is considered in a broad sense, and
includes any substance that people eat and drink to maintain life and growth, including safe and clean water. A FAO document extends the concept of sufficiency to include utilisation: “[f]ood security is achieved, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactorily utilized by all individuals at all times to live a healthy and happy life” (Gross, Schoeneberger, Pfeifer, & Preuss, 2000, p. 4, original spelling).

Although the above definition stresses the significance of nutritious food that meets dietary needs, in more recent professional and development literature the concept of nutrition security was added to the definition of food security. In a holistic approach to food and nutrition security, the latter is defined as: “adequate nutritional status in terms of protein, energy, vitamins, and minerals for all household members at all times” (Weingärtner, 2005, p. 4), emphasising that the combination of the two concepts provides a more complete description of the global aspiration.

Maxwell and Smith argue that household food security is a necessary but not sufficient prerequisite of adequate nutrition; that nutritional status is also affected by “caring capacity, health and environmental conditions, as well ....as past nutritional history” (1992, p. 48). In other words, “availability does not assure access, and enough calories do not assure a healthy and nutritional diet” (Pinstrup-Andersen, 2009, p. 5). While acknowledging that household food security is the foundation of meeting children’s nutrition needs, the focus of this study is the nutrition security of children. I use the term nutrition security as an extension of food security, which encompasses all factors that are necessary for adequate nutritional status.
2.4.2 Adapting the household food security framework

This research is placed at the intersection of household food security, a social, environmental, political and economic concept, and child nutrition, a concept located in the health field. In the development of a conceptual framework I studied some of the existing frameworks for household food security, as well as the ecological models of food and nutrition.

The 1992 USAID framework of food security focused on three interrelated and essential elements of food security: the availability of, access to and utilisation of food (Mathys & Gardner, 2009). More recently a fourth element was added to represent the dimension of time and sustainability. Food availability is related to the “quantities of food from household production, other domestic output, commercial imports or food assistance” (Mathys & Gardner, 2009, p. 1). Food access is associated with the adequacy of resources, “determined by how well people can convert their various financial, political, and other assets into food, whether produced or purchased” (Ericksen, 2008, p. 236). Utilisation is described as the food consumed through food choices, sharing and allocation, as well as its biological use and nutritional benefits. (Ericksen, 2008; Mathys & Gardner, 2009; Renzano & Mellor, 2010).

The fourth mainstay of food security, according to some authors, is stability (Gross et al., 2000): the household’s ability to be food secure over time. The temporal dimension of household food security manifests in “the past (stable) food supply, the current food stores, and the anticipated future supply of food adequate to meet the nutritional needs of all household members” (Gittelsohn, Mookherji, & Pelto, 1998, pp. 212-213).
Renzaho and Mellor (2010) extend the concept of stability beyond meeting needs: incorporating aspects of the DFID sustainable livelihood model (Krantz, 2001), they assert that the fourth pillar of food security is asset creation.

The conceptual framework for household food and nutrition security, represented in a simple diagram in Figure 2, is dynamic: the three dimensions of availability, access and utilisation are represented as a flow of the physical food, and are affected by the fourth, the temporal element.

![Figure 2 Food and Nutrition Security](Source: Weingärtner, 2005, p. 5)

I adapted the household food security framework, a variation of which has been used by several authors (Mathys & Gardner, 2009; Renzaho & Mellor, 2010; Woller et al., 2011) as the conceptual framework for young children’s food and nutrition security. The adapted framework was useful for conceptualising and designing the research, organising the data and directing the findings and conclusions. Because of its dynamic nature it was also appropriate to represent the study’s change-orientation, including the
local people’s critical assessment of their situation and their perceptions of the possibility of positive change. As well, it helped in the way I presented my preliminary findings to the community; in fact, it partially grew out of the need to take back these findings in a way that encouraged the community to assess my conclusions, respond to my recommendations and form some of their own.

What sets the conceptual framework for children’s food and nutrition security apart from the household food security frameworks, is its scale and focus. Figure 3 on page 67 is the diagrammatical representation of the conceptual framework developed for this study. The household food security frameworks treat households as an entity and, while they do not assume that all members of a food secure (or insecure) household equally benefit (or suffer), they do not concern themselves with intra-household differentiation. This study is concerned with young children who, because of their rapid growth, are the most vulnerable members of the household in terms of nutrition. Thus the focus of this framework is the child and not the household, and its scope is the household and not the population of a community or region; in other words it concentrates the inquiry on what is happening in the household concerning young children’s food and nutrition.

It was essential that the breadth of the viewpoints was confined to what was useful to make sense of the data collected at household level. At the same time household level data was juxtaposed with contextual information from key people within the household and from beyond. I acknowledge that this perspective may leave out potential directions for investigation. However, I argue that the benefits gained from the intimacy of scale outweigh some loss of the wide vista and result in insightful conclusions.
Similarly to the household food security frameworks, the three main dimensions of the children’s food and nutrition security framework developed for this study, are availability, access and utilisation. These are the three dimensions of the physical flow of food and nutrients, and within this flow utilisation is limited and affected by what is accessible, while access is limited and affected by what is available. Underlying the three dimensions is a set of determinants and although the focus of the framework essentially remains within the household, it considers the primary factors that impact on the determinants. The characteristics of the resulting outcomes in terms of dietary quality and practices, relevant to each dimension, are clustered around the themes that emerge from the data, and the opportunities identified for positive change complete the framework.

The dimension of time, a central element in the household food security frameworks either represented as stability (Woller et al., 2011) or asset creation (Renzaho & Mellor, 2010), is considered in the children’s food and nutrition framework as well. However, I found it more useful to use the temporal lens in the investigation of each of the three dimensions, and assess the different cyclic and progressive changes to each dimension according to their significance.
Figure 3: Adapted framework for children's food and nutrition security
2.5 Site, population, sample

In this section the grounds for the selection of the particular site and sample frame for the study are explained, followed by a discussion of the sampling techniques used and the main characteristics of the various groups of participants. Data was generated in a typical rural area, where it was likely that information from households as well as other participants yields results that would be, if not wholly generalisable for Ethiopia, useful for professional practice and further research.

2.5.1 Research site and sample frame

Two villages in Humbo Wereda, Wolayta Zone, in the Southern Nations, Nationalities and Peoples Region of Ethiopia, were selected as research sites. The sites and the sample frame represented a typical population for the issues of interest in this study.

As the 2007 census data demonstrates, 83.9% of Ethiopia’s population was rural (Central Statistical Agency [Ethiopia] & ICF International, 2012). Their main livelihood was dependent on rain-fed agriculture and many regions were affected by regular periodic food shortages and high rates of chronic child malnutrition.

Several reasons led me to the exploration of the research questions in a rural area. In households and communities relying predominantly on agriculture, there is a more direct connection between dietary diversity and livelihood. Interrogating this connection is more likely to yield information about those factors that, beyond cash poverty, affect child nutrition, than would urban households where cash income is the main resource supporting access to food. As well, rural areas are less supported
by health and other services, requiring a greater degree of self-reliance of people in terms of health-seeking decisions. A range of data in Table 3 illustrates the difference for access to health care services between urban and rural areas in Ethiopia, compared to the Southern Nations, Nationalities and Peoples Region (SNNPR), the state in which Wolayta Zone is located.

Table 3 Access to health services by location

<table>
<thead>
<tr>
<th>Access to service, %</th>
<th>Urban</th>
<th>Rural</th>
<th>SNNPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met family planning needs</td>
<td>52.5</td>
<td>23.4</td>
<td>25.0</td>
</tr>
<tr>
<td>Women’s access to doctor during pregnancy and birth</td>
<td>21.1</td>
<td>2.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Live birth home delivery in last five years</td>
<td>49.9</td>
<td>95.4</td>
<td>93.5</td>
</tr>
<tr>
<td>No postnatal checkup, including those after 41 days</td>
<td>64.9</td>
<td>95.7</td>
<td>93.2</td>
</tr>
<tr>
<td>Children age 12-23 months received all basic vaccinations</td>
<td>48.1</td>
<td>20.4</td>
<td>24.1</td>
</tr>
<tr>
<td>Children with fever accessed health care facility or provider¹³</td>
<td>37.8</td>
<td>22.4</td>
<td>23.6</td>
</tr>
<tr>
<td>Children with diarrhoea accessed health care facility or provider</td>
<td>53.5</td>
<td>29.2</td>
<td>31.0</td>
</tr>
</tbody>
</table>


The site was also chosen for the presence of ongoing development programmes implemented jointly by World Vision Ethiopia and World Vision Australia. These organisations have expressed strong interest in sharing the results of the study. World Vision Ethiopia had been implementing a nutrition education programme in the area for two years prior to my field work, and the study generated useful information in the assessment of their programme impact, especially the behavioural change communication approach on child feeding practices. In addition, at the study site World Vision Australia and World Vision Ethiopia were implementing a reforestation initiative, financed by the World Bank as an emissions trading project under the Kyoto Protocol’s Clean Development Mechanism scheme, and the some of the study’s findings were relevant for assessing the project’s impact on food

¹³ Excludes pharmacy, drug vendor/store, shop, and traditional healer
security. The research site, and its history and people are described in Chapter 3: The people and the place.

### 2.5.2 Sample size

“[Q]ualitative studies are not designed to be representative in terms of statistical generalizability” (Pope, Ziebland, & Mays, 2000, p. 115). This study employed a small but strategically and meaningfully selected sample (Liamputtong, 2009). The in-depth nature of the study required the development of ongoing and trusting relationships with the participants, therefore the household sample size was originally set to about 20 households. This number increased significantly during field work for more than one reason. Firstly, the Ethiopian Health and Nutrition Research Institute recommended an increased sample size before granting ethics approval, presumably due to their greater familiarity with quantitative research. The second increase happened once field work started: during our first explorative stage we approached a larger number of households than the sample required, expecting negative responses. However, nearly all households agreed to participate, and several additional households sought to take part as the interest the study generated in the village grew.

The recruitment of additional participants followed the criteria of purposive and, later on, theoretical sampling, details of which are discussed below. In addition to households the sample included over 20 non-household participants for individual interviewing, and several people were interviewed more than once. The thorough information and consent process that was carried out prior to the engagement of participants is presented in the Research Ethics section.
Table 4 shows the number of participants and activities during the two field work periods. The discrepancy regarding the total numbers of participants is explained by the different levels of engagement with the data collection activities: not all households participated in all forms of data collection, and in many instances observations and interviews were carried out more than once with the same participant.

Table 4 Participant and data collection activity numbers

<table>
<thead>
<tr>
<th>N of households participated</th>
<th>Main data collection period</th>
<th>Feedback period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Village 1</td>
<td>Village 2</td>
</tr>
<tr>
<td>HH observation</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>interviewing</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>group discussion</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of households in the study</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>N of non-household participants interview</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of times data collection activities occurred</td>
<td>HH observation</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>interviewing</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>group discussion</td>
<td>4</td>
</tr>
</tbody>
</table>

2.5.3 Sample selection

Qualitative inquiry seeks to learn not the distribution of experience or processes but rather insight into their nature and interpretation (Liamputtong, 2009; Nicholls, 2009b), therefore, qualitative studies have their unique strategies for sample selection. The main sampling strategy employed in my study was purposive sampling with criteria. The key criteria were that participants share the experiences and processes my study explored (Creswell & Plano Clark, 2007). The sample

14 There is overlap between the activities and participants, which explains discrepancy regarding the total numbers of participants
included members of village households, local leaders and professionals. Beyond the
criteria, participant selection followed the advice of the group of local advisers.

While the initial sampling was guided by the literature review and research design,
as the field work progressed sampling strategies were extended through theoretical
sampling. Theoretical sampling implied that the selection of new participants was
directed by the patterns emerging from the data, and prompted by the need to
include further perspectives. Gibbs and co-authors consider this “guided sample
selection ... a strength of qualitative sampling ... aimed at steadily intensifying
understanding of the research problem” (2007, p. 542).

Beyond sampling strategies involving households and key informants, data
collection had additional sampling dimensions: temporal and spatial. Seasonal
variations in food availability, as well as the small differences in observable
behaviour as infants and children grew, justified the length of time spent in the field.
Geographic differences between the two villages illuminated some aspects of
economic, environmental and social barriers; for example, climatic variations, road
access, distance to market and forest and access to health services.

The population of the two villages was relatively homogenous in terms of social and
economic indicators: it was, for the most part, a single ethnic group, predominantly
Protestant Christian, with high levels of poverty and low educational attainment.
During field work I documented indicators that described the household’s socio-
ecconomic profile, including asset ownership, size, level of family members’
education, religion, location within the village and social network. I introduce the
characteristics of the site and the participants in Chapter 3.
Household sample for observation and interviewing

The largest sample group was the household participants. For this category I approached families with at least two children under the age of five years, one of whom was between the age of 6 and 24 months at the beginning of the field research, and assumed to be receiving complementary food. Households with more than one young child were expected to yield observational and interview data about factors affecting the feeding of infants and children of different ages, in the context of competing needs. Household participants could choose to take part in one or more activities: observations, individual interviews and group discussions.

Under-fives, and in particular children in transition from breast milk to family food, are considered exceptionally vulnerable in the child health and nutrition literature (Neumann et al., 2004). The WHO (World Health Organization, 2002) recommends that complementary food is introduced to breastfed infants at six months of age. Although new research suggests that the global recommendations of the WHO guidelines fail “to allow for the different problems encountered in the industrialised nations compared with economically developing countries” (Foote & Marriott, 2003, p. 488), the local custom at the research site, which essentially aligned with the WHO guidelines, justified the criteria regarding children’s age in the sample.

Beyond the main criteria of having at least two children of specific age, households were included for maximum diversity: male- and female-headed households, as well as households with and without land or vegetable garden, and from different religion and socio-economic strata.
In each household the main informant was the person directly responsible for caring for the young children. Usually this was their mother, although in two households it was their grandmother. Individual interviews were also conducted with some of the fathers in the participating households. In reality, however, observations and individual interviewing often turned out be quite social, with several household members and neighbours watching our work and occasionally contributing their own perspective. As my aim was to develop the best possible understanding of behaviour and thinking about what and how children are fed, excluding other household members from giving information would have limited the diversity of perspectives. The presence of non-participants during data collection seemed mostly a beneficial factor, putting the participants at ease; however, we tried to make sure that, as much as local customs allowed, it was their choice. In many of the households the various activities of data generation were carried out multiple times.

In the first stage of field work 12 families were included in one of the villages and nine in the other. Through theoretical sampling the number of participating households was extended to 31 and 20 respectively. During feedback and validation process, in my second visit of the research site, no new households were recruited.

Group discussion participants

Group discussion participants were selected on the same principles described above, but many of them were from households that did not take part in observation and individual interviews. This did not only increase the diversity of perspectives but prevented people from becoming disinterested or being subjected to jealousy.
A culturally appropriate way of recruiting participants for group discussions became apparent over the initial weeks of observations. The strategy utilised the already functioning neighbourhood or extended family groups, rather than selecting group participants individually, building “upon the social networks that operate in a natural setting” (Dawson, Manderson, & Tallo, 1993, p. 2). While this required that I give up some control over recruitment, the participants thus invited still met the essential criteria of sharing the experiences and concerns my study inquired about, and the discussion sessions attracted representative and diverse groups.

During the data collection period, six group discussions exploring three main topics took place, with a total number of 28 participants, some of whom attended two discussions. Of the 28, ten people were not from households where I conducted observations or interviews. During the feedback and validation period 56 people formed four groups, each attending two group discussions (a total of eight). Forty-six of the 51 households that participated in the main data collection activities were represented in these discussions.

**Non-household participants**

Non-household participants included elders, agricultural and health extension workers, traditional healers and birth attendants, as well as local small business entrepreneurs, government bureaucrats and NGO project workers including WVE staff. Informants were also recruited from the leadership of each village, including the elected village head and leaders of associations.
The sampling strategy was a mixture of purposive, convenience and snowball sampling, and required the participants’ collaboration and availability in both villages and in the regional centre. A total of 22 individuals participated in individual interviews throughout the main data collecting period, some more than once. During feedback and validation I recruited five additional non-household interviewees.

2.6 Research relationships

Relationships in the research site often embrace several groups of people. In my case this included field and Head Office staff of World Vision Ethiopia (WVE), my research team members, and the various categories of participants. The steps of building relationships were carefully negotiated through cultural, professional and ethical sensitivity (Bonnin, 2010; Liamputtong 2010).

2.6.1 Entry to the field

Entry to the field comprised of presenting my research, its goals and how I planned to conduct data collection, to each group of local stakeholders with the help of language assistants. Initial community introductions to members of the village leadership, including representatives of government and village associations, religious leaders and professionals such as teachers and health care workers, were made by WVE field staff. Their local knowledge and familiarity with people was invaluable; however, I needed to consider this relationship carefully and make sure that I was not identified as a staff member as this would have distorted the field work process.
Qualitative researchers often rely on advice from local reference groups: exchanges between the reference group and researcher enhance the skills and understanding of both the researcher and the group member, regardless of a possibility of “complexities and tensions alongside the undoubted benefits” (Lewis et al., 2008, p. 82).

Beyond cross-cultural sensitivities, I needed to be aware of potential conflicts in ethical positioning in the highly politicised environment of the villages. Throughout my field work, but in particular during the first months, I tapped into the knowledge and wisdom of an informal reference group, formed of two WVE field staff, a women’s representative in the village council, a health extension worker, and members of my research team. In lieu of a formal reference group, this informal group of advisers provided cultural mentoring and guidance on sampling and data collection strategies, and ensured that I was aware of power asymmetries and local politics.

During the first three months I undertook structured language learning. I studied Amharic, the official language of Ethiopia, with up to four two-hour lessons a week and achieved some literacy, and enough use of the language to manage in shops and public transport, as well as basic personal interactions. I developed the capability to understand and speak words and terms, which were frequently used in my work and, occasionally, I was able to correct or refine the work of the language assistants. I also learnt some Wolaitta, the local language, mostly limited to greetings and other expressions used during social interactions, and to words and terms commonly used during interviews and observations.
2.6.2 Field support and facilitators

In order to formalise my relationship with World Vision Ethiopia, a Memorandum of Understanding (MoU) was developed with the help of Dr Sisay Sinamo and the Legal Adviser of the WVE’s Head Office. This was approved and signed by WVE’s National Director and outlined both parties’ contributions, responsibilities and limitations.

World Vision Ethiopia facilitated my field work in many ways. Dr Sisay Sinamo provided mentoring, and professional, practical and cultural advice. The Health and Nutrition Team allowed me to access reports and other documents essential for my study as secondary data. I received support with local transportation and obtaining visas and a SIM card, and was provided with a security briefing. WVE made accommodation and meals available in their compound at the research site and in the same compound they allocated an office for my project for the entire duration of my field work.

Having a dedicated office was very helpful for our team of up to four people. While in the village there was no electricity, access to power in the office during office hours, supplied by a diesel generator, was a great asset. My equipment and notes were stored safely in the office to which I had the only key.

A designated WVE staff member facilitated the recruitment of my Amharic teachers and most of the field team members, including the language and research assistants. He gave advice about our work arrangements, and followed up the team members’ performance. WVE field staff assisted in arranging meetings with wereda officials and in obtaining information relevant to the research. In the compound I was
continuously mentored with regards to local and national customs and events; this informal flow of information was instrumental for my grasp of the context of this inquiry.

2.6.3 Team members

Including members of the studied ethnic group in the research team, with the linguistic and cultural competence adequate for the targeted population, is fundamental for the trustworthiness and validity of data (Tsai et al., 2004). Many authors refer to local team members who fulfil the role of translators and interpreters as ‘bilingual research assistants’ (Squires, 2009). Bonnin uses the term ‘language assistant’ and stresses “the important role of language assistants in the process of fieldwork, [including] logistical and methodological concerns” (2010, p. 180). In this thesis I refer to members of the local research team alternatively as language assistants, research assistants or team members. Our team work was open and accommodating, and our roles were often elastic and rotated or extended to parts that were unforeseeable.

The term ‘interpreter’ would misrepresent the qualifications of my research team members, as well as the wide range of ways they supported and assisted my study. In my field work it was not possible to employ qualified interpreters; indeed it was not possible to find any Wolaitta speaker not already in full employment, who spoke English at the level that was required for helping with my research. This made it necessary to work with two-step interpretation: Wolaitta-Amharic and Amharic-English.
My English-Amharic language assistant worked full time and he was employed for eight months. I also worked with two part-time Amharic-Wolaitta language assistants, each employed for over four months, and two further English-Wolaitta language assistants, who held other full-time jobs and worked with me on a casual basis (see Image 1). It was an essential condition of their participation in my research that they did not give up other already existing responsibilities, including paid work or farm and household duties.

Their work load, employment conditions and per diem was negotiated with the facilitation of WVE staff. They were paid a daily wage according to level of contribution and responsibilities, based on time sheets that recorded activities and time spent. At the end of our work together I prepared a reference letter for each team member, describing the on-job training they received and their responsibilities.

I provided thorough training to each member of the team prior to the start of the data collection activities. This included learning about the project background and general project design, and about the methods and protocols of data collection. Other elements of the training were concepts of research ethics such as confidentiality and consent, interpreting and organising skills, as well as note taking, voice recording and photography. My main language assistant, whose English skills were very good, also helped training the other team members.

All methods of data collection were directed by protocols and guides prepared by the research team. An essential aspect of the preparation of the observation, group discussion and interview guides was to make sure that the terms we used, as much as it was possible in the cross-cultural and cross-language circumstances, were understood to have the same meaning by all of us, including the participants. The
team members’ contribution to the development of these guides was essential in
achieving what Squires refers to as ‘conceptual equivalence’: it is not only of the
literal meaning that is translated “but also how the word relates conceptually in the
context ... a technically and conceptually accurate translated communication of a
concept spoken by the study’s participant” (2009, p. 278).

The research assistants had a wide range of responsibilities. They translated written
material such as project information and consent forms, organised the household
visits, interview and group discussion appointments, and facilitated the project
introduction and consent process. They worked as language interpreters during
various activities and interpreted the voice recordings, took notes, controlled the
voice recorder and took photographs. They played vital roles in the development of a
glossary of local food ingredients and meals, carried out market observations and, as
described earlier, provided general advice on cultural, economic, political and social
matters. Every activity was subject to careful preparations in terms of roles and what
we planned to achieve, as well as to reflexive debriefing afterwards.

2.7 Methods of data generation

Ethnography employs several methods of data generation. Historically, ethnographic
fieldwork has been closely associated with participant observation, but it also utilises
several other qualitative research methods. Some of the most frequently used
methods are in-depth interviews, group interviews, life histories and, more recently,
rapid assessment methods (Liamputtong, 2009; Pelto, 2013). The common features
of these methods are that data collection takes place in the ‘field’, the main data source is the local people, the method are semi-structured, flexible and interactive, and a variety of techniques and tools are utilised to elicit and record information.

The primary data generating methods were utilised during my field work were observation, individual interviewing and group discussions. Guides, checklists and protocols were prepared in collaboration with the field research team for each of these activities (for examples of protocols see Appendix D and for examples of guides see Appendix E). The protocols outlined the roles of the team members, the main steps of approaching the participants, the consent process and the data collection techniques, the ways data were recorded, and the code of behaviour we needed to follow. The guides and checklists informed our data collecting activities with detailed description of the sort of information we were looking for, and were regularly reviewed and updated as the data collection process became more focussed. The group discussion guides and tools were revised based on data from observations and individual interviews. Similarly, individual interview questions were informed by the group discussions as the need for clarification or further reflection emerged, such as testing the behaviour models generated by the group discussions. Each data collecting session was followed by reflective debriefing between the team members.

The following section outlines the rationale behind the decisions about strategies and techniques for data collection and analysis. It explains the reason for choosing each of the methods and how they fit together in a cyclic process.
2.7.1 The stages of data generation

The activities of data collection and preliminary analysis were designed to happen in parallel, as each data generation method provided new information, new questions and more precise focus for the other. Data analysis was part of an iterative process, which included cycles of data collection and analysis, refining the research questions, and modifying the research instruments (Barbour & Barbour, 2003; Marshall & Rossman, 1999).

Generating and analysing data for the study proceeded as a continuum, often a spiralling one, going over the same ground at a different angle, rather than a sequence of stages. However, the process had discrete elements and some of these followed each other in a specific succession. These steps included negotiating entry, training the research assistants, village walks with opportunities for chance conversations and informal introductions, the community information and consent process, the recruitment of household and non-households participants and the relevant household information and consent process, and finally the data generation activities. During a second visit to the field group discussions and additional interviews served as credibility checks and feedback.

2.7.2 Observation

Participant observation is one of the most important data-generating techniques upon which ethnographers rely (Liamputtong, 2009). Observation facilitates comparisons between stated and actual actions, and helps form inferences which interview data solely could not support (Endacott, 2005; Maxwell, 2005). Although the term ‘participant observation’ suggests that the researcher becomes part of the study participants’ world, in reality most ethnographers live alongside the group they
observe “learning about the code of the social actors” and interacting with the group members, yet do not live exactly how they do (Liamputtong, 2009, p. 156). ‘Being there’, as Pelto (2013) comments, facilitates formal and informal opportunities for data collection, observing activities and cultural behaviours.

According to Adler and Adler (in Dwyer & Buckle, 2009), three ‘membership roles’ exist for qualitative researchers engaged in observational methods; the main difference between these roles is in the level of engagement with the core activities of the group of interest. My role was that of the “peripheral member researcher”: I did not take part in the participants’ lives, share their values and goals, or become “fully affiliated” in the participant groups during the course of the research (Dwyer & Buckle, 2009, p. 55).

For this study the main objective of observations was to help understand the dimensions that contribute to child nutrition. These included the diversity and quantity of foodstuff available and accessible for families to include in their meals, behavioural factors around child feeding such as attention and direction, and the methods of food preparation that contribute to the accessibility of nutrients in the meals. Recording what was happening was not merely for the sake of description, but to assist in focussing the inquiry and supplying information for the interview and group discussion guides.

Observation protocols and checklists were prepared for each observation scenario. The protocols defined each team member’s role, and prescribed the sequence of the activity, for example, information – consent – household questions. Checklists for household observations assisted in recording items such as household and main informant identity, other people present, description of the environment and the
equipment used, recording the type of activity and length of time. Checklists were also prepared for market and farm work observations. The protocols and checklists were prepared, piloted and regularly reviewed with the help of the research assistants.

Most of the observations took place in household compounds during the preparation and consumption of routine household meals, as well as meals on special occasions, covering formal main meals and snacks at different times of the day. Market places were visited in the Zonal capital Soddo, in the shire centre T’abela, and in one of the villages; the other village included in my study did not hold markets. These observations allowed the charting of changes in food availability, as well as in prices, by season and customer base. A series of observations took place in compound gardens and farmlands to complement the interview data regarding food growing systems and seasons.

Observations were carried out by a team of three: two language assistants and I (see Image 2 and 3). The field team needed to learn together how to make and record observations that were consistent, comparable and rigorous. With growing experience in observation we were increasingly able to reduce the impact of seeing through the filters of our own cultural and personal assumptions. As some of the lengthiest observations took place in kitchens, customarily the exclusive domain of women, the male language assistant was subject to much good-natured teasing. However, being the son of a cook, he was not unfamiliar with kitchen work and environment, and contributed to the field notes his own valuable observations.

Household observations yielded detailed accounts of the ingredients and preparation methods of food items and meals, as well as the ways meals are shared and
consumed in the households. The field notes contain descriptions of the material environment in which the preparation and consumption of food took place, such as the houses, kitchens and furnishings, kitchen utensils and their use, as well as the explanations provided by the participants about these subjects. The path of the meals from the kitchen to the table, the customs of seating and meal sharing, and the rituals before and after eating were also recorded. Beyond my field notes, further notes were generated by my English-speaking language assistant, and an extensive archive of photographs recorded much detail of the local food customs. The cycles of farming work and the seasonality of food items were documented through market, farm and garden observations, and were recorded in field notes and photographs. A limitation to my data was that, for safety concerns, the only observations of the evening meals I carried out were outside the sample, with personal acquaintances.

2.7.3 Individual interviews

“Interviews in social research are seen as ‘special conversations’” (Liamputtong, 2009, p. 42). They are universal strategies of qualitative research, especially when the focus of the study is the understanding of lived experience (Nicholls, 2009b), and they are conducted using a spectrum of question techniques from standardised questions to informal conversations (Patton, 1990). For the development of suitable and effective research instruments for interviewing it is vital to differentiate between the research questions and interview questions. While the former are about what the researcher wants to understand, the latter are the questions that are asked in order to achieve the understanding: the “development of good interview questions ... requires creativity and insight, rather than a mechanical conversion of the research question” (Maxwell, 2005, p. 92).
We needed to develop a ‘shared language’ for precise communication before interviewing commenced. This ‘language’ was a set of definitions that described the concepts and phenomena that were used, or emerged, in the course of the development of the interview guides and during data generation. They not only made a precise translation between English and Wolaitta more likely, but also allowed us to use terminology most suited to the given context and cultural sensitivities.

From the wide range of techniques for individual interviewing the most appropriate ones for this study were semi-structured guided interviews and unstructured narratives. I did not use pre-designed research instruments such as questionnaires, as they have limited utility in the context of inductive learning (Morse & Richards, 2002). For a period during household visits a few survey-type questions were asked that formed a semi-formal food recall; this is discussed below.

In my field work I primarily used a general interview guide approach, working with a list of topics and wording the questions in each instance to suit the respondents and the context (Patton, 1990). This approach allowed for probing and clarifying questions as well. The ongoing adjustment of questions, however, was often difficult for the language assistants to grapple with, and subtle differences in the use of words were not translated precisely. In response to this the interview guides became more detailed and a certain number of standardised questions were included. This combination of strategies was necessary for the sake of language assistants, and for ascertaining the best possible accuracy of interviewing.

Interviews provide more than words: the development of interviewing protocols that ensure the recording of non-verbal data is as critical as the questions or interview
guides. In her paper about the interpersonal dynamics of interviewing, Ewing (2006) cautions about the potential limitations of understanding between interviewee and researcher if the interaction records the spoken words only. Analysing the text that is thus produced by the interviewing process, researchers often lose key aspects of the negotiation of meaning and identity. Beyond prescribing the information and consent procedure preceding the interviews, interviewing protocols and checklists directed the team members’ attention to the circumstances of the process, such as the time and place the interview took place, as well as other people present and their verbal and non-verbal contributions.

Different interview guides were prepared for the different types of participants: mothers, fathers, elders, professionals and village leaders. The interview guides were informed by other data generating activities and were pilot tested through translation and back-translation. As the field work progressed the guides were reviewed and amended regularly to accommodate new inquiries prompted by theories emerging from the data, or when data saturation was achieved in some topics.

The interviews fulfilled more than one purpose: they elicited people’s perspectives on a set of topics, and they were used to seek explanations for what was observed. The topics included the norms, ideals and practices of breastfeeding, weaning and feeding of young children; how resources, in particular food, were directed towards children, and the motivating factors and decision-making processes surrounding resource allocation; the parents’ knowledge about links between food and illness; and the elements that contributed to the household’s food and nutrition security. Detailed inquiry targeted food customs, household food security, farm and off-farm livelihoods, family power-dynamics, perceptions of health and child well-being, as well as the historic dimensions of these subjects. The interviews also inquired into
perceptions and attitudes about the necessity and possibility of change regarding the nutrition of children.

A small number of unstructured interviews were conducted with grandparents, as well as traditional birth attendants and healers to record their reflections on social norms, customs and practices relating to the local food system and the nutritional security of young children, from a historic and professional perspective. Non-household participant interviews were conducted with a variety of office bearers and professionals living and working in the villages. These interviews were semi-structured and covered topics appropriate to the position of the participant. The main purpose of these interviews was to map social and economic relationships and to collect data helpful to describe the context of village lives.

The interviews took place at an agreed time and in a location chosen by the participant. One or two language assistants, depending on the participants’ preferred language, assisted in the conduct of the interviews. At the end of each topic within the interview, a summary of what was recorded in my notes was read back to the participants to minimise the risk of misrepresentation. Field notes and, when the interviewees consented, voice recorders were used to document the interviews, including many non-verbal elements.

2.7.4 Group discussions

Focus group discussions, originally used in market research, are now essential methods in health and social science research. In qualitative research their primary function is to elicit and document the participants’ perspective on a particular issue, and to give voice to their perceptions, beliefs and interpretations (Barbour, 2005;
Bender & Ewbank, 1994). Data generated by group discussions is different from those yielded by group interviews: rather than answering the researcher’s or moderator’s questions, group participants interact with each other as they explore a topic, and argue their point of view in a discussion that does not pressure them “into making decisions or reaching a consensus” (Liamputtong, 2009, p. 66). Group discussion data, however, needs to be treated with caution: as Pelto (2013) points out, it may reflect behavioural intentions and not necessarily actions.

Dawson and co-authors (1993) consider focus group discussions invaluable for exploring health issues and testing new ideas. An indispensable outcome of the group discussions was the refining of the correct terminology relating to health, family food and feeding children so not only we all talked about the same thing but did it safely and with respect (Pelto & Pelto, 1997). During the primary data collection period, group discussions yielded exploratory data which was further explored in individual interviews. As well, they were vehicles to elicit responses to the conclusions and recommendations that I presented to the participants in the feedback phase of my field work.

The topics of the discussions tested health beliefs and health-seeking behaviour, as well as perceptions of household food security and livelihoods. Children’s health and illness, and how these linked to food, was discussed, and participants debated over the nutritional value and particular importance of food items known and used locally, and the frequency they should be available for young children. Groups also examined household strategies for food security risk management and the need and opportunities for livelihood diversity.
Group discussions were organised along the customary coffee gatherings. At an agreed time a household participant invited and hosted her extended family members, friends and neighbours in her home. I provided all necessities: coffee beans, the customary snacks, sugar, salt and firewood, and the host prepared the coffee and food after the discussion finished – a sequence that was devised by the group.

Of the data generating methods, group discussions required the most thorough preparation. The research team developed detailed protocols and guides, and practice sessions were held prior to each group session to ensure the team members’ understanding of their roles and the use of tools. Group discussion tools included free listing and hypothetical scenarios about health and illness, market choices and income generation, as well as two sets of cards, used for pile sorting, prepared by the field research team. One of the sets listed 45 food items families used, or aspired to use, in meals. The other set of cards described 33 livelihood activities other than farming, but had potential in the villages.

The dynamics of group sessions in a cross-language environment required four research workers (Dawson et al., 1993): the main facilitator, the language moderator, the translator and the observer. The key roles were the main facilitator, the language moderator (a Wolaitta speaker), the translator (a Wolaitta-English speaker, who could make herself available for the group discussions only) and the observer. Research assistants were trained to moderator, translator and observer tasks, and I alternated between the observer and main facilitator roles (see Image 4, 5 and 6).

Each group session was recorded in two sets of field notes, by the main facilitator and the observer, as well as with two voice recorders. Summary of the discussion for
the participants, and a debriefing session for the research team followed each group discussion. In addition, translation and transcription of the recorded discussions of each group session was completed as a priority after each session.

### 2.7.5 Dietary assessment methods

The links between the adequacy of nutrition and dietary diversity, and between dietary diversity and household food security are well researched (Khor, 2008; Tontisirin et al., 2002). Furthermore, some authors suggest that dietary diversity is an indicator of household food security (Ruel, 2003; Smith, 2006).

As referred to earlier, during the individual household interviews and observations several food recall and food frequency questions were asked. These covered the meals the families and children consumed on the day of, and during the day prior to, the data collection activity, as well as main food items consumed during the preceding seven days. The dietary assessment methods recorded household food consumption in the period of two-three months after the maize harvest, after some of the major holidays but before household stocks were depleted. The purpose of these questions was to gain understanding of household food diversity and variety during times of no food shortage or unusual abundance.

Another set of questions focussed on market purchases throughout the week prior to the interviews. These questions explored household decision-making and the prioritising of cash expenses, as well as assisted with triangulating the food recalls.
2.7.6 Secondary data

Qualitative research often utilises documents. In written cultures written documents are often the depositories of “who we are and what we do as a people” (Nicholls, 2009b, p. 643) although written documents, with the exception of historical research, are rarely used as the sole source of data in qualitative research; they instead supply complementary information (Endacott, 2005). Nicholls argues that documents, for the purpose of qualitative research, can be any form that conveys meaning, including texts, artwork, or objects that carry cultural significance.

For this study statistical and descriptive information was collected and used to establish some of the contextual characteristics of the research site and population. These included demographic and health data, relevant government and NGO policies and reports, local maps, agricultural production statistics and calendars, and local history information, both oral and written. Descriptions of recipes for various meals, as well as of the methods, equipment and utensils used in agricultural production and domestic food preparation also formed a body of data that assisted in contextualising the main topic of the research.

Many of the documents obtained and utilised as secondary data were publicly accessible such as the Ethiopian Demographic and Health Surveys and several UN and NGO reports. A number of other documents were available only due to my personal connection to the organisations or individuals who had command over them. These latter included programme and project planning and implementation documents, as well as reports of some of the development programmes operating in the research site, including the Gates Foundation’s Alive and Thrive initiative about infant and young child feeding practices, the Ethiopian National Nutrition Program
and National Nutrition Strategy and detailed information about microfinance institutions.

2.7.7 Verification and feedback

A second phase of field work took place one year after the data collection period ended. The main objectives of this field visit were to give and receive feedback on the key preliminary findings of the study. A series of group discussions, presentations and interviews gave me the opportunity to verify my results and conclusions, and to receive supplementary information that allowed additional triangulation of the data. These discussions also made it possible for the participants to engage with further steps of the study, beyond providing data.

For the feedback group discussions our team invited all household participants, and prepared a series of posters using Wolaitta-language text, photographs and drawings (see Images 7, 8, 9 and 10). These posters represented the study’s findings and recommendations using the structure of the conceptual framework. To be able to review the large number of key issues, each of the four groups met twice. Every topic was discussed with each of the groups for the verification and completeness of findings, and they were asked to contemplate some recommendations for further action. A hard copy of the posters in a booklet form was handed out after the discussions to each household.

A similar feedback process took place in the two villages to present my results to the village leaders, although these meetings drew less deliberation than those with the household participants. In addition, I gave presentations to World Vision Ethiopia leadership and programme staff and to researchers at the Ethiopian Health and
Nutrition Research Institute. These opportunities to collect comments from households, officials and professionals generated questions for further consideration in the final analytical steps of my study. Presenting the study’s preliminary findings to the community also fulfilled the requirements of research ethics, as well as my agreement with World Vision Ethiopia.

### 2.8 Data analysis

Primary data included audio recordings, photographs, field notes, reflective memos and drawings. Secondary data consisted mainly of statistics, reports and maps. I took the vast majority of the field notes and photographs, but the research assistants also wrote field notes and photographed during observations and group discussions. The language interpretation and transcription of interview and group discussion data was carried out as soon after the event as was possible, and textual and non-written forms of data, significant for the research, were examined and organised for safe storage in an ongoing process in the field.

Data generation and analysis strategies formed an ongoing cyclic process, which proceeded throughout my field work. It was an integral part of field work to read through and explore and compare the fresh and older data and the iterative process included cycles of data collection and analysis, reviewing the data collection guides and checklists, and modifying details of the research design. Development of coding and categories, along with searching for relationships and links for contextualising started in the field, and it informed theoretical sampling and further data collection,
as well as decisions about when the required density of data or data saturation had been achieved.

For the analysis of data I used a combination of thematic analysis, with categories and themes emerging from the data, and contextualising analysis, looking for associations and patterns (Maxwell, 2005). This approach ensured continuous interaction between the collected data and the analytical process, keeping analysis focused and flexible at the same time. The resulting data-driven process, as Goulding (2005) suggested, prove helpful in the search for explanations for the existence of connections and patterns, and ultimately in formulating theories.

Qualitative data analysis ‘is essentially about detection’ write Ritchie and Spencer, and the tasks that facilitate detection are ‘defining, categorizing, theorizing, explaining, exploring and mapping’ (2002, p. 309, original spelling). During the analytical process I used some *emic* coding categories, based on the conceptual structure of local understandings, as well as some *etic* categories that were supported by the outsider interpretations which I attached to concepts and experiences. I used concept mapping, quasi-statistics and matrices to assist in making strong themes and associations visible, and developed theories for explanation.

Qualitative research benefits from what Becker refers to as ‘quasi statistics’ (in Maxwell, 2010). Framing research in numbers is often seen as evidence of valid and generalisable research, and this is particularly true in health-related studies where the paradigm of positivist quantitative research has strong footing. Data on the distribution of a phenomenon within the study setting contributes to the internal generalisability of the study (Maxwell, 2010). Maxwell suggests that using numbers, while making the nature and size of the sample, and the logic of the selection
evident, makes descriptive terms, frequently used in qualitative research, such as ‘typical’, ‘many’, ‘few’, ‘most’, ‘sometimes’, or ‘usual’, more explicit. As well, ‘quasi statistics’ enable the researcher to “identify and correctly characterize the diversity of actions, perceptions or beliefs” (Maxwell, 2010, p. 478). Exploring diversity is critical to offset our general bias toward seeking and recognising patterns of uniformity and regularity and the “assumption that similarities are theoretically more significant than differences” (Maxwell, 2010, p. 479).

This research examines attitudes, perceptions and opportunities in family food for children’s nutrition security in the context of a particular group of people. Therefore following a specific line of analysis to identify associations between circumstances, experience, behaviour and motivations was one of the main paths of ‘detection’. The categories and themes that emerged from the simple codes were consolidated into themes corresponding to the dimensions of young children’s food and nutrition security. These analytical processes were instrumental in the refining study’s conceptual framework while keeping a strong focus on the research question (Ritchie & Spencer, 2002).

In order to avoid ‘context stripping’, codes and the context they developed from remained connected by the use of a cross-referencing system (J. A. Maxwell, 1996), which linked participants with each discrete data collection event and its circumstances. Considering negative cases, which according to Nicholls’ (2009b) is an essential tool in the development of refined and nuanced theories, proved very useful.
2.9 Trustworthiness and transferability

Trustworthiness and transferability in qualitative research have been long-argued subjects of the social science discourse. Internal validity, or credibility, is a measure of whether the study achieved its stated objectives, whereas external validity looks at the applicability of the findings in contexts outside the study (Malterud, 2001).

While various checklists and standards have been developed for internal validity (Maxwell, 2005; Pope et al., 2000; Tracy, 2010; Whittemore, Chase, & Mandle, 2001), it is evident that “uncritical adoption of a range of ‘technical fixes’ (such as purposive sampling, grounded theory, multiple coding, triangulation, and respondent validation) does not, in itself, confer rigour” (Barbour, 2001, p. 1115).

As well, the transferability of qualitative studies is argued by authors representing a wide range of views. One position states that the multiple perspectives qualitative research represents cannot be judged by conventional criteria such as validity, generalisability or reliability (Pope et al., 2000). Other viewpoints claim that in spite of different perspectives an underlying reality exists, and qualitative research “attempt[s] to represent that reality rather than to attain ‘the truth’", therefore qualitative studies should be expected to meet criteria such as relevance and generalisability (Pope et al., 2000, p. 51).

The following section describes how I ensured trustworthiness and credibility throughout the research process, and discusses the transferability of the results.
2.9.1 Credibility

Tracy (2010, p. 842) defines credibility as the “trustworthiness, verisimilitude and plausibility of the research findings”. This definition of credibility does not call for the existence of a single, objective truth independent from the observer (Carpenter and Suto cited in Liamputtong, 2009). However, it does require the testing of the accounts, produced by research, against a set of “common markers of goodness” (Tracy, 2010, p. 839). Immersion and prolonged field work, the triangulation of data sources, and rich and thick descriptions assist in ensuring that the data is reliable and complete (Liamputtong, 2009; Pelto, 2013; Tracy, 2010). Credibility is supported by the researcher’s reflexivity and tested through informant feedback, although several authors warn about the potential for confusing responses with the latter, for ensuring the credibility of interpretation (Barbour & Barbour, 2003; Liamputtong, 2009; Tracy, 2010). Onwuegbuzie and Leech (2007) point out that as the stages of qualitative research are iterative, credibility is created (or threatened) at each of these iterative steps and cycles.

To ensure the rigour of the study I considered the impact of sampling bias. As participation was strictly voluntary, sampling was possibly biased to people who were already concerned about, and keen on improving child nutrition outcomes. Reactivity, the influence of a researcher’s presence in the village and interest in the issue of child nutrition, on routine behaviour and usual levels of awareness, could not be disregarded; nor could be self-reporting bias. Working in a cultural and language environment vastly different from my own also posed a potential threat to the quality of data and its interpretation. My values and beliefs, the culture I identify with, my gender and even my physical limitations impacted on the quality of the data and the processes of its generation. The application of “reflexivity in relation to
the rhetoric used in the production of texts” (Bevan & Joireman, 1997, section 5.4), and separating data from pre-conceived notions of, for example, poverty and power, assisted in assuring that findings and conclusions were anchored in data.

My long-term and repeated engagement with the households allowed more complete data, and the development and testing of some hypotheses. It also resulted in rich data, reducing the danger of receiving a narrow range of information leading to mistaken conclusions, or supporting prior assumptions. Generating data from a diverse range of sources using several methods allowed triangulation and a “better assessment of the generality of explanations” developed from the data (Maxwell, 2005, p. 112). I followed up negative cases and discrepancies in the data, and used quasi-statistics to check the prevalence of the issues I investigated.

I tested the credibility of my account through an informant feedback process, both during data collection and after reaching preliminary conclusions. During the interviewing and observation process, as well as after each group discussion, I summarised the information that was recorded for the participants to comment on and add to. Most importantly, after completing data analysis and developing preliminary results I returned to the study site to elicit feedback on my findings and conclusions. The key findings of the study were presented to members of the local community for verification in terms of their validity and completeness. Feedback from World Vision Ethiopia staff and health professionals was also part of the validation process. The verification and feedback process is described in the section on generating data.

Facilitation of interviews and discussions by language assistants introduced a degree of indirectness between the generated data and me, with potential negative effects on
its accuracy and completeness. Translation and back-translation practices improved the accuracy of language interpretation. There were also instances of the assistants imposing filters of interpretations, possibly wielding some “control over the flow of information and production of knowledge” (Bonnin, 2010, p. 184). Although this was largely resolved through my growing understanding of my environment, as well as my developing language skills, Esposito’s warning was apt:

> Without current fluency in participant language, [researchers] must depend on the qualifications, integrity, and skill of their instrument, the interpreter—a human being who is also dynamic and changing. Because of potential threats to validity, the qualitative researcher who plans to use an interpreter must do so with care (Esposito, 2001, p. 570).

### 2.9.2 Relevance, transferability and applicability

“Research can be relevant when it either adds to knowledge or increases the confidence with which existing knowledge is regarded” (Pope et al., 2000, p. 52). Transferability and applicability are the extent to which research findings and conclusions can be applied beyond the setting in which they were generated.

Explicit definitions of transferability and applicability academic literature often disagree, or the two concepts are used interchangeably (Wang, Moss, & Hiller, 2006). Malterud defines transferability as the “range and limitations for application of the study findings, beyond the context in which the study was done” (2001, p. 484), adding that data and its sources are of key importance in defining how a study’s conclusions can be applied outside its setting. Extending the findings and conclusions of research from the sample to a larger population does not necessarily
require statistical representativeness; in qualitative research the aim is to create
theory that has situational applicability and is applicable beyond the immediate
sample group “to all similar situations, questions, and problems” (Morse, 1999, p. 5).

The transferability of the findings and conclusions of this study derived from the
sample frame which was typical to many populations in Ethiopia and, to a degree, in
Sub-Saharan Africa. The data and data sources, as well as the sampling strategies of
my research imparted a degree of transferability to my study, extending its
applicability to populations who share the characteristics of the setting. As well, I
argue for the situational applicability of the conceptual framework for investigating
the food and nutrition security of young children, developed for this study, which
may reach beyond geographical or demographic boundaries.

Nevertheless, my findings are not wholly transferable, as they pertain to a particular
food culture and food system, and while the given food culture and food system
frame fundamental features of my research subject, any geographical, historic,
socio-cultural and political differences can result in considerable enough shifts to
render the results only partially relevant in other settings.

2.10 Research ethics

The National Statement on Ethical Conduct in Human Research (Australian
Government National Health and Medical Research Council, 2007) stipulates the
values and principles of ethical conduct in research. This research meets the National Statement’s guidelines for qualitative research.

Research ethics approval was obtained for this study from the Human Research Ethics Committee (HREC) of Menzies School of Health Research, as well as the HREC of Charles Darwin University. The relevant authority in Ethiopia for the assessment of health-related research ethics, the Scientific and Ethical Review Committee of the Ethiopian Health and Nutrition Research Institute (EHNRI), an arm of the Ethiopian Ministry of Health, also reviewed and approved the study (for copies of the approvals see Appendix B).

While the Australian processes for assessment of study proposals against the accepted standards of ethical research are well established (Australian Government National Health and Medical Research Council, 2007), this is not the case in many developing countries, where the protocols are weak or non-existent (Benatar, 2002; Molyneux & Geissler, 2008). Although there were delays in the approval process of my study, I did not have the impression of significant deficiencies in terms of “uniformity in the structure and function ... and ...public accountability”, which, as Benatar asserts, characterises the work of ethics committees in a large part of the developing world (2002, p. 1138).

At the end of the field work I asked for a debriefing opportunity with the Committee at EHNRI. I gave a detailed account of my field activities, including the recruitment, training and employment arrangements of local team members, the facilitation role of World Vision Ethiopia, the recruitment and consent process of participants, my data collection methods, and my plans for processing the results as well as reporting
back to the community. The Committee welcomed the details, as it contributed to their process of establishing research assessment protocols.

Ongoing engagement with local cultural mentors and my in-country supervisor assisted in the application of the values and principles of research ethics, in particular respect for local beliefs, religions and cultural sensitivity, as well as in understanding of, and respect for the social structure of the community.

My study did not involve any procedures that could have caused physical or health-related harm to the participants. I discussed with my local mentors the best ways to ensure that social or economic hardships as a result of participation, including hard-to-manage amounts of extra demands on time and energy, were avoided.

Consent

Detailed information was provided to the community at several levels: to regional and community leaders, health and education professionals, and to the participants. The information was translated from English to Amharic, the official language of the country, as well as to Wolaitta, and at all levels there was opportunity to clarify points of the research goals and methods, and of the implications of participation (for copies of the participant information and consent forms see Appendix C).

Participation was voluntary, and informed consent was recorded by witnessed consent forms. The research team explained the rationale and the background of the study, including current and possible future interests, as well as the potential benefits to the household and community. Before giving consent participants learnt how the results of the study would be disseminated, who would have access to the information they provided and how confidentiality and privacy would be protected.
They were given information about all options of participation; it was made clear that they could withdraw any time, and what their choices were regarding the data already provided should they withdraw.

Confidentiality

The identity of the participants was unlikely to be kept confidential in a small village setting, however, their views and accounts were not disclosed. Confidentiality agreements were made with all members of the research team and within the participant groups, not to reveal information and views given within the context of the data collection process.

Participants were given code identity and their actions, accounts and views recorded as data are unidentifiable to others than those present during the data collection activity. Notes, voice recordings and all other generated records were stored in a locked cupboard either in the field office, or at my residence while in the field, and in my office after my return to Australia. Computer files were accessible with password only.

The ethical dimensions of relationships

I was aware of the possibility that my relationships with the participants and research team members could develop in unpredictable ways. Being in a community for an extended period of time, it was necessary to make it clear when I acted in the role of the researcher, and when as a private person. Still, the risk of boundaries becoming somewhat blurry, a common experience of anthropologists and development workers (Guillemin & Gillam, 2004), was there, and had to be considered through careful negotiation and respect.
Working towards a delicate equilibrium of reciprocity, needing assistance but not creating dependencies, being respected but not distant, making friends and yet not creating jealousies, and withholding judgements required an almost vigilant attentiveness to people’s relationships with each other, as well as with me. There were frequent references made to my relative wealth and perceived ability to assist people. It was difficult to remain consistently firm about the conditions of participation during the data collection period, which involved no incentives. At the end, after consulting my field team and Ethiopian supervisor, as well as WVE staff who facilitated much of my field work, I chose to express my gratitude to the participants by farewell gifts to each, and helped out a couple of non-participating families who were in deep crisis.

Another example of managing research relationships related to sharing food. My field team and I were observing people preparing and eating family meals. How to be an observer without being a guest and changing the routines and dynamics of meals with my presence? The negotiations around hospitality, the inevitable sharing of food with the household members, caused some disagreement between me and the team members. My emphasis was on avoiding putting strain on household resources, and at the same time did not want to distort the data by contributing to the household budget, whereas the local team members responded appropriately to local customs and accepted the invitations.

One of my main concerns was the participants’ sustained interest and trust in my study. This was particularly important because I was not there on the invitation of the community, and the idea of the inquiry was mine. For creating collaborative relationships it was essential that the participants understood and embraced the objectives of the research and recognised that the issues it explored were common
concerns for themselves. The following quote is from the exit interview I conducted with one of the research assistants, suggesting that I achieved this goal:

People understood about this project very well from the information ... they ask me about you all the time: when is she coming again – they are really happy; if they did not get good information they would not agree happily to participate – they would want money or say no; but they are very happy to participate and give us all the answers (ALRA).

2.11 Limitations of the study

This thesis aims to establish what was available and accessible for nourishment for young children in the households, in the given economic, climatic and cultural context, and raise issues regarding utilisation. This study did not measure the amounts of food intake for either families or children, and did not aspire to assess children’s nutritional status through collecting anthropometric data. The food recalls were thorough and provided good descriptive data, but it would be inappropriate to draw food diversity scores based upon them, due the sample size and the collection methods. However, the description of the variety of food items available to make meals every day maps some of the barriers, as well as opportunities, for improvement.

I referred to the limitations of the study’s applicability and transferability above. There were several other factors that limited the outcome of the research, and among the most considerable of these factors was language. Although I had some command
of the local languages, I did not fully understand what was spoken around me and fully relied on interpretation for data collection. No qualified interpreters or translators were available to work with me, and it is likely that some nuance and accuracy of meaning was lost. The two-step interpretation of Wolaitta – Amharic – English exacerbated this issue.

It is usual for ethnographic research to take place in a culture that is alien to the researcher. Still, it is necessary to reflect on my cultural illiteracy, which somewhat diminished but did not disappear during or since field work. My fundamental unfamiliarity with the culture and the context, not understanding what people do and why: the history, the pressures, or the experience of their lives, limited my questions to those I could think of, based on preformed explanations and theories deriving from literature and from familiarity with similar settings elsewhere, or my own history and life experience.

Working within the constraints of a PhD research limited the resources available for field work, and the access to peers and colleagues. More ample resources could possibly have ensured better language interpretation; however, I do not think other aspects of the study would have changed. And although working alone is not uncommon for PhD candidates, it does limit the proliferation of ideas, interpretations and reflections, and the candidate needs to rely on supervisory relationships and friends for intellectual sustenance.
2.12 Chapter summary

This chapter introduced the philosophical orientation and theoretical foundations of this study, and presented the conceptual framework. The research design was discussed, including sampling decisions, methods of data generation and analysis, and the steps taken to ensure credibility and transferability. I described the work of the research team and the ethical considerations of the study design and implementation, concluding with the limitations of the study. In the following chapters of Part Two the findings of the research are presented.
PART TWO: FINDINGS
CHAPTER 3

CONTEXT: THE PEOPLE AND THE PLACE
This chapter opens Part Two of the thesis, which presents the study’s findings in a series of chapters. Preceding the detailed description of aspects of food culture, child feeding practices and some of the important factors affecting these, an introduction to the place and people is necessary. The aim of this chapter is therefore to build a contextual background for the findings of the thesis. I consider this chapter as part of the study’s ethnographic findings.

The chapter begins with an overview of the climate and topography of the study site. This is followed by a brief discussion of the history of the people, describing the main political, economic and physical characteristics of the place, supported by written sources and oral history collected during my field work. It is customary to describe the history of the places studied. For this study, the relevance of history of the Wolayta is that it provides a perspective in which to embed the agenda of future change. Wolayta history describes the movements, growth and socio-economic changes in the population, and the foundations of ethnic identity, of culture and religion, and of the region’s economy. These contexts have great importance in explaining why people are where they are, and define the opportunities and choices they may have. Food is embedded in culture and identity, and any change agenda needs to consider the depth of this anchor.

The later part of this chapter adjusts the focus of observation from people and region to village and then to household scale, to present the settlements’ history and characteristics and describe the households that participated in the study. I use a combination of sources to construct this picture, including literature, records and key informant data.
3.1 Climate and topography

As discussed earlier, participants for the research were recruited from two Wolayta villages. These villages were located in Humbo **Wereda**\(^{15}\), in Wolayta Administrative Zone, in the SNNPRS. Humbo is approximately 400 kilometres south of Addis Ababa, and about 180 kilometres southwest of Hawassa, the capital city for SNNPRS (see maps in Appendix A).

Humbo is located in the Great Rift Valley, extending from Jordan to Mozambique and stretching diagonally across Ethiopia. At approximately 6 degrees north of the Equator and at altitudes ranging between 1300 and 2400 metres above sea level, the area of the **Wereda** lies across two traditionally defined climatic, or agro-ecological, zones: midland (**Weynada**ga) and lowland (**Kola**). The **Kola** area is relatively flat and extends to the shore of Lake Abaya; the **Weynada**ga rises to rolling hills and plateaus.

The climate of the region is affected by its topography and the large scale patterns of the Tropical Convergence Zone (ITCZ), which define the rain and wind conditions. The total annual rainfall varies between 700 and 1200 millimetres and is concentrated in two periods of rain: **Kremt** or **Meher** rains start in May or June and end in October, and **Belg** rains occur from February to March or April (Disaster Area Assessment and Preparedness Planning Program, 1981; World Vision Australia & World Vision Ethiopia, 2010, p. 18). Erosion and regular flood events, sometimes locally severe, characterise much of the area. The annual rainfall in the **Kola** climatic zone is at the lower end of the scale, and the average annual temperature range is 20-

\(^{15}\) A **Wereda** is an administrative unit of local government, roughly the equivalent of a shire
27.5°C. The Weynadega receives higher rainfall and has a lower average temperature range of 17.5-20°C (Tadesse Deressa, Ringler, & Hassan, 2010).

The study site has two growing seasons, with a total of about 200 days average (Food and Agriculture Organization, n.d.), each with its distinct range of crops. The Belg - the short rains - is the season when the main staple food of the villages, maize, is produced. Other important Belg season crops are haricot beans, sweet potato and some of the cash crops such as chilli, cabbage and tomatoes. During the Meher, the long rainy season, farmers grow a second crop of sweet potatoes and haricot beans, as well as other legumes such as kidney beans, cow peas and chick peas. Cotton, various yams and taro are also Meher crops. More detail about field and horticultural crops is included in Chapters 4 and 5.

However, the traditional seasonal cropping calendar has to be regarded with caution: the farmers’ experience of the last decades showed that rains could not be relied on, neither in their timeliness nor their distribution, and extreme weather events – drought, excessive rains and excessive temperature – happened more and more frequently (T15, personal communication, 26 July 2011).

3.2 Oral and written history of the Wolayta

Wolayta are an Omotic people living in the southwest of Ethiopia. With approximately 2,000,000 people speaking Wolaitta, Wolayta represented 2.3% of the population in 2012 (Central Statistical Agency [Ethiopia], 2012). In spite of their
relatively small population and the distance of their land from the centre of state and power in its various manifestations throughout Ethiopia’s history, Wolayta had greatly influenced the nation’s art, culture, history and political life.

3.2.1 Medieval history of the Wolayta people

There is some disagreement in the literature about the early history of the Wolayta state. According to Abbink (2010) the Wolayta Kingdom, an early state in the Omotic-speaking southern area of what now is Ethiopia, was established in the 13th Century and existed until 1894 when it was integrated into the Ethiopian Empire. Abbink speculates that control over an important local natural resource, iron ore, and its processing into weapons, tools and iron bars functioning as money, was the likely basis for the emergence of a hereditary kingship in a region that was “presumably an assembly society with local chiefs and sacrificers” (2010, p. 1092). Conversely, Pankhurst (1997) mentions Wälamo, or Wolayta, as a tributary territory to the Ethiopian Empire, paying levy to the Emperor in horses, as early as the Medieval period (890-1454 AD).

Abbink describes the kingdom of the Wolayta as a small but flourishing independent state with a tradition of sacral kingship. The “divine element of the kingship…[the] supernaturally legitimized authority, powerful personal spirit” (Abbink, 2010, p. 1093) was a central aspect of the royal tradition. Although they conquered neighbouring territories, several Wolayta kings were revered not so much for their victories in battle but for their wisdom and beneficence as rulers (Abbink, 2010).

16 A historic phrase considered derogatory and unacceptable for present use.
During the time of Imam Ahmed ibn Ibrahim al-Ghazi’s occupation of much of Abyssinia\textsuperscript{17} and its tributary provinces, including Sidamo, Bale, Hadiya and Kambata in the South, the attempt to conquer the Wolayta territory failed. The Wolayta Kingdom remained independent until the invasion of Emperor Menilik II in 1894, when it was annexed into the Empire (Habisso, n.d.; Marcus, 2002; Pankhurst, 1997).

There may be inconsistencies in the written history of the Wolayta Kingdom, but the region’s long-standing significance is undisputed. The system of local and regional markets, connecting many of the groups, had been established as long as two thousand years ago. Economic connections, religious contacts, political alliances and migration patterns between the inner areas and the borderlands created links between ethnically and culturally very different people, and these links were the foundation of the nation of Ethiopia (Levine, 2000; Pankhurst, 1997).

The borderlands of the South-West played an important role in the wealth of the Ethiopian Empire, supplying gold, ivory, skins, spices and civet\textsuperscript{18}. Nevertheless, slaves were the most valuable exports of this area; they served in the Ethiopian palaces and the armies, as well as being traded to Sudan or Yemen (Levine, 2000; Pankhurst, 1997).

\textsuperscript{17} Rather than Ethiopia, authors often use the name Abyssinia, to convey a more accurate phrase for a historic concept than a nation, which occupied an area that included most of what is now Eritrea, Tigray and Begemdir, as well as parts of Gojam, Shāwa and Welo (Habisso, n.d.).

\textsuperscript{18} Small animal whose glandular secretion is used in the making of the scent called musk.
Wolayta Awraja\textsuperscript{19}, which roughly covered the former area of the Wolayta Kingdom, was ruled through a succession of governors, the last of whom was Wolde Semayat Gabrawald, overseeing its administration between 1962 and 1974, and “still remembered with nostalgia by the older generation as a man deeply devoted to developing the area” (Abbink, 2010, p. 1079). Wolde Semayat’s reputation as a visionary and firm leader was repeatedly confirmed by the interviews I conducted in the area:

As my father told me, Wolde Semayat showed [the people] himself how to dig, plough the field and he punished lazy people and drinkers. He encouraged people to work hard. He also introduced growing cotton, maize and berbere. Moringa\textsuperscript{20} was also introduced by Wolde Semayat. During that time Wolde Semayat was called the ‘Father of Wolayta People’. (M26)

During the imperial years the region was a predominantly agricultural area with high social inequality and no industry other than traditional crafts, and no commerce beyond small markets. By the late 1970s the main crops in Humbo Wereda\textsuperscript{21} were maize, haricot beans, sweet potatoes, enset, t’ef and, to a lesser degree, barley, wheat, cotton and coffee. The area became afflicted by not only regular widespread crop failure but large scale loss of livestock as well, due to anthrax\textsuperscript{22}, Rinderpest\textsuperscript{23}

\textsuperscript{19} Awraja means subregion or province, a term used during the times of imperial rule.

\textsuperscript{20} Moringa stenopetala, a tree with edible leaves, native to Ethiopia but cultivated in the study area.

\textsuperscript{21} Wereda (Amh) is a municipal unit, the approximate equivalent of a shire.

\textsuperscript{22} Anthrax is an acute bacterial disease, affecting humans and animals alike. Most forms of the disease are lethal. (Source: http://en.wikipedia.org/wiki/Anthrax, accessed 10 February 2014)

\textsuperscript{23} Rinderpest, also known as cattle plague, is a fatal viral disease affecting most hoofed animals, now largely eradicated. Originating in Asia, it spread through Africa following European colonisation. (Source: http://en.wikipedia.org/wiki/Rinderpest, accessed 29 June 2013)
and *Trypanosomiasis*\textsuperscript{24} (Disaster Area Assessment and Preparedness Planning Program, 1981).

### 3.2.2 Contemporary Wolayta history

Enormous changes took place in the history of Ethiopia since 1894, when the Wolayta people were first incorporated into the Empire. In 1974 a group of military leaders, constituting themselves as the Coordinating Committee of the Armed Forces, in short *Derg*\textsuperscript{25}, seized power and abolished the monarchy (Marcus, 2002). Much has been written about the often bloody history of the next 17 years and the establishment of a socialist one-party state, headed by Mengistu Haile Mariam. Finally in 1991, after many months of armed fighting, the Ethiopian Peoples’ Revolutionary Democratic Front (EPRDF) forced the Mengistu government out of power. The EPRDF, which gained “unique importance as a largely peasant movement [whose] fighters comprised countrymen from every ethnic and linguistic group in Ethiopia” (Marcus, 2002, p. 216), under the leadership of Meles Zenawi, formed a new government and transformed the social and economic development of the country.

Since 1991, the Ethiopian government has been conducting a “political experiment using ethnolinguistic identity as a politically relevant basis for politics and administration” (Abbink, 2006, p. 4). Equal in importance to democratisation, a fundamental political aim of the Ethiopian government is the “realization of

\textsuperscript{24}*Trypanosomiasis*, or sleeping sickness, is a potentially fatal disease caused by a parasite. Its vector is the tsetse fly and it affects mammals, including humans and livestock. (Source: http://en.wikipedia.org/wiki/African_trypansomiasis, accessed 10 February 2014)

\textsuperscript{25}*Derg* means council or committee; the term used for the socialist regime that followed the imperial era, similar to ‘Soviet’
‘nationality’ rights, meaning ethnic group rights” (Abbink, 1998, p. 62). Political power based on ethnicity is actualised through the operation of all aspects of citizenship, which itself is defined by means of ethnic identity. For voting, as well as residential and marriage registration, every citizen has to be a member of an ethnic group. Political party formation, the boundaries of electoral districts, and eligibility criteria for electoral candidacy and for employment in local and regional government, are also based on ethnicity.

Abbink (1998) describes the Southern Nations, Nationalities and Peoples Regional State (SNNPRS) at the end of the 20th Century as a politically and economically marginal state, seen within Ethiopia as culturally diverse and at the same time ‘backward’. Wolayta Zone is in many ways similar to the other areas of the SNNPRS, however, its political clout is likely to have become stronger in more recent years, with a Wolayta man as Deputy Prime Minister of the Federal Government, and since 2012, as Prime Minister.

Since their integration into Ethiopia, Wolayta aspired to have their own administrative region and to be acknowledged as a “political unit on the Ethiopian map” (Abbink, 2006, p. 4). This was finally achieved in 2000, when the Wolayta Zone became an administrative unit of the Southern Nations, Nationalities and Peoples’ Region, one of the nine regional states of Ethiopia, and local zonal administrators were appointed.

Wolayta Soddo, the capital of Wolayta Zone, was established in 1885 by northern settlers and administrators to provide a seat for the imperial government. Soddo became a relatively thriving centre of craft and commerce and by the 1960s it was
more developed than most southern Ethiopian towns, even compared to Hawassa, which since became a significant urban centre and the capital of the SNNPRS. Due to government neglect, Soddo started to decline in the mid-1970s, after the demise of the Empire (Abbink, 2010).

Wolayta Zone at the time my study took place was considered a region characterised by “a very weak and vulnerable agrarian economy, no industries, little growth, and high population pressure” (Abbink, 2010, p. 1090). Very few livelihood alternatives existed to animal-traction based smallholder agriculture and small-scale trade. Population density in some areas reached up to 750 people per km² with an annual population growth of approximately 3-3.5% (Abbink, 2010).

3.2.3 Population growth

For decades the Wolayta region has been one of the most densely populated areas in Ethiopia, with an average of 250 people per km² in 1980 (Disaster Area Assessment and Preparedness Planning Program, 1981) and around 380 in 2006 (Tessema, 2008). Humbo Wereda had relatively lower density at around 170, but even this was two and a half times the national population density of 68 in the same year (Tessema, 2008).

As can be seen from Table 5, there has been a rapid population growth in Wolayta Zone, equating to an approximately 25% increase in population density in just eight years. The magnitude of this change explains the pressure that moved people two generations ago to settle the once forested areas of the study site.
Table 5 The growth of the Wolayta population between 1998 and 2006

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<tbody>
<tr>
<td>Total population</td>
<td>1,363,555</td>
<td>1,439,269</td>
<td>1,628,789</td>
<td>1,722,279</td>
<td>79 (26%)</td>
</tr>
<tr>
<td>Density</td>
<td>301</td>
<td>317</td>
<td>359</td>
<td>380</td>
<td></td>
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</tbody>
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(Adapted from: Tessema, 2008)

3.2.4 Wolayta identity

The historic significance of the over hundred patrilineal clans, which Wolayta society was composed of, diminished (Abbink, 2010); however some fundamental divisions persist, as was referred to many times during my field work. While I was not aware of anyone belonging to a royal or noble clan, a distinction was made, in descending order of rank, between free farmers, artisan craftsmen such as potters, hide workers, blacksmiths and weavers and, finally, former slaves.

The contemporary Wolayta population is an amalgam of peoples incorporating neighbouring groups from different ethnic backgrounds: Hadiya, Arsi, Borodda, Kuca and Dawro. Nevertheless, in the course of history a strong sense of Wolayta identity and culture emerged. This identity, “as expressed in language, political status, cultural traditions, memories of clan and family lines, and social hierarchy did not disappear” with the region’s integration into the Empire (Abbink, 2006, p. 3). Wolayta identity was fiercely defended in 1999-2000, when the federal government’s plans for replacing Wolaitta in schools with another language were defeated (Abbink, 2010).

Further than the desire to realise identity and unity through political means, Wolayta identity has many cultural expressions and these reach beyond the boundaries of
Wolayta Zone. Wolayta music and Wolayta traditional dance forms, distinguished from other Ethiopian ethnic groups by the throbbing rhythm and whirling athletic performances, are not only present in the local festivities but are performed on stages throughout Ethiopia. Elements of Wolayta music feature in the work of internationally famous Ethiopian musicians, and Wolayta dancers, in traditional costumes or contemporary outfits, are represented in a multitude of Ethiopian music videos. The Wolayta colours of red, yellow and black were displayed on walls, on signage and clothing, and on printed materials such as pamphlets or posters everywhere in the Zone.

Holidays and ceremonies were opportunities to demonstrate religious and social bonds. Several of the most important holidays were tied to the annual calendar of the Ethiopian Orthodox Church, and these were observed in the predominantly Protestant Wolayta households: New Year and *Mesk’el* (the Finding of the True Cross) in September, Christmas and T’imkat (Epiphany) in January, and Easter in the spring. Ceremonies that marked major life events were circumcision, weddings and funerals. Holidays and ceremonies were comparatively lavishly celebrated, with festive meals and, on some occasions and when it could be afforded, new clothes for the whole family. Wolayta cuisine, in particular dishes prepared for festivities, was an integral part of the culture, and some items of it were well known in other parts of Ethiopia. As the cost of celebrations represented considerable portions of household resources, they are discussed in more detail in Chapter 4. Food culture and the high cuisine of the Wolayta people are described in Chapters 5 and 6.
3.2.5 Religion in historic context

Levine claims that most ethnic groups that live in the area of contemporary Ethiopia "believe in a single supreme deity… associated with the sky and is conceived as masculine…[and] generally speaking the ‘pagan’ as well as the Semitic religions in Ethiopia are monotheistic” (2000, p. 47). The Wolayta were one of those Omotic ethnic groups that believed in Tosa the sky-god, who people pleaded with for rain. They also believed in elemental spirits, such as the spirit of the Omo River, and venerated trees and animals, with a particular reverence for snakes (Levine, 2000). My interview data showed that these beliefs were remembered, and some still persisted in the villages:

There is a big cultural change. Because at that time [when people settled here] there was no Christianity, no Church in the village, people had traditional belief. I remember my grandmother also followed traditional belief. Snake was not killed by the people. They did not know about God. They slaughtered animals as gift for evil spirits. When we compare that time with this moment, it was darkest era.
(M26)

In the previous period there were customs like [for example] after the mother give birth, for about 15 days, she should take a knife in her hands in the morning, when she wants to go outside the home. Even now you can see this custom sometime... Because the older people advise that it protects from the mich\textsuperscript{26}….they say: as the mother is with blood, mich hits her. (ALRA)

Although proselytising by the Ethiopian Orthodox Church already started by the late 13\textsuperscript{th} early 14\textsuperscript{th} Century in the region, Wolayta held onto their animistic beliefs

\textsuperscript{26}Mich (Wol) is a malevolent spirit
(Pankhurst, 1997) until the 17th century, when Ethiopian Orthodox Christianity, “the first denomination of a world religion” (Abbink, 2010, p. 1091) to reach here, established a foothold in the Wolayta area. Catholicism was introduced by European missionaries in the early 20th Century, followed by the Pentecostal Protestant denomination of Evangelical Christianity in the 1920s. Evangelical Christianity, locally referred to as Protestant faith, became the predominant faith among the Wolayta and, as one of the legacies of the Evangelical missionaries, Wolaitta became a written language (Abbink, 2010).

Abbink (2010) refers to a degree of religious antagonism resulting from the growth of the Protestant Church. I observed a degree of exclusion and judgement directed towards non-Christians, as well as the ban on certain traditions such as non-religious music and dance, which were, ironically, regularly performed in theatres and dance events throughout the country as valued representations of Wolayta culture.

3.2.6 The history of the settlement of the area

Very little written information is to be found about the history of settlement of the research site. The description of the contemporary history of the villages below mainly relies on data collected during my field work.
There had been dense forest, described as ‘jungle’ in the area that I saw covered in fields, roads, compounds, houses and other buildings, until about two generations ago:

This area was too forestry, full of wild animal—no road, only forest. (F38)

Wolayta people started to migrate here mostly from the highlands in the late 1950s, many from the north: Hobicha, Bongota, Wanchi, Damota, and Delbo (see Image 11). They came in search of land, probably urged by growing population density. Some interviewees said they came here to find grazing land, others came to find cropping fields:

I came here because of my livestock, because there was space for the cattle. No people here. (Z15)

At that time my father’s land was narrow, and the number of my brothers seven. (F38)

[They came because] they did not have enough field in their area – to find big field for themselves. (Z16)

Another ethnic group, the Sidama from the South, also made a claim to this area, and settled here for a while, mostly in what now is Longena-Zegre, but later were pushed out by the Wolayta. Although all the people who live here now speak Wolaitta, some names and marriage connections show evidence of this historic link:
Where the [World Vision compound] is now there was another ethnic group:

Sidama and Gudji [Oromo] were settled there, otherwise no-one else. (F38)

Wolayta settled here. In Kolshobo and Gaffata the Sidama people, then Wolayta pushed them out, back to Sidama, to Lake Abaya. (Z15)

The Wolayta had been practicing mixed farming: growing crops and raising livestock, predominantly in a subsistence farming model. The forest was gradually cleared and replaced by crop land. First the growing number of families, then the expanding families required more and more fields. The farmers’ wealth diminished as the fields were divided between the many sons of each father. Livestock numbers decreased because of disease, and the grazing areas shrivelled:

There is a big difference. Previously we let the cattle or livestock graze in the field – the field was very big then. As gradually the fields became smaller we started to tie them with a rope, and [keep them] around the compound, around the village.

(Z16)

Oral history holds that people lost their herds to disease since they came to this area, mostly to *Genedi*\(^{27}\) and other diseases. The local concept of wealth seemed to be strongly associated with the ownership of large livestock, in particular oxen, and many interviewees expressed grief over the diminishing number of animals:

With regards to livestock: we had many, no one took cows or oxen inside because there were too many. Then the disease *Genedi* killed cattle. There used to be mules and horses – not now. Goats and sheep were in great numbers, also killed by disease, same disease *Genedi* – it makes them skinny and cough, then die. (Z15)

\(^{27}\) *Genedi* ((Wol) refers to Trypanosomiasis)
Not only the livestock, the people were suffering as well: the lowlands were malarial areas, which was the main reason they were not settled earlier. According to anecdotal information, due to the threat of malaria some families returned to the highlands, abandoning their new farms.

**Land tenure**

When people settled this area the land was owned by a handful of so called *balāabat*, or landowners. Many of them came from the north of Ethiopia and were from other ethnic groups: Tigrean and Amhara. There were also southerners among the landlords, with Wolayta, Sidama and Gurage ethnicity:

[the landlords were:] Kaba Allaro was from Soddo – Otona, they were Wolayta people; there was also a Tigrean: *Balambara* Kapo. Another landlord was called Gutche. All Longena area was occupied by 5 landlords. One was from Amhara: Azaze was his name. Another, Shambal Sime, was also from Amhara. Many northern people became landlords. …Those people were very rich people. So they asked the king Haile Selassie to give them the land and in return they offered paying taxes. (Z15)

The written history of land tenure concurs with the recollection of the old people at the research site. Land in the Wolayta area was redistributed after the Ethiopian conquest of the South, in the late 19th and early 20th century, by the Emperor’s officials. Uncultivated land was taken over and was divided between the state in land tenure called *mengist*, and the Ethiopian Orthodox Church and its hierarchy in the form of tenure called *samon*. The Emperor also granted land to members of the aristocracy.

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28 Aristocratic title in the Empire
northern nobility and to loyal local landlords, to be held in fealty (Kebede, 2002; Tenaw, Islam, & Parvaiainen, 2009). Local farmers accessed the land as tenants of these landlords (Crewett, Bogale, & Korf, 2008). Unlike in the north of Ethiopia, where under a long tradition of use rights – the rist tenure system - land could not be privately owned or alienated, private land ownership became the most common form of land tenure in the South, as a result of the imperial expansion (Tessema, 2008).

Once they arrived from the highlands, the farmers used land in the area through a feudal-type land tenure arrangement: they cleared the forest, cultivated the land and part of what they harvested, or its sales value, was handed over to the landowner. They also tended to the herds of the landlord alongside their own animals, but they did not pay fees in livestock.

I started to serve [the landlord] so he gave me the use of some of his land. He shared the maize and the product of livestock that I produced with my own work. We gave service for the cattle: the landlord gave us his livestock and we looked after it with our own; but he did not take our animals. (Z15)

About 15 years after the forest clearing work started, the Emperor was dethroned, and the entire social paradigm shifted. The Marxist-Leninist government of Mengistu Haile Mariam announced a sweeping land reform, which the interviewees remembered with much delight:

But I was lucky because after I lived here for one year the Derg regime came. The Derg declared that the land belongs to the man who works on it. So I did not share what I produced in the field with the landlord. As that declaration was announced the landlords left …and went to their own birthplace. (Z15)
Living and farming environment

During the time of settlement, at first people lived in the forest or in the fields in improvised shelters, and many maintained a house in the village where they came from, where their family – wives and children – continued to live. Those were difficult and dangerous times of hard work and harsh conditions:

We were living in the forest in this area, living together as a group, about 70 of us. In the daytime we were cutting the forest in different areas, then came together to spend the night together. (F38)

Previously the land was owned by the landlords and they were offending us, they could insult us or give us warning, threaten or give us orders, they served only their own interest. But now we are ploughing our own field, so we are the owners of our field; this is part of the improvement. (Z16)

Gradually, the families followed the men and the living conditions improved. The new place gave farmers opportunities that they could not have had in the areas from which they came, and people longingly recalled the abundance of those years:

Here it was very fertile – we got good yield, filled up the gothara29… We had 7 milking cows, 5 oxen, other animals – we could become rich then! …There used to be high rainfall, 3 times a day… There was grass for livestock in the forest, as much as they wanted. (F38)

In 1972 the people were wealthy. They measured their harvest by bullet. When a farmer wanted to know whether he had good yield or not, he shot onto the stored

29 Gothara (Wol) is the traditional grain silo
Maize. If the bullet passed through it he said: I did not produce much. But if the bullet couldn’t pass through he said: I have got enough yield. (M26)

Mainly ongoing population pressure, but other factors as well, led to increasing environmental degradation. Some authors hold the change of land tenure system responsible for the loss of forest cover, arguing that private land owned by the landlords was protected, and that the nationalisation of land under the Derg and the current regime brought about the loss of sense of ownership (Kebede, 2006). This viewpoint, however, disagreed with the descriptions of my interviewees who recalled that forest clearing for crop production, encouraged by the landlords, was deliberate. They also expressed a strong sense of land ownership as a result of tenure changes during the Derg.

3.2.7 The main points about the region’s history

It was relatively recently that the Wolayta people were integrated into ‘modernity’: they became part of a large country with international standing, were introduced into a world religion, Christianity, and their language, Wolaitta, became a written language. Since their incorporation into Ethiopia in 1894 the Wolayta witnessed, participated in and survived the changes of three vastly different political regimes. Throughout these tremendous changes Wolayta people maintained strong identity and a fierce sense of autonomy.

The Wolayta Zone, in the southwest of Ethiopia, was characterised by predominantly agricultural economy and very high population density in a rural settlement pattern. Population pressure in the highlands forced people to extend farming land through forest clearing in the lowlands. Subsequent changes in land tenure, which offered
relative livelihood security to the farmers, led to the establishment of settlements in areas that were uninhabited before, partially due to the threat of malaria.

3.3 The villages

The total population of Humbo Wereda, which was divided into 30 k’ebele administrations, was approximately 130,000 in 2011 (Humbo Wereda Administrator, personal communication, 17 January 2012). Records of the population of the two villages that were included in the study were based on the number of households rather than people. According to the health post register, Wolqá had 861 households, and Issíppe had 634 (A1H, personal communication, 16 December 2011 and A2H, personal communication, 8 February 2012). Applying the average household size of 6.5, established for the lowland and midland areas of Wolayta Zone by The Food Economy Group (2011), the estimated number of people living in the villages would be 5,600 and 4,120 respectively.

3.3.1 The different history of the two villages: Wolqá and Issippe

People started to move to the two areas in the same decade, but old people recall the process of the founding of the settlements quite differently. The imperial government supported the settlement of the area of Wolqá in the 1960s and 70s:

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30 Municipal unit, approximately equivalent of a large village

31 The names of the villages were changed to protect the participants’ privacy. Wolqá means power and issippe means together in Wolaitta.
I heard information that there was land here distributed for free by the government. … First we heard about it: government announced it from car loudspeaker – government will give land, come to Abela. (F38)

The activities of the governor assigned to the area were focussed on the area of Wolqá, most likely because this place was relatively close to the main road that connected the area to the Wereda seat, T’abela, the Zonal capital Soddo and the major city of Arba Minch’ to the south. Also its proximity to Lake Abaya promised an ongoing water supply. Significant infrastructure was built during this time including roads, an office compound and schools, and new farming and industrial technologies were introduced.

Soon after the area was settled, the Evangelical Protestant and Catholic missions were established, constructing compounds and churches, before their withdrawal in the 1980s and 90s. During the 1984 famine, large warehouses were built and the village became a centre for distributing food aid. Since that time World Vision International and World Vision Ethiopia have been involved in providing a wide range of aid and development programmes. In 1998 the Wereda became one of World Vision Ethiopia’s Area Development Programme (ADP) areas and since then World Vision Ethiopia’s permanent staff have been utilising the aid compound in Wolqá for work and residential purposes (M14, personal communication, 17 January 2012).

The geographical location, the fast and supported settlement process, and the ongoing presence of the missions, followed by a large international NGO, generated

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32 Abela (Wol) means hot area, and it is the name people use for a large area in which several villages were located
social, economic and physical infrastructure development in Wolqá. By the time of my field work, markets attracted customers from the region three times per week, and there were several small shops and restaurants. As well, a grain mill was operated by the Catholic Church two or three times a week.

The area of Issíppe was settled more gradually:

It was not [organised] by the government. People came one by one and negotiated with those landlords and ploughed the field for share. (B18)

Before I came to this place I had children at Hobicha. But after I have got a field in this place I brought my children to this area. When they grew up they also built their own houses here. The others also did the same thing. So the number of the people became increased. The people who were my neighbours at Hobicha also came and settled here. And their children also built their own houses and occupied the land. (Z15)

This location was significantly farther from the main road than Wolqá, and at the time of my field work there were no roads passable for vehicles directly from this village to T’abela, only via a long roundabout route through Wolqá. The alternative was a two-hour walk across a rugged hilly terrain. Issíppe did not receive much government attention and support until the Derg when the Peasant Associations were set up and agricultural income tax began to be collected:

The Derg... government started to allocate the land... during the allocation I got additional field. But immediately the government started to charge tax payment. (Z15)
More recently, in 2007 Issippe became part of the site of the first large-scale forestry Clean Development Mechanism project in Africa to be registered with the United Nations Framework Convention on Climate Change. This historic project – popularly called the ‘Carbon Project’ - was implemented in collaboration by World Vision Ethiopia and World Vision Australia and it brought positive environmental, economic and social changes (The World Bank, n.d.). The cooperative management structure of the forest regeneration project strengthened the sense of community in the village. More tangible benefits included flood mitigation and improved farm yields, as well as commercial infrastructure paid for by the carbon credits (Szava, 2013).

Issippe was part of a large k’ebele until very recently. Due its growth, in 2011 – during the time of my field work - it became separately incorporated:

This k’ebele is new and just separated from [village name] We start from zero …This k’ebele separated because of the number of population. The government and also the people wanted to separate, to work more directly with each other. It is also easier with administration. (M21)

Commercial development was negligible in Issippe. There were no markets in this k’ebele and people had to visit neighbouring village markets or the large weekly one at T’abela. There were no shops or restaurants, except for a little teahouse and a few minute outlets in the houses of enterprising women, who traded small items a few hours a week.

Children had attended primary school in the village from which Issippe had split. The administration offices, health post and grain mill that used to service Issippe
residents was also there. While it was apparent that Issíppe people welcomed the separation, it also brought about many days of labour contribution to the construction of an office compound and a primary school.

3.3.2 Governance

What I refer to as villages in local terminology are Peasant Associations, or k’ebelés. The system of k’ebelés was established during the Derg “to organise … peasants so that they could run their own affairs, solve their own problems and directly participate in political, economic and social activities” (Ayele, 2011, p. 139). The actual role of this institution had changed from development and service delivery to being the apparatus through which the central government exerted power.

At the time of my study k’ebelés were the lowest administrative units of the local government system. Their size and boundaries were determined by population, usually between 500 and 1000 households. According to the constitution of the SNNPRS, the regional state, k’ebele administrations had a mandate to provide social services and economic development for their population. Each k’ebele had three branches of government: an elected council, an appointed administrative or executive body, and a social court. This structure was repeated at wereda, zone and state level. While the authority and functions of the zone and state governments were quite clearly outlined in the federal and state constitution, the division of powers and responsibilities of the wereda and k’ebele level governments were not well defined (Ayele, 2008).

In a study of the constitutional and legal structure of government in Ethiopia, Ayele (2011) maintains that weredas are authorised to collect land use and agricultural
income tax at rates determined by the regional state, adding that although the weredas are “expected to transfer the proceeds from these taxes to the regional government, … in practice they retain the proceeds for themselves” (p. 146). This revenue, however, covers less than one third of the wereda’s budget, and the unconditional block grants they receive from the regional government are sufficient only to pay salaries and do not cover even a small portion of the responsibilities the weredas are supposed to discharge. As a result, local residents are required to contribute in labour, in cash or in kind to building schools, roads, or health posts (Ayele, 2011).

My observations supported Ayele’s claims: during my field work local farmers worked on a new wereda office building, and they were under pressure to contribute cash – part of their Safety Net income entitlement – as well as building materials and animals to be slaughtered for the feast to celebrate the opening of the new facility. Traffic police collected cash contributions from taxi drivers on the highway (and issued receipts), and the school teachers were also approached for donation.

K’ebele level institutions - k’ebele administration and neighbourhood group leaders - played a key role in mobilising the community for development work. While this work was declared to be voluntary, the political pressure left people very little choice even when the timing of the required contribution was detrimental to their farm work schedule.

3.3.3 Community infrastructure and services

In each village considerable infrastructure has been established by a variety of agencies, including the current and previous government, NGOs and religious
institutions, with sizeable in-kind contribution of the residents. Some of the infrastructure of the two places differed quite significantly, but there were two essential services that the villages equally shared. One was a water pipeline that carried water from a capped spring to several strategically located public standpipes; the other was a power line under construction during my stay in the villages, which held the promise of electricity within five years.

**Roads and transport**

Wolqá was connected to the paved road to Soddo by a rough but virtually all-weather road. This made transport relatively easy and not prohibitively expensive. On the days of the weekly Soddo and T’abela markets buses were running between Wolqá and the towns. Small motorcycles between the village and the main road, together with motor rickshaws along the paved road to and in the towns, represented a more flexible form of daily public transport. Freight was mainly carried by donkeys and donkey carts, and often young boys were hired to take big loads either on their shoulders or head, or on home-made wheel barrows. The biggest motorised vehicle owned by any of the local farmers was a 175cc motorcycle.

As mentioned earlier, Issíppe was more isolated in terms of road access. The buses for the town markets only served a nearby village, at least approximately an hour walk away. Many of the dirt roads connecting Issíppe to other settlements became impassable for vehicles, even for motorcycles, in the rainy season (see Image 12).
K’ebele administration

Each village had a compound with a set of offices and other rooms where the different government functions were carried out. The k’ebele administrator’s office frequently doubled as meeting room for the council or court. In both villages the Health Extension Workers had an office in the administration compound, although Wolqá had a separate large health post as well. An office for the Agricultural Extension Programme, another for administering the government’s microfinance initiative, a couple of small store rooms for tools, and a prison cell were also accommodated in the compounds, as well as large courtyard areas for village meetings. These buildings, like most others in the villages, were built with a local version of wattle and daub - thin poles interwoven with branches covered with a mix of mud, grass and manure - and had earth floors and window openings covered with solid timber shutters (see Image 13). However, the offices, unlike many houses, had corrugated iron roofs.

There were regular office hours for all government services. The courtyards were often crowded with meetings about government policy or improved farming practices or for the distribution of Safety Net entitlements. The office compounds were also used during the local elections. While there was no police presence in either village, several local citizens, armed with rifles, patrolled the community as volunteer guards.
Health and agricultural extension

Wolqá’s considerable health post was built with assistance from World Vision International. It was made of concrete blocks and had several treatment rooms and a small pharmacy, but had no running water in any of the treatment rooms and no electricity or generator. A full-time qualified nurse and two or three health workers attended to people’s needs, treating accidents and illnesses. The health post operated under the Ethiopian Government’s Health Extension Programme, however, according to interview data, patients were charged for the use of services. Issíppe did not have a dedicated health post, and people had to travel to a nearby village for treatment. There was an ambulance in T’abela, which served the entire area of 130,000 people, and the nearest doctor was in Soddo.

Agricultural Extension Programmes operated nurseries in both villages. Beyond producing seedlings for the farmers and offering training workshops in improved agricultural practices, the nurseries also offered employment opportunities. World Vision Ethiopia assisted with the construction of a small veterinary clinic in Wolqá, and a visiting veterinary doctor attended the needs of livestock once a week. There was no veterinary post in Issíppe. Water and soil conservation projects were part of the Agricultural Extension Programme in both villages, where farmland suffered from the loss of top soil due to torrential rains and floods. Issíppe farmers also benefitted from flood and erosion control measures that were implemented as part of the forest regeneration and carbon trading project. More details of these services and programmes, and how people related to them, are presented in Chapter 4.

Fees were charged for registering as a patient on the day of visit, for lab test and for certain drugs. Information regarding the amounts was inconsistent, and according to WVE information treatment at the health post should attract no charge.
**Education and religion**

Wolqá’s secondary school for year nine and ten students serviced a wide area. The school was large and had several classrooms and a library. There were around 400 students and class numbers were very high, between 60 and 90 depending on the subject (TT, personal communications, 16 September 2011). The school had received a large flat screen television, a satellite dish to access broadcast educational programmes, and a generator to run the equipment for a few hours a day; however, there was no budget for fuel. Computer skills were not taught and no electronic equipment was used for teaching purposes. Four to six students shared copies of text books as they could not afford their own. Disability access was ensured by social rather than technical means: children carried disabled classmates to school.

A large primary school was built at the edge of the village; originally it was part of the facilities of the Catholic mission. At the time of my field work it was a state school, with over 1000 students enrolled in years one to eight. Both schools had older, even adult students in a range of classes, learning basic literacy and numeracy skills or studying at higher levels aiming for high school certificate. The primary school buildings, as well as the secondary school, were assembled of different structures and each had a large sporting field.

Issippe, as referred to earlier, was in the process of establishing their own school, at first for the youngest students so they did not have to walk far. The school building, with mud walls, earth floor and iron roof, was built by the local farmers. It had no furniture, so along with their exercise books students carried little stools to sit on.
Both villages had several churches and smaller assembly houses. Most of these belonged to two Churches of the Evangelical Protestant denomination. There was a small Catholic community in each village, and Wolqá had a handful of people of the Ethiopian Orthodox faith. Local and visiting preachers provided Sunday services and attended to the pastoral care of people. The church groups reached many areas of people’s lives. Literacy classes were organised for preschool children and adults, and religious education was offered. Many of the saving associations were organised around church communities, and assistance was available within these groups in time of crisis or during such large-scale events as wedding and funeral feasts.

**Commerce**

While most k’ebel administration workers were locals, health professionals and in particular teachers who were assigned to work in the villages came from other parts of the country, some not even speaking the local language. In Wolqá they found accommodation in the government owned buildings of the office compound and the few privately lent rooms. Wolqá also had several boarding houses for secondary school students who came from other villages. Issíppe, however, lacked these facilities and that made recruiting teachers and other professionals for their growing needs difficult.

The grain mill in Wolqá has already been mentioned. An ancillary business of the mill was to charge mobile phone batteries for a small fee using its generator. As the bigger churches also had generators for amplifying the Sunday service, some people had access to those facilities to charge mobile phone batteries.
While I was conducting my field work two community facilities were under construction in Issíppe. Both were investments of the carbon revenue received by the Carbon Project cooperative, but they were intended to benefit the entire village. One of these, a grain warehouse, was to operate as a grain bank with the potential of smoothing the fluctuating price of staple foods and so assisting farmers during the hard months. The other facility was a grain mill, which, for the women and children of the village, would save many hours of walking and waiting.

There were two large open areas in the more urban part of Wolqá. One of these was the market square which held three markets every week, each time starting towards the end of the afternoon and finishing just after sunset, to accommodate the window of time between the end of work in the fields and the descending darkness. The other open area was a designated football (soccer) field that doubled as grazing land and crop drying area.

### 3.3.4 The main points of the characteristics of the villages

The two villages of the research site were settled within the last two generations prior to the study. The population of the two villages identified as the same people. However, their history was dissimilar in fundamental ways: one began as a spontaneous settlement, while the other was supported by the Ethiopian Government and various NGOs form the start. These historic factors, combined with the differences in their geographic and topographic location, the more contemporary engagement with international development projects, and the incorporation of Issíppe as a discrete k’ebele during my fieldwork, resulted in communities whose infrastructure, level of urbanisation and socio-economic opportunities were different.
The greater commercial opportunities in Wolqá seemed to offset the slightly better climatic conditions and the presence of the Carbon Project in Issíppe. A range of wealth was evident in the households in both villages, however the gaps were not deep and, as discussed in a later chapter, at times virtually all households experienced food insecurity.

3.4 The households

In this study I use the term ‘household’ for the group of people who live under one roof and share resources. In the villages this usually meant two generations: parents and children; although sometimes a household consisted of only an older couple or an old person. Grown sons established their own households as soon as they got married, whether in their parents’ compound or elsewhere, but if they remained farmers they usually stayed in the same village. Women moved to their husband’s village or to the compound of their husband’s parents. Old people maintained their own household, even if widowed, in the compound, or near their sons’ homes.

The Wolayta villages did not have visible boundaries; they were a collection of homes and fields scattered across the land, either in compounds of three to six to seven huts, or in a loose string along the road. The villages formed an even and continuous carpet of habitat and cultivation over the landscape, with the exception of the protected regenerating forest in the hills above Issíppe. Fields changed colour by season, from the almost black of freshly ploughed earth to the vivid green of fresh growth and the gray and blond of dry stalks, dotted by small round or rectangular
houses and a few trees. At any time during the day there were people and animals in this landscape and everywhere there were signs of human activity.

The following section presents an overview of the participating households describing socio-economic features of their lives as well as the physical characteristics of their living environment.

3.4.1 Social characteristics of the participants

Household sizes varied across the sample (see Table 6). The average number of people living under one roof was 5.8 in my sample, somewhat less than what the Food Economy Group (2011) found in the lowlands of Wolayta Zone. In three of the sample households the men had two wives; I considered that each wife had her own household and that the husband was a full household member in it. There was one woman-headed household among the participating households, whose husband left the area and remarried. However, there were several other households with women as single parents that I came to know, but their children did not meet the age criteria of my sampling.

Table 6 Household size, in households participating in the study

<table>
<thead>
<tr>
<th>Household size</th>
<th>Number of households</th>
<th>% of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>N=31</strong></td>
<td><strong>101</strong></td>
<td></td>
</tr>
</tbody>
</table>

34 The households for which detailed information is available are those that participated in both observation and interviews; 17 from Wolqá and 14 from Issippe.
The age of parents also varied (see Table 7). This approximately but not entirely corresponded to family size, as women continued having children throughout childbearing age. According to reported age, 25% of the women had their first child when they were 15 years old.

Table 7 Age of parents in participating households, as reported by the participants

<table>
<thead>
<tr>
<th>Self-reported age of parents</th>
<th>N of mothers</th>
<th>% of mothers</th>
<th>N of fathers</th>
<th>% of fathers</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 20</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>20-24</td>
<td>5</td>
<td>16</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>25-29</td>
<td>12</td>
<td>39</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>30-45</td>
<td>4</td>
<td>13</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>over 45</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>responded did not know</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>not realistic answer35</td>
<td>5</td>
<td>16</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>missing data</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>N=3136</td>
<td>100</td>
<td>N=31</td>
<td>99</td>
</tr>
</tbody>
</table>

Educational attainment differed widely among both mothers and fathers; men generally completed more years of study and had significantly higher rates of literacy. It is likely that girls dropped out of school sooner than boys, as women married younger than men: most families reported an approximate five year age gap between husband and wife. According to the participants’ accounts, the most important factor that defined levels of education was the location where they grew up and therefore access to school.

35 According to my observation, or considering the age of oldest child the reported age was vastly underestimated

36 The households for which detailed information is available are those that participated in both observation and interviews; 17 from Wolqá and 14 from Issippe.
A vast majority of the households that participated in the study were Protestant. In the sample of 51 households only five adhered to Catholicism, one family belonged to the Ethiopian Orthodox Church, and two households were mixed in terms of religion.

### 3.4.2 The household and home

Each village had an ‘urban’ heart where most of the community infrastructure was located and many families lived in the urban heart of Wolqá, on small blocks in a grid of streets that were laid out by Wolde Semayat (see Image 14). Their fields were farther away but the location of their houses ensured easier access to certain services such as school, health post, church or market. Nevertheless, many of the Wolqá households lived among the fields or along the road to the fields. The houses of Issíppe were virtually all among the fields. Table 8 illustrates the difference between the two villages in terms of settlement pattern.

#### Table 8 The location of participating households

<table>
<thead>
<tr>
<th>Location of households</th>
<th>Wolqá</th>
<th></th>
<th>Issíppe</th>
<th></th>
<th>Both</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
<td>number</td>
<td>%</td>
</tr>
<tr>
<td>Live in the village</td>
<td>15</td>
<td>48</td>
<td>3</td>
<td>15</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>Live among fields</td>
<td>13</td>
<td>42</td>
<td>17</td>
<td>85</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>N=31</td>
<td>100</td>
<td></td>
<td>N=20</td>
<td>100</td>
<td>N=51</td>
<td>100</td>
</tr>
</tbody>
</table>

I visited the homes of all household participants for interviewing or observations, and some of the interviews with non-household participants, for example, old people, village leaders, traditional healers, teachers and business entrepreneurs, were also
conducted in their homes. I took detailed descriptive notes of the living environment of each of these households.

Some of the household characteristics were reflected in the physical features of the homes. The older, more traditional homes were round houses with conical grass roofs. The newer houses had corrugated iron roofs and were rectangular, but the floor and walls were the same in both types: earth floors and walls rendered with mud. In my sample approximately one quarter of the participating households lived in grass-roofed houses, and more houses were of this construction type in Issíppe than in Wolqá.

The interior space of the round houses was usually partitioned into rooms by woven mats, grain sacks stitched together, or a sheet. The front room, or salon, was the site of much of the family life, and included a small sleeping space sometimes with visual privacy. The back area was the kitchen and the place where the households’ prized cows were kept, even during the day. While the front room had a door and often a window opening, the back room had no other ventilation than some small holes left without render on the top of the wall. The kitchens are described in more detail in Chapter 5 under food technology.

The rectangular houses had solid interior partitions providing visual and some sound barrier as well as keeping the kitchen smoke away from the front room. These houses usually had a separate sleeping room and a small store room, and each room had at least one window. Some of these houses incorporated a combined space for kitchen and cows but this space was windowless. Others had a separate kitchen structure doubling up as a ‘barn’.
To a degree, the households’ economic standing showed in the size of the house, and in the material and details of doors and window shutters, but it was most visible in the way the home was furnished. The poorest houses had no furniture beyond a couple of low stools and a grass mattress. The interior of one of the wealthiest households is described in my field notes as having a large front room, with plastic sheet on the earth floor and the walls painted green and white. The room had glazed windows with steel bars, and was furnished with 12 armchairs, an upholstered sofa and three tables, and a tall cupboard with glass doors stood in the corner.

All houses had front yard areas of clean-swept earth, and many – mainly the ones that were among the fields - had gardens. In the more urban part of Wolqá, yards had clear boundaries and most of them were fenced on all sides. The houses in the fields had no boundary fence.

There was no running water in any of the houses; water was carried to the homes by mostly children, in the ubiquitous yellow jerry cans that once contained cooking oil. As there was no mains power in the villages, there were no electric appliances in the homes with the exception of a few battery operated radios and lamps. Light at night was by small kerosene lamps fashioned from reused tins. Most (but not all) houses had their own squat pit toilets with improvised privacy screen and no hand washing facility in the yard or in the field; their distance from the living and cooking areas depended on the size of the yards.

3.4.3 The extended family and the compounds

In both villages, many households lived in compounds comprised of several houses. As Wolqá’s layout and functioning was more urban, a significantly greater
The proportion of families lived in compounds in Issíppe than in Wolqá, both in the general population and in my sample.

The compounds were the homes of extended patrilinear families: the male children built houses, more and more in the new, rectangular style, for their own households around their father’s house. This allowed them to stay close to the fields that their father shared out between them. Each ‘nuclear family’ lived in its own house, and co-wives lived next to each other within a compound (see Image 15 and 16). Some of the compounds were quite crowded; but their layout always allowed for a central open yard, visible from all of the houses and often shaded by large trees, where all the children played and animals grazed. While the compounds were not fenced, some of them had formal entry arches, and generally had an estate-like quality, representing a strong tradition of hierarchy.

3.4.4 Household wealth and assets

The livelihood of the vast majority of families in both villages was dependent on farming; therefore the most critical productive assets were farm land and livestock. In terms of productive assets, the participants of my study were comparable to, although somewhat poorer than the Wereda-level statistics produced by The Food Economy Group (2011) presented in Table 9. In my sample, four households reported that they had no field to cultivate. However, in reality two of these four households had regular cash income: in each the male household head was employed by the government and received monthly salaries. Because these two men were born in the village it was likely that while they were in employment their fields were contracted to other farmers. The other landless people, a widow and a family whose male head was not from this village, were struggling daily to make ends meet doing
day labour when available and drawing rent by sharing their home with secondary school students.

Table 9 Wealth ranking and productive asset ownership in Humbo Wereda\textsuperscript{37}, 2007 data

<table>
<thead>
<tr>
<th>Wealth group</th>
<th>% of population</th>
<th>Land cultivated (\textit{t’imad}\textsuperscript{38})</th>
<th>Typical livestock holding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very poor</td>
<td>13.5</td>
<td>0.5 – 1.5</td>
<td>chickens: 1 – 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sheep/goats: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cattle: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>oxen: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>beehives: 0</td>
</tr>
<tr>
<td>Poor</td>
<td>34.6</td>
<td>1 – 2</td>
<td>chickens: 2 – 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sheep/goats: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cattle: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>oxen: 0</td>
</tr>
<tr>
<td>Middle</td>
<td>32.3</td>
<td>2 – 3</td>
<td>chickens: 3 – 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sheep/goats: 4 – 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cattle: 2 – 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>oxen: 0 – 2</td>
</tr>
<tr>
<td>Better off</td>
<td>19.6</td>
<td>4 – 5</td>
<td>chickens: 4 – 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sheep/goats: 5 – 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>cattle: 10 – 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>oxen: 1 – 2</td>
</tr>
</tbody>
</table>

(Adapted from: The Food Economy Group, 2011)

Tessema’s study (2008), which included villages in Humbo, found that the overall average holding size in the lowlands was 2.1ha. My interview data with Agricultural Extension Workers and WVE employees shows a degree of inconsistency, and although one set of data only relates to one village and the other to the lowland area of the Wereda, the variation is too great to be explained by the difference in coverage. According to Agricultural Extension Programme reports for Wolqá, 17% of the farmers had more than five hectares of land and approximately 5% of the households were landless (EF, personal communication, 9 April 2013). WVE data showed that nearly one half of the households cultivated between 0.1- and 0.25 hectares - less than one \textit{t’imad} - and only three percent of the farms was greater than 0.75 hectares, or three \textit{t’imad} (T15, personal communication, 26 July 2011). Table 10 illustrates the extent to which the data sets differed. Although I did not collect

\textsuperscript{37} This data excludes approximately 10% of the Wereda’s population whose main livelihood is from irrigated banana production

\textsuperscript{38} \textit{Timad} is the traditional unit of land measurement in Ethiopia, the equivalent of what a pair of oxen can plough in one day. One \textit{timad} is generally equated with one quarter of a hectare.
household specific data on actual farm size, farmers’ assessment of the adequacy of their land to produce food for their families is discussed in Chapters 4 and 5.

Table 10  Comparison of three sets of data on farm sizes

<table>
<thead>
<tr>
<th>The Food Economy Group (N unknown)</th>
<th>Agricultural Extension Programme (N=861)</th>
<th>WVE data (N unknown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm size in t’imad</td>
<td>% of farms</td>
<td>Farm size in t’imad</td>
</tr>
<tr>
<td>0</td>
<td>5.0</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>0.5 - 1.5</td>
<td>13.5</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>1 - 2</td>
<td>34.6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2 - 3</td>
<td>32.3</td>
<td>&gt; 5</td>
</tr>
<tr>
<td>4 - 5</td>
<td>19.6</td>
<td>&gt; 5</td>
</tr>
</tbody>
</table>

Large livestock - cattle – ownership was reported by 43% of the participating households, and 29% of the households owned more than one head. While more households owned one head of cattle in Issíppe than in Wolqá, livestock numbers in the participating households, in general, did not vary greatly between the two villages. The largest number of cattle owned by a household in my sample was four.

Ownership of smaller livestock, such as goats or sheep, was more fluid as these animals served as relatively short term investment and were bought and sold between two of my household visits. Their numbers would also significantly fall after New Year and Mesk’el when a large number of goats and sheep were slaughtered for the feasts. Small livestock numbers reported in the participating households, collected after the festivities, are presented in Table 11. Poultry were restricted to chickens and their numbers were almost impossible to establish as they were free ranging in the compounds. Approximately one third of the households reported having chickens.
Some households in Issíppe owned beehives but none of them had harvested honey in the two years previous to the study.

Table 11  Livestock ownership in the participating households

<table>
<thead>
<tr>
<th>Livestock holding per household</th>
<th>Wolqá (N=31)</th>
<th>Issíppe (N=20)</th>
<th>Both villages (N=51)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of HHs</td>
<td>% of HHs</td>
<td>Number of HHs</td>
</tr>
<tr>
<td>Has large livestock</td>
<td>12</td>
<td>39</td>
<td>11</td>
</tr>
<tr>
<td>Has &gt;1 large livestock</td>
<td>9</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>Has small livestock</td>
<td>6</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>No livestock</td>
<td>6</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Not known</td>
<td>10</td>
<td>32</td>
<td>4</td>
</tr>
</tbody>
</table>

Many households had productive gardens where during the rainy seasons vegetables and herbs were grown. Most gardens produced fruit and taro, and many, in particular in Issíppe, grew enset. The number of productive gardens was greater in Issíppe than in Wolqá. Neither the fields nor the household gardens were irrigated. Agricultural and non-agricultural livelihoods are discussed in more detail in Chapter 4.

Household food security is not discussed in this chapter, though it is important to note when describing the characteristics of the households that a majority of them are food insecure for several months every year. The extent and implications of this are discussed in detail in Chapter 5 and Chapter 6.

39 Only those households that participated in observation and interviews were asked to supply wealth data
3.4.5 The main points of this section

I found that the structure of households, as well as many of their socio-economic characteristics and living environment, were alike. Households were vulnerable: they had little reserves to fall back on, and the remote rural setting amplified some aspects of vulnerability, in particular for service delivery. The study found sizable gender difference in educational attainment, and the family home environment was not conducive for healthy living practices, especially regarding food and personal hygiene, and the prevention of infectious diseases. These factors heavily impacted on the availability of food and children’s access to it, and on their ability to appropriately utilise it.

3.5 Chapter summary

History and politics, climate and topography, as well as the socio-economic environment of the villages and households bore momentous implications on the food and nutritional security of young children. At the study site climate and population density severely limited the quantity and diversity of family food.

The next chapter, describing the livelihoods, social networks, and government and NGO programmes functioning in the two villages of the study site complete the account of the contextual complexity within which families work towards children’s food and nutrition security.
CHAPTER 4

CONTEXT: LIVELIHOODS, SOCIETY AND DEVELOPMENT
In the Wolayta villages, food was produced and consumed in a complex milieu formed by historic, environmental, social and economic factors. The previous chapter introduced the historic, political and environmental context of the study site. This chapter continues to present the contextual dimension of food culture and children’s food and nutrition security, with the focus on socio-economic factors. These factors were decisive aspects of food availability and access, as they directly affected both food quantity and diversity.

The factors included below are livelihoods and the rules that delineated the division between men and women in farm and off-farm work; household decision making and gender-based difference in responsibilities and authority; social networks and reciprocity; and the support and development programmes operated by the Ethiopian Government and non-government agencies.

### 4.1 Livelihoods in the villages

The economic activities of the sample households exemplified the predominantly agricultural livelihood of the population in the two villages of the study site. As noted earlier, of the 51 households in the sample, four were supported entirely on non-farm income; one household head was a day labourer, a single mother relied on rental income, and two household heads were in full-time government employment.

The rest of the households lived primarily off their farms; however, approximately half of them supplemented their farm revenues by other activities, mostly as petty traders and with day labour.
4.1.1 Agricultural livelihoods

Like in much of Sub-Saharan Africa, low external input mixed farming characterised the study area (Mohammed-Saleem, 1995), producing horticultural, as well as field crops and livestock on the same farm. Most of what the farms yielded was consumed by the family, but in many households a portion of the products – although in no way surplus – was sold to generate cash for household expenses.

Field crops

Agricultural production relied on rainfall, and each of the two rainy seasons had their distinctive set of crops (see Image 17). Maize, the main staple was usually sown during the Belg, the shorter rainy season, along with smaller crops of taro and cassava. Maize was harvested in August and September, but tender cobs brought relief to the households in the ‘hungry months’ in July. In the Meher, the long rainy season, fields produced sweet potatoes and cash crops such as chilli, cotton and, in areas with somewhat higher altitude, t’ef. Legumes, including cow peas, haricot beans and red kidney beans, were grown in both Belg and Meher. Many, but not all farmers produced crops in both growing seasons of the year. While intercropping was a familiar practice, with tubers or beans growing among maize, and chilli and legumes intercropped, not all fields were cultivated using this technique. A detailed discussion of food seasonality, including the regular periodic food shortages, is presented in Chapter 5.

According to the agricultural extension agents and some of the farmers, soil fertility was declining in the study site. Use of manure was limited: farmers needed to carry
manure from their household to the field in baskets, and animals were able to graze in the stubble after harvest only for short time. Very few farmers made and used compost, though workshops demonstrating the preparation and use of compost had been held by the Agricultural Extension Programme. Improved seeds and chemical fertilisers were promoted by the Extension Programme, and while some were willing to experiment with improved seeds, most farmers found the price of fertilisers too high. Local government officials, themselves from farming background, confirmed that there was “little capacity in the community to purchase and use the inputs provided [sold] by the government”. (W40)

The number of farmers who used irrigation on their fields was diminishing with the declining water levels in the river, and at the time of the study was approximately 5%. No one in the sample irrigated their field, though there were some households whose field was situated along the river.

Farms, the single resource for most households to satisfy the food and other needs of family members, were small. However, farmers could increase the area that they cultivated by share farming: they contributed labour and productive assets, such as tools and draft animals, and received a portion of the harvested crop in return. Leasing was another, though less frequently occurring practice. Farmland was available for share or lease from families where the male household head was absent: he was either employed in a far-away location, or held a government post and had no time to work on his field. However, people who leased their land to others were keen to make sure the fields were productive, and carefully screened the potential lessees:
I do share [farming], but not contracting; farmers don’t give me large field because I don’t have oxen. They evaluate my situation…they are government workers. They don’t have time to work on the field. (Z08F)

Opinions diverged in regards to whether the productivity of farms improved or declined. Some participants stated that their yields significantly increased due to erosion control implemented by development projects, discussed below. The use of improved seed also boosted the production of maize, although not to the extent it would have if chemical fertilisers were applied as recommended. Those who maintained that productivity decreased mostly attributed it to two factors: the declining rainfall and the increasing poverty of households. Poor farmers did not have oxen and tools and, as a result, they often missed the optimal time for, and were generally less efficient with, soil preparation, sowing and cultivation. Ultimately, beyond rainfall, the success of a farmer was believed to depend on a handful of factors, primarily productive assets and hard work:

There are others farmers who produce 50 – 60 quintal\(^{40}\) maize a year, like X’s family. Their field is near the river, fertile land; they have oxen, and they have hard-working boys. They are all married [but] they did not divide the land yet though their father died; they will after the mother is dead. (F18)

Farmers waited for the rains before they started the arduous work of field preparations (see Image 18). The fields were ploughed four or five times through a period of a few weeks, to kill weeds and prepare the soil. During the last round of ploughing the farmers followed the oxen with the bucket of seeds to sow. Weed

\(^{40}\) One quintal equals 100 kg
control and improving the soil’s water absorption continued during the growing season, using oxen and plough, as well as hand hoes:

I plough three or four times before I grow maize. At the fifth ploughing I use seed…if there is rain we plough again and again, but when there is no rain we wait – only wet soil is ploughed. After seeding, when the maize starts to grow, we dig with hoe and also plough between the rows, and also remove the stem when there is more than one [of maize]. We plough to control water erosion … and to create valleys so the maize gets water easily – this happens twice between seeding and harvest. When it becomes eshet [fresh, tender], ready to eat, we start picking for household use. (Z08F)

Livestock

The range of livestock kept by the households included cattle, smaller ruminants such as sheep and goats and chicken. Oxen had a vital role in crop cultivation:

… No one can do anything in his field [without oxen]. … Every activity performed in the field is by oxen. (B18)

After three or four years of working as draught animals oxen were fattened up and sold for slaughter. Milking cows were of high value, in particular because of the cultural importance of butter, although it is important to note that the level of milk production was very low: local cows were milked two or three times a day and produced a total of 1.5 – 3 litres of milk compared to the approximately 25 litres produced by European breeds of dairy cattle. Infertile and old cows that did not produce milk were fattened and sold or slaughtered.
Sheep and goats were raised and bred for meat, their milk and wool was not utilised. Chicken eggs were preferably hatched and the chicks were raised: the roosters for slaughter and hens for breeding. However, households often sold fresh eggs in order to generate small amounts of cash for household necessities. No other poultry was kept. A number of bee hives were scattered in trees, and a beekeepers’ association operated in one of the villages. Some of the study participants had previously had bee hives but were not practising beekeeping at the time of the study. Honey was rarely available at the village markets, suggesting that beekeeping was not an actively pursued commercially enterprise.

Donkeys had high value as pack and draft animals, but although I saw many on the roads, none of the households participating in the study had donkeys. Mules and horses, common transport animals in other parts of Ethiopia, were also rare in the study site.

All types of livestock represented investment:

…we fatten livestock. Then we sell it and buy another ox; the rest of the money spent on necessary things. If we sell it for expensive price we also buy a calf. Even though we fatten the ox the price is not very profitable. (Z15)

When we have got enough money (profit) from the fattened ox we buy one ox and other calf or bullock. We prefer to raise animals instead of saving our money. (GD20130408)

While the investment promised good returns, it also carried a certain degree of risk: disease and drought took toll on livestock, and farmers also worried about thieves. The investment was mostly reaped at the time of the holidays – New Year and
Mesk’el in September, Christmas and Timkat in January and at Easter time, in the form of cash, or as slaughter for household use. Livestock also served as insurance: a quick sale, though often below market price, assisted families in emergencies.

In general, feeding livestock was often difficult because of the shortage of grazing land, and providing fodder required strategies that involved many members of the household. Cattle were fed grasses and weeds collected in the forest, in the maize fields and at the roadside; they were given crop residue such as leaves and stalks and, to get them fat, sometimes even crops – maize, cow peas - and leftover food. However, collecting enough fodder was hard and the changing seasons created different benefits and problems with regards to livestock fattening, the cows’ ability to produce milk, and the quality of milk:

We can cut the grasses, the stem of maize, collect and store the husks, and use little by little until the next grass grows. (Z23)

We have 3 cows. … When we collect weed from the maize field, between the rows, we get more milk….The cow needs wet/fresh grass. We can get fresh grass after the rains but not in the winter. In June [when it rains] the maize grows and the weed comes out; also we cut the infertile maize for the livestock…..The same weed and maize is used for fattening. (Z07F)

Poor households often combined their resources and invested in livestock together: one party would buy a young animal and the other would feed and raise it. This system operated with smaller livestock, as well as cattle, and the offspring, or the revenue of sale, was shared between the two households, following established rules.
The esteem granted to the different types of livestock followed a distinct order. Cattle in general enjoyed high status and were given great care, and oxen were the highest in the hierarchy. They were associated with men, and with all the work that was necessary to grow food for the household. Men took oxen to the veterinary clinic and paid for their vaccinations, and it was generally their responsibility to look after them, with the help of children (see Image 19).

Cows belonged in the domestic sphere, to the women. Cows, and often calves as well, were kept in the house, usually in the space also used as kitchen, to protect them from sun and tsetse flies, and much of the fodder was brought to them by women and children. Women were responsible for milking and for removing the cows’ waste from the kitchen, and children took them once or twice a day to water, either to the river or to one of the standpipes in the village. Cows were also taken to the veterinary clinic for vaccination, fly repellent spray and artificial insemination. This responsibility was shared by men and women.

Sheep and goats, although they were valued as investment and for providing meat for festive occasions, were lower in the hierarchy and were cared for by the women and children. Sheep and goats often free ranged around the compounds and in the fields, or were watched by children on the roadside. They were often not closely attended to during the day, but they were brought inside for the night to protect them from thieves and animal predators.

Chicken seemed to occupy the lowest status in the hierarchy of livestock. They also free ranged around the houses, and the fences around the yards presented no barriers for them. Chicken were seen as much needed cash source, but the survival ratio was
very low: of 10-12 eggs, two or three birds grew up, the rest were taken by predators and disease:

From 15 eggs 10 chicks hatch, from that three or five grow up, [the rest is] eaten by wild animals. (F37)

We have one hen. The hens here lay one egg every day; after 10 eggs they stop. We keep the eggs to raise chicken; they are sold for cash. We never eat the eggs. (F07)

Epidemics were often mentioned as a significant factor the loss of chickens. Sheep and goats rarely, and chickens hardly ever, were taken to the veterinary clinic.

In the two villages in which my field work took place I did not find commercial scale livestock breeding enterprise. A young male student talked about his dream of starting a chicken farm but he was worried about disease and predators.

Horticulture

The household gardens produced a variety of herbs, chillies and castor plants, as well as fruits such as mango, lemon, papaya, orange, banana and avocado. In many gardens, mainly in the higher altitudes, people grew coffee and enset, and taro and cassava were common as well (see Image 20). Only the very small inner-village blocks did not have horticultural areas around the houses. The gardens produce was commonly consumed by the family rather than sold. The home gardens were seasonal, predominantly rainfed, although in a small number of households,
particularly those closer to the village standpipes, coffee and some vegetables were hand watered.

A small number of home gardens produced pumpkin, cabbage and tomato, and practically all of them produced kale. One of the most significant sources of non-staple food was a tree crop, grown in the fields and in the compounds. The leaves of this tree, *Moringa stenopetala*, were available in all seasons (although some women claimed that the leaves turn bitter during the dry season), and substituted kale in the meals.

The contribution of horticultural production to fulfilling the households’ needs was not generally acknowledged by the farmers. Gardens were considered as producing items that did not ease hunger: the staple came from the fields not from the gardens. As well, these products did not attract high prices, so their contribution to household income was low:

…these things are very cheap in the market. So it is not helpful for the household income generation. The other thing is: we can’t grow vegetables throughout the year because can’t get enough rainfall. When we compare the advantage and disadvantage, the disadvantage is more because [the garden production] is seasonal, it catches the field from growing maize or other grain, also it dries easily and the price [market value] is cheaper. For all household use maize is more important than the others [garden products]. (Z08F)

There were some larger market gardens that were irrigated either from the river or by tapping into the village water supply; these produced significant amounts of fruits and vegetables that were sold them at the village markets. Irrigation and land size
were vital to the success of these enterprises. The market gardens grew horticultural produce that was selling in large quantities, such as kale, cabbage, tomatoes, chilli and shallots almost all year. They also produced bananas, avocados and mangoes for the markets.

I visited and interviewed the farmer who owned one of these market gardens. His field, inherited from his father, was next to the river and he used river water for irrigation. He bought his tools, irrigation pipes and the petrol pump from his savings and learnt how to grow fruits and vegetables and set up the market garden, mostly by observing other farmers, through trial and error: His workforce consisted of his own family – his wife and older children – as well as five ‘orphan’ boys: children who worked for him for board and food, and were each given a small piece of land to cultivate for their own profit. He became a successful entrepreneur in a few years, and was extending his production by leasing fields from others.

Division of labour and authority by gender

A set of somewhat flexible rules delineated the division of labour in agricultural work between men, women and children. Without exception all study participants maintained that the fields were the men’s domain: all crop-related work was carried out by men and their sons. Nevertheless, wives took the midday meal to the fields for their husband and his helpers and, during harvest time, many women worked alongside the men collecting and carrying the yield to the house. In some circumstances, such as a wife helping her very sick husband, or a widow cultivating her farm, women would do some of the work, but they would not work with oxen.
The interview quote below summarises the division of farm and household labour between husband and wife:

Mother cleans the cow’s place in the house; [her responsibility is] also milking and feeding the cow, and to prepare lunch and dinner. She takes care of the children….For a father: to plough the field, seeding, digging, harvesting. If he has enough field his own he perform this on his own field. If not, he does this with share. He takes care of the cattle when they go to the field and there are no children [big enough to look after them]…if the livestock sick the father brings them to the animal clinic. (Z09)

Horticultural work was shared between men and women: gardens seemed to be the settings where the gender-based lines of the division of labour were the least well-defined. In general, women were in charge of herbs and coffee, as well as vegetables. Planting and cultivation of tubers was shared work in many households and decisions about what to grow and where, were negotiated between husband and wife. However, watering the plants was a responsibility of women and, against their other work load, it did not appear to be a high priority.

The sale of farm products was discussed between the husband and wife, but carrying out the transactions followed a protocol that gave different tasks to men and women, and somewhat reflected the division of labour with which they were produced. Cattle, larger quantities of maize after harvest, and most often smaller livestock, were taken to markets, or their sale otherwise arranged, by the men. Women, who were responsible for the storage of harvested goods, traded small amounts of grain, milk and eggs in order to make small purchases of everyday necessities.
4.1.2 Off-farm income generation (non-agricultural)

Few non-agricultural income generation opportunities existed in the primarily agriculture-based economy of the villages. These included day labour, small enterprises in commerce and services, and NGO and government employment.

Men had more opportunities than women to engage in income generation outside the farm for several reasons. The types of work available favoured men, in large part for cultural and social reasons. Men were more able to leave from home for a length of time, if needed for weeks or months, to earn income. This, however, did not mean that women did not have income generation opportunities, and many of them maintained that it was lacking the capital or equipment to start a small enterprise, rather than shortage of time or social unacceptance, that hindered them. In fact, women were free to move in and between the villages, visiting each other and the markets in other places, and a large number of them were engaged in petty trade.

Income generating activities for men included day labour and trade, a variety of service industry opportunities, as well as government and NGO jobs. Within the villages, day labour was available for men in the nearby quarry that produced gravel for road construction. Some men also worked as day-labourers in the fields, and in building construction. These jobs paid very low wages, and none of them were secure.

Skilled work in construction was generally more profitable, especially for masons and carpenters:
Builders are very successful. One of them now owns the grain mill...he is a mason. His father is a security guard at the World Vision compound and he was trained by World Vision. Working with chik’a [mud] in construction is not so profitable. I haven’t seen any mud workers who changed their life - they are all drunk. But those who work with the timber in buildings get good money. (F18)

However, local work for skilled masons had ended with the completion of the health centre and school extension built with assistance from World Vision.

A steady market existed for transporting goods and people between villages and towns. Pack donkeys, donkey carts and porters, who carried the load either on their shoulders or their head, or on a timber wheel-barrow, took goods to and from markets. Small motorbike taxies carried passengers on the unpaved roads, which they could manoeuvre even in the rainy seasons. Motorbikes required a big investment even though most were bought second-hand, and their maintenance was often difficult:

Motor taxi is not profitable: one week lots of work, good income, but next week the motor needs repair and costs big money...[there is] no mechanic in the village, only in town; [here] only for tyre repair. (F18)

Haircuts, shaves and clothes repairs were offered in each of the villages. The barber set up business in the shade of a tree, and had a slow but continuous flow of customers; he was trained by World Vision and equipped with a simple set of tools (see Image 21). Clothing repair was mostly men’s work; they also received skills training from World Vision, and at the conclusion of training they were given a foot-pedal sewing machine. In one of the participating households, the husband taught his
wife how to use the machine and they both did repair work. On the main street of one of the villages a man offered bicycle tyre and shoe repair services. Some men also worked as traditional healers, treating both humans and livestock, mostly for broken bones and other injuries. Their fees were very low.

In the villages men were less likely to be involved with food service than women, and the only man who cooked and served meals in his restaurant in Wolqá had spent many years away from the village. His story represents the desire to be independent and achieve business success in spite of the risk of losing regular salary, and he was not ashamed to prepare food, considered women’s work:

> We both were government workers. My wife was a teacher and I was a machinist in a factory. …You know people were surprised when I left my government work. My salary was 1500 Birr at that time. So people were saying why he left his work? But I want to be a role model for this people. I want to show them about how to create new business…I bake bread by myself, I am also involved in women’s duty for example I chop vegetables or anything else. I am involved both men’s and women’s duty. So I am getting more income than I was paid before. (M26)

Men were more likely to be involved in larger scale trade than women, although there were exceptions. The husband in one of the households, which was the wealthiest among those that participated in this study, traded livestock, as well as building materials, and had large clients such as World Vision. Even this family, however, reported a degree of uncertainty in regards to the household’s year-round food supply. No gender bias was evident among the owners of the handful of small shops selling plastic household goods, as well as some packaged food items and bottled soft drinks (see Image 22).
Government jobs were considered the most desirable. They granted security with regular monthly – though sometimes delayed – wages, and social status:

The society gives you more status if you are a government worker, they assume that you are a good person. (F07)

A number of government employees worked in the villages, more in Wolqá than in Issíppe, in the newly founded k'ebelé. Wolqá had a health centre, a full primary school and a secondary school, and several government development programmes whose officials worked in the Wolqá office compound. The schools had several local employees, but most teachers were from other places. The teachers, however, contributed significantly to the village economy, as their disposable income was absorbed into rental accommodation, markets, shops, barbers and food service. The village government administration, health service, microfinance and agricultural extension employees were mostly local people. The high positions in these workplaces were occupied by men, and some men were also employed as gardeners, security guards and ground keepers by the local government and at the World Vision compound. Serving in the Army was a relatively lucrative arrangement, with monthly salary and pension after completion of service, but it meant being far from family for long periods, with only yearly visits home.

Income generating opportunities for women

In general no day labour was available for women, and they did not work in construction unless they were building their own houses. Their participation in small enterprise in the service industry was not as wide ranging as the men’s: women did
not drive motorbikes, work as porters, or repair tyres. However, some women owned donkeys, which they drove to markets, and one woman was reported to own a motorbike and employed a driver to provide a taxi service. Several women in each village, some trained by World Vision, ran small hair dressing businesses in their homes. This work, however, was quite seasonal: they were in high demand before the major holidays, and much less at other times of the year.

Several women generated income by selling home-made coffee and tea, served from thermos bottles into small china cups under improvised shade, mostly during market hours. Fresh wheat bread rolls and t’ef injera were popular items, often easier to buy than prepare at home, and these brought a regular flow of customers to the two or three women who sold them. One woman was a successful owner of a small village restaurant, where she cooked and served food, as well as employed other people, some of them men:

> With restaurant [enterprise] people can change their economic status. One woman here started with small amount and now she built a house and earns good amount of money. (F18)

The most frequently reported means to generate cash income by women was petty trade. This ranged from occasional engagement to a regular market presence up to three times a week. It usually entailed buying relatively small amounts of produce – maize, coffee, peanuts, or moringa leaves, from people living farther from the village centres and reselling it with a slight margin of profit. A handful of women sold small

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41 Traditional Ethiopian soft flat bread
merchandise such as matches, candles, small packages of sweets and soap - a normal size cake of soap was cut in half to increase profit.

Women in the villages did not usually engage in large-scale commerce. However, one of the study participants was an exception: she traded in grain, mostly maize, in the scale of hundreds of kilograms. She had an unusual history as she had been a successful merchant in a larger town before her marriage to a village man.

Government and NGO positions were less likely to be occupied by local women, simply because these required literacy and often qualifications. The Government of Ethiopia actively promoted women’s employment and participation but the disparity in education between the men and women in the villages was a barrier no employment policy could overcome. Although many of the school teachers, including in secondary school, were female, they came from other areas of the region or the country. Local women were employed as ‘office girls’, gardeners and cleaners in the village administration. The World Vision compound, where up to 15 project staff lived away from their own families, employed five village women to cook and wash the staff members’ clothes, and as gardeners.

Several local women were trained Health Extension Workers and were employed at the health posts. They each supervised a large number of women, all trained volunteers, engaged in health and nutrition programmes. Their roles are discussed in the section about health services. Traditional healers and birth attendants played an important role in health care, and they received some mainstream training to augment their ability to treat patients. However, their fees were low and none of them pursued their vocation full time.
Study participants’ engagement in non-agricultural livelihoods

Nearly half of the participating households took up some of the opportunities described above, and had income generated by non-farming livelihood activity\footnote{This did not include the work that was carried out under the Safety Net Programme, which is discussed further in the chapter.}. Four men were in government employment: in qebele administration, the Agricultural Extension Programme, the Army and mosquito spraying, and one retired soldier received pension. One of the women had a casual job in the nursery of the Agricultural Extension Programme.

Four men worked as day labourers, one of them away from his home village. Seven women were engaged in petty trade, and one man and one woman in larger scale commerce. Embroidery, spinning and clothes repair provided small amounts of supplementary income for four households. In two households participants drew income from passenger transport, and two had rental income, taking boarders into spare rooms in their homes. There were two traditional healers among the household participants in addition to the two non-household interviewees. Many people worked on community infrastructure projects, however, these jobs were part of the Ethiopian Government’s development and welfare programmes, which are discussed below. Several volunteers were among the participants: three Peer Mothers and two guards; their work was unpaid.
Drawing income from natural resources

In the years previous to this study three participants in Issíppe were engaged in paid employment once a week, working in the forest regeneration programme, implemented by World Vision Ethiopia and known locally as the Carbon Project. Due to the end of the particular phases of the project this employment had changed to voluntary work. Nevertheless, this project provided ongoing natural resources-based livelihood opportunities for the residents of Issíppe, including collecting and selling fodder, firewood and wild fruits, although the latter did not have great commercial value. It was commonly children who picked the wild fruits in season in the forest or on the roadside; they ate some and sold the rest at the markets, and the little cash they received they spent on sweets: a small piece of sugarcane, lollies or chewing gum.

Only two participating households, both living in Issíppe, reported selling fodder they had collected in the forest. These families had no livestock and they collected specifically for the market. Many participants sourced firewood in the forest, but for household use only: the small branches and twigs that they were allowed to collect in the forest were not suitable for sale as firewood. Nevertheless, all participants agreed that it was great help for the households, minimising their firewood expenses. The tasks of collecting firewood and fodder were shared by several members of the family, with a somewhat greater reliance on women and children than men.

Seeds for revegetation were bought by the Agricultural Extension Programme. Collecting seeds of various native and revegetation trees was a seasonal opportunity; two participants reported drawing income from seed collection.
Barriers to income diversity

The two principal barriers to pursuing off-farm livelihoods, according to the study participants – women and men alike - were lack of starting capital and insufficient skills. From a list of over 30 possible income generating activities, participants felt confident about only a handful: trading, breeding and fattening of livestock, spinning and embroidery. All of these enterprises they had skills for and experience with and they did not need equipment or other conditions that were difficult or impossible to obtain. Their concern was not about whether the enterprise would be successful or not, but where the initial capital to buy stock and equipment or to pay transport would come from. Starting capital for small business could be obtained through several microfinance institutions established in the villages; details of their services are discussed below. However, for most petty traders, who were primarily women, the conditions of lending were problematic and they had to rely on their family or neighbours for a loan:

I wish I got some money. [Then] I will try to retail, buy oxen… Maybe I can fulfil my wish to become a merchant. My dream is to borrow money from the others and share the profit or pay interest. I will try to do this. Whoever I can get money from: from someone in the family, or someone else with money. (Z02)

Other activities, requiring more skill and equipment, were thought unworkable, for example motor repair:
Motor mechanic work… is above my knowledge. I don’t have experience. Not only me, from the members of this group no one has knowledge about motor mechanic work. That is for the people who live in cities like Soddo. (GD20120121)

While many participants thought that transporting passengers and goods would provide good opportunities, buying a donkey, a cart or a motorbike was beyond the reach of most people. Those who received training in skilled trades, for example making and repairing clothes, food service, or masonry, found that there was not enough demand for their work. Lack of electricity, and therefore no prospect of using machinery even if it could be afforded, made local fabrication of wood and metal building parts and furniture impossible.

Beyond lacking starting capital or skills, a range of other obstacles stood in the way of small enterprise and off-farm revenue. Competition for the small amount of disposable income circulating in the villages seemed to intensify, in part because more and more families needed to rely on diversifying their income and generating cash as large portions of their necessities were to be paid for. Also, participants claimed that youth entered the workforce away from the family farm at increasingly young age, mostly driven by the desire to satisfy their own personal preferences:

…previous children were serving their family around the house, they worked what parents asked for, stayed most of the time at home. Now children go to school, and after 13 or 14 years [of age] they want to retail in the market or go and work somewhere….This generation doesn’t want to follow their family’s interest, they want to fulfil what they want, as they want it – clothes, shoes. (Z13)
Industrial employment opportunities were virtually absent in the district. One of the interview participants talked about some prospects that could offer secure livelihoods in the area provided investors were found for these industries. According to him the nearby lake could support agroforestry and sugarcane production, and in turn the establishment of incense and sugar factories. Other participants were less optimistic, and their thoughts returned to farming as the only realistic option to make a living in the study site:

This is a rural area, no possibility for investment, no potential. But there are people who are successful farmers, a role model how to improve our lives… In this area many people are educated – but with no work. It is difficult to create opportunities, it’s not a city. [Being a] merchant could be possible, other options: poultry, bee hives…. (M21)

For men and women equally, taking on full time employment, or to do work that required regular and significant engagement, would have required that they had to abandon the tasks that were essential for the functioning of the household. However, it was generally easier for men to be absent from the household: they could engage in off-farm income generation during the periods in the yearly cycle when less seasonal work in the fields was necessary. If their work required extended and long-distance absence they could leave their farm fallow or lease it to other farmers. It was also easier for men to pursue day labour, leaving the children and the livestock in the care of their wives and older children.

Women had ongoing duties around the household that were mostly not seasonal, and which required their presence in the home. Their central responsibilities were providing food for the family and looking after the children. According to my
observation notes, women spent between 30 minutes and 1.5 hours with actual food
preparation before each meal. In addition to this, the daily activities that contributed
to preparing the family’s food included picking vegetables from the field or garden;
sorting, drying and cleaning seeds, vegetables, spices and herbs. Purchasing food and
taking grains to the mill often took a long time, depending on how far the market
was from the household.

Obtaining water from the bono (Wol., village stand pipe) could take an hour or so as
well: there were several bonos in each of the villages, fed by a pipeline from a spring
in the hills, but the queues for water were usually exceedingly long and some of the
bonos were out of order for months. Looking after livestock, gardening and cleaning
the house were part of women’s daily routine, in addition to their central role:
ensuring that the children were safe, clean, fed, and went to school.

Many of the women’s tasks could be – and in some households were - delegated to
older children or child servants, but being away from home for extended lengths of
time was generally less accepted for women, mainly because of their responsibility
for their children’s well-being. For example illnesses in children were often
attributed to the mother’s absence:

When the mother goes somewhere …when they go to get firewood or water, or to
get white clay from the Lake Abaya [to sell] for cattle feed, the children get hungry
…eat soil and get hookworm. (GD 20111017)

Bederecha (Wol, a childhood illness) …causes diarrhoea, they get very tired and
their eyes sink in…the cause is much crying, when their mother leaves them and
goes to market. (BTH)
Generally women, however, stated that they would have time if the opportunity was there for income generation.

**Landlessness and low caste occupations**

The products of several traditional crafts were offered in the village and town markets. Every household used hand-made pottery products: the traditional coffee-pot, or *jebena*, the larger and smaller griddles called *mit’ad*, and a range of narrow-necked round-bellied containers for water, milk, butter and spices. Hand-woven traditional textiles, hand-made iron and steel tools such as hoes, knives and pots, as well as rawhide furniture and leather products, were also widely sold and used. However, none of the participants were engaged in any artisan activities.

Potters, leather-workers, blacksmiths and weavers were considered people being of a lower caste. Norms regarding lower castes ruled out intermarriage and the sharing of food, and even spaces such as church or classroom for children in school. Although at the time of field work this type of discrimination was illegal in Ethiopia, some of these traditions still held, and my inquiry about the potential of these occupations for income generation met strong resistance.

Generally people, who were not farmers, were talked about in negative terms by the community. The prejudice about, and inequity of, landless families was a legacy that carried on in economic and social aspects of life and precipitated further deprivation. An example is a landless family that participated in this study. They were raising three children and lived in a rented one-room mud house, close to the centre of the village. The father was a day labourer and they had no livestock. They did not have a
garden because the owner grew sorghum and maize in the yard around the house. Neither the woman, whose oldest child had been born from a previous relationship, nor her husband, were truly locals; he left his home because there were too many boys in his family to share their father’s field. They received some charitable assistance from the church but they were also ostracised and harshly judged.

4.1.3 The main points regarding livelihoods in the villages

Mixed farming was typically the main livelihood activity in the study site. Field crops, livestock and horticultural products supplied food for the households, however, the crops were often insufficient to support the family even with staple food. Daily cash needs were met by selling some of the crops and livestock products, and by engaging in off-farm income earning activities.

A narrow range of options was available in employment and in small business enterprise to generate cash income. Most of these offered small returns, and many of them were unreliable in terms of consistency of engagement and level of income.

In the study participants’ view, the two main barriers to a more diversified livelihood structure were their inability to generate the starting capital for small enterprise, and the lack of skills required to pursue many types of potential business activities. These sentiments were prevalent in spite of the numerous skills training workshops that formed part of both government and NGO development programmes, and the growing presence of microfinance institutions offering loans for small business, whether agriculture-based or not. Microfinance organisations operated in both villages supplying a variety of various saving and loan products, and while many
farmers felt uncertain about taking out loans, borrowing and saving through these
formal institutions became more common.

The pervasive poverty of the local population, which limited the potential customer-
base of any small business enterprise, and the lack of external investment into larger
undertaking that would provide employment, were additional factors that impeded
the expansion of off-farm livelihoods.

4.2 Households located in society: power relationships, social
networks, obligations

This section is located the choices and decisions family members made in the social
milieu of the villages. It starts with the portrayal of how economic decisions were
made in the households, followed by the description of the networks and social roles
of women and men. Lastly, traditional cooperatives and social reciprocity are
discussed.

4.2.1 Household decision making

The process of household decision making is an important factor influencing the
availability of, and access to, food and nutrients. Many prior studies, discussed in the
literature review, found that power relationships within the households, in particular
women’s authority, had direct impact on children’s nutritional status, therefore it was
essential to understand the dynamics of decision making in the study site.

I found that akin to the division of labour in the households, the rules of decision-
making about allocating household resources were, to some extent, fluid, although
clearly defined and gender-based. While the authority and responsibilities of each party were different, much of the significant decisions were shared. The following section outlines elements of decision making, including prioritising, authority and negotiation.

**Prioritising**

Use of household resources reflected a set of priorities in which food had its context-specific place. In the everyday allocation of resources obtaining food - whether through production and purchase – was prioritised, and the household members’ time, energy, cash and social relationships were utilised in order to achieve this goal. The emphasis was on staple foods, first of all maize, and on a small number of other food items such as coffee and green leafy vegetables (food preferences, food choices and frequencies are discussed in more detail in Chapters 5 and 6). Beyond the daily food supply, high priority was given to paying off debt and, when necessary, to paying the cost of the treatment of sickness.

In the long term, household resource allocation had two foci. The first was managing risk and investing into productive assets, mainly through buying and providing for livestock. The role of animals, even if they were raised for their flesh, was not to supply meat to the household directly but to provide security and profit:

[When we sell livestock] we spend for our children’s school necessities. We buy them new clothes. When we have got larger [amount of] money we buy calves, goats and oxen for ploughing. If the money in our pocket does not allow us to buy a big ox we buy the small bullock and we wait until it grows enough to plough the
field…. Again, if our money, the amount we have, allows us, we buy milk cow.

We spend our money, like this. (GD20120121)

We fatten livestock for sale. Once we fattened an ox we sell it, and with the money I buy other ox to fatten; the rest I use for household: clothes for children, and other things. We have one sheep also – that is also fattened for market… To slaughter them for household? Can’t even think of that! (Z08F)

The other focus was upholding and safeguarding the family’s social standing by observing the social norms and customs of local society. This required fulfilling a range of obligations, from making sure the children had reasonably presentable clothes or uniforms for school, to donating to religious and social organisations, and from contributing to other families’ ceremonies to performing the household’s own.

Resources, if possible, were saved throughout the year for the main holidays, and a large portion of the crop yield was spent immediately after harvest, celebrating New Year and *Mesug’el*. Events requiring great resources were mostly carried out in the months after harvest, from September to January: many ceremonies, as well as most house construction took place during this season:

Between those months, September to January, that is the time when people build new houses, and wedding ceremony and circumcision is performed. So we also spend our money for these kinds of issues….The amount of money that remained from these expenses, we use it for household consumption, for food.

(GD20120121)
Authority and negotiation

Provisioning the household with food crops and cash placed the control of money into men’s hands in many families. In general, women had to refer to their husbands when making decisions about money, giving the impression that, in the actual physical sense, their husband was holding the household’s money. The question about where their market money came from, drew almost uniform answers, even when the woman herself was a successful merchant:

When my husband gets money by working jobs I get market money from him. (F06)

[The father is] selling livestock, selling maize, put aside money, he is giving me the necessary amount [when I need money]. (F11)

I take from my husband’s pocket if he has any, or he gives me. (F05)

Women made virtually all food purchases, and while some stated that they consulted their husband beforehand, most of them claimed that it was up to them what and how much they bought at the market:

First we discuss together and decide what to buy. (F18)

Most of the time I decide what food to buy and how much. (F11)

My husband is not here, so I decide. Even when my husband is here I decide about food. The man’s role is to eat what I prepare. (F21)
Decisions about other small, everyday purchases, such as firewood, lamp oil, soap or matches, were also in the realm of the women. Bigger household and farm items, for example household utensils, furniture, tools and animals, were typically bought only when the household had larger amount of cash, most frequently after harvest when some of the crop was sold. These expenses, as well as those great expenditures linked to ceremonies or building a house, involved discussions and planning, and shared decision making:

For example soap, lamp oil, firewood, pots and plates [we buy] according to a plan we make together, and I make the purchases….Also clothes, furniture: if I get money from him, I can buy those things. (F15)

For clothes, furniture, animals or new roof the most decisive thing is income; we decide together. (F18)

As they were mostly in charge of the household’s cash, paying for treatment for the children’s illness at the health post was referred to the fathers. According to my observations most of the children were taken to the health post by their father, and he also often purchased food from the shop for the child, following the custom of giving sick children what they asked for. But a child’s illness often called for immediate response, and it was the mother’s assessment of the severity of the situation that governed the decision about whether to seek professional help, including the associated costs. In their husband’s absence women had the authority to make decisions in these types of emergencies, and if they did not have the cash, they borrowed:
I should ask my husband first. If he is here he pays for clinic. If he is not here I borrow from neighbour. (F13)

When he is around he takes the child to clinic and pays. The other times I borrow money from neighbour and take the child. (F14)

While the cash was controlled by the men, other household resources were managed by the women. Produce was stored in the households after harvest, and it was in the sphere of the women’s responsibilities, as well as authority, to look after the stock:

The responsibilities of the mother: she controls all things at home like…the product that comes from the field and stored at home. She has control over all the household things, like the harvested crops. (F07F)

Due to the distinct roles of husbands and wives in generating, managing and controlling household resources, the allocation of these resources was subject to careful and often very detailed negotiations. Even with everyday purchases, cash shortage sometimes led to arguments, especially about items that were beyond the sheer necessities:

When we finish grain for household I tell him to buy some but he argues. Sometimes I win, sometimes he wins. But most of the times we agree. (F29)

When I want to buy t’ef he gives me too small amount, I ask for more, he says that was enough, but then he gives more. (F06)

Decisions about selling crops or livestock, and other plans that affected the household’s economic well-being, were made together by husband and wife:
Yes, there is conflict. [But] mostly our argument is not about buying. Because of our [difficult] financial situation, it is about what to sell. After the argument we come to an agreement. (Z13)

We discuss the plan. And most of the time we are successful, but sometimes, mostly because of [lack of] rainfall, our plan does not become real. (Z10)

Leaders and most non-household interviewees expressed the opinion that people did not plan their expenses carefully and they spent beyond their means. Many household interviewees and group discussion participants, however, contradicted this view:

We don’t spend our money extravagantly … we spend our money according to the amount we have, we don’t spend more than our ability. (GD20120121)

4.2.2 Women and men in social networks

Social networks, ranging in size from the nuclear family to village scale, played an essential role in coping with vulnerability and forming risk management strategies. Exploring these networks was helpful in mapping many of these strategies, and also revealed the social structures which underwrote and balanced women’s and men’s household power.

Nuclear household

Interactions between women and their husbands were characterised by mutual respect and care, and their domestic behaviour, within the confines of roles, was
informal. Men and women displayed affection towards children without reserve. Towards each other, however, the social norms required a degree of distance:

Custom does not allow the married couple to show together in public. They go to church, wedding, or funeral separately, normally the men first. Even sharing a motorbike taxi is not done. This changes now, as town-educated people return to the village. (ALRA)

Women were free to leave their house or compound alone, or in each other’s company, to run errands or visit each other. While conflicts existed, as the need for conflict resolution mechanisms described below attests to, they were rare and never public.

Polygamy had been practiced in the study site for as long as people could remember, although the population of the area never followed Islamic traditions, and Christianity had been established there centuries ago. In the sample of 51 households five men had two wives. Second wives were significantly younger than first wives, and while the first wife had more influence, the younger wife enjoyed more attention. The practice was accepted though negatively judged by some members of the community:

Men who have second wives marry [again] because once first wife has many children she will not cook fine food and give love to her husband; so he takes a second wife to get those things. This only benefits the husband. When the first wife is Protestant she sometimes does not agree to the second wife and divorces her

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43 This may or may not be representative of the village population, as the sample selection did not include this as a criterion – I became aware of this practice some weeks after the engagement of the participants
husband saying that she wants to live with her children and her religion, her God.

(ALRA)

Resources were intended to be shared justly by the two wives and their respective children. The husband divided his land according to the size of each part-household and each co-wife had control of what was produced in the field that was assigned to them:

I share not the yield but the land. The bigger wife gets the bigger field, the smaller wife gets the smaller field. (Z09F)

Not all co-wives had good relationship with each other and even when they did, some fighting seemed flare up from time to time. The above quote was from a man whose two wives, while I interviewed him, were in the village lock-up for the day, for their endless quarrels.

Women’s social networks

According to traditions the choice of marriage partners had been negotiated between families. Young women moved to their husband’s village when they got married, and often to the compound where their husband’s father and brothers lived together. Women thus were surrounded by in-laws and many of them were quite isolated from their birth family, whom they only saw at the time of ceremonies. However, customs prescribed that they must feel welcome and protected in her husband’s home:
In our area there is a custom that once the bride comes to her husband’s home by wedding ceremony, the family feeds her special foods, to fatten her up. The purpose is to feel her warmly welcome. (ALRA)

Women were protected by social mechanisms in their in-laws compound, which included the role of the father-in-law or another senior male as arbitrator when conflict rose between the woman and her husband.

There was camaraderie between sisters-in-law, and the many members of the extended family participated in daily coffee-ceremonies served in the elders’ house. Daily interaction with in-laws was common even in those households that were not part of an extended family compound. Nevertheless, it did not follow that all women, married into the group, were completely comfortable with the other members of the extended family, and when they needed help, support or advice, they preferred to turn to neighbours and friends, outside the compounds:

For me to borrow or ask, other people [not the in-laws] is better. I can ask freely from others. It’s easy to borrow from family, but the problem is that they talk about each other and sometimes even insult you. The neighbours hide [don’t reveal] your problems. The other wives in the compound do the same what I do. (Z03)

Some participants said that when they experienced difficulties they would rather sell some of the crops or livestock to buy food than to ask for help, and turned to the in-laws only in emergency:
If it is a serious case I will ask them. (F06)

They may give, but not much....not relying on husband’s family [when there is shortage of food]....my family, my sisters and brothers will help. From his family we just borrow. (F07)

The sentiment of not relying on each other was mutual in the in-law relationship between women, and mothers-in-law preferred not to depend on their sons’ wives either:

Both of my neighbours are my daughters-in-law, they can borrow from each other.

If I want to borrow from neighbours I have to go farther away, to ask from my peers. (F05)

Nevertheless, the older generation of women, in particular widows, were an integral part of the activities of their sons’ households, sharing – and contributing to – meals, and participating in social events. Their sons and sons’ wives displayed much respect for them, and when their husbands passed away they came to be considered the head of the household for many aspects of family life. An earlier quote of sons not dividing up the family's fields while their widowed mother was alive is an illustration of this custom.

Another example of older women’s authority came from a young mother, who remained near her birth family after marriage, and who described her mother as well-placed to help her daughter in need:

My mother lives nearby…When I am sick I go to her and she helps me with money and medicine because she has more field than us. (Z08)
Women established networks of friendships among their neighbours, with whom they had reciprocal relationships, sharing everyday tasks, advice and assistance. They looked after each other’s small children including breastfeeding each other’s infants, borrowed salt and flour or small amounts of cash, and helped during the time of post-delivery confinement:

When the mother gives birth we help by washing clothes and preparing food for the whole family – when I gave birth my neighbours also helped me. When one person builds a new house the neighbours prepare food and kineto for each other. When I want to build a new house I can tell my neighbours please help and they will come. (Z02)

Men’s social networks

The foundation of men’s networks was their birth family. Even those who did not live in the family’s compound had regular, often daily interactions with their father and brothers. They attended meetings, church, funerals and other ceremonies together. They often helped each other and their father in the fields and in other work, as illustrated by the quotes below, from interviews with old men:

They help me, the student son especially, after school. When they see me ploughing they get the hoe and dig in the field. They help me with every work that I am doing. They [also] help each other, thanks to God. For example this is my child, he lives in Gaffata, but he came to help me; he just came back from the field, he was ploughing my field today. (Z16)

They don’t help each other on the field, just work themselves. But they help each other with building new house. (Z15)
Men also formed relationships with their neighbours and exchanged some assistance and favours:

The closer neighbours help each other; it is not formal, but they tell each other when they need help…[but] if I face hard months I will sell my own things and cover our food needs from market. It’s difficult to ask other people. (F19F)

Men’s roles in the life of the village allowed them to form networks outside the extended family. Many of them served as volunteer law enforcement patrolmen, in church office, as peace arbitrators or on the village council. Women, when asked about their husbands’ responsibilities, acknowledged these social roles that reached beyond the household sphere:

He has responsibility in the village: if there is some problem he goes and helps, he has a role in the village social life. He has bigger responsibility and authority. (Z03)

Men played more active roles in the political life of the village and their family connections were often blamed for the perceived inequity of allocation of community resources such as welfare benefits, or skills training. The following section of a group discussion transcript demonstrates this point:

L: why do you say that the training is given by turn? It is by family relationship – sometimes one person can get training four or five times a year, and the others don’t get at all. There is a big discrimination. They don’t see the people equally, they give chance to the close relatives, not to the poorest but the rich.

N: why do you reveal all reality [to the researcher]?
L: why not? We have to tell what is going on. When we ask them about the training they say that you will get the turn on the next round. They always say next, next, next....

F: I have got one training after a big argument and with the help of my son M [he works at the WVE compound]. My son played an important role in giving me this chance. (GD20120208)

4.2.3 Traditional cooperatives

Traditional cooperatives have contributed to people’s ability to fulfil social and economic needs for centuries in Ethiopia. The two types of traditional cooperatives mostly referred to in the study site were *iddirs* and *ekubs*. *Iddirs* functioned as small-scale mutual insurance societies, dispersing the economic shocks households experienced, while *ekubs* were informal savings associations (Getahun, 2001; Tesfay, 1993). Both required regular contribution from members, and had male and female members within one cooperative. However, women usually paid less membership contribution in the *iddirs* than men.

*Iddirs* were associations whose primary function was to provide financial and practical assistance for funerals. Funeral ceremonies lasted for days and involved preparing a sequence of traditional dishes for a large number of people, adding to the high costs of the burial itself. The grieving family received money from the *iddir* to help with these expenses, and other members contributed labour to food preparation and setting up the big tents. The tents, as well as the large cooking pots, utensils and serving dishes belonged to the cooperative, and were lent to the families who needed them.
Local *iddirs* also loaned money to members, and organised collections to help at times of crises such as loss of livestock, fire or flooding. During weddings and other celebrations the cooperative lent equipment and organised help, similar to the assistance for funeral ceremonies, but no financial support was offered. When the need was greater than their reserves, *iddirs* collected additional contribution or loaned money from members. *Iddirs* had a constitution that set out the rules and membership criteria, and were expected to be registered by the regional government’s justice department. In the study area *iddirs* were mostly organised within the formal entity of the various churches. Membership in *iddirs*, in particular for household heads, was seen as obligatory, fulfilling a responsibility towards one’s family.

*Ekubs* were informal savings associations, which operated as rotating funds with the membership of friends or peers. The usual membership number was 12 people; each contributed equal amounts every month and each member received the monthly collection in turns, decided by draw. The recipient could use the money to solve immediate household problems, for example taking care of urgent repairs or debt payment, or invest in productive assets.

*Ekubs* operated in one-year cycles, they were not permanent like *iddirs*, and were not required to be registered. The collected money did not generate interest as it was immediately paid out. Because most members got paid before their full contribution was collected, it was an essential part of the arrangement that members were from a similar wealth bracket and were able to give a personal guarantee. A failure to meet the guarantee could have serious consequences:
I don’t want to be a saving club member because if I can’t pay they sell my roof iron and then how do I raise my children? I am only member of irdir, it helps us in funeral or wedding. (Z07F)

Less formal, but significant in terms of risk sharing, was the occasional collaboration of the people of a neighbourhood to help a household who were struck by disaster:

There is no [regular] contribution for that; but there is another custom: if my ox breaks a leg or something happens to it, the neighbours buy and slaughter it – I get the money, they share the ox. (F19)

I was living in a godjo beyt [grass-roofed round hut]. But accidentally it was burnt down by fire, with all belongings in it. I built this house with the others’ help. People contributed [roof] iron sheet, building timber and different things. [They were] different individuals: friends, my wife’s family, my family, uncles, teachers and other government workers. I asked them, told about my problems. (F07F)

4.2.4 Celebrations: costs and reciprocity

Celebratory events, such as the major religious holidays, as well as weddings, circumcision ceremonies, or building a new home, required extraordinary financial efforts. Along with the traditional cooperatives other traditional social mechanisms, based on reciprocity, played significant roles in ensuring a degree of risk sharing and support for families in these situations. This section outlines how the costs of the festivities were met, and the diverse opinions in the community about the related customs.
Celebration of holidays

The feasts that marked New Year, *Mesk’el*, Christmas and Easter were family-oriented events, and while they were celebrated in every household as richly as the family could afford, they did not involve large numbers of visitors. Households aspired to buy new clothes for all family members and prepare a variety of special dishes traditionally associated with the holidays. New Year and *Mesk’el* took place around, or immediately after, harvest, and the special food items and clothes were purchased using cash generated by selling an often significant part of the harvested crops and livestock. Regardless of the resources of the household, holidays needed to be observed appropriately:

For this kind of holiday we try to fulfil our customs as much as possible, even if we have to borrow from others. (F07)

We also celebrated *Mesk’el* and Christmas, so maize was finished by April – May every year. They were very difficult times: we sold livestock or the government helped, or we stayed hungry. (Z12)

When we fatten livestock and sell it, we mostly spend for holidays like *Mesk’el*, Christmas and Easter. (GD20130412)

The custom of sacrificing a large portion of household income for the festivities drew judgement from some non-household respondents:

You know in Wolayta culture there are many bad customs. I have seen different parts of Ethiopia and I saw how people celebrate holidays like *Enkutatash* [New Year]. People in other areas celebrate one or two days only. But our people
celebrate Enkutatash by slaughtering. Then again they have big celebration on Mesk’el for many days….Again, in January there is Christmas, they also slaughter and celebrate. So they spend much at these times…. To fulfil this expense they sell their produce immediately, as soon as they harvest it. (M26)

Celebration of ceremonies

Wedding and circumcision ceremonies were large-scale events and attracted many people. Tents were erected so people could eat in the shade (according to tradition food must not be exposed to sun) and benches were borrowed or hired. The family’s home was repainted outside, often with welcoming messages or quotes from the Bible written on the walls. Inside the house the earth floor was repaired and the walls painted or wallpapered with old newspaper.

The expenses of wedding and circumcision ceremonies had to be met by the household, and in some cases long periods of planning and saving preceded them. Opinions diverged regarding the custom of these, by local standard lavish, festivities. Some respondents saw them as barriers to development and progress:

Beside weather fluctuation there are also bad customs, especially in rural areas… extravagant ceremonies: funeral, wedding, circumcision. People spend more than what they have….To stop this extravagancy government interferes …by teaching them to reduce spending at funerals and weddings. (W41)

Indeed, the ceremonies drew much-needed resources away from the households, and this was felt not only by the family that arranged them, but also by those who attended and were expected to contribute:
There is a custom in our area: let say if something [a celebration] is happening in my wife’s family, even though there is no maize in my household, I am expected to take about 50 kg of maize for them. Even by debt! Besides this I should give them 20 or 40 Birr. This is obligation. Unless I meet this obligation they will look down on me. In the same way, if something is happened in my household the others are also worried and try to return what they got from me before. (F07F)

... For example wedding ceremony – it can lead us to great loss… In case of funerals it is acceptable. The difference is: with wedding it is our choice to invite many people. With funeral it is not our choice, it happens with God’s will, so it is good to help out. (Mikael RA)

Some participants saw the obligation of reciprocity as detrimental to their household’s economic security, in particular as the obligations often escalated:

I don’t accept the idea. When this kind of ceremony happens we are forced to sell what we have like oxen and sheep, and it leaves us poor. (F03)

This is not a good custom in our people….Specially when the individuals who received maize or money are obliged to return it back …If someone received 50 kg he should return more: about 75 kg or 100 kg. If he received 40 Birr he should return about 60 or 70 Birr. (F07F)

Others embraced this custom as an important part of the social and cultural heritage of the village, a tradition that built social cohesion and provided support when needed. They maintained that while sometimes it was difficult to comply with it, in the long term reciprocal contributions evened out:
Yes, it is important custom. I support it; whether I get profit or loss, I get happiness, and that’s enough – for the other people that is true too. I don’t mind about the contribution. (F37)

As a culture I support it, because when someone contributes to the other it’s like a credit. Because that person also contributes next time. So it is not harmful. It is our culture. (Z23)

Other forms of reciprocity existed as well. One, mentioned earlier, was the assistance offered at the loss of large livestock, in particular of oxen, which were considered critical to farm work. Another type of reciprocal giving was the fundraising event prior to the start of building a new house. These so called bazaars were organised either by the church to which the family belonged, or by the household itself, and involved a feast for the guests who came to donate some money or building material:

You know the other thing that force us to spend our money or yield …when there is ‘bazaar’ for building new house people contribute three or four iron sheets [for roofing]. (GD20120121)

Similar to ceremonies, these events were judged with mixed sentiments: they were mutually necessary, but often inconvenient from the guests’ point of view, and in the balance not always successful for the hosts.

4.2.5 The main points the social environment of the households

Power relations in household decision-making were perceived to be balanced and the structure of household responsibilities and authority required that the management of household resources was negotiated: although men controlled cash, and had more
opportunities to earn money than women did, women were in charge of the crop that was stored in the household. Women enjoyed substantial authority in decisions of directing resources towards food and the health of children.

Men’s and women’s spheres of authority and responsibilities, as well as their contribution to the activities that supplied households with necessities and kept them functioning, were divided along a bendable line, and largely defined by customs and cultural norms. The gender-based division extended into the social networks they formed and belonged to: men associated with other men and their birth family, while women connected more strongly with their peers.

In daily life the provision of food was the highest priority in terms of resource use, nevertheless, social and cultural imperatives often overruled this, drawing on the already severely constrained resources. At the same time, an array of traditional social mechanisms operated in the villages to moderate the vulnerability of the households. Farmers had opportunities to increase the size of the fields they cultivated, and the custom of sharing the cost of purchasing and raising livestock increased the investment chances of the poorest households. Traditional cooperatives offered informal insurance and savings options, and the well-structured system of reciprocity and assistance enjoyed by households in unusual financial strain, though in some instances a burden, was considered a balanced and helpful institution.
4.3 Government and NGO programmes

The final section of this chapter presents a brief outline of programmes, implemented by government agencies and NGOs, that had direct relevance to the health and well-being of children and the food security of households, both fundamental for the nutrition security of children. The two prominent providers of social protection and social services in the study area were the Ethiopian Government and World Vision Ethiopia. World Vision Ethiopia’s project activities were coordinated with the government strategies and in some instances World Vision was involved in implementing government development policies and projects.

This section covers relevant aspects of the Health Extension Programme and traditional health care, child sponsorship, the Agricultural Extension and Productive Safety Programmes, as well as skills training and microfinance, but by no means does it aspire to introduce the entire spectrum of services and programmes.

4.3.1 Child health and child well-being programmes

The Ethiopian Government’s Health Extension Programme, the full description of which is beyond the scope of this dissertation, had posts in both villages of the study site. Wolqá had a compound with several treatment rooms, a pharmacy and laboratory. A qualified nurse and several other staff members were on duty most days, including two trained Health Extension Workers. Issippe’s health post consisted of a one-room office. Wolqá’s health centre offered some diagnostic tests and treatments of some common diseases, such as malaria. These services were not available in Issippe; residents had to attend the health centre in a nearby village, about half to one hour walking distance.
Child health

The Ethiopian Government’s Health Extension Programme provided vaccinations for children. Vaccination programmes followed the World Health Organization guidelines and included BCG, DPT-HepB-Hib\textsuperscript{44}, oral polio and measles vaccines, all courses ideally completed before 12 months of age. According to the mothers in all participating households every one of their children were fully vaccinated. This somewhat contradicts the 2011 Ethiopian Demographic and Health Survey, which found that in the SNNPRS approximately one quarter of the children were fully immunised; this corresponded with the national coverage (Central Statistical Agency [Ethiopia] & ICF International, 2012). As there was no refrigeration in the villages, vaccination campaigns were carried out two or three times a year and not all children were covered or received the doses at the ideal time or all of the required doses.

The Health Extension Programme also included the provision of vitamin A supplement and intestinal de-worming medication for children, and all mothers reported that their child received these. These treatments were carried out in a system similar to the vaccination campaigns and, according to secondary data, their coverage was approximately 40% and 20% respectively (Central Statistical Agency [Ethiopia] & ICF International, 2012; Mekonnen & Demessie, 2010).

Health Extension Workers (HEW) were not qualified to diagnose or treat patients. Their role was to implement the preventative and educational aspects of the government’s health strategies, amongst them those that focussed on child and health.

\textsuperscript{44} Diphtheria, Pertussis (or whooping cough), Tetanus, Hepatitis-B, Haemophilus influenzae type B (Hib)

The Health Extension Workers observed positive shifts in attitude and behaviour:

There is change: previously people did not want vaccination [for their children], now they ask for it themselves – we are very happy with that. The other [is with] hygiene: people did not accept the idea previously, now we see improvement .... There is also change [in child nutrition]. Exclusive breastfeeding for six months – they did not accept [the idea], used to start to give food at two months; but now we see the practice has change. (A1H)

The National Nutrition Programme of the Government of Ethiopia calls for at least six-monthly screening of children under five years of age; this was carried out during the intermittent vaccination campaigns. As well, severely malnourished children were identified when they presented at the health post with illness. Plumpy’Nut and fortified porridge mix were provided for these children, however, some of the therapeutic food supplies found their way to the markets. Nutrition and food preparation advice to mothers was part of the implementation of the Alive and Thrive project.

Alive and Thrive

The Alive and Thrive initiative was funded by the Bill and Melinda Gates Foundation in three developing countries: Bangladesh, Ethiopia and Viet Nam. Its aims were reducing child mortality, illness and malnutrition through creating
improved models of infant and young child feeding practices. In Ethiopia the project piloted a public sector programme that operated primarily by utilising community mobilisation, advocacy and behaviour change activities (Rawat et al., 2013; Sanghvi, Jimerson, Hajeebhoy, Zewale, & Nguyen, 2013).

Health Extension Workers and Peer Mothers, a particular group of trained community volunteers, were essential in the project implementation. The Health Extension Workers’ role was to train and supervise the community volunteers, and they were responsible for keeping project records. Community volunteers, or Peer Mothers, were allocated each a number of families – up to 15 - where infants, children under two years or pregnant mothers lived. They visited these households at specific intervals, following a plan of ‘timed targeted counselling’. A detailed manual defined and supported the counselling work, outlining and often repeating the most important messages. The messages covered a wide range of food preparation and feeding practices, from commencement and exclusivity of breastfeeding to complementary food preparation, food hygiene and feeding ill children. I interviewed five Peer Mothers but did not have the opportunity to observe their practice.

Health Extension Workers and Peer Mothers agreed that the project benefitted children in many households. Seeing positive change further inspired the already dedicated Peer Mothers:

My husband wants me to be a housewife, but after this [Alive and Thrive] training I argue with him and tell him about my responsibility. (FPM)
I see the children become healthy, happy, grow well. But I get tired all the time – I put a lot of effort to achieve this …Big change, improvement. I am seeing progress. [Do you plan to continue?] Yes, until I die. (ZPM)

However, they emphasised that following the advice they give to mothers is not easy in many households, where resources are scant and the number of children high:

It is two different things, to advise and to do it. It’s easy to give advice, [based on] what we learnt. But when it comes to follow that advice, it needs financial effort so it is difficult. Besides, we have many children, that makes it difficult too. (MPM)

**Family planning**

Family size had a direct impact on access to food and nutrients in the village households with limited resources. Family planning was promoted in village meetings, and this initiative was also supported by World Vision, which gave “reward to model household with small number of children: cultural dress for mothers and fathers to encourage them” (M14). Contraceptive implants\(^45\) were inserted at the health centre, and some of the study participants were using this type of device:

I have reasons to use family planning. At this time I have four children. There is no big age gap between them. At this time to buy clothes for one child, the cost is about 200 – 300 Birr minimum. Imagine if I went to buy clothes for these four children: I need much money. So we decided to use family planning then after five

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\(^45\) Contraceptive implants were accessible at the local health post. Other methods may have been available in towns and medical practices.
years we discuss and decide what to do then. Until then we try to improve our life situation. Then we will discuss if it is good to get child or not. (Z08)

According to a respondent, women were worried about the safety of the implant as “many women had extensive bleeding from it, depending on the woman’s resistance” (ARA). Although the Health Extension Workers did not have exact numbers they estimated that over half of the women were using the device at the time of the study, and the number of was steadily growing.

Other preventative programmes

Village workshops were held to raise awareness for the methods to prevent the transmission of diseases, such as malaria, HIV and AIDS, and tuberculosis. Most households had a bed net over the main bed. Bed nets, one per household according to the study participants, were supplied by the Health Extension Programme and World Vision, but not all participants were satisfied with the distribution:

We have a lack of bed nets in our village. We cannot get according to our need. Instead of giving bed net to pregnant women or mother with baby they give to bachelors and spinsters. There is favouritism. (GD20130412)

Bed nets were also sold in shops in the towns, but the price was very high. In some areas mosquito spraying was also part of prevention programme.

Some other points of the Health Extension Programme were promoted at village meetings, for example the elimination of harmful traditional practices such as girls’ circumcision, and underage marriage and abduction. As well, aspects of
environmental health and hygiene were subjects of educational workshops attended by village residents. During household visits Health Extension Workers inspected the toilets for functionality and cleanliness, and encouraged parents to wash children’s bodies and clothes more frequently.

**Traditional health care**

The work of traditional healers and birth attendants was in many ways in agreement with the Health Extension Programme. They identified severely ill or malnourished children and referred them to the health centre, promoted good personal hygiene for mothers and children, and supported family planning:

Yes, I give an advice for the mothers. I advise them if they don’t follow family planning their children get stunted, their smartness get reduced and also the mothers get unhealthy. So I advise them to give birth with the gap of six or seven years. (BTH)

When I go to help with birth… I give advice: don’t get pregnant within five months, because it’s difficult to feed and buy clothes for many children; it’s difficult for the children’s health. I tell them to follow family planning. MTB

Health Extension Workers provided training to the traditional health practitioners in principles of hygiene and nutrition. In general, nutritional advice of the traditional healers and birth attendants aligned with that of the Health Extension Programme, with some differences with regards to exclusive breastfeeding: some of the traditional health professionals encouraged mothers to give herbal concoctions to
newborns to help their digestion. Diagnosis and treatment of childhood illnesses by traditional medicine is further discussed in Chapter 7.

Child sponsorship

An extensive child sponsorship programme was operating in the study area as part of World Vision’s mission, supported by World Vision US. The goal of the programme was the general well-being of sponsored children. The sponsorship programme covered their medical care, as well as school supplies and school fees including fees for college and university, and in some instances a small stipend for university students. The programme also contributed to funeral costs if the sponsored child died.

Not all sponsorship was applied directly to the child, but invested in projects that had impact on the family and community’s wellbeing. World Vision contributed to the Health Extension Programme, as referred to above. Sponsorship projects included school construction, furniture and equipment, reference books and other educational supplies, and ran awareness-raising workshops in the villages to promote girls’ education and to reduce the general drop-out rate. For improving household food security, sponsorship projects contributed to the construction of a veterinary post in Wolqá, and organised training opportunities for farmers to improve farm practices, with a particular emphasis on livestock keeping and animal health. Sponsorship projects were also involved with reducing the impact of HIV and AIDS in the area, with a specific focus on orphans and vulnerable children from affected households.
4.3.2 Food and livelihood security programmes

In the year 2008 the Government of Ethiopia embarked on a global development initiative for economic development and the sustainable eradication of poverty. A five-year Growth and Transformation Plan commenced two years later (Federal Democratic Republic of Ethiopia, 2010). The food and livelihood security schemes described below are either an integral part of, or coordinated with, this development initiative.

The main mechanisms through which government agencies and NGOs delivered food and livelihood security-related interventions were the Productive Safety Net Program (official spelling) and its complimentary schemes, the Agricultural Extension Programme, various microfinance initiatives, and a diverse range of skills training activities.

Productive Safety Net Program (PSNP)

The Productive Safety Net Program of Ethiopia is a social protection programme on a national scale, initiated in 2005 by the Government of Ethiopia and a consortium of donors. With an annual budget of 500 million USD, and reaching more than seven million people by 2008, it was the largest social protection programme in Sub-Saharan Africa outside South-Africa (Gilligan et al., 2009). The central objective of the PSNP was “to provide transfers to the food insecure population in chronically food insecure weredas in a way that prevents asset depletion at the household level and creates assets at the community level” (Gilligan, Hoddinott, & Taffesse, 2008, p. 4). The target population of the programme was clearly defined, however, the
programme did not set standardised indicators or thresholds, and delegated the setting of criteria and selection of beneficiaries, based on a set of guidelines, to the Wereda Food Security Task Force.

The PSNP utilised two paths to support poor households. The larger part of the programme operated via public works, where selected beneficiaries contributed labour five days per month to projects building community assets, and received payment at a daily rate. The other path of the PSNP provided direct support in the form of food or cash transfers to those households that did not have able family members to participate in the public works programme. A cluster of food security activities, referred to as the Other Food Security Program, including access to credit, agricultural extension, irrigation and water harvesting schemes and technology transfer in crop production and soil and water conservation, complemented the activities of the PSNP.

Households would be members of the programme for at least two, and up to five years. Humbo Wereda data showed that of the total population of approximately 130,000 people 64,729 were beneficiaries (M14). Productive Safety Net Program money was scheduled to be paid quarterly, but according to some household and non-household interviewees, people often did not get the payment on time, or received reduced amounts:

Safety Net payment is not regular. We don’t know how it works. For example I worked for 3 months and did not get payment. This happens all the time. Payment times are unknown. (F37)
Yet many participants referred to the benefits they draw from the PSNP, in particular how it made them feel more secure:

I worry when they [the children] are sick: I have no money to buy medicine. But it’s not bad, God helps us and government helps with Safety Net Program. (Z08)

**Community infrastructure**

Several community infrastructure projects, with potential impact on livelihoods and food security, were in progress either as part of the PSNP, the Other Food Security Program, or a different development initiative of the Government of Ethiopia. All involved labour input from the local residents, and a significant part was volunteer work. Among these were the construction of the power lines, road maintenance and water harvesting. Village leaders emphasised that work on these projects was in the people’s own interest:

The community is maintaining the previously constructed road, both by community participation and by Safety Net. (W40)

People are engaged in this water harvesting activity because of their own interest. It will go for 20 days; we stopped Safety Net work because of it. …This project is carried on by the people’s own interest [in it] and for no pay. After this activity there is another plan…. but that will provide some wheat and some little payment for the workers. That project is terracing and also water harvesting; it is separate from Safety Net, for people who are not beneficiaries of Safety Net. (M21)
Direct food aid

During the food aid distribution campaigns the several large warehouses, managed by World Vision Ethiopia, were filled with grain, such as wheat and sorghum, cooking oil, and sometimes dried legumes. Emergency food aid was supplied by a variety of donors, predominantly from the United States of America and to a lesser degree from the United Kingdom, Canada, Japan, the European Commission and the United Nations. Distribution was controlled and coordinated by the Government of Ethiopia, and beneficiaries were selected by the *wereda* and village government.

Many study participants claimed that they often relied on food aid when the household suffered food shortage. This dependence, just like the recurring nature of hard times and food shortages, were talked about with a degree of acceptance:

> We had very difficult times: we sold livestock, or the government helped, or we stayed hungry. (Z12)

> If the harvest is not good we can hold our hand to the government for aid, or to Safety Net. (GD20120208)

> When food shortage happens in my household the same thing would be happening in the other households. Especially when it is because of drought. So it would be difficult to ask individuals [for help] because they would respond: “we don’t have anything”. So we expect help from government. (F07)

Reliance on assistance such as food aid or cash was seen as weakness by the village leaders. They suggested that farmers were getting increasingly independent, due to the achievements of the PSNP and the various development and extension programs:
Previously there was weakness – everyone was expecting aid from government and aid organisations. Since I started this work …the people have got awareness that we change our luck by our own self. (M21)

During the months of field work, in 2011, acute food shortage occurred in several regions of Ethiopia, and food aid was distributed to many households in the villages of the study site. People queued up at the warehouses of the World Vision compound to receive 100 kg sacks of wheat and a carton of cooking oil. Merchants with horse and donkey carts were waiting outside the gate and much of the food aid was turned into cash as soon as soon as it left the compound. Wheat-based food was not customarily prepared in the households as family food, and with the cash they received for the sacks of wheat people could buy the food of their choice.

Agricultural Extension Programme

The Agricultural Extension Programme in Ethiopia aimed to increase agricultural productivity. It had several elements, including knowledge and skills development, plant nursery, distribution of inorganic fertilisers and improved seed, water harvesting and soil improvement projects and veterinary services.

Knowledge and skills development was carried out through training for farmers either by the local Agricultural Extension Agent or by a specialist engaged by the wereda government. Farmers learnt about natural resource management, plant and animal science, and animal health:
We train the farmers, both theoretical and practical. We are waiting for the training room to be finished, then will train 120 farmers each year, in a 6 months course. Training includes those four things; afterwards they get ‘green certificate’. (AF)

Theoretical learning was underpinned by on-farm demonstrations of improved practices and technologies, including composting and more effective ploughing and seeding.

Village nurseries were established in both villages, employed several people, and were supervised by the Agricultural Extension Agent. At the time of field work the nurseries supplied seedlings of *Grevillea robusta* for construction poles, neem and *Erythrina variegate* for shade trees, and some orchards trees, such as coffee, moringa, mango and avocado. The nursery in Wolqá produced mango, banana and moringa seedlings, as well as acacia, palm trees and grevillea. These seedlings were made available for the farmers at some cost. No vegetable seedlings were grown in the nurseries although chilli and onion seeds were available for free to the farmers. The fruit of the mature fruit trees in the nurseries was sold to cover running costs such as tools and fence repair.

The distribution of improved seed and inorganic fertilisers was a key component of the Agricultural Extension Programme. The ‘full package’ in the study area included improved maize seed and two types of fertilisers: urea, a nitrogen fertiliser, and DAP\(^46\), a phosphate fertiliser. Improved maize seed was bred for its suitability to local conditions. It had higher rates of yield, better nutrition value and pest resistance, and matured faster; however, without fertilisers, the improved seed would

\(^{46}\) Diammonium Phosphate
not produce the ideal yield. Furthermore, the next generation of seed was not fertile, forcing farmers to buy seed each year. According to the Agricultural Extension Agents around 50% of farmers actually applied the ‘full package’, although about 80% bought it.

Through the Extension Programme farmers could buy fertilisers on credit and with subsidy, with full payment due after harvest. This scheme was openly used by some farmers to generate immediate cash: they on-sold the bags of fertiliser to merchants in the hope that they would have abundant harvest and they would be able to pay off the debt. Inorganic fertiliser use was generally low; according to the Agricultural Extension Worker, approximately 50% of farmers applied fertilisers. The rate of application was much below the recommendations.

Construction of water harvesting infrastructure in the fields was coordinated by the Agricultural Extension Programme. Contour banks and trenches were constructed for rainwater retention and soil conservation along the edges of fields. For irrigation on their fields farmers received some assistance from the Productive Safety Net Program, as well as from the Agricultural Extension Program.

Veterinary services were provided as part of the Agricultural Extension Programme. The veterinary post in Wolqä was attended several times a month by a qualified specialist, offering vaccination and skin spray against sleeping sickness, artificial insemination for hybrid cows and treatment for sick animals. For vaccination and treatment farmers were charged, while skin spray and insemination were free.
Incentives for farmers

Incentives were part of the implementation of the objectives of the Growth and Transformation Plan. Managed at the level of local government this initiative encouraged farmers to compete with each other in a set of projected outcomes, and rewarded their achievements:

Since 2008 there is a program called Development and Transformation…. [Farmers] are awarded by federal and zonal and *wereda* level [if] they send their children to school and they get successful education; if there is peace in the household between husband and wife; if [the farmer] digs a small dam in the field and lines it with plastic; and builds a good house in the village or the town. All these activities were evaluated for the awards. (M21)

The government recognises and rewards model farmers … this is to encourage the other farmers to work hard. [The reward is] a radio, tape recorder, or maybe 500 – 1000 Birr. (W40)

Those successful farmers, however, who were awarded for being outstanding role models, had not been among the poorest at the start of the government’s incentive programme:

Initially they were already in better situation; they could become role models by adding their effort to what they already had. As their wealth becomes bigger they buy a place in town, take timber from this village and build a house. (M21)
Livelihood skills training

Several aspects of skills training has been described in previous sections about off-farm livelihoods and the Agricultural Extension Programme. In summary, a range of skills training activities had been held in the villages, organised in collaboration by the wereda government, World Vision and other NGOs. I did not have the opportunity to observe any training workshops, so the information presented here is from interview and group discussion data.

The *per diem* offered by many of the training workshops often attracted people as much as the information they received. It appeared that workshop participants were assigned to attend training, and it did not always follow their interest. Some informants argued that access to training was not equal.

Skills development to improve farm-based livelihoods focussed on farm productivity. Great emphasis was placed on improved agricultural practices. Workshops were held with topics such as water conservation, irrigation and erosion control; ploughing and sowing techniques; and soil improvement through the application of compost, manure and inorganic fertilisers. The farmers were taught nursery skills such as preparing for, growing, and caring for seedlings; they learnt about improved varieties of grains, tubers and legumes, and about appropriate storage techniques for crops after harvest. Breeding and fattening livestock, and growing fodder and forage for them, as well as livestock health, were also subjects of training sessions.

Off-farm livelihood skills training encompassed a relatively small range of occupations, and it appeared to be more intermittent than workshops related to
agricultural practices. Study participants recalled training provided to a small number of people in masonry, fishing, hair dressing and barbering skills, and clothing repair. Training in the food service industry was provided in the nearby town and World Vision sponsored a number of young women, mostly vulnerable youth, to complete their studies there.

Microfinance: loans and savings

A range of microfinance services were available in the study area, delivered by a variety of organisations. The options to save and withdraw or borrow money supported families during emergencies so they were not forced to divest of productive household assets, as well as assisted them in developing income generating activities.

Meida, a microfinance organisation operated by a Canadian NGO, had been working in Ethiopia for over 20 years. It set up a branch in Wolqá, supported World Vision staff, in the year of my field work. Meida organised saving groups in the village: households contributed small amounts in regular intervals, the accumulated money was kept in safe boxes by a trusted member of the group and members could withdraw money in crisis. Meida also supported the participating families with advice, financial help and loans in the development of small business enterprises.

The Omo Microfinance Institution, which was managed by the Ethiopian Government, offered voluntary savings, loans and insurance products. Omo was established in 1997, and operated in the SNNPRS with headquarters in Hawassa, the capital of the SNNPRS. It had branch offices in each village, each with full-time
Omo’s main vision was financial education: “to teach people about saving and improve their economic situation” (MMF). The strong educational focus was evident from the activities of the Omo staff, who organised workshops in the villages to explain about savings, interest and careful financial management. Omo specially targeted women, day labourers and widows: people whose livelihoods were less secure or less independent. Loan conditions included prior history of savings by members and guarantee. The organisation’s local agent described his achievements as follows:

Omo started here two years ago. 147 HHs took loan, there was no failure; 28 of these got the second round, which is 4000 Birr; the others also wait for their turn for 2nd round. People borrow for raising animals – goat, sheep; or [want to be] merchants selling goods. Commonly in this area these two things people want loan for….247 households have savings account. (MMF)

Wisdom Microfinance Institution was established in 1999, and operated as an affiliate of World Vision International (Wisdom, n.d.). Wisdom delivered a wide range of loan and savings products. Loans were offered to smallholding farmers, agri-businesses and to rural enterprises. Consumption loans were available to ease short-term cash shortage. All loans had a sliding scale in terms of maximum size and maximum lending period, and considered the loan history of the borrower. Wisdom provided microfinance to graduates of the livelihood skills training programmes of World Vision Ethiopia. Wisdom also provided savings products. The guarantee requirements rendered the loans difficult for many farmers, and the short and non-negotiable lending period pushed them beyond reach. Several stories of defaulted loan customers circulated in the community:
Yes, I want to participate in Wisdom saving club, but I don’t have ability. You know, once you are a member of Wisdom and you can’t pay the debt on time, they may take your house or if you have a field they may sell it. So I am not interested to be a member of these kinds of club. (Z07F)

The Carbon Project

An important development initiative, locally known as the ‘Carbon Project’, operated in the Wereda. The aim of the Community-Managed Natural Regeneration (CMNR) Project was the restoration of locally indigenous, diverse forest species, and it relied on community participation. The project was initiated by WVE, in collaboration with the Government of Ethiopia, in response to land degradation and its effects on rural agricultural populations, and received support from WVA and from the World Bank. Innovative use of cooperative institutions was fundamental to the implementation and ongoing sustainable management of the project.

Beyond restoring the biodiversity of the native forest a central goal of the project was to improve the living standards of the target population. This was to be achieved through enhanced opportunities for income and employment generation, and through the revenue generated by the initiative as a Clean Development Mechanism project for carbon sequestration and trade. It was envisioned that economic benefits would translate to improvements in food security, health and education, and that women and marginalised groups in particular would benefit from the project.

At the time of field work some carbon trade revenue had been received by the cooperative and invested into community infrastructure, such as grain mill and grain store. Many of the projected social and economic outcomes were fulfilled.
Significantly, food security reportedly improved through increased productivity of farmland, attributed to the soil and water conservation work that was part of the Carbon Project:

[Before the project] the number of beneficiaries in Safety Net and food aid increased from year to year. Since the project became effective the number of beneficiaries decreased: this is a real assessment of the improvement of the household situation. (D07)

4.3.3 The main points about the local development programmes

A set of government and NGO programmes and projects assisted with food security and child-wellbeing. Their individual effectiveness was hard to distinguish, but at the same time it was strengthened by the overlaps and collaboration of their activities. These programmes and projects had many innovative aspects. For example the Productive Safety Net Program combined social transfers and constructing essential community infrastructure. The Carbon Project pulled together local and global interests and utilised cooperatives in an environmental project, and the Alive and Thrive project worked with trained community volunteers who provided advice to mothers in a precisely targeted and timed system.

4.4 Chapter summary

This chapter elaborated the economic, socio-cultural and developmental context in which the dimensions of children’s food and nutrition security are embedded. The implications of the study’s findings for children’s food and nutrition security were
significant. Virtually all food items that were used in family food were the outcome of local agricultural production, and that imposed severe constraints on diversity, as well as quantity and therefore reliability. Low livelihood diversity set limits to the households’ options for coping with vulnerability, and to the resources that could be directed towards improving food availability.

Positive factors were the supportive traditional social structures that existed within the households and in the community, assisting families in managing risk, alongside the major food and livelihood security programmes that operated at the study site. In addition, the study found relatively balanced power dynamics within the households, and social norms that allocated authority to women to participate in the generation and allocation of household income.

The following two chapters describe what constituted family food: its physical features and its social determinants.
CHAPTER 5

WHAT DID FAMILIES EAT? RAW INGREDIENTS AND TECHNOLOGY
Understanding what there was to eat in the local households provided a basis from which children’s food could be contextualised. This was essential in assessing deficiencies, inefficiencies and potential for improvement, and moving toward answering the research question. It was, however, not merely a contextual issue: I found that children were introduced to, and relied on, family food very early. For infants, virtually without transition through specially made meals, family food served as complementary food. In essence, what families ate was identical to what was available for young children.

Following the introduction of the place and the people, including the history of the region and the villages, and the physical, economic, social and developmental environment in Chapter 3 and 4, the next two chapters are dedicated to the description of many aspects of household food in the study area. This will set the scene for Chapter 7 on children’s food.

Chapter 5 is an account of the physical aspects of food. Based on the findings of my field work it describes the ingredients available and accessible at the study site, and the preparation methods of food that families ate on ordinary days of the year, regardless the day the week. It also discusses food diversity and the impact of seasons on food availability. A food glossary in Appendix F, lists the ingredients used, as well as the dishes commonly prepared in the village households.
5.1 Food in the villages

Food in the villages was predominantly plant-based. The main staple was maize, to which the seasonal availability of tubers added some variety. A small range of vegetables and, when in season, legumes and tropical fruits were consumed on a daily basis. Spices and palm oil completed the diet and coffee was an important element of a meal every day. After a short recapture of where the food households consumed came from, I present a detailed account of the components of the meals.

5.1.1 Food production

The bulk of the daily food households used was produced by the households themselves. However, as noted earlier, not all households had land and most households did not produce enough to last until next harvest even in years of good rainfall; I will return to this issue later.

All households that had fields produced maize. It was usually grown during the short rainy season but a few farmers grew another crop of maize during the long rainy season. It was more common though to produce other crops during the Meher, some for household use and some for sale. These crops included a variety legumes, tubers and spices and a non-food crop, cotton. Food was also produced around the houses: mainly fruits and vegetables, tubers and herbs and, in some places, coffee and enset (Ensete ventricosum), better known in the English-speaking world as false banana.

Many households kept small or large livestock, and as a common rule they were raised to work as drought animals, to provide milk and to assist with risk management. Livestock and animal-source foods were viewed as an investment and
as cash-crops, the sale of which covered the household’s daily purchases or bigger investments, as well emergencies. Livestock products, such as eggs and dairy, with the exception of a portion of the latter, were mostly sold.

Several of the villages and all towns in the area had regular markets; however, their scale and frequency varied. A large part of the food items that were sold at these markets was produced locally or within the region. There was very little that came from elsewhere, and it was sold not so much at the markets but by the little village shops, such as salt, cooking oil, pasta, rice, soft drinks and some sweets.

In the lowland villages, where my field work took place, the markets offered the same variety of goods that were grown in the local area. In the larger town markets, food ingredients from the highlands could be bought, most importantly enset products, t’ef, shallot, garlic, spices and herbs and coffee. In the shops of these larger market towns some packaged and imported food was also available: tins and jars of tomato, jam and sardines, and a greater variety of pasta and sweets.

5.1.2 Plant foods

The following section gives an overall view of the plant foods most commonly consumed, whether they were produced or purchased by the household, and includes details about the ways in which they were used and combined with other food items in meals.
Maize

Maize: we eat it every day - oh! If maize disappeared our life also disappeared!

(GD20111210)

Maize was the source of everyday sustenance in the villages. The three main meals on any ordinary day were built around food prepared from maize. Maize, prepared in many different ways and forms, represented the bulk of food in every household.

At the beginning of the harvesting season some of the maize was picked before full maturation, as eshet (tender new grain). Roasted eshet was a delicacy, but it was also the harbinger of the end of the hungry months preceding the new harvest. After harvest the cobs were often stored for a period of time without shelling. Kernels were ground to somewhat coarse, unsifted flour in a nearby grain mill every few days; flour was only stored for short time.

Whole cobs or kernels were boiled or roasted and served with or without any condiment. Maize flour was made into round flat bread (called k’ita in Amharic and oitta in Wolaitta), or used in preparing porridges of varying thickness and dumplings. All of these were commonly accompanied by a stew-like mix of vegetables and spices. Maize kernels were often mixed with legumes, most commonly with kidney beans or haricot beans, to prepare nifro or k’olo (kokka and shasha in Wolaitta), boiled or roasted respectively, without any flavouring. These were simple meals eaten in the morning or for lunch, often served with coffee.
Other grains

Other grains were represented in the ordinary diet to a significantly lesser degree. *Injera*, the large soft flat bread made of the fermented batter of *t’ef* flour, was considered the national staple of Ethiopia but was only used at special occasions in these villages. *T’ef* was a highland grain, and therefore involved cash purchase. Households were not equipped to prepare it either: the special *injera* stove or *mit’ad*, a large round flat clay pan was found in very few kitchens, and mostly in those households that had closer ties with the highlands or other areas of Ethiopia. For special occasions *injera* was available from the local restaurants.

Wheat was hardly ever used in the households. While a couple of families prepared wheat bread during the holidays, it seemed to be a rare skill to make leavened bread. Like *injera*, wheat bread was available in the local restaurants. Packaged pasta made of wheat flour was available for purchase, and was a food parents aspired to give to their children. However, very few families could afford to buy it, and I did not see it being used in any household. Pasta appeared in food recalls once, served with flat bread, in the wealthiest household of my sample.

Liquid porridge made of oats, wheat and barley – none of which was grown locally and therefore had to be bought - was prepared for infants in a small number of households. This is discussed in Chapter 7 under complementary food. These grains were not used for everyday meals served for the family, only as ingredients in the special food for holidays and ceremonies, and in the porridge made for new mothers or for sick people. Small amounts of red sorghum was grown in the villages, and while interview data shows that sorghum was sometimes mixed with maize flour, it
was a practice I did not observe. Ethiopian black barley, produced in the highlands, was considered to have medicinal properties and therefore was recommended for pregnant and post-partum women. Black barley was sold in the Soddo market; again, I did not observe it in use in any of the households.

Different enriched porridge mixes were available at the shops in town specifically formulated for infants and young children. Although some mothers were familiar with these, they found the price too high to buy any of them. An enriched porridge mix, called *pordjit* (Wol), however, was bought at the village market occasionally: this was a fortified therapeutic food that was handed out to families with undernourished children in the local health centre and sold for cash by the recipients.

**Tubers**

A range of tubers was produced and consumed in the villages. A white variety of sweet potato, with a relatively long seasonal availability - from July to December - was one of the most popular. Sweet potato was boiled and usually served with a hot chilli-based condiment called *dat’a* (Wol), and was served as a snack rather than a main meal. One participant described a soup made with sweet potato into which *dat’a* was mixed. Potatoes (referred to as Irish potatoes) could be bought in the markets, but were not produced locally, and were relatively expensive.

Taro and cassava were available for a larger part of the year; they were produced in either of the rainy seasons and could be stored for a relatively long period. They were boiled and served with chilli paste as main meals, for breakfast, lunch and dinner. *Enset* was a significant source of staple food in the highlands, but less so in
the lowland villages where it was infrequently cultivated (see Image 23). Enset products were mostly used in special meals, mainly because of the high cost of obtaining them.

**Legumes**

Legumes produced and regularly consumed in the villages included haricot beans, kidney beans and cow peas. A smaller amount of fava beans and ground nuts were also grown, and pigeon peas were gaining popularity. Beans and cow peas were mostly boiled and used mixed with maize kernels in nifro. Sometimes whole boiled beans were mixed into porridge made for the family, and bean flour was used to enrich porridge for small children. Ground nuts, grown mostly for cash crop, were roasted and served as snack, with coffee.

Peas, chick peas and lentils were not grown in the area but were readily available in the markets and shops. However, the cost of these legumes was significant, and not many households used them regularly. The usual preparation method for peas was roasting, to be served with maize as k’olo. Lentils and shro (pea flour) were commonly used in many parts of Ethiopia as ingredients of condiments consumed with injera, but in the village households lentils were hardly used. Among the study participants, the stew-like condiment made of pea flour, shro wet’, was prepared only by the two women who married into the village from another ethnic group.
Vegetables

The two most frequently used vegetables in the village households were the leaves of the moringa tree and of the Ethiopian kale (*Brassica carinata*): *abesa*\(^{47}\) *gomen* in Amharic and *maxxesanta* in Wolaitta. Moringa trees, native to Ethiopia and not demanding much care or water, grew everywhere in the village, in the fields and around the houses. The leaves of the tree were harvested daily for household use or for market sales all year around. Growing kale was a more difficult undertaking, as it needed rain or watering.

The common preparation method of the two green leafy vegetables was identical: boiled in water with a little oil, salt, onion, garlic and fresh chilli; in poorer households only with oil and salt. This stew was served with *k’ita*. Alternatively, cooked leaves were mixed with maize porridge, or made into *kurkufa* (Wol) by adding maize dumplings to the stew while it was boiling. Moringa had a stronger flavour than kale, and some people said it turned bitter during the dryer months.

Although cassava, cowpea, pumpkin and sweet potato were grown in the villages my study took place in, for reasons I did not explore, their edible leaves were not used for food the way they are in other parts of Africa.

Vegetables that were known and used regularly but less frequently in household food included tomatoes, pumpkin and the European variety of cabbage, called *t’k’il gomen* (round cabbage in Amharic) or *tatesanta* (Wol). Although there seemed to be a strong awareness of the value of carrots and beetroots, their availability and use was very limited. Some households experimented with growing them, with limited

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\(^{47}\) *Abesa* (Amh): Ethiopian
success due to the climate. The preparation of all of these vegetables was similar to that of the green leaves: boiled into a stew with shallots, garlic and chilli.

**Fruits**

All fruits cultivated in the study site were introduced to the area, originally from Southeast Asia or Central and South America. A wide range of fruit trees were grown in the compounds, including lemon, orange, banana, mango, avocado, papaya and guava. These fruits were grown for both household use and for sale and, in season, families included them in their meals on a daily basis as snacks.

Sugarcane was also grown in nearby irrigated fields and small lengths of it were sold as sweets. A small number of custard apple and white Sapote trees also existed in the villages and their fruit was sold in the local market at a high price, mostly to the salaried government workers. Fruit brought from other parts of the region, mostly from irrigated areas near the lakes, was available in the markets throughout the year, although prices fluctuated with the season.

**Wild-harvested plant foods**

The only wild-harvested plant foods that were regularly consumed were wild fruits. Those that mostly grew in the forest, such as muchako, ladee, hagila, gassa, ongafree, boyniboyee, mullaho and tawayee (all Wol) were only accessed by those people who lived near the forest regeneration site in Issippe. Domiyee, ochaa, astiya, gammo gade, woshilecha and bedena (all Wol) could be found in the forest, as well as on roadsides and in community land in the villages. It was mainly children who
harvested and ate these fruits, and sold them at the market to spend the cash they earned on packaged biscuits or sugarcane. Of the 14 different wild fruits nutritional analysis was only available for one.

During the study period no wild-harvested vegetables or roots were used. Several green-leafed weeds, for example, ch’umeliya, aena, and gemeyida (all Wol), were pointed out for me, as food people would use during extreme food shortages. These wild vegetables grew along the roads or in the commons, and were often harvested for fodder.

Herbs and spices

Shallots, the onion cultivar most commonly used, garlic and fresh chilli were consumed daily in all but the poorest households. They were either boiled with the leaf-vegetables, or ground into a paste that was used as a condiment. Shallots and garlic were not produced in the households: garlic was grown in the cooler highlands and shallots were brought to the markets from the irrigated fields around the lakes.

Two kinds of chillies were produced in the area: a larger chilli that was the main ingredient of the spice mix called berbere, and a smaller, hotter variety, the African Birdseye chilli, from which the spice mix mitmita was prepared. These chillies were grown either as cash crops or for household use. Once they turned red the chilli was dried and ground for sale and long term storage, but in the households food was frequently prepared with k’ariya, the fresh, often still green Birdseye chilli.

Over 20 herbs and spices were used in Wolayta cuisine, especially during the preparation of the complex meals for holidays and ceremonies. Many of these were
also used for ordinary meals, or for particular purposes due to their special attributes. For example, *koseret*, an herb of the *Lippia* genus, as well as false cardamom, nigella and turmeric were mixed with butter for long-term storage; *koseret* was also used to clean the clay pots milk was stored and soured in. Women used cabbage seeds to rub the clay cooking pan, the *mit’ad*, to clean it and give it a nice aroma. The section on the medicinal use of foods, in the next chapter, describes the use of herbs for treating illness.

### 5.1.3 Animal-source foods

Large and small ruminants, such as cattle, sheep and goat, as well as chicken were kept in the study area. The chickens free-ranged and were not prolific egg-producers, and a large proportion of the hatchlings fell victim to predators. No other poultry was kept. A large number of goats and sheep were raised in the villages, but there were no great herds belonging to any one household: the largest number an individual household in the study sample had was five. Of all livestock cattle had highest status; indeed the question about household livestock numbers usually drew answers about oxen and cows only. Additional questions needed to be asked to find out about smaller livestock, as if their existence did not matter in the self-assessment of wealth. Oxen were highly esteemed draught animals without which farmers feel quite disabled and the raw meat\(^{48}\) of fattened oxen was preferred to any other flesh food. Cows were valued for producing milk and offspring.

\(^{48}\) In the following discussion the term ‘meat’ is used for food made of the flesh of ruminants as well as poultry and wild animals.
Meat

The meat of sheep and goat was slightly less appreciated than that of oxen, although some dishes for special occasions required either sheep or goat. Chicken meat was used in one particular dish usually prepared for celebrations, and hardly ever on ordinary days of the year.

For home consumption smaller livestock such as sheep, goat and chicken were usually slaughtered at the household, either by the household head or a butcher. Butchering followed prescribed rules, similar to the kosher or halal rules of other cultures. Many families, who could not afford to slaughter livestock during the holidays, collaborated so the household would not be left without meat. Up to ten families bought an animal, usually an ox but sometimes a sheep or goat, which was slaughtered and divided up by a butcher. As traditions required, each type of animal was divided to a certain number of parts. For example, a chicken had to be cut into 12 or 14 sections, there was no consensus in this matter, and each family’s a share contained a portion of each of these parts. During the New Year, Mesk’el and Christmas holidays oxen were slaughtered in the field with the families sitting around waiting for their share:

This is illegal slaughter because of food hygiene laws, but people prefer it. This way there is no cleaning up afterwards. And in the shade of the tree they can start eating the raw meat right away. (MRA)

Most internal organs of the animals, except for the brain, heart and lungs, were considered edible. Various dishes were made of the fat, stomach, intestines and liver,
as well as the bones, for example, *dulet* (stew made of meat, kidney, stomach and liver), *k’ik’il* and *shorba* (both soups with bone and fat).

A favourite of Wolayta people was *k’urt’*: chunks of raw meat from the best parts of beef, served with *dat’a*, to which fresh bile was added for extra flavour (and apparently to protect from malaria), and with *injera* or *k’ita*. Raw meat required trust that the animal was healthy and the preparation clean; health and hygiene rules were more likely to be observed by commercial establishments than the village slaughterers.

Sheep and goat, cut up into small cubes, was stir-fried, usually with shallots and fresh chilli and sometimes herbs such as rosemary were added. This tasty meal called *t’ibs* was popular throughout Ethiopia; in the local custom it was served with *dat’a* and *k’ita*. The only way chicken was cooked in the households was the festive food called *doro wet’*, a spicy stew with large sections of meat and hard boiled eggs.

These rich and delicious meals, however, did not make it onto the table more than once or twice a year in most households. Meat was not part of family food on ordinary days. There were only two households in my sample whose food recall included any meat dish outside the holidays. Although the amount, variety and number of meat dishes varied from family to family during *Mesk’el* or Christmas according to their economic status, the lack of meat throughout the year was uniform.

The village restaurants did not serve meat as there was no electricity and therefore no refrigeration. In the larger market towns of T’abela and Soddo there were many places where meat dishes could be consumed. While women who attended these
larger markets only reported to visit a tea house for a piece of bread and to drink tea for sustenance for the many hours of travel, the men were more likely to have a meal of meat in a restaurant.

**Dairy and eggs**

Dairy production was an essential part of farming culture in the area. Every household aspired to own milking cows, but only a little over half of the sample households actually did, and not all cows produced milk. Milk production was quite low:

> We get six cups of milk a day. It is not for sale, we feed our children [with it].

(F05)

Household observations, confirmed by interviews, showed that fresh full milk was not consumed. Milk, *wetet*, was kept in clay pots and made into sour milk called *ergo*, similar to creamy yoghurt. By rocking the pot the milk fat was then separated, leaving behind a thin white liquid called *arera*[^49], or *yalacha* (Wol), and this skim sour milk was consumed in the households. Small amounts of the sour butter, or *k’ibe* was used regularly in cooking in better-off households, however, most families sold it to cover other necessities, or saved it for months to be used in the special dishes during holidays or ceremonies.

*Ayib*, a crumbly cottage cheese, was made of *arera* every few days and, depending on the economic means of the household, was either consumed at home or sold. For

[^49]: Arera (Amh) could be best described as sour skim milk
a meal ayib was mixed with k’ibe and spices. Both k’ibe and ayib were fermented dairy products with wonderful strong flavour and aroma. In the following food descriptions I will use ayib and k’ibe as opposed to cheese and butter, as they both significantly differed from our usual understanding of these dairy products.

In the villages cow’s milk was the only milk consumed by people. In the past goat’s milk had been consumed, but at the time of my field work its use was limited to medicinal applications. Explanations for this change ranged from goat milk being smelly to making children too wilful; although it was also acknowledged that it made people strong and protected them from illness.

The productivity of the local variety of hens, just like of the cows, was low. Eggs were seldom eaten; only one food recall included two eggs in my entire data. Even of the special foods prepared for holidays and ceremonies only doro wet’, chicken stew, was made with eggs.

**Honey**

Beekeeping had been a tradition in many areas of Ethiopia; in the Wolayta Zone this was limited mainly to the highlands. However, there were beekeepers’ associations in the villages of the study area, and traditional beehives were hanging on trees. Honey was highly valued as a delicacy and a small amount of honey was consumed in some of the households.
Game

Wild animals used to be hunted and many were considered edible, in the past before the fields replaced the jungle that once grew there. Farmers used to hunt for gazelle, deer and warthog, as well as different kinds of birds and their eggs, but they became virtually extinct in the area. With the regeneration of forest in the hills near one of the study villages many of these animals returned but hunting had become illegal under Ethiopian law. In spite of a nearby lake where fish was part of the everyday food culture, at the study site, fish only appeared in the description of the preferred diet of very sick people, for the medicinal attributes it was presumed to possess.

5.1.4 Drinks

Water accompanied all meals. Coffee was prepared and served in every household at least once a day. Coffee was an expensive food item with quite significant price fluctuation and, although many people grew some, they were only able to produce a fraction of the household’s need. Coffee consumption therefore largely depended on the momentary cash situation of the family.

Leaf coffee was made of the leaves of the coffee plant and was referred to as a drink prepared when families could not afford coffee beans. The preparation of leaf coffee involved many herbs and spices and, depending on what was available in the household, the result more closely resembled a strong and spicy broth, than a beverage. The leaves of the coffee plant were boiled with garlic, shallot and Birdseye chilli, to which a number of fresh or dried herbs and spices were added: ginger, false cardamom, fenugreek, coriander green, thyme, ariti, and rue.
Other beverages, although familiar and available, were not prepared and consumed regularly, or at all, in the households. Sweet fizzy drinks could be bought in the village shops and restaurants; the price of a bottle was equivalent to the price of two kg of maize. I did not see any soft drinks at any of the participating households. Tea was served in restaurants in the village but was not prepared in the homes. A locally made cold beverage called *keneto* was popular but was made for special occasions only; its main ingredients were barley and honey or sugar, all relatively expensive to buy.

Alcohol was apparently sold in one of the restaurants in Wolqá. The preparation of honey wine and barley ale (*t’ej* and *t’ela* respectively) were traditions in the households of other Ethiopian regions, and it is possible that these alcoholic drinks were made in the study area as well. However, the consumption of alcohol in the area was not openly acknowledged, as the denomination of Protestant Christianity, practiced by the vast majority of the population, prohibited alcohol consumption. In the larger market towns many outlets sold various alcoholic drinks, and according to unconfirmed anecdotes many men spent some of the earnings from selling farm produce in these establishments. Nevertheless, alcoholic drinks were not present in the households, and none of the women I interviewed referred to alcohol causing problems in their families.

5.1.5 Changes in the diet

As described earlier, Wolayta people started to settle in the study area in the early to mid-1960s. The mid-highland agricultural practices, to which they were accustomed, were mostly transferable to the new place with the exception of those plants that were not suited to the climate of the lowlands. However, the mixed farming system
continued to produce the ingredients for a similar diet: a staple grain, a small amount of green leafy vegetables and cow’s milk-based dairy.

While the diet remained fundamentally similar, the availability of, and access to certain foods had changed considerably. Recollections of childhood food painted a picture of greater abundance, and the most striking difference was in the frequency of access to animal-source foods. Milk and *k’ibe* had been available several times a week to two thirds of the participants, whether they grew up in the highlands or the lowlands, and *ayib* used to be a regular part of the diet:

I grew luxuriously, with much milk product and *k’ibe*; I grew on these things.

(F05)

The previous generation was getting good food: full milk, *k’ibe*, also goat milk with black barley. (MRA)

Yes, there is a big difference. When I was a child there were many milk cows. There was more than enough milk, whether *arera*, or full milk, or *ergo*, we could get it according to our desire. Besides this, the food was cooked with milk or butter. ... We were getting milk, butter, meat and other good foods. There was also a kind of soup that was prepared from meat and much *k’ibe*. (Z12)

In the dishes women prepared during my field work *k’ibe* and milk was replaced by palm oil, small amounts of which could be bought daily at the shops.

Meat had been consumed weekly or fortnightly, with a pronounced difference between the generations: about two thirds of the people who reported eating meat frequently were of the older generation, grandmothers and grandfathers. The
gradually diminishing amount of meat and dairy in family food, from generation to
generation, reflected the decline in livestock numbers. It seemed that eggs had not
been an important part of the diet even in times of plenty: only two women recalled
having eggs as children.

People who grew up in the highlands did not experience better food diversity or
more access to animal-source food than those who grew up in the lowlands: they
came from areas of higher population density. The main difference between the
childhood diet in the highlands and lowlands was in the greater reliance on *enset*
products and much less on maize. As well, sorghum was a more common staple in
the households in the highlands, especially in the childhood of the grandparents’
generation.

Beyond access to dairy and meat, there were many similarities between the diets of
the generations prior to, and at the time of, the study. Maize had been the main staple
in over half of the families. *Injera* was consumed regularly in one quarter of the
households in the past, however with greater frequency. Legumes and various tubers
had been regularly used in dishes, as well as the two most common vegetables: kale
and moringa. Most participants emphasised that their diet used to be more diverse,
however, it was not possible to ascertain the frequency of each food item based on
their recollections, with the exception of dairy and meat.

In some aspects family food became more diverse, with the introduction of
vegetables such as tomatoes, pumpkins and cabbage, as well as exotic fruits. Only
the youngest of the mothers recalled having fruits like banana and mango when they
were children.
The local food culture, however, was not altered fundamentally between the generations: its main forms of *k’ita*, porridge and stew remained; and the favourite dishes, the list of preferred ingredients, and the use of spices and herbs were unchanged. Food technology was similar to how it used to be one or two generations prior to my field work, with its main elements the three-stone cooking fire on the ground, and the very small number of cooking utensils. The way food was served and shared remained fundamentally unchanged with the exception of the appearance of new containers made of plastic and stainless steel, which replaced some of the clay vessels.

5.1.6 The main points about food in the villages

The primary source of food in the households was their own farm production, augmented by food items purchased at the markets. The bulk of food items bought there was produced local or within the region. The main staple in the predominantly plant-based diet was maize. The limitations of the availability of other staples and legumes were their seasonality and cost. Green leafy vegetables were accessible and used all year around.

Large and small livestock was kept in many households as draft animals, and as investment. Their direct food value for the household was restricted to the few times during the year when custom required the preparation of meat dishes, and to dairy products. In the past, however, animal-source foods were in greater abundance, and this represented the main change in the diet of the generations.
5.2 Food technology

The previous section mapped the availability of food items in the study site, whether produced or purchased. The following section reaches beyond the availability of food items, and describes how these ingredients were used, turning raw food into everyday meals for physical and social nourishment.

5.2.1 Preparation

Food preparation, without question, was in the women’s sphere of duty and authority. The kitchen was their domain where men did not set foot; although they would sometimes assist by bringing firewood or by looking after a baby while the mother cooked, they literally did not step inside the kitchen, only their hands or their heads crossed the implied threshold.

According to my observation notes women spent between 30 minutes and one hour with actual food preparation before each meal. In addition to this, many other activities that were necessary for preparing the family’s meals demanded their time. Vegetables were picked daily from the field or garden. Obtaining water from the bono (water point, Wol) could take an hour or so once or twice a day. Several times a week the women took the often long journey involved in purchasing food, depending how far the market was, and carried grains to the mill. As well, among their regular tasks were the sorting, cleaning and drying of seeds, vegetables, spices and herbs, milking the cows and processing the milk. The complex fermentation procedures of enset and dairy products were the women’s responsibility as well, although this may not have happened every day, depending on the season and the purpose of preparation: whether for sale or special meals.
Kitchens

Kitchens in the older-type round huts were inside the house, in most homes partitioned off from the other areas by mats made of woven grass or sorghum stalks. These partitions were about the height of a person, and did not reach the underside of the roof. Connecting the kitchen to the rest of the space and to the door was essential for the smoke to get out. Very few of the round huts had a window, but often there was an unfinished section in the wall or, alternatively, the grass on the roof was loosened above the fireplace to improve the ventilation.

In the newer, corrugated iron-roofed rectangular houses the kitchens were either a separate structure, or attached to and accessible from the main house. These inside kitchens were not much different from those in the huts: they had no window, only some loosely constructed patches of wall for the smoke to leave. The outside kitchens were enclosed to differing degrees, some with only a roof, others with finished walls, or in an unfinished state in between. While the men observed a cultural ‘do not enter’ rule, children of both genders and small livestock walked in and out of the kitchens as they wished.

Milking cows were usually kept inside the house, in, or directly adjacent to the kitchen (see Image 24). Cows only left the house to be watered and to graze, but much of their fodder was collected and fed to them inside. The cows attracted flies into the cooking space in spite of the continuous effort of the women and children to clean up the animal’s waste. Having smoke in the kitchen helped fighting the flies.

There was virtually no furniture and minimal storage facility in the kitchens, aside from one or two low stools and a shelf built of poles and mud. Storage pots for
water, soured milk and cheese, as well as the utensils used at food preparation, were mostly kept on the floor of the kitchen. Food ingredients and leftovers, however, especially in the households with outdoor kitchens, were stored in the house, in the bedroom or a store room.

Food hygiene, equipment and cooking fires

All kitchens had earth floors, finished with cow dung, and kept dust-free by splashing on it the water used during cooking. Food preparation took place on the floor. A chopping board, placed on the ground, and a curved knife with two edges were the universally used kitchen equipment for preparation. The board often had small legs to keep it away from the floor, and the women worked squatting or sitting either on a very low stool or on the narrow wooden mortar turned on its side. Sometimes a round woven grass mat was placed under the chopping board to catch the cut up pieces of kale (see Image 25 and 26).

The care that was taken with food falling on the ground was part of the food hygiene practice that I observed in all households. The large clay pans were rubbed clean with leaves and oily seeds before use, and the milk pots were cleaned with an herbal brew. Utensils, including dishes and stirring sticks, were carefully rinsed before use, and the women washed their hands several times during the process of food preparation (see Image 27). This included when they started preparing a new food item or handled cooking fuel that was dirty.

Nevertheless, food hygiene was frequently challenged by the need to clean their infants’ bottoms. The babies did not wear diapers and their waste was cleaned up
with a dry piece of cloth by the mother, who rinsed her hands afterwards and resumed the food preparations. In none of the households did I observe the use of soap or detergent before, during or after meal preparation to clean hands and utensils.

The common food preparation equipment also included a plastic basin for kneading *k’ita*, sieving *bullä*\(^{50}\), washing dishes and, turned upside down, was used as a low table. In several households I saw sets of grinding stones: a larger irregular slab with a shallow indentation, and a smaller round hand stone (see Image 28 and 29). In the past maize had been ground on these stones; at the time of this study they were mostly used for fresh spice mixes such as *dat’a*. Mortar and pestle carved from wood were essential as well to grind coffee and roasted spices (see Image 30).

Cooking was done on an open fire in the kitchen. The fireplace was a small diameter shallow cavity, lined with clay, either in the floor or in a stepped-up hearth made of stones and mud, and finished with a mixture of dung and ashes. Fire was lit over this hollow, above which three stones supported the cooking dish (see Image 31). Each household had one or two large flat round pans made of clay, called *mit’ad*, and a smaller steel version of it. An aluminium pot with lid, a stirring stick with a three-way fork at one end (see Image 32), an amphora-like clay coffee pot called *jebena*, and one or two round-bellied wide-mouthed clay cooking pots completed the inventory. The differing size of the cooking containers was accommodated by moving the three stones farther or closer to each other.

\(^{50}\) Culturally important food item, made of a part of the *enset* plant
Fuel used for the cooking fire ranged from maize cobs and stalks from the fields, to thorny twisted twigs and branches collected in the bush and along roads, and to long pieces of thicker branches and split wood purchased at the markets off donkeys’ backs. Charcoal was not used in household kitchens. Cooking fuel was used with remarkable efficiency: the process of cooking the various parts that made up the meal was sequenced around the heat they required. Bread, which needed high heat, was cooked first, followed by the roasting of a handful of coffee. The vegetables were cooked next on a slower fire and, finally, the coffee was boiled over the coals, with the stones set close to each other for the smaller belly of the jebena.

Only two of the kitchens in the sample households had a special stove for cooking injera, with an enclosed fire chamber below the special injera mit’ad. Injera was not a local staple. It was not made of maize and its preparation method was long and relatively complex, very different from the quick and simple cooking of everyday meals in the study area. Cooking injera required a hot fire maintained for a long time, thus much firewood. These stoves were mostly used during holiday time when customs called for dishes whose origins, just like the holidays’, were in the north of Ethiopia.

Food preparation methods

Food preparation for ordinary, everyday meals was simple and quick. The main components of any meal were assembled and cooked within an hour or less. K’ita, the round flat bread made of maize flour and water without leavening, salt or any other flavouring, was one of the most common foods. It was prepared swiftly: maize flour mixed with just enough water to combine into dough that separated cleanly
from the bowl, was then shaped into small balls and patted into flat disks about five mm thick and about 150mm in diameter. The disks were cooked on an ungreased clay mit’ad for about 15 -20 minutes, turned around once (see Image 33, 34 and 35). K’ita could also be cooked wrapped in enset leaves; this reduced the cooking time by five minutes. The result was crusty stiff bread with a somewhat gritty texture that could be broken into pieces and used to scoop up the accompanying stew with fingers. K’ita could be stored throughout the day without losing much of its quality.

Porridge of slightly different consistencies was made by mixing flour into boiling water, to which a small amount of oil and salt had been added, and stirring it until the desired thickness, usually of a crumbly dough suitable to eat with fingers, was reached. The cooking time varied between five and 15 minutes and the porridge – posese or fosese (Wol) - was served on a platter or in a bowl. Some variations of porridge – shendera and poshamu or poshamuwa (Wol) - made of maize flour were usually more complex and involved a longer cooking time; customarily k’ibe, milk and some spices were added to these meals, but during my observations porridge was only ever prepared with a small amount of oil and salt.

Porridge was mostly made of maize flour, although a few women mixed other grains, such as t’ef or barley into the maize. In one of the wealthier households a different kind of porridge-like meal, muchuwa (Wol), was prepared. Its main ingredient was an enset product, bulla. In its raw form bulla was a crumbly meal, which was first sieved and roasted for 10 minutes, and then made into a doughy consistency by adding some k’ibe and arera.
Maize kernels were often mixed with legumes, most commonly with kidney beans or haricot beans, to prepare nifro or k’olo, boiled or roasted respectively (see Image 36). Dried legumes were sometimes soaked for 20 to 30 minutes before being roasted. Tender fresh whole cobs of maize were roasted on the hot dry mit’ad, while the older, drier cobs were boiled in water. These were simple meals, which did not involve the use of any spice, not even salt, and were eaten in the morning or for lunch, often served with coffee. Tubers, such as the white-fleshed sweet potato, taro and cassava, were boiled in water, without removing the skin, then broken or sliced into smaller pieces for serving. The accompanying paste, dat’a, was usually freshly made either on a grinding stone or in a mortar, mixing fresh Birdseye chilli, shallots, garlic, salt and oil or k’ibe, with additional spices such as ginger when available.

Stew made of leaves of kale or moringa was cooked for approximately 20 minutes and 30 minutes respectively. First the veins and stems were removed (see Image 36) and the large leaves were chopped into strips; then the leaves were boiled or steamed under lid in water to which a small amount of oil – about one or two tablespoons – and after a few minutes some salt, minced garlic, shallots and chilli were added. A dish called kurkufa (Wol) was made with the same green leaves, and while the vegetables cooked some dough was mixed from maize flour and water, made into small dumplings and dropped into the boiling stew (see Image 37 and 38).

There was no indication at any point of my investigation that women felt that their kitchen and its furnishings, the utensils that they used, or the processes they employed in food preparation, were deficient or needed to change in order to improve the nutrition of their children and their family. In their view it was their
inability to include certain food items in the meals they prepared that made the ideal diet unattainable.

**Cooking knowledge**

The knowledge of how to prepare food for the family was passed down from mother to daughter. All responses indicated that women learnt how, and what, to cook from their mothers, in the home where they grew up. Some of the knowledge was explicitly taught to them, and some was absorbed through observing and helping. The women mostly continued the practice they learnt as children and youth, although some of them improved certain preparation methods and learnt to prepare new foods and special recipes:

All these things I learnt from my mother, I did not learn from anyone else; I am doing it the way I learnt it. (F06)

There are things that I improved after I married, like *doro wet* and *injera*. *Doro wet* – I use different kind of spices and changed the amount of onion – improved it because I like it better this way. *Injera* – my mother’s *injera* broke apart easily, so I improved the quality. Just improved it by myself, no one told me how. (Z02)

Sometimes I roast the kale…not just boil it. Less firewood consumption, and takes shorter time so when the children are hungry they can get it quicker. (F13)

As women moved to their husband’s village, those who were not from Wolayta areas, as well as those who came from the highlands, had to learn about the local foods. They were usually assisted by their neighbours and sometimes by their mother-in-laws.
School was seldom the source of nutrition knowledge. Only two women referred to nutrition education they received in a science subject about feeding children. Most women stated that they did not receive nutritional information from the Health Extension Workers, but there were a few who got advice during vaccination or clinic visits, specifically for child nutrition. Some mothers said the nutritional information from the clinic did not differ from what they learnt at home, and most women were emphatic about how they followed the teaching of their mothers:

When we go to [clinic] for vaccination and weigh the children, they collect us and teach us some things; [there is] no difference from what I learnt from my mother. (F05)

According to my observations food preparation did not vary much from household to household, and the interview data confirmed this. Generally the women’s view was that they did not prepare food any differently than the others. They emphasised that if there was any difference, it was in what food they prepared for their families and not how they did it:

I always prepare the same as the others in the village, because all the materials are the same; can’t prepare anything different because of lack of income. (F05)

The only difference is that sometimes I can’t buy oil so I prepare food without it. (F10)

The different thing is not the preparation but what I prepare. (F13)
5.2.2 Preserving and storage

Everyday meals were mostly prepared from fresh ingredients. There was no refrigeration, so fresh produce was not kept for long. Vegetables were used the day they were picked; flour was freshly ground every few days, and animals were butchered just before their meat was used. Leftovers were covered with a plate or a cloth and finished within a day. There was a limited range of technologies for preserving food so it could be stored for longer periods, and the most common methods were drying and fermentation. Other preserving methods, such as smoking, use of brine and canning were not customary, and by most accounts not known, in the study area.

Dried products

Maize and other grains, cassava, legumes such as beans, peas and ground nuts, as well as coffee, chilli, spices and herbs were sun-dried and stored either in clay vessels or in reused sacks and plastic bags (see Image 40). K’want’a was made of finely sliced meat cut into thin strips, covered with salt and spices and sun-dried; this was an ingredient in some dishes, although more popular in other areas of Ethiopia than in the Wolayta Zone.

After harvest maize was dried on the cob, piled up in the fork of a big tree, too high for livestock to reach, or next to the houses where it could be guarded (see Image 41). Shelling the cobs was hard handwork involving many family members, and the cleaned and sorted maize kernels were stored in sacks. The sacks were kept on the floor inside the houses, if possible on timber boards laid on the ground. There was
often quite a significant loss due to the poor condition of storage sacks, as sheep and chicken freely moving around inside the houses discovered the spilled grains and opened the holes even further:

Sometimes I lose one sack of maize in my home when children leave the door open and livestock enters and eat it. (GD20130409)

There were strategies for preventing insect damage during storage: some people used chilli, crumbled in between the maize kernels, others used chemical pest control tablets bought form the store. According to farmers and agricultural extension staff pests, in particular insects, could cause significant damage:

[Grain] storage is not safe; mice, but mostly an insect – *nek’ez* – is causing problems, sometimes great losses; it could be controlled by chemical treatment but hardly anyone uses that. (T15)

Maize flour was never stored for longer periods than few days, and it was kept in clay pots or plastic bags.

The harvest of sweet potato and legumes, as well as of vegetables, tended to be an extended process; they were collected on an as-needed basis. Root vegetables and tubers were sometimes stored for a few weeks, either on sacks laid on top of timber boards on the ground, or high up on a hanging shelf called *cot* (see Image 42). Cassava was cut up into small cubes and sun-dried for longer-term storage, and to be ground into flour.
Fermented products

Milk was usually soured before use to ensure that it kept longer and that the butter could easily be removed; this fermentation process also extended the ‘shelf-life’ of butter, or k’ibe. Fresh milk was stored in a clay pot overnight. When the milk became sour the clay pot was rocked for about 45 minutes to separate the butter (see Image 43). The long-term storage and fermentation of k’ibe was a careful and complex process, as it was a valuable and essential ingredient of holiday meals. Each new batch that was added to the already stored butter was carefully washed (see Image 44). K’ibe was collected in a dish and stored often for months; once it soured to the desired degree it was boiled with herbs – but without salt - and then packed away in clay, or more recently, steel containers.

First we collect [the butter] for eight months, then boil it, then store for another five or six months. Previously I used to collect in clay container but now metal and plastic container, [which] we buy in the shop...we only boil k’ibe after months. We want to keep it without boiling for at least four months, but we wash it. The flavour has to change before we boil it. …When we boil it we use kororima, t’kur azmu d and nech azmu d, but no salt [false cardamom, nigella, Ethiopian cumin respectively]. (F05)

Fermented food products were also made of various parts of the enset plant. The main foodstuff was produced from the heart of the pseudostem of the plant. The extraction of the edible substances, k’och’o and bulla, was a complex and labour intense process involving scraping out the pulp and pulverising parts of the stalk. Packets of k’och’o and bulla were wrapped in enset leaves and fermented underground for months before they were ready for meal preparation and
consumption. Beyond the slow-maturing nature of the *enset* plant – it takes three or four years before it can be harvested - the difficult and lengthy processing made these foods expensive.

As relatively inexpensive imported plastic products and packaged goods had become available at the town markets and the village shops, by the time of the field work an increasing number of the traditional food and water storage containers made of clay and gourd had been replaced by plastic bowls and jars, as well as by reused jerry cans and plastic bottles. More recently stainless steel containers appeared on the market and found popularity for storing the precious boiled *k’ibe* and fermented *enset* products. The traditional small clay pots used to store spices and herbs were substituted by plastic containers or reused bags. However, many potters still made and sold their ware at the markets, charging minimal prices as they were trying to compete with the flood of similarly cheap plastic vessels.

### 5.2.3 The main points about food technology

Kitchens were the women’s domain. They had virtually no furniture and only very simple equipment. Food was prepared on the floor and cooked on a three-stone cooking fire. Food technology was simple, and the preparation of everyday meals was quick and lacked certain techniques that could assist in the absorption of the nutrients in food, for example, soaking, leavening or germination. Food hygiene was compromised by the proximity of livestock in the kitchen, the shortage of water and lack of detergent use.
The knowledge of food and cuisine was passed down between the generations, and although women adjusted their practice to circumstances and tastes, the dishes they prepared did not vary much.

The storage methods of staple foods were often poor. Food preserving practices included drying and fermenting a small number of products, with a focus on high-value items that were accumulated throughout the year to be used during the holiday feasts. No food preserving methods were used to reduce the seasonal availability of fruits and vegetables.

## 5.3 Seasonality and food shortages

Household food supply was severely affected by seasonality and the uncertainty of the volume and timing of harvest. The calendar of seasonal produce was not precise, and due to delays in rainfall harvest times could slip by months. Fluctuation in the availability of staples led to the cycles of annual food shortage, the so called ‘hungry months’, an experience most local farming families shared. The seasonality of vegetables and fruits posed a different challenge: it contributed to the limitations in the diversity and variety of food. As well, household decisions about what crop to grow in which rainy season made the availability of items somewhat erratic. However, there was a distinct pattern of availability, and parallel changes in price levels, which impacted on household food.
5.3.1 Seasonality

The following section describes the differences in the make-up of family food due to the seasonal changes in the availability of ingredients from the fields and the markets. The seasons are discussed as they were referred to by the participants: based on a rain calendar of historic averages which, as they pointed out, most years were far from reality.

Staples

The main staple, maize, was sown a couple of weeks after the start of the Belg, the short rainy season, between early March and mid-April, and harvested from mid-June, although sometimes as late as mid-August. According to interview data, maize stocks in many households ran out by February or as early as December, but for the majority of families the most difficult period was usually from April to June.

Small amounts of t’ef and sorghum were produced, both during Meher, the long rainy season. Depending on the time of sowing, early maturing t’ef could be harvested already in September, while sorghum was ripe by October. Sorghum was mixed with maize in the households, and therefore extended the time maize lasted; t’ef was mainly sold.

The harvest schedule of the starchy tubers that were grown locally did not assist during the times of grain shortage. Taro was harvested between early October and late December. Cassava matured in early September and could be harvested for months, till about February. Sweet potato was available from mid-July on, although
some farmers grew it during the Meher as well, and started harvesting around mid-
October. By March the stocks of these tubers were usually finished.

Local legumes were produced in both rainy seasons; some farmers cultivated beans
and peas during either Belg or Meher, others in both. Belg cowpeas and kidney beans
were picked starting the end of May, and the Meher crops began to mature towards
the end of September. Chickpeas were Meher crops, and were harvested in the
beginning of November or later.

Fruits and vegetables

Vegetables and fruits grown within the households, with the exception of moringa,
did not cover the family’s needs throughout the year, regardless of rainfall, mainly
because the land and labour devoted to horticulture was small relative to family size.
As a result, for a large part of year consuming vegetables and fruits involved cash
purchase. Still, the small quantity of fruit and vegetables that grew around the
compounds did enrich the diet, if only for a couple of months:

The rainy season yielded from the garden some mango, chilli, tomato, kale – that is
now finished. (F07)

Moringa was consumed all year around. Although some people indicated that during
the hottest months the leaves turned somewhat bitter, this green leafy vegetable was
available throughout the year due the extreme drought tolerance of moringa trees.
Ethiopian kale and, to a much lesser degree, pumpkin and tomato, were produced in
many of the household gardens, mainly on rainfall and that defined their availability.
Considering the combination of household produce and market purchases, the supply of most vegetables, with the exception of moringa, was low between the months of November and March. In June and July, during the long rainy season, the availability of many vegetables was the lowest and their prices the highest. In most households this fluctuation made almost no difference: green leaves far outweighed any other vegetables in terms of frequency of consumption.

Household fruit production was similarly limited, although a variety of fruit trees was growing in many of the compounds, and the popularity of fruit was increasing. Banana and mango were harvested in the village gardens in the period of October to December and May to July respectively. A small amount of avocado was produced locally, and households consumed mainly what they bought at the market. These fruits were available virtually throughout the year in the local markets, as Arba Minch’, one of Ethiopia’s major areas for banana, mango and avocado production, was only approximately 80 km south of the study area.

Papaya and guava, grown in the villages, were in season from April or May till September, and orange ripened in the compound gardens from November. These fruits were less available in the markets and people relied on their own produce to a greater degree. Wild fruits ripened during the rainy seasons and their abundance was tied to the amount and distribution of rain.

Animal-source foods

Animal-source foods had their own yearly seasonal rhythm. Dairy production was higher in the rainy seasons, starting a couple of weeks after the rains started. This
helped during the hungry months as families could sell milk or butter and buy maize. In many families dairy was more likely to be used for household consumption during the longer rainy season, while they still had some of their maize stocks.

The fattening of animals was also more effective when grasses and weeds were in abundance, during the rains, but selling fattened livestock was generally limited to the times of holidays: New Year, Mesk’el, Christmas and Easter. Thus the seasonality of meat was governed not so much by the climatic as the social calendar. However, a crisis such as accident, illness or an exceptionally bad harvest often forced people to sell livestock instantly, and usually at a very low price.

**Results of seasonality**

There was a distinct seasonality to foods that were available from fields, gardens and local markets. Nevertheless, what constituted the bulk of the diet was not different according to seasons: maize provided the foundation to which a green leafy vegetable - kale or moringa, available virtually all year - was added in almost every household at least once a day. The spices that were used for flavouring: shallots, garlic and chilli, had no seasonality either.

Other, more seasonal, food items, many of which were purchased at the markets, augmented this diet depending on the household’s means. Precisely because the diet was quite monotonous, the inclusion of seasonal products, even in small amounts and at low frequency, increased food variety by a relatively high degree. Figure 4 illustrates the seasonal availability of the most important plant foods, with the darker tones marking the periods of greater abundance.
Figure 4  Seasonality of main plant food items at the study site

5.3.2  Food shortages and the ‘hungry months’

A vast majority of households experienced food shortage for several months every year. Figure 4 makes those months when staple stocks ran very low clearly visible: the large white field stretching between March and June. Some families were food insecure for up to seven months each year, but most households reported food shortage during from March to June (see Figure 5). Much of this period coincided with some of the most intensive time in the cycle of agricultural work, when farmers needed much energy.
During the ‘hungry months’ the quantity of food decreased and food diversity further diminished for the entire family. However, the vast majority of households asserted that they shielded the children from food shortage as much as possible. This is discussed in Chapter 7 in more detail. The majority of farming households were unable to produce enough to cover the family’s food needs for the year, on their farms. Even in years of good rainfall, for many farmers it was impossible to grow sufficient amount of maize to last until next harvest. According to the farmers, in a year of abundant and well-distributed rains, the increase in maize yield would generally add another two or three months’ supply for their families.

The year of my field study was considered an average year in terms of harvest, yet two thirds of the families reported that the maize they had harvested would feed the household for no more than six months. Only approximately 15% of the respondents expected that their maize stocks would be sufficient until next harvest, however, even they worried that there would be no surplus to cover unexpected events.
If the family eats it, it is enough for one year; only if we don’t have to sell any.

(Z07)

Only one household felt confident about their maize harvest:

This year’s maize will be enough for the whole year, and there is extra to sell.

(F20)

The only solution to the shortage of self-produced staples was buying, and considering the severely limited options for generating cash the ‘hungry months’ seemed virtually unavoidable. While the majority of farmers maintained that their maize yields were sufficient for half of the year, the average reported length of the period of annual food shortage was four months. The two months variation may signal the amount of cash households, on the average, were able to generate for purchasing staple foods, although without having precise data this explanation is speculative.

The Ethiopian Government’s Productive Safety Net Programme was one of the few opportunities for generating cash, and approximately half of the Wereda’s population were beneficiaries. However, the cash income provided by the programme, approximately 200 ETB per quarter, would only cover the price of about three to four kg of maize for a household each week, a fraction of the average consumption of 25 kg per household per week.

Farmers utilised a range of coping strategies for the months when the staples they produced had come to an end. They generated income by selling livestock and cash crops, or operated petty trade business; these livelihood strategies are discussed in
Chapter 4. When the resources ran very low, households had to resort to selling assets, as well as reduce the amount of food they ate through adjusting portion sizes and meal frequency:

Yes [we eat less], once we get coffee [the term coffee is used for breakfast] we jump our lunch and we eat at dinner time. (Z14)

The above paragraphs describe farm-grown food supply in average or reasonably good years. In some years, however, the whole yield would be lost and households would face exceptionally difficult times. Many families remembered 2010 as one of those years when they sold livestock to buy food, and several people recalled unusual hardship in 2004, 2007 and 2008 as well. In the decade prior to the study almost every year some families received food aid; in 2010 approximately one third of the sample households accessed direct food aid in the form of wheat, sorghum and cooking oil, in addition to the 12% who received child food supplements.

During my field work, from July 2011 to February 2012, there were two large-scale food aid distributions. However, throughout that period no family in the study sample reported significant food insecurity in the preceding 30 days: none experienced days with complete lack of food in the household, and only two recalled having to substitute their preferred food with something considered inferior:

We did not have maize flour in the home, and the beans were not harvested yet, so all we had was roasted maize [kernels] for the family, and we did not like that; [this happened] for about three days. (F03)
To a certain extent, the failure to fulfil the food customs prescribed for Mesk’el, one of the most important holidays of the year, traditionally marked by special dishes and four days of feasting, was an indication of food insecurity. It demonstrated the inability of households to obtain the preferred food items in terms of quantity and desired variety. With the exception of one household, none of the women claimed that they were able to prepare all the meals necessary to satisfy the customs of Mesk’el (these meals are described in more detail in a later section on meals for special times). The items most frequently reported inaccessible were bulla and chicken, followed by k’ibe, barley and another enset product, k’och’o. One woman strategically prepared almost all of the obligatory meals but in significantly reduced amounts; in other households vastly simplified versions, or less number of dishes, were served:

I could not prepare most of Mesk’el foods: no keneto, no meat, only k’ita and dat’a. We did not spend Mesk’el like other people. (F12)

Families that had regular cash income such as government workers on salary, or a wholesale merchant with established clientele, were mostly sheltered from the impact of the 'hungry months’. Nevertheless, the consequences of rising food prices during the times of food shortage were felt even in these households. It reduced the ability to provide household members with the food they preferred, although not to the degree that they would not be able to buy enough food in general:

This family lives by salary. The seasons make no difference for us. The difference is in the maize [prices], you can get it easily now [after harvest], with lower price. But I use mostly t’ef and that is the same price always. Even though food shortage happens in this area, because we live from salary, we do not suffer as others. (F21)
5.3.3 The main points about the cycles of food supply

Two types of seasonality characterised the households’ food supply. Firstly, the staple production of the vast majority of households was insufficient to meet the family’s year-round need even at times when the seasonal rains were adequate. As a consequence, in most years these households were food insecure for extended periods. Secondly, tubers and legumes, as well as many vegetables and all fruits, were seasonal produce, and their absence resulted in low diversity.

5.4 Food diversity

To assess dietary diversity, during the household interviews I collected data by two dietary assessment methods: food recall and food frequency information. The first recorded the meals of the entire day previous to, as well as up to the time of data collection, on the day. The other method asked people to recall the foods they consumed in the household during the week-long period prior to the time of the data collection. They were read a list of food groups, and were asked to only indicate frequency of use of each type of food in the given period. In addition to these methods weekly market purchases were recorded as well.

Although the sample in this study was small, it is likely that the data captured the characteristics of the diversity and variety of food in the households. The daily food recalls represented 24 families, and included 61 breakfasts, 52 lunches, 27 dinners and 19 afternoon snacks (few households reported having afternoon snacks at all). Data for the week-long recall of food groups came from 23 respondents.
Daily food recall

The three main meals did not differ significantly in terms of food variety or meal size. Dishes prepared for breakfast, lunch or dinner, were generally interchangeable: 60% of the time they consisted of k’ita with or without vegetables. A further 19% of the dishes consisted of boiled or roasted maize kernels, in a few households mixed with legumes, and 9% of the dishes was maize porridge with or without spices or k’ibe.

Table 12 Staples, vegetables, legumes and dairy in the daily diet

<table>
<thead>
<tr>
<th>Meal component consumed</th>
<th>Breakfast meals N=61</th>
<th>Lunch meals N=52</th>
<th>Dinner meals N=27</th>
<th>Afternoon snack meals N=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize-based dish</td>
<td>74</td>
<td>49</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>T’ef injera</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Tuber</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Wheat-based</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Any vegetable</td>
<td>20</td>
<td>17</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Beans</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Spicy sauce with lentil flour</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Butter</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Skim sour milk</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Fruit</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coffee</td>
<td>23</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

A distinct pattern appeared to exist in some aspects of the meals: vegetables were the least likely to accompany k’ita at breakfast time and most likely at lunch time; coffee was mostly consumed in the morning – indeed, in some households morning meal was talked about as tukiye, which means coffee in Wolaitta; and skim sour milk was
least likely to be served in the morning (see Table 12). These differences had likely practical explanations. Breakfasts could have been simpler because vegetables were not picked or purchased by the time the morning meal was due, and the butter has not been separated from the sour milk yet, so arera was not yet available. As not many households could afford it more than once a day, women prepared coffee, a stimulant, in the morning.

Another emerging aspect of the meals was that while there were several examples of young children eating slightly different food than the adults during the day, when they were fed outside the family meal times, in the evening, according to interview data, they shared the same food as the rest of the family.

Figure 6  Proportion of maize-based dishes consumed without condiment, at meal times
Maize-based dishes comprised a vast majority of meals:

In our area there is no diversity, we eat the same thing – k’ita, shasha and coffee. (Z09)

The reason: most product is maize so all food is made from maize. (F12)

K’ita, porridge and dumplings made of maize flour, and roasted or boiled maize kernels, often served without any condiment, represented between 80 and 90% of all dishes in the one-day and two-day recalls. (see Figure 6). Non-maize staples, such as injera, wheat bread, pasta, bulla, sweet potato and potato, were the basis of less than 10% of breakfasts, 13% of lunches and just over 20% of dinners. Between one quarter and one third of the households included vegetables in any of the three meals at least once a day. All of these were dark green vegetables, either moringa or kale, with the exception of one household which had boiled pumpkin.

Dairy in the form of skimmed sour milk was consumed at 16% of the meals including all breakfasts, lunches, and dinners. In less than 10% of the meals small amounts of k’ibe were added to the porridge and another 5% k’ibe was used in spicy sauces and condiments. Approximately 10% of the meals contained beans, and small amounts of pea flour were added to sauces in 13% of the meals.

Week-long food frequency information

The week-long frequency information of various food groups yielded a similar picture (see Table 13). Staple foods other than maize were consumed infrequently. The purchase of a diversity of grains for family use appeared to be connected to
wealth status; virtually none but the wealthiest households used other grains than maize more than once or twice a week:

    We don’t have any change [variety].... we always use maize; those people who have money they can buy t’ef but we can’t. (F07)

However, a number of families reported a daily preparation of liquid porridge for their infants, for which they used barley, wheat or oats. This special food was made in very small quantities and not shared with the older children or adults. Purchasing grains specifically to enrich the liquid porridge prepared for infants, was less linked to wealth; a small number of mothers across the wealth categories used a variety of grains for this purpose.

Tubers, although they were in season at the time of the data collection, were consumed only in a small number of households. Sweet potato, taro and cassava were grown in small quantities for household use and were viewed as a snack rather than a staple.

Legumes were reported in family meals at a greater rate in the week-long recalls than the daily ones. In most households beans and peas were used three times a week. Vegetables, either kale or moringa, were consumed daily in every family with virtually no exception. The proportion of these leafy vegetables in the weekly recall was four to five (kale and moringa respectively), and during the data collection time only a few instances of the use of other vegetables, such as pumpkin, carrot and cabbage, were reported.
Table 13  Week-long food frequency data from 23 households

<table>
<thead>
<tr>
<th>Food item consumed</th>
<th>1x</th>
<th>2x</th>
<th>3x</th>
<th>4x</th>
<th>5x</th>
<th>6x</th>
<th>7x</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of times per week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td>2</td>
<td>0</td>
<td>0</td>
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The pattern connecting wealth and food variety, noted above in relation to grains, was apparent for the other food items as well. The two poorer households reported preparation of pulses twice or three times a week, while the wealthier ones six or seven times. The pattern that emerged regarding the consumption of moringa and other vegetables showed a greater level of moringa use in the poorer households and a higher consumption of other vegetables, many of them purchased, in the wealthier families.

Two women reported that they prepared meat during the week, each once. As the data collection did not take place during the holiday season, when all households aspired to prepare meat, their cases were quite unique. One of the women was the wife of a high-ranking government employee with a regular monthly salary. The

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51 Please note that the rows do not add up to 23 because households where the particular food item was not consumed at all in the preceding week were omitted.
other woman was a severely anaemic mother and meat was recommended for her by the Health Extension Worker, who also advised supplementation of breast milk for her small baby with liquid porridge, which was a very unusual intervention.

Eggs were used in one household once during the week-long recall period. Again, this family had a distinctive characteristic: the young mother was one of the Peer Mothers (volunteers working with the Alive and Thrive project) and made efforts to follow the training she had received – and passed on to others - about optimal nutrition for infants and young children. Dairy consumption was daily in the households that had a milking cow; those who had to buy milk did that two or three times a week.

**Market purchases and seasonal change**

To augment the data on food variety and diversity a third set of information, about weekly purchases of food, was collected. Looking at these purchases and recording responses about seasonal changes in the diet were ways of triangulating and verifying the week-long food recall.

An analysis of market purchases and food recalls showed that after maize, on the top of the everyday food shopping list were a small number of food items: green leafy vegetables (kale and moringa), coffee and salt. These were consumed daily, and when the household could not rely on its own produce they needed to be bought from the market. Other food items were purchased considerably less frequently. The weekly market purchases of 21 families showed that after these first three, the next most highly priorities group of food items were those staples that the households did
not produce enough of or not at all, but were desired to bring diversity into the maize-based diet: grains, tubers and legumes (Figure 7). Ingredients for the condiments, such as spices and oil, as well as other vegetables and fruit, dairy and sugar were also represented in the purchases, but at a significantly lower rate. The frequency of these purchases was consistent with the recalls.

![Market purchases over one week (% of respondents N=21)](image)

**Figure 7  Weekly market purchases**

In the months following the harvest the relative abundance of maize allowed families to eat more and to exchange some of their produce for more diverse food. As the market recalls were conducted two or three months after harvest and a long way before the start of the hungry months, it could be assumed that there were resources for market purchases. However, access to seasonal food items through purchase added mostly to the variety of plant foods, and had much less impact in regards to
animal-source foods: no eggs or meat were bought, and dairy was the only regular purchase of animal products reported.

Non-specific questions were asked about seasonal changes in the family’s food. The responses were quite uniform describing the same maize-based diet at any time of the year, whether from their own or purchased product:

Three months ago we bought maize so it was the same; now it is our own maize: that is the only difference. (F05)

We bought maize – ate the same thing. The difference is buying it or own harvest. (F03)

Interviewees were asked to reflect on the possibility for improvement in food for their households in the few months ahead. No one anticipated great change, but some hoped for better financial situation:

I don’t expect much change, maybe that I can buy milk; I expect no other diversity. (Z09)

The group discussions conducted about food groups and food diversity yielded a wealth of data about general nutritional knowledge, and in particular the parents’ understanding of nutritional values and benefits in connection to the most common food ingredients. Aspects of availability and barriers to access were also examined. As these discussions focussed on children’s food more than on family food, the results are presented in Chapter 7.
5.4.2 The main points of food diversity

Three forms of consumption recall was used to elicit information about dietary diversity and the frequency with which some food items were used in the households. The results of these recalls concurred in demonstrating a low diversity in staple foods and, importantly, a low representation of other food groups, in particular animal-source foods. Green leafy vegetables were consumed daily, but the variety of vegetables and fruit was low, and the only animal-source food that was available on a relatively regular basis was low-fat dairy.

5.5 Chapter summary

The variety of food that comprised the everyday diet for the families at the study site was severely limited by what was available, produced locally or regionally. Family food was predominantly plant-based. Food preparation techniques were unlikely to allow for adequate utilisation of nutrients. Data suggested that for the households, the main difference between seasons was not in food diversity but in the degree of scarcity. The ‘hungry months’ were an annual experience in the majority of the households, and during those months the quantity of food, as well as dietary diversity, further diminished.

Because what families ate was identical to what was available for young children, the low dietary diversity and variety of family food and the annual cycles of food shortage had significant implications on children’s food and nutrition security. Children’s access to food and nutrients was also affected by social and cultural
norms that were part of the food culture. The following chapter explores these dimensions of family food.
CHAPTER 6

HOW DID FAMILIES EAT? CULTURAL AND SOCIAL INGREDIENTS
The previous chapter described the physical attributes of family food: the types and diversity of food items available in the villages and how they were obtained and made into everyday dishes. It also explained how seasonality and food shortage affected family meals. In the focus of the following chapter are the social and cultural aspects of food items and meals: the customs and the value system underpinning food choices and mealtime behaviours, and the special use of food in exceptional times.

6.1 Commensality, customs and preferences

The following section describes the food consumed at everyday meals in the households, but this time from the perspective of customs. It explores traditions and norms of commensality and values attached to food items. Food restrictions are also discussed and the section concludes with the medicinal use of certain ingredients.

6.1.1 Meal formats

Meal formats in the households at the study site followed two distinct patterns. One was the staple and condiment format, typical throughout Sub-Saharan Africa. In the Wolayta households the condiment – a vegetable-based stew – was sometimes mixed with the staple and served as one dish. More often, however, the stew was prepared as a separate dish. The other meal format was simpler, consisting of a single staple, usually maize or a tuber without condiment, and mostly served for breakfasts and snacks. Regardless of the meal format, coffee could be included with any of the
meals depending of the time of the day or the occasion. According to recall and observation data there was no difference between weekday and Sunday meals.

A distinctive feature of family food was that the entire meal was served up at the same time, including coffee. Once the meal was served the whole family sat together and it was rarely that anyone left the table unless a child was sent to fetch something that was forgotten.

In times not affected by food scarcity or fasting, household members had three meals per day, with the exception of young children who received food more times than that. This is discussed in Chapter 7. The morning meal was often split: an earlier breakfast was prepared to accommodate the schedule of school children, and a later one for the men who had already been to the fields and returned for breakfast. Coffee was most commonly served with this later morning meal. The time of the midday meal was quite flexible, and the evening meal was usually consumed after dark, when work in the fields or other labour was finished and the market was over. The sun, with small variation so close to the Equator, set around 6:30 PM all year and there was no electricity in the villages, so very little work could be carried out after sunset. However, people gathered on the street before dinner and visited each other’s houses in the early evening hours.

In some households, with great irregularity, a small mid-afternoon meal called *mekses* was prepared and served. This was not a full meal but rather a snack, and either *k’olo*, *nifro* or boiled tubers such as sweet potato, taro or cassava were served, at times with coffee.
6.1.2 Meal sharing: rites and customs

We always all shared the one plate, even the neighbours shared with us; I still follow that custom and share with my neighbours. (F39)

Eating alone was undesirable for it contradicted the customs and values of Wolayta society. It was seen as an almost tragic situation that needed to be corrected whenever possible. However, this strong custom was not unique to the Wolayta but characterised cultures throughout Ethiopia. As an Afar saying stated, ‘it is hyenas that eat alone’ (Gebre Mariam, 1991, p. 16). Indeed, even in restaurants people who came alone joined, or were joined by, strangers for a meal and the accompanying conversation.

Family meals took a central role in the life of the household in maintaining communication and cohesion within the family, as well as between the members of the household and their neighbours. Parents and children were mainly the household members who gathered for the meals every day, but were often joined by a relative who shared their home, or a widowed grandparent living in the same compound. Men who had two wives ate at either wife’s house; the wives did not share meals with each other.

During the seasons of intense agricultural work men often collaborated with each other in the fields. On these days they took meals at the house of the person whose field they were working in. As well, day-labourers shared the family’s meals at many households (see Image 45). When school children had meals before they went to school or as they returned, their mother waited so she could eat with her husband. However, it was preferred that the whole family shared as many meals as possible,
and it was usually dinner time when every family member could gather to eat together.

The place of commensality

In contrast to the kitchens, the place where family meals were consumed was relatively well furnished. Each house had a ‘salon’, a separate room or a space that was partitioned off from the bedroom and cooking areas, where at least one table and several seats provided a formal setting for sharing food. The seats ranged from roughly carved long wooden benches, stools or chairs to home-made settees constructed of pieces of building poles and raw hide. A *rakabot* – a low, small chest with special compartment for coffee cups, next to which the clay coffee pot, brought in from the kitchen rested on a ring – and a low stool to sit by it were essential elements of the ‘salon’ setting.

The seating arrangements varied from household to household and, from time to time, even within the household. In many homes adults and children sat together at the table, but in some families the children were seated separately on a mattress or on sacks on the floor (see Image 46 and 47). When coffee was served with the food the mother sat and ate at the *rakabot*, interrupting her own meal by filling and re-filling the coffee cups, which she or an older girl handed out to the people sitting at the table. When the children ate without the rest of the family their meal was served with less formality, either in the kitchen, or in their bedroom.
Serving the meals

The food prepared in the kitchen was not taken directly to the dining table but to the bedroom or a small store room, where the serving platters, plates and bowls were kept, and where the meals were arranged on the trays. The dishes that comprised the meal were laid out in an aesthetically pleasing way, usually in circular and symmetrical pattern, no matter how simple the food itself was. A heap of porridge was placed in the middle of the tray and arranged nicely; a small bowl of condiment was surrounded by half-moons of k’ita; or a plate of roasted maize kernels were arranged around a small pile of roasted peanuts or in the middle of a ring made of half k’ita pieces (see Image 48 and 49). The tray was placed in the middle of the table and everyone reached in with the fingers of their right hand to lift out little portions of food.

Even when they sat apart from the adults, the same food, similarly arranged, was served for the children. If there were many children they sat in small groups of two or three, each group sharing identical plates of food. In a few households children were given individual servings, but this usually happened when no adults were eating during the same mealtime. The women sitting at the rakabot prepared a plate for themselves with the same food as the main tray, which they usually shared with their youngest child.

Drinking water was passed around the table in a cup shared by all. Coffee, up to three rounds for each person, was served in individual little cups; it was black coffee and customarily flavoured by salt. There were no households where sugar was regularly used in the coffee, but this did not mean that sweet coffee was disliked:
When women organised coffee ceremonies for group discussions for this research, to which I supplied the necessities, they asked for sugar for the coffee.

When ‘coffee was boiled’ in a household outside the usual mealtimes it was announced so the neighbours could join in for coffee and snack. Coffee, or *buna*, was never served on its own but with a snack, usually *k’olo* or *nifro*. On more festive occasions wheat bread or popcorn would accompany it.

**Rituals of food sharing**

While the food was being arranged by the mother, a younger member of the household, mostly but not always a girl, went around with a pitcher or large cup offering water for hand washing and for rinsing the mouth before eating (see Image 50 and 51). A strict sequence of seniority was observed by age and gender, as well as status in the house: guests came first, then the old men and women, followed by the male head of the household and the others. It was a sign of respect to decline the offered hand washing water to let another person have a turn first. A similar order was followed by serving individual portions of food or drink, such as chunks of boiled sweet potato or coffee.

No one started eating until everyone had washed their hands and they all sat together. At this moment, engaging everyone’s attention, the mother stood and said a relatively long prayer that the others followed with their eyes closed and face turned towards the ground. After the closing ‘Amen’ everyone waited for the most senior person to take the first piece, signalling the others to start the meal. The Ethiopian tradition of offering *gursha*, a small portion of food from the communal plate, placed
into the mouth of one person by another as a sign of affection, did not seem to be a common custom even towards children at the study site.

Any visitor during mealtime was welcomed to share the food; indeed, the hosts insisted that they should eat. The etiquette guiding the behaviour of the hosts and guests was not simple: it was unseemly for a guest to display eagerness and had to first reject the offer. If the visitor was a young woman she needed to wait until the men finished eating even as she sat at the table with them, and the men made sure they left food on the tray for her. Generally, however, gender seemed to play a lesser role in food sharing than age, and old age invited positive bias.

It was not only food that was shared during the meals: the lively conversation among the adults that included the woman sitting at the rakabot, was an essential component. Although I did not have the capacity to understand much of the discussion, judging from the few occasions when I was included with interpreter help, and from the fragments that were translated for me, the topics ranged widely: from work in the fields to prices at the markets, from the health of relatives to local politics. Regardless of the subject, people maintained a friendly and pleasant conversation, avoiding confrontation; even disagreements were wrapped in politeness and compliments. While children were usually not invited into this exchange, the custom that prescribed that they do not participate in it was getting more flexible and in some households children were allowed to make some comments.

At the end of the meal everyone washed their hands and rinsed mouths again, and in the more well-to-do households soap was handed around at this time. It was
important to remove the smell of food from the fingers and mouth: it was seen impolite to shake hands with food residue on the fingers, or talk to people with the smell of the meal on one’s breath. Explanations for this custom varied, but essentially it was to avoid raising envy, disappointment or sadness in others for not being included, or for not being able to afford a similar meal. Guests usually did not linger; once the meal was over everyone left the table to engage with the next task of the day.

When children’s meals were served separately from the adults’, boys and girls shared the same plate of food, and there was no bias in terms of quantity, quality or frequency. A later section in Chapter 7, focussing on children’s food discusses this aspect child feeding practices in greater detail. In some households, when there were highly esteemed guests, the children were seated separately from the table with the adults, or had to wait until the meal at the table was finished to get the leftovers.

The use of only the right hand for food was a very strong social rule, and people who were left-handed were under great pressure as children to comply with this custom. In one family I observed a child allowed to eat with his left hand; the young parents explained that they learned in school not to force left-handed children to use their right hand, as it may ‘hurt their personality’.

Water was probably the only thing that was consumed unceremoniously and alone, even in the presence of other people, although the ritual of rinsing the mouth before drinking was observed in most times. People frequently walked into a house they passed on the road to ask for a glass of water; a glass was quickly rinsed and filled to
the rim, the guest took a sip, spit it out onto the floor and drank the rest, often without sitting down, and then left.

6.1.3 Food outside the home

Most meals were consumed at the home of the family. The custom of inviting people with a degree of formality, with the exception of special events, was limited to coffee, a meal consisting of up to three cups of coffee and some snacks. Neighbours and extended family, however, shared food regularly in an impromptu manner and, as mentioned earlier, men who worked together in the fields ate together as well, regardless whether it was collaborative partnership or employer-labourer relationship. Food shared on these occasions was not different from what the family ordinarily consumed.

The traditions of some special events such as funerals, weddings, circumcision, birth and some religious holidays, prescribed feasts on a large scale, which the whole neighbourhood and members of the extended family, even those living far away, were expected to attend. The distinctly different food that was prepared for these events is described in a later section on food for special times. Some of these events occurred throughout the year, although certain types of ceremonies and celebrations were usually scheduled to take place in the months of plenty, following the time of maize harvest. The rich food of these festivities, because of their frequency and distribution, were unlikely to contribute significantly to the nutritional status of adults or children.

Markets and shops offered food items that could be consumed instantly. In the villages these foods were mostly fruits, roasted maize, peanuts, fried dough and
sweets, but town markets and shops sold a variety of roasted grains, bread rolls and other street food. Children accompanying their mother or father to the markets were regularly bought fruit or sweets, but the parents did not buy these types of food for themselves.

There were a relatively large number of restaurants in one of the villages, and none in the other. The main reason for this difference was that the large number of teachers and the three markets each week in the first village provided an ongoing supply of customers with disposable income, on which the restaurants could build their business. The village restaurants served a small number of dishes: usually injera and leavened wheat bread served with a simple vegetable stew made of kale, cabbage or potato, and a lentil stew. They also sold soft drinks and sweet tea. Meat was not prepared: there was no refrigeration and the risk of loss was great due to the high price of meat and the low income of the customers. Meals were usually consumed there, but bread and injera were frequently sold for take-away. The customers were almost exclusively single people: teachers and other government employees, mostly men, whose placement in the village took them far from their families, and a small number of the better-off secondary school students. None of the households participating in the study reported to have eaten food in these restaurants, although some occasionally bought injera or bread.

The larger market towns, such as T’abela and Soddo, had a variety of food outlets ranging from street vendors of coffee to little teahouses, and from small eateries to large and, especially in Soddo, expensive restaurants. The meals in some of the restaurants were not different from the village ones, but many served meat: the towns
had a largely reliable electricity service and a greater mass of salaried population and well-heeled merchants.

6.1.4 Values, preferences and status in food

Values, preferences and status attributed to food items were articulated by the study participants not so much as personally held values or preferences but as an understanding held by all. Portraying a food as being ‘good’ or ‘better’ did not necessarily connect to utility. When asked why this or that item was preferred to another, the answers suggested that the superiority of one staple over another, or of a vegetable over another, was self-evident, and only some of the answers were framed in terms of functional advantages. These practical reasons included, for example, that the preparation of an item required less firewood or shorter cooking time, that it had better flavour or it was easier to digest. Nutrition value was also attached to foods and this is discussed in Chapter 7 in connection to knowledge about children’s food.

Yet a social value system was evident as well, and the prestige of food items was not always linked to utility, nutritional or market value. There seemed to be two primary, and somewhat opposing, forces that instilled prestige in food: one was the belief that food items or agricultural products that had non-Ethiopian, or ferenj, provenance, represented higher value. The other, conversely, had its origins in the food traditions that people, who settled in the study area just two generations prior to the study, carried into their new food system, and as many items of the ‘old’ food culture became more difficult to obtain, this endowed them with special value.

The clear statements about the regard for certain food items were corroborated by the custom of making great efforts, even sacrifice, for providing a particular food, not
explicitly for its nutritional value, for sick people or women during birth. Details of this custom are discussed in the section about food for special times. As well, the desire to prepare ‘better’ food for a visitor was expressed through higher status foods.

In general, foods of higher prestige were consumed with greater regularity by people who were wealthier than the others, and by those who had a regular cash livelihood either as a main source of household income, or to augment the earnings their farms provide. Market purchases of i’ef, injera, bulla, and ferenj cabbage were more likely to be reported by households who lived on government salary or had a business on a larger scale.

Food traditions

The lowland areas were settled by people from the highlands, and although the changed circumstances required the production of different food crops, more appropriate to the conditions in the lowlands, much of the food culture was carried to the new settlements. The particularly high status of enset and k’ibe indicated the continuity of the food culture, with its roots in the highlands food production system. Enset, coffee and dairy remained the heart of the Wolayta cuisine but, because these items were difficult to afford, the use of k’ibe, enset products and meat were, in general, limited to festive dishes. The appreciation of foreign food somewhat contradicted the high regard with which food preparation knowledge, learnt from the previous generation of women, was held, as in that knowledge the exotic foods either had not played significant role or had been unknown.
Though the meals on ordinary days were simple, and the families’ food budget was exceptionally restricted, Wolayta, just as many other Ethiopian ethnic groups, had a very sophisticated cuisine. This was mostly manifest during the holidays when complex meals were prepared, for which many ingredients were purchased or accumulated throughout the preceding months. Most women were accomplished cooks who learnt the recipes from their mothers, and perfected them as they established their own authority as wives and mothers.

A strong link existed between the tradition of eating with ones’ fingers from a shared platter and the shape and consistency of meals. Spoons were used infrequently, mostly when feeding infants; eating with a fork was not observed in any of the households, and knives were used at the table during mealtime only when chunks of raw meat, *k’urt’,* was served.

**Staples and condiments**

When asked about food, participants’ responses considered mainly staples, dairy and meat. The direct and immediate meaning of food was substances that alleviated hunger. Vegetables and fruits were thought to have less importance, as they did not ease the feeling of hunger. This perception was demonstrated by the resentment farmers felt about the space gardens took away from growing staples:

> When we compare the advantage and disadvantage, the disadvantage is more because [the garden production] is seasonal, it catches the field from growing maize or other grain, also it dries easily and the price [market value] is cheaper. For all household use maize is more important than the others [garden products].

(Z08F)
Rank among the foods belonging to the same group was articulated quite clearly and unanimously by the participants. In terms of staples the highest status belonged to *enset* products, *bulla* and *k’och’o*, whether made into flat bread or porridge, followed by wheat bread and *injera*. Maize was placed in the lowest category, and was considered inferior to manufactured packaged pasta and to grains that were not grown locally but were part of the old food culture from the highlands, such as barley and oats.

The predominance of maize and the low diversity of grains were not based on preferences. In fact, many participants complained about their inability to diversify the everyday meals by adding different grains, such as barley and oats, which they considered superior to maize, in particular to the flours porridge was made of:

> I don’t know the difference, but I heard people say that it is good to mix [grains] for diversity….Oats, barley, beans, peas, maize. The mix of the flour of all these and prepared as liquid porridge…I used to prepare this when I had money but now I can’t. (F03)

> I would like to prepare from barley products and oats, liquid porridge or *beso*\(^\text{52}\), but could not because it is expensive. (F05)

*Enset* was one of the main staples in the highlands and it retained its cultural importance even in the lowlands, where not much *enset* was produced. Products made of it were used for the preparation of traditional dishes mostly for holidays and ceremonies. *Bulla* was the main ingredient in porridge-like dishes of varying

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\(^{52}\) *Beso* is an uncooked meal, prepared from ground roasted barley with hot (not boiling water; a thick version is prepared with salt and butter.
complexity, from the simplest muchuwa (Wol) to a rich version of it. Dishes made of k’och’o flour included a k’ita-type flat bread also called k’och’o, and some porridge-like dishes such as bilanduwa and bach’ira (both Wol).

*Injera* was mostly used in special circumstances at the study site. *Injera*, a fermented product was customarily made of t’ef and not from other grains in this area, although in other parts of Ethiopia *injera* was known to be prepared from barley, wheat, sorghum, maize or millet, and even using *enset*. *T’ef injera* was commonly viewed as ‘better’ food, especially by those women who came from other parts of Ethiopia where *injera* was the staple:

> If I could I would prepare *injera* for my children because *injera* is made of t’ef....

> Both t’ef and maize are good but t’ef is better......Maize is also good, but t’ef is better than maize. (F03)

> *Injera* is better than maize; more comfortable. (F13)

As well, *k’ita* was made of many of the grains available in other parts of Ethiopia, but not in Wolayta kitchens where women only used maize flour. Maize was the least expensive bulk food, so the choices were largely economically driven. The use of maize also offered the ease of the familiar preparation technology and taste. A variety of grains was available at the market and sometimes purchased for other purposes, and wheat was distributed regularly with food aid, but none of these grains were used in the preparation of *k’ita*.

Leavened bread was not unknown at the study site, but it was only prepared in commercial food outlets and by the very few women who learnt to make it when
living in other regions of Ethiopia. ‘High bread’, or difo dabo, had high status, underlined by its role in the rituals of the Ethiopian Orthodox Church. However, as the population in the study site were, for the most part, Protestants, and wheat was not grown locally, this form of bread was not prepared regularly. Leavened wheat bread was not even part of the range of prescribed foods for ceremonies and holidays, in spite of the fact that people enjoyed eating it outside their homes.

Boiled tubers represented a local tradition, although apparently less known in the highland areas of Wolayta Zone. Cassava was the main ingredient in a special dish called pich’ata (Wol). The white-fleshed sweet potato was one of the very few sweet food items available beside fruits, honey, sugarcane and sugar. Boiled sweet potato was a much liked snack food, preferred over taro and cassava, but not thought to have much nutritional value:

It only fills the belly, it is not that much useful. (GD20111017)

What is [sweet potato] useful for? Even though it seems delicious food we don’t know its use, it only [makes] urine. (GD20111210)

Condiments, such as stews, sauces and pastes, were simpler throughout the year and became more elaborate for special occasions. Stews were prepared to a consistency so they could be eaten by fingers, and because of this the cooking water was often discarded, along with the nutrients it contained. Sauces and pastes were usually made with chilli, and tended to be spicier than the stews. The choice between mild (alich’a) and hot (k’ey) stews that existed in other parts of Ethiopia did not exist at the study site.
Wild plant foods

Many other types of plant foods, including legumes and vegetables, were fitted into an order of prestige, although between the different fruits there seemed to be no particular hierarchy. On the lower end of the spectrum of status of plant foods were the wild-harvested fruits and vegetables: they were considered poor people’s food. That kale enjoyed higher prestige than moringa, for example, was due to the image of the latter being a food item that people relied on when they could not access any other vegetable, the result of the history of introducing moringa to the villages, as famine food.

Many people spoke of some of the wild fruits as not fitting for adults, although in reality many adults would regularly eat them. Some parents even disapproved the wild fruits:

Even though we advise them [the children] not to eat it they still eat it. Because sometimes you can get worm or Giardia and diarrhoea. (ALRA)

Yes, they eat [wild fruit] without my encouragement – it’s not good for children, it has worms. (Z04)

The edible green leaves that grew along the roads and in the commons were also considered to be low status and to be only relied upon in extreme circumstances. Many interviewees seemed not to know about these plants at all.
Dairy

Dairy products had strong traditions in Wolayta food culture. Although in the past households had greater livestock numbers and produced more milk, the decrease in dairy production in the decades prior to this study did not fundamentally change preferences and food preparation methods. But while family meals, at the time of my field work, were similar to what they had been in terms of general configuration, they became poorer in animal-source products, and cooking oil, a non-traditional ingredient, substituted k’ibe (butter) in everyday food.

From all food items, including meat, k’ibe seemed to be kept in the highest esteem:

Food without k’ibe is not real food. K’ibe is the most important ingredient in any food. If you cook only with oil it tastes like wood! If you don’t have money for anything else for holiday food, you still have to buy k’ibe: k’ibe is the key. (F05)

It was k’ibe that lifted the ordinary meals and coffee into a more unique, celebratory event, and k’ibe was added to foods that had special purpose, such as giving strength to a sick person, a pregnant woman or a mother who has just given birth. In the generations prior to this study it was customary to give raw, unboiled k’ibe to infants at the age of two or three months, and sometimes as early as one month, but this practice was strongly discouraged by the Health Extension and Alive and Thrive programmes. Nevertheless, the conviction that k’ibe had unique qualities that gave children strength and helped them grow, had not vanished:
The special food [for children] for growing: raw k’ibe; and poshamu with much k’ibe; this helps children to be stronger and grow; it also makes their growing faster, and to develop from crawling to walking. (F22)

Ayib, or cheese, was also a high prestige food item, which almost never appeared in family food during the year. It was an essential ingredient in festive foods, in particular at weddings and circumcision ceremonies.

In the past goat’s milk had been given to children. Some participants revealed that, as children, they used to drink goat’s milk. An older man said he had never been sick until he stopped drinking it. The reasons for not consuming goat’s milk included its strong smell, but mostly it was associated with behaviour problems in children who, if raised on it, apparently became too strong and wilful, and did not obey their parents:

When children drink goat milk their heart becomes ‘brave’. [What do you mean by ‘brave’?] It makes them disobedient, they insult each other, makes them cruel. They do not listen, they become aggressive. The other problem is the smell. Goat’s milk smell is not good…I drank goat’s milk until my marriage. It protected me from any kind of disease. But after I stopped drinking goat’s milk, after my marriage, I had different kinds of diseases in different times. (F34)

Meat

Wolayta people were regarded as ‘meat-eaters’ by other Ethiopian ethnic groups. This impression had its roots probably in the fondness Wolayta had for meat, especially raw meat. However, as described earlier, in the villages meat was not a
regular food item in the households. Although chunks of raw meat, k’urt’, was considered a ‘cultural food’, it was only served during holidays or ceremonies when a cow or ox was slaughtered. An exception to this was when an injured animal was killed and the neighbours helped the owner by buying its meat. In the study site only beef, and only certain parts of the red meat and white fat, were eaten raw; goat, sheep and chicken were cooked in various ways.

A hierarchy existed among the flesh foods. For cooked meat, chicken was considered more special than the meat of other livestock. However, raw meat had the highest status and therefore beef was highly prized. While many restaurants in T’abela and Soddo served k’urt’ and roasted meat, t’ibs, throughout the year, chicken stew was only on the menu in those places that catered for tourists. For the locals doro wet was strictly a holiday meal, endowing chicken meat – it was mainly roosters that were slaughtered and the egg-laying hens spared – with high status.

An order of status also existed among the different parts of slaughtered animals. Butchering followed strict rules in regards to how animals were cut into different parts, and for each kind of livestock there were a prescribed number of distinct parts, each with a name and a rank. At mealtimes meat was distributed among the household members in accordance of their status. For example, the back of the doro, which was considered the ‘best’ part, was served to the household head or to the most distinguished guest, and there were similar customs regarding the better parts of beef or goat. The portion sizes of the different parts, however, did not differ much in terms of the amount of meat.
In my observation meat was the only food item that was distributed according to the social status of the individuals sharing the meal. Other foods had reasonably equitable allocation among the household members and, if distribution was biased at all, it was usually favouring the children; for example, they were often given arera while the adults did not have any.

Coffee

Coffee preparation in Wolayta households was similar to that in other regions of Ethiopia. A small amount of coffee beans was freshly roasted and ground, and served from the clay pot, jebena, in which it was boiled. For special occasions sour k’ibe was added to the salty coffee, a custom also common in other regions of the Southern Ethiopia. Sweetened coffee was a relatively new phenomenon of ferenj and urban influence, and although it was appreciated, it did not have the festive value of k’ibe.

Leaf coffee was an example of the more complex face of Wolayta cuisine, unusual in that it involved a surprising number of ingredients and yet it was prepared in ordinary times to replace bean coffee in households that momentarily could not afford to buy coffee beans. The salty and very flavoursome brew, however, was considered a compromise, a lower-grade substitute for real coffee. Coffee had higher status than tea as well, which was only consumed outside the homes.
Ferenj food

Generally any ferenj – this adjective was used to describe people and things not from Ethiopia – food, or variety of plant and livestock, was considered ‘better’ than the local, abesha version. For example, of the green leafy vegetables regularly cooked in the households, ferenj gomen, the ordinary light green round cabbage, was valued the most. A certain long variety of banana called ferenj banana, brought from the Arba Minch’ area to the market, ranked higher than the Lady Finger-like bananas that grew in the village compounds. Red onion – ferenj shnkurt – was considered ‘better’ than shallots which were more common and had been produced in Ethiopia for a long time.

6.1.5 Food restrictions and taboos

Food taboos and restrictions that were observed in the study site were generally similar to those of other ethnic groups in Ethiopia. The taboos were mostly founded on Biblical prohibitions. Additionally, certain wild animals and insects, and some internal organs of animals, were not eaten, as these were thought to be ‘not for people’.

For adult followers of the Ethiopian Orthodox Christian faith, regular periods of fasting involving certain types of food, were prescribed. Only one meal each day, after three in the afternoon, and no animal products whatsoever, were allowed during the eight-week Lent period preceding Easter. Similar fasting rules applied every Wednesday and Friday during the year (except for 50 days after Easter) and an additional five short periods prescribed by the Orthodox Church. These rules were not observed by devotees of the Protestant Church, which a vast majority of the
Wolayta belonged to, and in practical terms the prohibition of animal-source foods would have only affected a handful of households where the adults regularly consumed dairy. During my field work I only saw fasting in one household, where a single mother, of Protestant faith, observed a Wednesday and Friday morning complete fasting regime, for which she gave no explanation.

Significant food avoidances had to be observed by pregnant women. These included some animal products, such as certain dairy items and the fat parts of raw meat, and also taro. One of the main reasons given for these avoidance rules was difficulty during delivery, as the fatty part of the meat made the baby fat and ‘sticky’, and therefore the labour could become difficult and long. Another factor was the shame that the mother and her family would feel when the newborn was covered in a white substance as a result of eating ergo and taro:

[She has to avoid] boyinaa (taro, Wol), fat of the raw meat, ergo also to avoid after five months of pregnancy. She can eat red meat raw, but without the fatty parts; fat meat will fatten the baby inside her body and will attach the baby to mother’s body, it will make birth difficult….If she drinks ergo after five months of pregnancy the ergo remains on the baby’s body; that is shame during birth; and people who help her with the birth will see it and dislike it. But close family and friends, they don’t mind it and they help to solve the problem, even though they dislike it, they scrape it off….Taro is like ergo, remains on the baby’s body.

(MTBA)

6.1.6 Medicinal use of food

Much traditional medicine seemed to be based on manipulating the body by massage, positioning or pressure with hands, fingers and fingernails, and sometimes
with a hot stick. Brews made with a wide variety of spices and herbs were often used for curative or preventative purposes, mainly for abdominal problems. According to one of the traditional healers I interviewed, for stomach complaints spices such as nigella seed, fenugreek, Ethiopian cumin and coriander seed were ground together and either boiled or just mixed with water. Black barley and rue were also known to improve stomach problems, and so was a small amount of lemon juice taken with water. Other herbs and spices, such as ariti (Artemisia sp), coriander green, linseed, kororima (false cardamom) were also frequently used to help various, mostly stomach, complaints. Garlic was recognised for its preventative and medicinal value, especially in the treatment of intestinal worms. Ariti was used in herbal tea for very young infants to provide ‘abdominal comfort’ and to regulate their stool.

Fresh bulla mixed with k’ibe and ariti helped people recover from injuries; consumption ayib (cheese) and liver were also considered helpful in healing injuries, while eating fresh fruit was believed to help to stop bleeding and pain during pregnancy. The unique qualities of k’ibe were also employed to cure stomach problems in children:

A fist size [amount of] k’ibe is boiled and clarified, cooled, then put it in their nose – feeding through their nose the whole; it cleans out the bad things from the stomach; it comes out through their anus. (F22)

Traditional birth attendants used k’ibe for external massage and internal lubrication during labour, and maintained that cooking oil was not good for this purpose. Use of k’ibe during breech birth was described by a traditional birth attendant:
[When] it happens I wear the glove, I pull the baby little by little while the mother pushes – make the birth faster so the baby does not suffer from lack of oxygen – massage the mother inside with k’ibe. (MTBA)

Another animal-source food item, fish, was believed to have outstanding medicinal properties. One interviewee, a middle-aged woman told me the story of one of her daughters who, after long illness, was cured by fish soup:

One girl, she is at school now, she stayed in bed for three years. I did not talk with anyone [about this] but God. She was having this cold or flu for three years, even with injection [from the clinic] she did not get better. I got advice from somebody: [give her] fish meat with garlic and spices. Got the advice from a person who was sick the same way, and got this medicine from someone else. I fed her fish meat, from Abaya Lake. We can’t get fish easily here: just once I gave her fish! (F05)

In terms of the use of food to prevent illness, the exceedingly bitter bile mixed into dat’a, the hot chilli paste accompanying raw meat, was supposed to aid in averting malaria. Traditional healers recommended carrots to improve eye sight. At the time of field work the older tradition of burning the skin at both temples to ensure healthy eyes, the round silky mark of which most Wolayta adults but only few children carried, was practiced less and less. Another example of the preventative use of food was bulla prepared with k’ibe, which protected children from illness, while finger millet gave them strength and promoted their ability to learn:

They grow strong and clever when they eat it. (BTH)

53 The Ethiopian Government provided education as well as some basic equipment, including items such as disposable gloves and sterile razor blades, to traditional birth attendants in the villages, through its network of health posts.
6.1.7 The main points about commensality and food customs

I found that the strong formality of meals was not discriminatory against young children and that the norms of commensality allowed their mother to direct attention to her children at meal times. Customs and behaviours during family meals were inclusive for all household members: men, women, the elderly and children. Food intake outside the homes was usually more diverse, but this did not happen frequently enough to be significant for the diet and the nutritional status of people, especially of children.

The hierarchy of food was somewhat linked to rarity and provenance, and the high esteem non-Ethiopian items were held in was balanced by the value placed on traditional foods. In general, restrictions and taboos were not severe, however, they restricted women’s fat intake during pregnancy.

6.2 Special meals

The relative monotony of everyday meals was replaced by rich and festive meals in every household a few times each year. Even the poorest families aspired to serve at least some of the customary foods the main holidays required, and a similar range of meals were prepared for ceremonies such as weddings, circumcision and funerals. Special food was prepared for women during and immediately after labour, and for sick children and adults.
6.2.1 Holidays and ceremonies

The rich and flavoursome food that was prepared for holidays and ceremonies showed the Wolayta cuisine in its full glory. Most of the main religious holidays occurred in the times immediately or shortly after harvest, allowing for the customary culinary specialties (see Table 14). By Palm Sunday and Easter, however, many families ran out of stores; indeed, April was one of the most difficult months of the year in terms of food security. Weddings, circumcision ceremonies and bazaars (feasts to raise money for house construction) were mostly held between New Year and the beginning of the Lent period, which months coincided with relative abundance.

Table 14 The main religious holidays in Ethiopia

<table>
<thead>
<tr>
<th>Name of holiday</th>
<th>Amharic name</th>
<th>Date in Gregorian calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Year</td>
<td>Enkutatash</td>
<td>11 September</td>
</tr>
<tr>
<td>Finding of the True Cross</td>
<td>Mesk’el</td>
<td>27 September</td>
</tr>
<tr>
<td>Christmas</td>
<td>Genna</td>
<td>7 January</td>
</tr>
<tr>
<td>Epiphany</td>
<td>Timkat</td>
<td>19 January</td>
</tr>
<tr>
<td>Palm Sunday</td>
<td>Hosanna</td>
<td>Sunday before Easter</td>
</tr>
<tr>
<td>Good Friday</td>
<td>Siqlete</td>
<td>movable</td>
</tr>
<tr>
<td>Easter</td>
<td>Fasika</td>
<td>movable</td>
</tr>
</tbody>
</table>

The food glossary in Appendix F includes a list and description of the main holiday meals. For the most part the format of these meals was not different from those of the ordinary days: either porridge-like meals, such as muchuwa, bach’ira, or pich’ata (all Wol) or stews, for example, zilzil t’ibs (Amh) or santa wotaya (Wol), and were all accompanied by k’ita or injera. For the festivities the chilli paste, dat’a, was enriched with much k’ibe, and was served with fresh bile, available through the
slaughtering of cattle during these times. Certain ways of preparing meat only took place during holidays or for other exceptional events; these included soups, such as *doyissa, chambaa* and *goch’qoch’uwa* (all Wol), and cooking strips of meat either wrapped in *enset* leaves or directly in the hot coals - *ashuwa shayeta* and *ashuwa t’it’a* (both Wol) respectively.

*K’ibe, ayib, meat, *enset* products such as *k’och’o* flour and *bulla*, egg, barley and a rich variety of spices characterised all of the festive foods, much of which was stockpiled for months prior to the event. Many of the meals required extended preparation time in addition to the actual cooking. This entailed roasting and pounding many different spices, getting lots of water and obtaining the additional wood necessary for the cooking fire. Some dishes took several days to finish as they had to mature between stages of preparation. The description of the preparation of *muchuwa* was an example of the complex recipes:

We need *bulla, k’ibe, spices* and salt. First *bulla* is roasted on *mit’ad*, and then water is sprinkled on it. Then water is boiled in a pot and to protect bulla from the water, the water is covered with a leaf of *enset*; between water and *bulla* a leaf of *enset* is placed. Then *bulla* is put on [the leaf] and cooked [steamed] for at least for 30 minutes; then the pot is taken off from the fire and put on the ground. Then water, *k’ibe*, spices, garlic and salt are mixed together and boiled separately; these boiled ingredients are added on the cooked *bulla*; finally it is put on the tray and served for eating. (TT)

As noted earlier, all meals were arranged on the round trays with an aesthetic ambition, in symmetrical compositions: the porridge heaped up, or the stew in a bowl placed in centre of the tray; the half-moons of broken maize *k’ita* or *k’och’o*
arranged in concentric circles on the outside. When *injera* was served, the tray was covered with one layer of it, and *injera* rolls were arranged similarly around the central mound of porridge or stew. Pastes were served in small bowls to share. Soup was usually dished out in individual serving bowls, with big chunks of boiled meat in it. One was supposed to remove the meat and drink or spoon out the fatty, spicy liquid so the bowl could be passed on to the next person waiting for his or her serving.

Drinks specially prepared for holidays and ceremonies in the study site were limited to *keneto*, a dark, almost black, sweet drink made of roasted barley, boiled with honey or sugar. As noted earlier, alcoholic traditional home-made drinks, such as *t’ej*, or honey wine, and *t’ela*, dark barley ale, were not prepared in the Protestant households.

### 6.2.2 Pregnancy, labour and nursing

Antenatal nutrition is important for foetal development and infant survival; therefore specific customs guiding food during pregnancy were included in the inquiry. Many of the foods that women were encouraged to eat during pregnancy and were considered healthy and strengthening, belonged to the high status items: the traditional foods included *bulla*, barley, *k’ibe* and *ayib*, and carrot, beetroot, onion, potato and round cabbage among the *ferenj* or purchased foods. A traditional birth attendant described her advice and nutritional guidance to pregnant women:

> They should eat carrot, beetroot, onion, round cabbage, to make the mothers strong …Also have good rest. Not to carry heavy things on their back; when they clean the cow’s house not to carry lot of manure at the same time; not to go long way on
the sun; have enough rest. Foods like meat, full milk, and fruits – make her and the baby healthy and strong… Most of the time mothers prefer smaller babies, so it is not difficult at birth time; they fatten the baby after birth. (MTBA)

Many women held that legumes such as chick peas, peas and beans, as well as $k’och’o$, were good for the mother, especially in the last months of pregnancy. Food restrictions for pregnant women, including fat, ergo and taro, in particular starting after the fifth month, are described previously. Interestingly, the Alive and Thrive Programme which targeted mothers from the last trimester until their child was about two years old, did not appear to include any nutritional messages for the mothers themselves, either during or after their pregnancy.

Opinions were divided about the best foods for women undergoing labour. According to some traditional views drinking cold water during and after labour was important for expelling the placenta. Traditions also maintained that liquid porridge and other foods enriched with $k’ibe$ gave strength to the mother, and that a brew with $ariti$ and $k’ibe$ conferred additional benefits:

I advise mothers when they give birth to drink boiled $ariti$, a kind of white coloured herb. It helps the mother to stop bleeding after giving birth and also it helps to clean the mother’s milk. (BTH)

It was the responsibility of the mother of the woman giving birth to provide her daughter with some of these foods, especially $k’ibe$, which she collected for months for this occasion, but neighbours also contributed milk and $k’ibe$. The Health Extension Workers advised against the heavy rich drinks, saying that they made the
mother tired, and recommended Mirinda, an orange flavoured sweet soft drink, or arera instead, as well as liquid porridge with sugar, and coffee.

There was consensus, however, about the special food needs of women after giving birth: coffee with ariti and bulla, both with lot of k’ibe, k’och’o, and porridge prepared from oats and barley. The use of many spices and herbs, and in general a diverse food intake, was recommended:

She should eat different things every day – rotate the food. (F03)

This diet was very different from the ordinary family food and these special dishes were not shared with the rest of the family. Many households could not sustain the above than usual level of spending. While some of the women I interviewed were able to follow the traditional recommendations, it was not necessarily so with all their newborns, and not always for the prescribed length of time, which varied between two and four months:

It should be different food [from the usual]. I used different food, but only when I had enough money. (F06)

Because of this [the need to sell milk and butter to cover household expenses], the problem is not only for children and adults, but it is also difficult to give full milk or k’ibe even to the mother when she gives birth. New mothers are also eating halakuwa [moringa] and k’ita these days. (GD20130415)

6.2.3 Illness

The most common diseases in the study area were malaria, respiratory and gastrointestinal infections, intestinal and other parasites, and eye disease. Regardless
of how the illness was treated and whether assistance was sought from traditional healer or the health post in the village, food vastly different from the ordinary meals was offered to the sick person.

The social norms regarding the feeding regime during illness required that whatever food the ailing person desired, whether it was a child or an adult, the family tried to obtain even at a relatively great expense. It was essential that sick people ate; according to the strong belief that hunger was a cause of, or could trigger illness, it followed that their being hungry should be prevented. Strong emotional meaning accompanied this obligation: a woman who, with great suddenness, lost her teenage son to malaria *falciparum* during my field work sadly recalled that her son died without having even a *gursha*, a bite of food.

There was some contradiction in the norms guiding the feeding of sick people. Traditional beliefs attached symbolism to certain foods and made it harder for family members to decide how to fulfil their wishes. Below are some examples, but by no means a full list, of symbolic meaning in food items:

> When sick person asks for *injera* we think he will die, so we don’t give *injera*. *Injera* is a sign of soil, therefore grave, if they ask for *injera* they are close to death….Meat is a sign of tears, so sign of death. When the sick person asks for meat it means separating, dying; flesh means meat and flesh also means a relative, it is the same word, [so it is] a sign of separation….There is a type of cassava, if the sick person asks for that we don’t give it because it comes from soil, so it is a sign of grave and death. (GD20111017)
Generally, during illness every possible measure was taken, including borrowing money, to fulfil the wishes of the sick adult or child; richer food was prepared for them, and the intention was to increase diversity. Indeed, many participants suggested that, as lack of diversity caused illness, diversity may help curing it.

6.2.4 The main points about special meals

Elaborate traditions and broad food knowledge were evident in the high cuisine of the festive foods and the medicinal use of many herbs and spices. Food intake during holidays and festivities was significantly more diverse, but because of their infrequency these events did not have great impact on the diet and on the nutritional status of individuals, in particular of children.

Besides the celebratory meals, extra resources were directed toward adults and children during illness, and toward women during labour and the weeks of confinement. This attitude had significance not only in terms of physical nourishment but also as an indication of protection and prioritisation.

6.3 Chapter summary

Following the exploration of the physical aspects of food in the villages in Chapter 5, this chapter’s inquiry into the cultural and social dimensions of food and meals completed the picture on family food. These social and cultural dimensions have considerable implications on the availability of food and nutrients in the households, on young children’s access to it, and their ability to utilise it.
Having established what constituted family food, and how it was shared, the next chapter brings the focus to children’s food: food choices, feeding and child rearing practices, and the knowledge underpinning these customs and behaviours.
CHAPTER 7

FEEDING THE CHILDREN: THE CULTURAL, SOCIAL AND ECONOMIC ASPECTS
The previous two chapters present an account of the physical and social environment that defined food availability and access in the households at the study site. This chapter focuses on the food that was directed towards infants and young children in this given the context, and on the practices and behaviours that defined and influenced children’s access to and utilisation of food and nutrients.

In the first section of the chapter I introduce infant and young child feeding practices, followed by a section on caregivers’ knowledge about the children’s health and nutrition. The third section discusses children’s place in the household, as the social context of their nutrition security, including some of the norms and customs of child-raising in the context of household priorities.

### 7.1 Providing food for infants and young children – food and child feeding practices

Local infant and young child feeding practices were essential components of the factors that affected children’s nutrition security. The practices observed and inquired about included the choices of food and the preparation methods of meals for the children across a range of ages, from birth to five years. Meal frequency and the mothers’ and carers’ behaviour during meal times were also important elements of the infant and young child feeding practices.
The following section outlines what food was available for infants and young children in the households and how it was prepared. It discusses feeding practices from breastfeeding to transition to family food, and tracks historic changes in these practices.

7.1.1 Breastfeeding – to six months and to four years

Breastfeeding of newborns was universal; every mother in the sample reported having breastfed all of their children. Except for high-risk cases, all births took place at home, most often with the assistance of a traditional birth attendant, and less frequently with the help of a non-traditionally trained Health Extension Worker. Women stated that they preferred having small babies; they believed it was easier to remedy low birth weight\(^{54}\) than to deal with the complications that may arise from protracted birth:

Most of the time mothers prefer smaller babies, so it is not difficult at birth time; they fatten the baby after birth. (MTB)

Commencement of breastfeeding

Traditional birth attendants advised women to start breastfeeding within hours of giving birth. Mothers claimed that they began breastfeeding within a couple of hours after giving birth, usually after the placenta was expelled. According to custom,

\(^{54}\) Foetal size is found to be an important factor in prolonged obstructed birth and in the development of obstructed labour injuries, most frequently obstetric fistula. In 2005, 0.22% of Ethiopian women between 15 and 49 years of age had experienced obstetric fistula (Muleta, Rasmussen, & Kiserud, 2010). The maternal mortality ratio between 2004 and 2011 was 676 maternal deaths per 100,000 live births (Central Statistical Agency [Ethiopia] & ICF International, 2012).
coffee with lots of butter was prepared for the new mother before she started breastfeeding, but if the newborn was unsettled it got fed prior to the coffee ceremony:

The mother should start to feed her breast the newborn baby after the placenta expelled and also after having coffee. The coffee is boiled [prepared] with much butter. But if the baby starts to cry she can feed her breast after placenta comes out. Placenta must be removed before breastfeeding. (BTH)

The traditional birth attendants emphasised the necessity of passing the placenta before the start of breastfeeding. This was in contrast with the advice of the non-traditional health care providers and health promotion programmes, which supported the beginning of breastfeeding right after birth, reasoning that it helped the expulsion of the placenta and reduced bleeding.

Special drinks and foods were prepared for women post labour, such as bulla and ayib with k’ibe (local cheese with butter), to give her strength:

They [the mothers] need to drink leaf coffee\(^{55}\) with ariti (wormwood), it helps remove the blood, and helps the breast to have enough and clean milk. They need to drink muk’ (liquid porridge), that helps the baby to get enough milk. Also [the mother] needs to have freshly cooked food. (BTH)

The common account about the virtually immediate start of breastfeeding conflicted with the claim (the origin of which was unclear) that colostrum was not given to newborns, maintained by health professionals and Health Extension Workers:

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\(^{55}\) Leaf coffee is described in the earlier chapter on family food
Colostrum is not provided for children. There is a belief that it is dangerous, causes abdominal cramps for the children. They press it out and throw it away. (D16)

**Confinement**

Mothers were protected and supported in the first months after the baby was born, allowing them to recover and focus on the newborn without the pressure of having to work in the household or do other chores. Custom required that women did not leave the house, preferably not even to go to the outside kitchen, for about six to eight weeks after giving birth. Members of the extended family sent or brought rich food, money and clothes in the days after the birth. Grandmothers, neighbours or older children prepared meals for the household and the new mother during this extended confinement period:

The mothers should get good foods. Unless [that happens] the child can’t get enough breast milk from his mother. (GD20120123)

For a further two months it was expected that mothers do not leave the household and their older children, neighbours or husbands helped with tasks such as getting water or going to the market. At the end of this period the family took the new baby to the church, where he or she was accepted into the community: this ritual gave permission to the new mother to assume her regular activities. In households considered to be poorer, or in which there were no older children to assume the helper’s role, the rules of confinement were somewhat flexible:

In this area, during birth, if the mother is from wealthy family, she stays [at home] with her baby for about four or three months and is fed [by others]. But if the
mother is poor she can’t stay at home this much [time]. Because she needs to start to work. She says that ‘if I stay at home for months, who is going look after my other children, and who retails something in the market for me?’ Then she feeds her breast [to the baby] and starts to work. (ALRA)

Exclusive breastfeeding

Infants were breastfed on demand and the length of each feeding largely depended on the child. During breastfeeding the mother stopped her other tasks, whether cooking or selling grain at the market, and turned her attention to the infant.

Most mothers reported that they exclusively breastfed their infants for six months, not giving them any complementary food or drink, and a few women continued exclusive breastfeeding up to seven or eight months:

Health Extension Worker told me [it should be for] six months – so when they reach seven or eight months I start to give them sweet packaged biscuits. No drink either before six months. (F03)

There could have been some self-reporting bias as a result of the ongoing nutrition education of the Health Extension Programme, as well as the NGOs’ health development work, which advocated for the WHO guidelines of six months exclusive breastfeeding. Advice from traditional healers was generally similar, although they suggested that herbal brews were useful when a child had stomach problems. During observations I did not see infants under six months being given any other food or drink than breast milk.
The self-reported and observed data somewhat contrasted with the claims of Health Extension and child nutrition programme workers in terms of the exclusiveness of breastfeeding. They stated that the traditional practice of early complementary feeding persisted, in particular when mothers felt that their infant was not getting enough breast milk:

[They give the infant] yoghurt, full milk, liquid porridge, raw butter…under six months they give them food. They give them liquid porridge saying: my breast milk is not enough for the baby – that’s the reason mothers give. [Also give]…boiled ground grass to drink – it’s a special grass, they believe it is medicine to start them on passing stool. (A2H)

If the mother does not have enough secretion of milk they may start [giving food] at three months. Mostly unboiled raw milk, full milk. (D16)

Breastfeeding continued until the mother’s next pregnancy, for at least two and up to four years of age. The apparent reason for weaning children during the consecutive pregnancy was a belief that if they continued it would reduce milk secretion for the next child. Weaning was sudden in some cases and gradual in others, and several women claimed that the children themselves chose to stop breastfeeding at a certain point:

The oldest one stopped when we went to town: we celebrated his birthday and took photo; he got scared and stopped breastfeeding. The second child slept at his grandparents and stopped then. The third child I stopped when I got pregnant.

(Z07)
[I had] long gap between pregnancies; [when I knew I was pregnant] immediately I gave my small child to my mother so she forgets breast milk. (F22)

Some mothers apparently breastfed more than one of their children in the same period, but no one acknowledged this practice themselves:

I did not breastfeed the two children at the same time; some mothers do feed two different aged children at the same time but I did not. (Z01)

As most married women of childbearing age, who were not pregnant, were breastfeeding, the practice of nursing a neighbour’s baby while looking after it so the mother could run errands was widespread. As well, grandmothers put crying children on their breast for comfort until their mothers came home. How breastfeeding changed when the mother was sick, was not raised by any of the participants and I did not specifically inquire about it.

7.1.2 Transition to family food – from six months to about two years

The transition period to family food was relatively short and started around six months of age. Infants were fed complementary food while they continued getting breast milk and they increasingly sampled the food the rest of the family ate:

First of all, the children should get only their mother’s breast until the sixth month. Then we give them additional foods. Unless the children get additional food, if they eat only breast milk, they don’t become strong. (GD20120123)
Liquid porridge

Complementary food was predominantly liquid porridge, *muk*; this was virtually the only food that was made especially for infants. The main ingredients of liquid porridge were maize flour and water, to which ideally flour of other grains and dry legumes, as well as dairy and egg were added. Enriching the maize porridge with other grains, legumes, and in particular with animal products, however, was more a desire than everyday practice in most families. The difference between the ideal and actual practice was explained by the lack of financial resources to purchase those ingredients that were not produced by the household. The following quotes describe the ‘special food’ mothers aspired to make for their infants:

[I used] oats, barley, beans, peas, maize; I mixed the flour of all these and prepared liquid porridge called *miten*. I used to prepare this when I had money, but now I can’t. (F03)

There are many things that I could not follow [in the advice] because of lack of money. For example for *miten* expensive ingredients like oats and barley; instead I gave them my breast. They also advised to give the children k’want’a (dried meat) and eggs – but I could not. (Z03)

Regardless of the types of grains used in the ‘special food,’ the preparation techniques were not different from the ones used at preparing porridge for the family: flour was mixed into boiling water and cooked for a short period of time – generally less than ten minutes. Porridge for infants was made thinner and smoother; this was achieved by adding more liquid – water or *arera* – and in some cases *k’ibe*.

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56 *Mitien* refers to a liquid porridge – *muk’* - made with more than one type of grain
Mothers prepared *muk’* usually once a day and stored it in covered pots, giving the children small amounts of it several times during the day.

**Diversity in complementary food**

Eggs, well cooked, were considered appropriate food for infants over eight to 12 months. It was recommended that the egg was hard boiled, mashed up and mixed with butter, and the paste then spoon-fed to the young child. Meat was generally not introduced into the diet of young children until the age of three or four years. Neither eggs nor meat were observed in infants’ meals during the household visits, and meat consumption of this age group was not reported even during *Mesk’el*.

A Peer Mother (child nutrition volunteers associated with the Alive and Thrive initiative) said that while she advised other mothers to give meat to their infants, she was unable to prepare meat for her young children more than once a year, during the *Mesk’el* holidays, because she could not afford it at other times. Meat was not only expensive, but small amounts of it were not readily available in the village or small town markets with no refrigeration.

Very few mothers reported feeding their infants fruit such as pulped bananas and avocados. No vegetables were generally cooked with the liquid porridge, although infants did receive small amounts when they were given family food, which usually included the green leaves.

The emphasis on the importance of the diversity was remarkable, although references to diversity mostly made regarding grain variety rather than the inclusion
of different food types. This was typical for the mothers’ views, as seen in an earlier quote, and also for the nutritional advice from the Health Extension Workers:

Mostly mothers follow the previous custom: preparing muk’ from one grain – but this liquid porridge should be at least two or three grains. Approximately half of mothers follow this advice, the other half don’t; they prepare what they have at home – they don’t buy additional things. (A2H)

Introducing greater diversity of food was also part of the counselling protocol. However, the volunteers were aware of the difficulties of carrying out these recommendations, as a Peer Mother’s description of the reality mothers faced illustrated:

During your observations maybe special food was already finished and that’s why you did not see it [in many places]. They do not get it every day anyway; only when they buy grain from market – while it lasts they prepare it, then the infants only eat what the rest of the family eats. After one and a half years [of age] children start to eat the adults’ food. Most families’ economic situation does not allow to buy special food for the children – they only get it when the rest of the family. To get meat or egg – it is difficult; children may get this food once every one or two months. (APM)

Feeding infants and young children: frequency and attention

The Peer Mothers recommended that mothers fed their infants with liquid porridge every two hours as a general rule, and their timed and targeted counselling manual also included advice on the increasing amount of porridge as children grew older.
The frequency and timeliness of feeding infants and young children was central in the interviews describing feeding practices. While the family usually ate three times a day, small children were offered food in between meal times. The actual number of feeding times was different from family to family, but in principle small children were given food when they asked for it:

If mothers give them [children] any kind of food when they want it, or at regular mealtime, that protects them from illness. (F06)

The common response that ‘children can’t resist hunger’ implied an understanding that small children suffered more intensely from hunger than the adults. There seemed to be no rule regarding when to offer breast milk and when muk’; the pattern was pragmatic and children were given whatever could be produced simply and quickly.

Small children were paid special attention while they were eating: a mother would use her cupped palm and fingers, a small cup or a spoon, to feed liquid food to the child seated in her lap, and offer small pieces of her own food if it was appropriate for the child (see Image 52 and 53). There were no baby bottles in any of the participating households, and in the village shops, although they could be bought in the towns. Young children were encouraged and helped to try the food the family shared, and often they were served a small portion in a separate dish to make sure they did not have to compete with the older siblings (see image 54 and 55). I did not observe any gender difference in regards to the amount or kind of food infants and young children received, and the interview data confirmed that the same feeding practices applied for boys and girls.
Most commonly, mothers continued the preparation of the liquid porridge made of grains for infants and young children until about two years of age, although in some households this stopped sometime after the age of 12 months. Children as young as eight or nine months started sampling the food the older family members ate, and usually from the age of 12 months the three types of feeding practices overlapped (see Figure 8). While breastfeeding on demand continued, and liquid porridge was made and given to them a few times a day, they also shared some of the food during family meals:

After one year they eat what we eat; I still prepare special food until two or three years, but if they want they can share what we eat. (F03)

I fed them from my breast for three-four years, even while they already started to work, bring water or firewood, I still fed them [from breast]. After six months [I gave them] liquid porridge and also tried to give them other food. (F05)
Food avoidance for infants

Interview and group discussion data did not uncover any food taboos for little children. Food restrictions were mostly based on rational explanation and the knowledge of associated risks: whole cooked or roasted kernels of maize and legumes represented choking hazard, raw meat could potentially carry the risk of intestinal worms:

Only prohibition is meat for little children, because they cannot chew it very well, they just swallow it – it is not good for them, even if we chop it up to small pieces it is not good. (F12)

A coordinator of the Alive and Thrive initiative confirmed the practice of avoiding feeding meat to children under two years, and added that this was the only food avoidance for young children he was aware of in the Wolayta villages. Hot spices such as *berbere* were avoided in food made for very young children because they would not like the flavour.

7.1.3 Children old enough to share with family

Food for children over two years, but as discussed above often from 18 months of age, was identical to what the older members of the family ate. The only difference was that they would still have access to breast milk, although with decreasing frequency as they spent less and less time around their mothers, playing with groups of other children away from home.
Food diversity

In Chapter 5 I describe the food prepared and shared in the households. In summary, the main staple was maize, cooked as porridge or baked as flat bread; to this green leafy vegetables were added at least once a day, usually with small amounts of vegetable oil, shallot, garlic and chilli. Access to legumes and fruits was modest and irregular in the households. At an everyday level, animal-source products were limited to skim milk, and to a lesser degree butter, and only in those households that had a dairy cow or lived on salary. The different data sources concurred with regards to the comprehensive role family food played in young children’s diet, with its limitations in terms of diversity, variety and its recurring scarcity.

In the household food recalls use of eggs in children’s food was reported only once in the preceding seven days, in the household of a child nutrition volunteer. All mothers aspired to feed dairy – mainly arera and butter – to their children, and many found it hard to accept not being able to provide those, or eggs and more fruit on a regular basis:

Mothers could give full milk and eggs to their children but they need cash for other household necessities. (GD20130409)

The lack of meat in young children’s diet, however, did not evoke a similar sense of urgency and it was unthinkable that a family would slaughter livestock, even a chicken, on an ordinary day just to feed meat to a small child. Meat was generally claimed to be introduced into the diet of young children around the age of three or four years, although some mothers said they would give their infants meat cut up to
small pieces and cooked under the age of two years, and small pieces of raw meat over the age of two.

During my household observations I only saw young children being fed meat during the September holidays. In one of the households a little girl, two and a half years old, protested when she realised that meat was in her mouth and spat it out. Her parents explained that she did not like eating meat, and as this household was one of the poorest ones, I wondered whether she ever tasted meat before and perhaps she was just not used to it. Mothers suggested a range of ages for children to start eating meat, most of them around three or four, and there were other women who stated that young children disliked meat:

[Children don’t get meat] up to four years, some up to ten years. It is not forbidden, but most children don’t want to eat meat. [Among my children] my oldest one [9 years old] is the only one that eats raw meat; [they start] cooked meat at four years. (F20)

Frequency and timeliness of meals

The diversity and variety of the food of the children of this age group, for whom mothers stopped making ’special food’, was identical to what other family members ate. However, the frequency of their meals, the timing, and the way they were sharing often differed. Similar to how infants were treated, mothers offered food to their young children between mealtimes. A mother said about her two year old daughter:
She eats five times, the youngest one. I know that she can’t resist [hunger] like us, so I offer her food even when she is playing outside. (F03)

They also tried to give the children food whenever they were hungry, and I observed many times that small children were given food whenever they asked. This was usually a piece of leftover k’ita, a handful of roasted or boiled maize kernels or, in households with fruit trees, a banana or orange:

He eats every time when he says ‘I am hungry’. (F05).

They asked and I gave, also I offered and gave them food. (F37)

Give them when they ask. They don’t have official time. Whenever they come in from outside they ask and we give them food. (Z13)

Some food items were valued for their immediate availability when children were hungry:

*Injera* is better than maize; we can make *fitafito*\(^{57}\) (Wol) quickly. Once I make *injera* I can use it for three days, so the children can get food as soon as they ask for it. But I don’t know the nutrition value. (F13)

Mothers regularly sent their young children, who were crying for food when there was none in the home, to the next door neighbour, often a family member. Although participants firmly rejected the notion that they could be dependent on neighbours or extended family for food, even in hard times, the reciprocal practice of offering food to children of other households was quite common.

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\(^{57}\) *Fitafito* (Wol) or *fër* in Amharic, is made of small pieces of *injera* mixed with butter or oil and spices
Young children sharing family food were encouraged, helped and carefully watched by their mothers during mealtimes. In some households even at the age of over two years they were given separate servings of food to avoid competition with the older children, and often mothers hand-fed them even though they were capable of feeding themselves. As with the infants, there was no difference between boys and girls in this age group: they received identical food, equal freedom to access it and enjoyed the same attention from their mothers.

As children grew older on-demand food somewhat diminished, but the insistence on having timely meals did not. Morning and midday meal times were fitted around the schedule of the school-aged children. This was often at the cost of having to prepare and serve two breakfasts and two lunches, to accommodate the father’s work or social schedule, whom the mother shared meals with rather than with the children. Sometimes part of the meal, usually the vegetable stew, was made in sufficient quantity for just the children and some ingredients were saved for a freshly made portion for the adults.

Older children were expected to help with work around the household and the fields. Some of this work was divided along gender lines: boys did not help in the kitchen and were less likely to be sent to the markets or shops for small purchases, and girls were less likely to work in the fields. But duties such as fetching water, taking animals to graze or to water, and collecting grass for livestock and firewood for cooking was shared by all children. Their work duties created opportunities for the children to access small amounts of additional food, mainly by harvesting wild fruits on the roadside and in the forest. Working in the kitchen did not seem to advantage
girls in terms of access to food: during my household observations I never saw an older girl – or her mother – sampling the food that was prepared for the family meal.

7.1.4 Recent changes in feeding young children

According to the recollections of adults of a variety of ages, young children’s food used to be similar, although some feeding practices became somewhat different, and some foods, for example packaged dry foods such as pasta, were unavailable in the past. However, the diminished availability of animal products was emphasised as the most significant change.

It was stated by some participants that newborns were less likely to receive colostrum in the past, although there was a range of viewpoints in this regard. Grandmothers claimed that they started to breastfeed their infants within hours after birth, but health professionals contested this. According to the participants’ accounts, breastfeeding was less exclusive during the first months in the past. The practice of giving herbal brews to newborns to flush their digestive system, and to infants when they had abdominal pain, had been common, and mothers started to feed other liquids as well to infants as early as two month of age:

During the infancy period, before [in the past], in most families the mothers were using cultural herbal medicines; they were also providing butter for the child. They believed that there were herbs very important for the abdominal comfort of the infants. They prepared it for drinking, from cup. (D16)
At [the age of] two - three months [the infants] raw butter, not boiled, after that full milk mixed with *arera*; also *ereta* (Wol). (F39)

Health Extension Workers claimed that this practice was increasingly abandoned, and exclusive breastfeeding in the first six months was becoming more common:

They started to give food [to infants] at two months; but now we see practical change. (A1H)

With the exception of the early introduction of some liquids, the process of transition to family food in earlier times did not significantly differ from the practices observed during field work, and it was completed within the same age bracket. The most common complementary food was liquid porridge, however, maize was a less predominant ingredient. People who grew up in the highlands recalled more reliance on *enset* products than on maize. Others stated that maize had always been an important staple food but other grains were available as well:

That time things were better – we fed the children with sorghum porridge with lots of butter, until 2 years of age, then they ate adult food after that. (Z14)

The food was different for children: *ereta* made from barley and maize, mixed with full milk and stirred; children drank it. The adults could eat *k'ita* and meat, but children needed special food. (F39)

The greatest difference was in the availability of, and access to animal-source products, with the exception of eggs, which were not given to children in the past.

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58 *Ereta* (Wol): liquid porridge prepared from maize or barley flour and mixed with milk or butter.
All participants agreed that children had better, richer food in earlier times and that they grew faster, and were healthier and stronger, and there was much concern about the consequences of children missing out on important food types:

At that time [previously], as I mentioned before, children were getting fatty foods. They became strong and grew fast and they started to go to the field with the older children at eight month of age. Gradually they started to eat the adult’s food at one and a half years of age. (Z12)

The previous generation [of children] was stronger. This one can’t be half of what the previous one was, in strength and size. Previously there was different food: full milk, meat, butter. This generation gets only maize product. (F05)

I worry when I see my grandchildren’s food. Because I compare what I ate during my childhood to their food. I want to feed them what I ate during my childhood….which is impossible now…There are other grandmothers who share my feelings. They compare their childhood and their grandchildren’s food today. Because of lack of those kinds of foods these days children are sick and growing with lack of strength. Worms are created in their stomach. (Z12)

Milk – not _arera_ but full milk, as many people emphasised – and _k’ibe_ were part of the meals several times a week. Although there was some difference between the two villages - one half of the participants described eating meat regularly as children in Issíppe, while only one third in Wolqá - meat used to be given to children weekly or fortnightly in many households, especially in the generation of those who were grandparents at the study period:
When I was a child most of food was served with full milk or yoghurt. This time the children drink liquid porridge, eat injera, white bread. We used to eat much meat; eat meat every time; now if we eat meat at Mesk’el we have to wait until next Mesk’el to eat meat again. Our mother worried for us, provided meat once a week or every 15 days\textsuperscript{59}; also much butter. But now everything is changed. (F39)

Feeding practices of young children who shared food with the rest of the family were reported to be similar in the past generations. The way meals had been served differed from household to household, as in some families only the older children sat with their parents at mealtieme, while in others the whole family shared a single dish. In either case, parents paid careful attention to ensure children’s access to their share:

> We were eating our food with our parents… At that time we were getting enough and better food than my grandchildren getting now. Once we ate at that time [in the past] we didn’t want to eat within a short gap, between meals, because the food was fatty, rich with butter. Children did not have to fight for food because there was enough, and rich, and they did not need to eat much [to get full]. But now children fight over the plate because of lack of food. (Z12)

The following quote from a group discussion summarises the perceived difference between the diet of the current and the previous generation of children:

> The children were getting their food as they wanted; meat and butter were cheaper at that time. At this moment people who have the ability [enough income] feed their children good food, but people who don’t have enough income they feed their

\textsuperscript{59} The term ‘15 days’ is a direct translation of an Amharic expression, which can mean a fortnight, or a frequency of twice a month.
children moringa and k’ita. Even though we prepare poshamu⁶⁰ there is no milk, so instead of milk we use water. These days even when we have a small amount of milk or yoghurt we mix water in it to make it much, to share for many children. There is a big difference between nowadays and the previous times. So the children in the previous period were growing faster than the children at this moment. (GD20120121)

7.1.5 Poor food for children was attributed to poverty

Perceptions regarding the direct links between poverty and poor diet, which was defined by the participants as lacking the diversity of food necessary to health and development, surfaced in group discussions and interviews repeatedly. Participants were in no doubt that the cause of the shortcomings in their children’s diet was predominantly economic and, as a result, their children’s health, growth and development were dependent on the family’s economic standing. The strong consensus, voiced by all household and non-household participants, was that unless their economic circumstances improved the food that the children accessed would remain the same:

Even though at this moment education, medication supply and technologies are extending, unless the family has enough economy for its children, there may not be change in the families’ food. At this time the economic situation is not satisfying, it does not let the children grow well. (GD20120121)

The two fundamental dimensions of shortage in food and nutrition were discussed earlier: most households reported that they were unable to produce enough crops and

⁶⁰ *Poshamu* (Wol): porridge prepared from maize flour with boiled water, milk, spices and butter.
livestock to cover the family’s food and cash needs even in a year when the harvest was plentiful. In addition, the limited diversity of crops that was produced in the villages did not supply the whole range of food items necessary to meet the children’s nutrition needs. Study participants claimed that their ability generate cash income was severely constrained, mostly to selling some of their produce, and they lacked resources to buy the food items not produced on their farm and missing from an ideal diverse diet:

In our area we can’t produce many different kinds of food. But we could get it from the market. The problem is financial problem. Because of lack of income and lack of different kinds of foods, we only feed our children the same kinds of food like halakuwa and k’ita. (GD20111017)

I know what food makes them strong and play happily, but I know I can’t buy them - cheese, butter, eggs, fruit, round cabbage, mango, avocado, long banana. We could buy [good food] in the market: fruits, butter, milk, meat – but the problem is cash. So we leave the best foods in the market, we just look at them. (Z09)

As well, they had to consider other needs, such as small household items, health post fees or school supplies, and prioritise them over food:

[People] use only maize product for household consumption, and they sell the other [produce], because they need to buy coffee, fuel for lamp, salt and other things. (GD20130409)

We have shortened hands [not enough income], that makes it harder to grow children well; people struggle to grow their children well. Children always have
food to eat, but the problem is to fulfil other necessities like clothes and school
supplies. (F19F)

While all parents would have liked to improve the children’s food and feed them
more diverse and rich meals, they felt they were unable to do so, and some
participants emphasised that not only the children’s but the adults’ diet was also
inadequate:

Full milk and eggs are not only important for children, they are also important for
us, when we come back from ploughing activities. But we need cash [and we can
get cash] by selling those. So children or adults cannot get full milk and egg.
(GD20130402)

7.1.6 The main points of this section

Breastfeeding of infants was universal. Mothers stated that breastfeeding
commenced within hours after birth. However, this seemed to contradict the
assertion of health professionals, who claimed that colostrum was not given to
newborns. Strong traditions prescribed that mothers were supported and protected in
the first few months after giving birth, making it easier for them to focus their energy
and attention on the new infant. Breastfeeding continued until the mother’s next
pregnancy, often up to four years. While its exclusivity in practice in the first six
months could not be ascertained, women were aware of the contemporary
recommendations in this regard.

Complementary food for infants in general terms was a liquid form of the family’s
staple food: maize porridge. Mothers made efforts to enrich this with other grains
and dairy, but this largely depended on their livestock assets and access to cash.
Around the age of one year children started to sample the food the older family members ate, and after a few months this became their predominant source of nutrition. What did make a difference, however, was that they were still accessing breast milk, and that their mother paid special attention at mealtime to the youngest children, ensuring that they got their share.

When comparing infant and child feeding practices between the generations at the time of, and prior to the study, the prominent points participants made were the increasing exclusivity of breastfeeding, and the diminishing access to animal products in children’s food. All participants agreed that nutrition needs of children were inadequately met. They attributed this to the families’ poverty, and held the view that without changing the economic circumstances of the households the food children eat could not improve.

The section above gave presented a description of infant and child feeding practices and the recent changes in practice. The following section describes the norms and knowledge that underpinned those practices.

7.2 Knowledge and norms – linking children’s health and food

Behaviour is guided and often prescribed by culturally held norms, as well as by information accessed and internalised as knowledge. Infant and young child feeding practices in the villages were governed by the knowledge and norms of the community, the household, and in particular of the parents. Their interpretation of
health and illness and their understanding of causality and connection between children’s health, development and food was a critical component in the description of the infant and young child feeding practices, providing the rationale behind the choices and behaviour. In addition, exploring what were considered as credible sources of culturally acceptable knowledge and information was important, as this would impact on the success of any initiative targeting health and nutrition-related behaviour change.

In the following section I focus on the knowledge and norms that relate to health, nutrition and food, which guided infant and young child feeding practices at the research site. I describe parents’ perspectives on the health problems their children faced and their assessment of the children’s health status, their understanding of the value of food items used in everyday household meals, as well as the sources of information and knowledge they apply in decision-making.

### 7.2.1 Health and illness of children

According to the commonly held perception young children’s health was fragile. All participants agreed that children, weakened by illness or hunger, were vulnerable to disease and got sick more often:

Oldest [child]...is always sick. We took him to the clinic and spent 59 Birr, but he is still sick. He vomits all the time, we don’t know [why]. The oldest one used to be the healthiest, was not sick for three years, but this year he is sick.... Now the middle one is the healthiest. He is the strongest. I love him most, he does most of the work helping. (F03)
I have one child who is sick by epilepsy, he can’t catch things by his hand – so I worry about him. Another child – lack of food – skinny, his belly swollen – I worry about him too. (Z09F)

The middle one is sick all the time. A while ago, when she was two years old, she got malaria that goes to the brain [falciparum], and got very skinny. Since then she cannot resist any sickness. (Z09)

Malaria was the most prevalent of the illnesses affecting children. According to the parents, it was unlikely that a child could grow up without being infected by malaria vivax or falciparum, the two forms of malaria endemic in the area:

[In terms of their health] there is no big difference, all [of my children] are sick with malaria sometimes. (F20)

The warning signs of a malaria episode were fever, lack of appetite and children and ‘not playing as usual’. Malaria testing and treatment was available at the health posts, and all of the families reported that they made efforts to take their children to be treated in a health facility. These efforts were considerable: many parents had to travel with the sick child to another village, and they often did not have to money for treatment:

When my children get sick at the same time that I don’t have money on my hand, so these two things, sickness and lack of money, happen together, I feel worry.

(F07F)

Traditional healers referred malaria patients to the health post; they did not provide treatment themselves:
I check the child; if the child is not sick I tell them the child is not sick. But if the child needs my treatment I treat it. But if the problem is above my knowledge, like malaria, I tell them to take the child to the clinic. (BTH)

Other frequently cited illnesses were of the digestive system, often described with symptoms such as stomach ache or cramps, diarrhoea, sometimes with blood, abdominal swelling, and vomiting. Intestinal parasites and the twisting of the intestines were among the frequently mentioned problems. Sore throat and tonsillitis were also considered quite common. Among the signs of illness parents described were difficulties with breathing or swallowing, sharp pain in the side of the chest, and ‘making painful sounds’. Mothers watched their children’s behaviour and sought help from traditional or non-traditional health care providers when they noticed these symptoms or saw that a child became quiet or lost his appetite:

Most of the time the children get quiet if they are sick. If they have malaria or other sickness. When the child does not play or laugh as the others, they bring them to me and ask me to check whether they are healthy. (BTH)

Several diseases affecting mostly children were described, for which discrete Wolaitta names existed but which I could not identify. For these illnesses parents sought out the help of traditional healers. Aysara and sorgiya (Wol) were explained to be potentially fatal, spreading from other parts of the body into the mouth and throat, eventually blocking the airways. They were caused by extended sun exposure, exhaustion and weakness from other disease, and their traditional treatment involved applying pressure by finger or fingernails to the swollen areas within the mouth and throat. Seminiya (Wol) had similar symptoms and was treated the same way, but it was caused by fever and intestinal problems. Other illnesses such as bederecha, eka,
gammogarda and kurkusiey all had symptoms in the mouth and stomach, and could be connected to teething or fungal infection in young infants, causing lack of appetite and problems with breastfeeding. Traditional treatment was carried out by fingernails or the hot end of a burning stick in the mouth or on the stomach. Another example was described by a traditional healer below:

The bending [twisting] of the intestines happens when the children don’t get food when they want to eat, when they are hungry. In Wolaitta it is known by the name Gorbia. If this illness is treated when it happens, it is easy to treat it by massage. But when it becomes stronger it may be difficult for treatment; it needs operation. The symptom is vomiting. (BTH)

7.2.2 Connecting food to growth, development and health

Group discussions and interviews demonstrated a clear awareness of the association between the quality and quantity of food, and the health of children was during, and participants drew powerful links from what children ate to their growth and development.

There was consensus about the inadequacy of the young children’s diet. All respondents shared the opinion that ‘children did not get what they needed’. Most interviewees claimed that as for quantity, in times when there was no actual food shortage, the food was generally sufficient, and children ate as much as they wanted, although they acknowledge the impact of the ‘hungry months’, and some parents thought that meal frequency was inadequate:

According to households the children are different: sick or healthy; fat or thin – depending on family’s situation. When the family’s economy is good they grow
their children well – if it’s less, their children are skinny and sick. Also, during the
difficult months of the year their children are affected by hunger and illness. In our
area most years the months between April and July it happens. (APM)

Children don’t get good food, and also the frequency is not enough, they eat with
big gap of time, and they rarely get good food. (F19F)

The main concern, however, was lack of diversity. It was commonly held that, as the
food children ate was mainly prepared from maize and hardly any other grains or
dairy was included in their meals, their growth, development and health suffered:

Children do not get the food that is needed; we always use maize products.

[Diversity is important because] it gives strength and health. (F03)

Because of lack of different kinds of foods like peas, broad beans, yoghurt, and
milk, our children’s growth is not good. When the children don’t get these kinds of
food their belly becomes swollen, they get sick, they become skinny. In our area
the children mostly get maize and halakuwa (Wol)\textsuperscript{61}…So that’s why our children’s
growth is not as good as the growth of others, who get different kinds of foods. Not
only this; they also get diarrhoea, and the colour of their hair changes. Instead of
walking on their own legs they just sit, up to two or three years of age. Sometimes
up to four years they can’t walk on their own. Their growth is backwards
[delayed]. (GD20111210)

The small stature of children did not seem to be perceived as a health problem on its
own, as long as they started to walk and talk in good time, and did not get sick very
often:

\textsuperscript{61} Halakuwa or haleko is the Wolaitta name for moringa
Even though [they are thin] they are well and healthy. (Z08)

The Health Extension Workers were aware of stunting as an issue, but their interventions targeted severely underweight children. They stated that the number of those referred to the Outpatient Therapeutic Care Programme was steadily decreasing:

There were many children registered for OTP (outpatient therapeutic programme) before…OTP is based on the condition of the child. This number is reduced: in three or four years, from 15 – 20 to 11 – 12 each year. (A1H)

Hunger was often talked about in terms of lacking the right kind of food. Although it was acknowledged that children ‘always wanted food’, it was apparent that in the parents’ view the greater health threat was the monotonous nature of the children’s meals rather than the amount of food they had access to:

Because of lack of food diversity they face different illnesses…when children eat the same food always, it is a disease by itself. (GD20111017)

In this area the children always eat maize product…the main problem is there is no food diversity. When we make k’ita it is maize, liquid porridge is still maize. Because of this, the children’s body can’t prevent disease, so even a short time of hunger can cause disease. (F03)

Because of lack of diversity they [the children] get sick easily and suddenly. (F22)

Most episodes of illness were linked to lack of appropriate food, and some diseases were directly attributed to hunger and lack of food diversity. Hunger, experienced even for short periods, was identified as the main cause of illness in children:
Sometimes when the children are hungry they get amoeba and diarrhoea, mixed with blood. (F03)

Several mothers said that when they needed to go somewhere, leaving their young children behind, and they were not be able to leave food for them, the children were hungry and got sick by the time they returned:

Sometimes when I go somewhere on business, to get firewood or water, or to get white clay from Lake Abaya for cattle feed, the children get hungry and get sickness. (GD20111017)

Malaria was strongly connected to hunger and lack of good food, causing weakness. While some parents were aware that malaria was a mosquito-borne infection, others mentioned a range of other causes such as person-to-person transmission through the air. However, the recurring episodes of the disease were attributed mostly to hunger and, to a lesser degree, weakness, exhaustion, and long exposure to sun:

Malaria is caused when children get hungry or stay in strong sunshine. (F20)

Hunger causes malaria – it shivers the body and the malaria comes. (F05)

A Health Extension Worker described a belief about linking sweet food and malaria:

Mothers believe that bedena\(^{62}\) is cause of malaria because it is sweet, but nobody proved it, it is not studied by science. People used to believe it with sugarcane also, and banana, but honey was all right to eat. But we taught them that the cause of malaria is mosquito. (A1H)

\(^{62}\) Bedena is a wild fruit; grows in the forest as well as in the commons
Hunger was implicated indirectly in some diseases even though the parasites or germs causing them were identified by the participants:

When the mother goes somewhere the hungry children eat soil and get hookworm. (GD20111017)

The debilitating effects of hunger and inadequate food were linked to poor school performance in older children; their weakness and inability to focus and the missed school time due to recurring illness were often mentioned. Many participants judged the health and development outcomes of young children as poor, primarily due to their diet, with the exception of the children’s mental development:

When children don’t get good foods they are going to be skinny and sick. Sometimes they can’t start walking at the necessary age. (GD20120123)

There is a big difference between now-a-days and the previous times. So the children in the previous period were growing faster than the children at this moment. On the other hand, the children these days are better than the previous ones by their knowledge. They have sharper brains than the previous ones. So now, even though the children are not getting the necessary good foods they are wise and have sharper minds. (GD20120121)

Health professionals agreed with household interviewees in general, but they believed that great improvement took place in the last three to five years:

Children used to be weak, they did not get treatment [when they were undernourished]. This time [now] children are stronger and bigger. Same age child that used to be six kilograms, now is ten kilograms. (A1H)
7.2.3 Knowledge and norms regarding children’s food and feeding practices

The following section discusses the participants’ perceptions in regards to what food items an ideal diet for young children, in particular the under-five years age group, would comprise. The statements about the poor diversity and variety in children’s food, outlined above, were supported by the parents’ knowledge about the nutritional value that particular food items contributed to meals. Their understanding of food groups and their nutritional significance was apparent in the wide range of grains and tubers, legumes and animal-source foods, as well as fruits, vegetables and herbs listed as essential for a balanced diet for young children.

Appropriate food by age group

Many interviewees emphasised the importance of diversity in grains and other staples, such as barley, oats, **t’ef, bulla**, and the inclusion of eggs and butter in complementary foods for children under two years of age. Meat was also mentioned for this age group, although many mothers suggested that it was more appropriate for older children. For children between the age of two and five years, injera, milk and cheese were included:

> For babies under two years of age the best is liquid porridge with butter, *injera frfr* made of **t’ef** with butter, eggs, and meat in very small pieces. Important foods for children between two and five years, because the nutrient value is high, are oats, *injera*, and *porijit*\(^63\). (F07)

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\(^63\) *Porijit* (Wol) is a fortified premix, distributed by the health extension system for undernourished babies, and re-sold at markets, probably by the recipients
[Best food] for babies under two years of age: sweet potato, *bulla*, barley, oats….Barley is better for children, for example *banigaa gurdwa*64 (Wol). Also *bulla* with butter, *injera* with *wet* – if we had the ability to buy *t’ef* we would feed them *injera*. Also liquid porridge made of oats, and white [wheat] flour for liquid porridge. (F05)

Eggs, butter [is necessary] for children between two and five years, and milk, butter, barley and cheese for older children. (F06)

A greater diversity that included other types of foods was considered essential as children grew older. Meat, legumes, fruits and vegetables were added to the list of necessary foods, nevertheless emphasis on the importance of the variety of staples and on the inclusion of dairy products remained:

When children become older, over five years, we start give them cheese, meat, chickpea, pasta. (Z03)

It is important to give carrot, beetroot – chopped to small pieces; older children also need meat, tomato, mango, beans, peas. (F12)

For babies under two years of age important are: eggs, cheese and butter, *beso ch’bt*65, and also roasted and ground oat with milk made into a drink for strength.

For children between two and five years: porridge with milk, *k’ita*, kale, boiled beans and sweet potato. For older children boiled or roasted maize kernels with beans or peas, and *k’ita* with kale or milk. (F15)

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64 *Banigaa gurdwa* is the Wolaitta name for a snack made of barley and butter

65 *Ch’bt*: a handful of thick *beso* made into a longish lump with fingers and palm
Nutritional value in food items

Participants of group discussions and interviews were asked to identify the nutritional value of food items, using the concepts approximately identified as foods assisting with strength and energy, protection from illness, and with growth. There was convergence on what the most important food items were that gave energy and strength to children. *T’ef*, maize, oats, *k’och’o* and full milk were included in this category, but barley and *bulla*, butter, meat, eggs and honey, as well as peas and broad beans were the most highly valued. Consumption of meat and dairy was strongly linked to strength:

> Previously children ate so much milk, meat, butter, and they were very strong. In these days there is difficulty for everything. These days everything is weak, and this generation is also weak. (F07)

Food items valued for their role in preventing illness included eggs, chick peas, papaya, mango, avocado, tomato, beetroot, sweet potato and fenugreek and, according to many participants, the strongest protective qualities were carried by liver and butter, and second to those were kale, carrot and garlic. Fenugreek was said to strengthen the stomach, and carrot was thought to promote healthy eyes and good vision. Butter, as in all aspects of the Wolayta food culture, was particularly valued, and colostrum was mentioned among the protective foods:

> When kale is cooked for children with much butter and made it [into a paste] it can get rid of the [intestinal] worms. (F07)

> [These days] our children can’t get worm-killer food like butter. (GD20111017)
In the old times mother did not give the colostrum, it was thrown out – now we know it’s necessary, it is like vaccination. (APM)

Opinions about food items that promoted the growth of young children ranged more broadly, with less agreement between participants. In terms of staples maize, taro, *k’och’o* and *t’ef* were listed, as well as some legumes such as lentils and haricot beans. Cooking oil and fenugreek were also included, but the main emphasis was on animal-source foods: dairy, such as cheese, full milk and *arera*, and flesh foods, such as meat and fish. Fish was also associated with development and learning outcomes. Nevertheless, butter was claimed to be one of the most important food items for growth:

Raw butter …helps children to be stronger and grow. It also makes their growth faster, and to develop from crawling to walking. (F22)

When children get milk they grow faster, become fat. When they eat butter they get strong and play freely. When they eat fish it protects them from diseases like malaria. But when children are not fed these kinds of foods they will be stunted. If a person is not fed these kinds of food during childhood he may not grow enough for marriage at 20 years of age. He may be late [and marry] at about 30 years of age. (Z08F)

In spite of the awareness of the nutritional benefits of many foods, scientifically-based explanation was only offered by one or two participants:

There is vitamin in kale: B, C, and A. From vegetables children can get these vitamins. (F07F)
There were food items whose nutritional value was judged minimal. The locally produced sweet potato was considered worthless by many mothers, while others thought it was important for young children. In general, moringa was the most undervalued food item:

If the children are fed the foods that don’t have vitamins, like nifro and moringa, they are going to be sick and become skinny. Also, their bodies will be swollen.

(GD20120123)

Ideal frequency of important food items

One of the topics of group discussions was the frequency with which those food items considered essential in the diet of infants and young children—other than breast milk—should be given to them. The list of foods that was thought to be consumed by young children every day included a variety of staples and legumes, as well as milk or arera and garlic. Although in practice kale or moringa were prepared daily in virtually all households, very few vegetables, mainly kale and beetroot, were considered necessary for daily consumption. Similarly, most participants listed only two types of fruit to be given to children daily: mango and papaya. Approximately one third of the participants did not think that any fruits or vegetables were needed every day.

It was clear that parents would have preferred to increase the diversity of their children’s staple foods by breaking up the monotony of maize with bulla and k’och’o two or three times a week. Among the vegetables that should be prepared twice or three times a week were carrots, tomatoes and, for some respondents, kale. No fruits
were listed in this category of frequency, but a variety of animal-source products were included, mainly butter and eggs.

There was no agreement regarding the frequency with which meat should be given to children, opinions ranging from three times a week to once a month and a similar range was considered in regards to liver. Honey was an important energy-food, however only considered appropriate once a week.

**Ideal practice of feeding young children**

While children’s ideal diet, as described by the parents, differed from reality to a large degree, the expressed knowledge and norms in regards to how infants and young children should be fed were more aligned with actual practice. Many parents reflected on the need to monitor and encourage small children, ensure that they get appropriate share of the meals, and the importance of timeliness in providing food:

> The children between two and five years and between five and ten years should eat separately because they can’t share the food equally. The food also should be different. The children should get their food always when they want to eat. If the children eat with the adults, the adults should leave extra food for them on the plate. (GD20120123)

Parents made great efforts to treat sick children to food that was otherwise not available to them. It was important to make sure a sick child did not remain hungry, otherwise their illness would get even worse. Parents tried to comply with the child’s wishes for particular food and it was considered appropriate to provide rich meals
that were not prepared in ordinary times, or to purchase food items that were not usually kept in the household:

When children are sick we prepare what they ask to eat until they get healthy; even when we don’t have that food at home we try to get it and prepare it. We all have the same opinion: if they want milk we get milk; if they want soft drink we get soft drink; even if we have no money we tell the problem to friend or neighbour and borrow money. We should fulfil what they want. (GD20111017)

It was commonly accepted that sick children would have less appetite and would eat less. However, they were encouraged to eat as much as they wanted, not only by giving them the food they asked for but also by the special attention they were given while eating:

When they are sick I will give them separate place and feed them, not with the others. (F12)

I feed [the sick child] by embracing them and feed them like that, in my lap. I buy bread and sweet biscuit in shop. (F14)

Mothers recognised the signs of malnutrition in their children, illustrated in an earlier quote from a group discussion. Children who became skinny with swollen bellies, whose hair turned a reddish colour, who did not grow as other children, whose developmental milestones were delayed and got sick often, were considered malnourished and in need of special feeding regime for recovery. While acknowledging that in reality it would be difficult to follow this procedure for most families, group discussion participants described the appropriate family food-based treatment for children who were weak or not growing well:
When we recognise those signs we prepare food from kale, cheese and spices and butter, and feed the child. Butter should be small amount because as the child is skinny it is not good for his stomach. When that child eats this food for some consecutive days he becomes stronger and better. The worm in his stomach is also destroyed. When he becomes better, we also start to give him yoghurt and also we prepare him soup from meat. The meat should be separated from any kind of bones and boiled with spices. Even though this child can’t be [immediately] as his previous strength his health situation improves. Until he becomes a strong and healthy person he should eat these kinds of foods.

This is all about what we prepare in our home. But if we took them to the clinic there are supplementary foods like Plumpy’nut. (GD20120123)

7.2.4 Sources of knowledge

For most participants the predominant source of knowledge and information regarding infant and child feeding practices were their mothers and, for a few women, other family members they grew up with. As young girls they were expected to help with the chores in the kitchen and looking after their younger siblings. Some of their learning took place through experience and practice, and some by direct teaching:

I learnt from my mother. I saw when she prepared food for my younger siblings. [I learnt] from no other person. My mother also advised me: ‘when you get married and become a mother do it like this and this’. (Z02)

All these things I learnt from my mother, I did not learn from anyone else. I am doing it the way I learnt it. (F06)
We learn from our mother. When our mother looked after our younger sisters and brothers, and when she prepared foods, we saw and followed her activity and learnt. Our school is our mother, we learn from her. (GD20120123)

While the Peer Mothers acknowledged the existence of gaps between what they recommended and the conventional practices, they thought the traditions and the new advice were essentially similar:

Previously we raised children according to [advice from] our own mothers. But not much difference between our Alive and Thrive training and mother’s teaching.

(ZPM)

Women respected and appreciated what they learnt from their mothers, but many of them found that knowledge difficult to apply, as their own circumstances as mothers differed from those they grew up in:

Although my mother taught me a lot of things, it is not the same. There is big difference in economical situation, because she had access to milk, meat, butter, cheese, k’och’o. But I cannot follow what she taught me. (F05)

As women moved to their husband’s family’s village or compound when they married, the influence of their birth family and access to their advice somewhat diminished. The support system they relied on in the place where they raised their children included sisters-in-law, neighbours and friends, but women generally avoided asking for advice of their mothers-in-law.

Most participants claimed that the network of traditional and non-traditional health professionals was not their primary source of information:
I learnt [about feeding children] from my mother. Also [got information] from a friend in this area, a neighbour. But not from health clinic or Health Extension Worker. (F15)

Women thought that what their mothers taught them in terms of children’s food was identical or superior to what they learnt at the health post or from the visiting Health Extension Worker. They argued that the Health Extension Worker’s advice was limited or impractical, and they were often unable to follow it; rather than advice they would have welcomed actual assistance, such as fortified porridge mix or other supplementary food, from the Health Extension Worker:

When we went to health post for vaccination and to weigh the children they collected us and taught us some things, no difference from what I learnt from my mother. How to feed small children – liquid porridge and what is good food. They showed us pictures of affected children whose body was swollen and said that your child becomes like this if you don’t give good food. (F05)

Porridge, that’s all she [the Health Extension Worker] gives advice on. They say use *porijit* powder, they don’t say anything about animal food, vegetables or fruit. Their advice is good but we use our own way. We prepare *muk’* with butter – that’s better for the child. (F07)

Everything what we learn from our mother is better than the Health Extension Worker’s ideas. Actually, Health Extension Workers should give us medicine or supplementary foods. Our problem is lack of income. If we were able to perform what we learnt from our mother that would be better. Health Extension Workers only fill our hope by lovely words, ‘spices of mouth’. (GD20120123)
The Alive and Thrive volunteers also found that their own advice, based on the training they received, was hard to follow:

It is two different things. It’s easy to give advice, after what we learnt. But when it comes to follow that advice it needs financial effort so it is difficult to follow.

Besides, we have many children, and that makes it difficult. (MPM)

For a small number of mothers school was another source of information about healthy food choices and good feeding practices for young children. The concept of ‘nutrition’ was introduced in science subjects in secondary school, and the few mothers who attended school at that level recalled their lessons:

Yes, I remember a little bit. The teacher said to bring different kinds of food, and then he categorised them. Chickpea and papaya – prevents disease; injera – supports energy; milk – builds the body. (F07)

[I remember] from school; in science subject we learnt how to feed children. To feed them separately, each child. (F20)

7.2.5 Local assessment of knowledge that guides infant and child feeding practices

Perceptions regarding the parents’ understanding of appropriate food and feeding practices were diverse. While the mothers and fathers themselves were confident in their knowledge, health and development professionals and volunteers often expressed doubt about the sufficiency of the parents’ understanding and were concerned about the gap between understanding and practice.
The older generation expressed trust in their daughters and daughters-in-law. They thought the young mothers were doing their best and their knowledge of how to meet children’s needs was adequate. They were also aware that information, they had no access to, became available for the younger generation of parents and thought that the mothers were applying this new knowledge well:

They [the current mothers] are growing the children according to this modern time, so I don’t worry. (F29)

The government started to teach young mothers how to raise children, also about health. So they raise their children better than previously; they know how to clean the children and their clothes. (Z14)

Assessment by health professionals

Health Extension Workers were generally of the opinion that the traditional ways of raising children lacked the understanding of fundamental nutritional and hygiene principles. In an apparent contradiction with their own statements, they acknowledged that many parents had good knowledge of the ideal practice, though this may not have been reflected in their actions, and concluded that not all families were alike and that each household responded to the emerging problems differently, so it would be inaccurate to generalise;

[In the households] there is no problem regarding food [availability], only regarding knowledge. (A2H)
[There is] lack of knowledge. And different behaviours among the mothers…Not all people have a problem, and not all people are well-informed – can’t generalise. (A1H)

Traditional healers and birth attendants agreed that not all mothers followed ideal practice in caring for their children:

I don’t think that all mothers are raising their children well. There are mothers who have good experience how to raise their children: those mothers prepare and give their children’s food at a time when children want to eat. And also they keep their children clean…But there are others that make me worry. For example there are mothers who only know how to give birth. They don’t think about the children’s hunger or thirst, they don’t think about their cleanliness, they don’t wash their clothes and body, they don’t cut the children’s nails. (BTH)

However, they argued that most mothers’ understanding of what was good food and how young children should be provided for was adequate, and supported the parents’ claim that the main barriers were not lack of knowledge but of economic capacity:

The women have the knowledge; the problem is their economic situation; even if they want to grow the children well they are not able to do so. (MTB)

For example, the problem could be connected with poverty. If a family doesn’t have enough food for their children, especially the variety of food, the children do not grow well. I advise the family to feed their children better ways, as much as possible. (BTH)

A recurring topic was breastfeeding. Health Extension Workers thought that the mothers’ understanding was inadequate in regards to importance of exclusive
breastfeeding in the first six months. Also, according to the Alive and Thrive Initiative facilitators, local mothers needed to be taught about the appropriate way of holding the breast and positioning the child on it while breastfeeding. They maintained that the mothers had limited understanding about breastfeeding in general:

[Mothers] did not know how to feed the breast milk to the child. Also, they don’t know the parts of the breast milk …the foremilk and the hindmilk, and they only feed the child the foremilk and changing the breast – the foremilk only contains water. (D16)

Secondary data, obtained from a survey in Humbo Wereda, where the two villages were located, contradicted this view and showed considerable knowledge of the principles of meeting the nutritional needs of infants and young children among the women, especially those linked to breastfeeding. Over two thirds of the women’s understanding of the timely start of breastfeeding and of complementary feeding of infants was in line with the WHO recommendations, and around 90% suggested that infants should be breastfed for at least one year.

Assessment by the Peer Mothers

The opinions of the Peer Mothers varied to a degree but they all claimed that the knowledge of the mothers they visited and counselled had improved. They told about their surprise at the great difference between traditional knowledge and what they learnt while training for the Alive and Thrive initiative, and how the improvement in the health of infants and mothers prove the superiority of the new information:
The mothers say: we knew before how to grow our children… [But then] they see the result, so it is easy for them to agree to follow my advice. (ZPM)

Professionals employed by the Alive and Thrive Initiative explained that the Peer Mothers training did not provide the tools to reason in support of the information they were to give to the mothers. They were only trained to counsel but not to explain:

Most Peer Mothers don’t understand or know the scientific background, only the usefulness [of foods]. They know there are animal and plant foods; plant-source foods are not complete, so they should add animal-source. But [they have] no knowledge to explain the background. (D16)

Peer Mothers carried out their tasks with confidence and conviction, though as they were not equipped to explain to the mothers the reasons behind their advice, they relied on emotional rather than rational means. The following quote is from a Peer Mother referring to advice given to pregnant women:

Sometimes I advise them seriously. If the mothers do not follow my advice I tell them if they don’t do what I say they face difficult problems. I tell them: you can die from Tetanus. Or if you get illness the household face a big problem because of you. Who will grow your other children if you are dead from these problems?

When I advise them like this they accept and follow what they are taught. (FPM)

In addition to the already discussed timeliness and the nutritional value of food items, the themes that emerged most frequently in the discussions about knowledge of nutrition and child feeding practices were food and personal hygiene:
Most of the mothers don’t prepare food cleanly. Also, some mothers don’t prepare the food for the children in time, when the children want to eat. (MPM)

In the past we gave children food carelessly…mothers fed the children the food fallen down on the ground, just by blowing on the food. But now I learnt how to feed the children and I teach them … to feed them good food, clean food, with clean utensils. (FPM)

Following the experts’ advice

The most frequently raised subject in connection to the parents’ understanding of infant and young child feeding practices was whether they followed the health professionals’ and nutrition volunteers’ guidance. Non-traditional health professionals were of the opinion that many mothers did not follow the recommendations:

People do not follow recommendations: it is not the knowledge that is missing.

(T15)

Peer Mothers and traditional healers took a more positive view. They saw change in attitude in general, and their regular and frequent interaction with the households allowed a more differentiated view of how some elements of their advice were more difficult to follow than others. They also appreciated the economic and social reasons for non-compliance:

They accept and perform all [that I recommend] – that’s why we see healthy children. I am seeing the results. (FPM)
The mothers, they want to follow the Peer Mother’s advice, but the grandmother or mother-in-law advises differently. They say yes-yes to the relatives but follow the Peer Mother’s advice. (ARPM)

With following the advice: no problem. [But often] they complain that these foods are too expensive to feed the children. But I say that at least for two years they have to struggle, so they can grow healthy children … They accept our advice and follow it – this makes me happy. (ZPM)

7.2.6 The main points of this section

Parents were aware of the health and developmental consequences of the inadequacy of food for their children. They argued that the lack of diversity was a much more significant problem than food shortage. Their reflections on children’s food in the past suggested a clear awareness of what the current diet was lacking in terms of nutritional value. They emphasised that they were unable to provide better food because of their inability to produce certain types of food on their farm, and because of their cash poverty.

Local health professionals claimed that the mother’s knowledge of nutritional values in the various food items was inadequate. My data showed a general understanding of nutritional values and the importance of diversity and variety in food, although with a degree of confusion regarding the specific nutritional role of given items, and without nutrient-specific explanation of its value.

The composite knowledge that guided infants and child feeding practices at the study site was a result of traditional and non-traditional learning. According to the mothers, the greatest influence on their behaviour was what they learnt from their own
mothers. However, the impact of the health development programmes that introduced non-traditional information and advice was acknowledged by the health professionals and the parents alike.

The following section carries on the theme of the social dimensions of child feeding practices, and presents the values and dynamics in family and household functioning in relation to children.

### 7.3 Children’s place in the household

Infant and young child feeding practices, and the knowledge and norms which underpinned them, operated in the family structure, anchored in its traditions and dynamics. The configuration of authority in the households, and the priorities that household units set up in order to achieve security and manage risks, defined the forces and processes of family functioning. Children’s needs were met within this paradigm, therefore outlining the characteristics of how it functioned are critical in completing the picture of the factors influencing children’s nutritional security.

In the final section of this chapter I describe how responsibilities for the well-being of children were divided in the households, and how children’s needs were prioritised. As well, some of the child-raising practices are depicted, as I considered them contextually significant, in particular with regards to the use of, and opportunities in, food and mealtimes in the process of socialisation of young children.
7.3.1 Division of responsibilities in raising children

A distinct gender-based division of labour and responsibilities in the households emerged from the data. Participants conveyed a sense of firm boundaries between the responsibilities of mothers and fathers, generally separating the everyday care for children and the household chores, carried out by the mothers, from the provision of all essential goods that the family needed in order to function, which was the fathers’ duty.

Men were expected to do all, or most, of the work on the fields that had to do with producing crops, from ploughing and weeding to harvesting. The women would help sometimes, mainly with the harvest and carrying the yield to the house, and by taking food to their husband and his helpers to the fields. Beyond farm work men were expected to generate income by other means: selling crop and livestock, and taking on off-farm jobs, such as casual work at small business enterprises, or as day labourers:

It is his responsibility to make sure there is money and produce for food for the household. (Z03)

[The father] has to make sure there is food and clothes for the children. (F20)

There was no disagreement between husbands and wives in terms of their respective roles in the household, although men saw themselves as shouldering greater responsibilities: not only they were ‘feeding the household’ but they were also important role models for their children. The second quote below was a half-joking remark from a father, teasing his wife during our interview:
There are also men who don’t…try to change their life by working hard, and they
don’t show how to do things, to be a role model for their children. They just sit and
lead the same life from year to year. In my opinion, for someone who tries to
change his life situation by working hard, no one encourages him. The fathers
should show their children how to change their future. (Z10F)

Ploughing, digging, fulfilling the all the roles of a husband. It is difficult to be a
father – the role of the mother is very simple, just prepare what [food] the father
produced. The role of the mother is very easy. (Z07F)

While men often helped around the house, the household duties were predominantly
carried out by the women, with the children’s help. The main responsibilities of the
mothers included all steps of preparing and presenting food, feeding the children,
and keeping them and their clothes clean. It was also their responsibility to make
sure the house was clean, there was water and firewood for cooking, and that the
food crops stored in the house after harvest were safe:

Everything in the house is my responsibility. The father… has to plough, grow
crop, harvest, do all work in the field. (F05)

The responsibilities of the mother are to control all things at home like the
children, and the product that comes from the field and is stored at home. She
controls all the household things, like the harvested things. And she takes care of
the children generally. The responsibility of the father is ploughing the field and
harvesting the product, and he has a responsibility to provide necessary things
from outside [the farm]. If he is a day labourer he works at different places and
contributes to his family’s economy. (F07F)
Mother and father had similar roles in the social aspects of upbringing children, although instructing them in good behaviour and getting them ready for school was mostly the mother’s job. More participants located disciplining children in the mothers’ realm than in the fathers’, but both parents were expected to give children emotional support. Indeed, I observed fathers comforting little children as many times as mothers.

[As mother] the main role I have to arrange the household needs; and to follow up the children, to advise them, when necessary to punish them. (F11)

The mother’s main responsibility is to raise children in good behaviour, to shape their behaviour. (Z02)

If the children are crying the father is expected to stop them, by giving them something like sweets. (F07)

Regarding the children – all things concerning raising children is mother’s responsibility. Breastfeeding, preparing food, washing them. Mother is not only mother, she is also a sister and friend for the children. (F21)

The women’s tasks in providing for young children continued into older age. As grandmothers, they maintained the role of preparing and feeding their young grandchildren, their sons’ children:

I am cleaning the house. Also I need to generate income for the household. I prepare everything for my grandchildren: prepare and cook food, clean the cow’s house, cut grass for livestock. (Z14)
When my grandchildren come to my house, if something is prepared, I give food to them. But when there is nothing, even though I know what they want, I am not able to give them anything. (Z12)

7.3.2 Child-raising: parent-child relationship and authority

The local culture required respect towards people older than oneself; this was, among other things, evident in the painstakingly observed sequences of offering the hand washing water and food to people around the table. According to my observations expressions of authority between parents and older people in general, and children were gentle and calm. Adults spoke to children in the same tone of voice as they used with each other, there was no ‘baby talk’.

Child-parent relationship

All adults showed tender patience to small children, helped them with whatever they tried to achieve, whether reaching a cup or climbing onto a chair; a grandfather would spoon feed a small boy, or a woman would help a little girl lift the jerry can of water on her back. Nagging children were not pushed away by their parents, and children who were hurt were hugged and comforted by older children and grown-ups. I hardly ever observed children physically fighting with each other. Pinching the arms was described as the most common means of physical punishment for children, and the most violent case of corporal punishment I witnessed, causing quite an amusement among the onlookers, was when a mother threw one of her slippers at an insolent child from the other side of the road.
Children were quietly reminded of customs and duties, and asked to assist with chores or work in hushed voices. They generally obeyed and helped willingly: a girl of seven would go to the shop for cooking oil, or sold small items at the village market with her mother; girls at the age of four or five carried water from the village water point; and a schoolboy, although it was against custom, helped his mother by washing the dishes before the meal. Even when the children did not comply the parents never raised their voices, although they admonished the disobedient child; the example below is from my field notes taken during a household observation:

The mother tells her oldest boy who has been watching us: ‘when I tell you to do something you are disobedient, but strong enough to sit here and watch the guests’; the boy leaves and returns with some maize stems for the fire; the other girl brings a jerry can of water. (Z0620112201)

Beyond being obedient and helpful, the norms of behaviour also required that children remain silent while the adults were having conversations, were modest and grateful, accepted their parents’ decisions, and did not express their opinion or emotions. Although the quotes below are from discussions of the recent changes in children’s conduct, they illustrate the behavioural norms and expectations as well:

When I was a child children were quiet, they did not say anything in front of adults, they were shy. This time children are so fast to express their feeling, even insult people. (F06)
The previous children, when guest came, they don’t sit with the guest in the salon. The previous children, unless you sent them, they did not go far from home, but this generation goes away without informing the parents. This generation is disobedient: they sit equally with their mother and father and argue with them.

(F29)

Generational changes in children’s behaviour

The newer generation was seen as more astute, who moved around more freely, openly disagreed with the older people, and did not readily accept traditional ways such as arranged marriage:

When I was a child I was shy. I was afraid of the adults, there was a big difference between us. The children are free now to express themselves, their feelings… the children in the village speak above their age. We [adults] wonder: how are they able to say this? They know more than the previous generation. (MRA)

The previous time children were very kind and obedient to their family, and when they grew up enough for marriage the family selected wife or husband, and they accepted it happily. They accepted happily if they were bought clothes, they did not argue about colour. This generation don’t want to follow their family’s interest, they want to get what they want, as they want it – clothes, shoes. But this generation getting good education. (Z13GM)

However, as illustrated by the quotes above and below, all participants agreed that the current generation of children and youth are different in terms of their attitude and behaviour. The children were seen as less obedient and less loving towards their
parents and paid less respect to their elders and other people with authority, such as teachers:

This generation is disobedient. I can call my daughter four times she does not respond. (Z23)

This generation completely changed: they are disobedient, they go wherever they want …Your own child may say: who are you to force me to do this…they explode. (F07)

Many people did not know what to ascribe the change to, or simply said this was a ‘bad era’ but some respondents attributed it to government policy, and others claimed technology and changes in social norms were the cause:

Children’s democracy was announced by government, we can’t discipline the children by pinching – the government stops us. (F07)

Previously if government wanted meeting they called only adult men. But this government calls children, men and women together, so children start to talk about their rights. (F29)

The main difference is because of technology. Children are changing with technology. (Z13F)

During our time, when we were young, we could not see each other with boyfriend or future husband. We could only communicate by intermediary, not face to face. We could not meet before we married and our [future] relationship was first known to our parents….In this generation: they ask each other face to face. They have opportunity with each other and marry by their own decision. (Z23)
Socialisation at the table

Food preparation and mealtimes played significant role in shaping the children’s behaviour. Beyond the demands of help and passing on skills around processing and cooking food, mothers also demonstrated for their daughters and sons the directives of authority, expectations and responsibilities that guided women’s lives in the household.

Formal and informal mealtimes were different in most households in regards to how children were included in the adults’ circle of sharing of food. As described in Chapter 6, many families, especially the ones with smaller number of children, sat together during meals on ordinary days, and children quite freely participated in the conversation around the table. Even these families, however, served the children separately during times when there were guests in the home. This effectively shut out the children from the interaction between the adults, not only by locating them away from the main table but also by the expectation that they would be quiet. Nevertheless, children paid close attention to the conversation to which men and women contributed unreservedly and equally.

Meals were used in the socialisation of children in several ways. Most children needed to share with at least another child, but more often with several other people, the tray of food in front of them; only very young children, and not in all families, had the privilege of their own dish. In no household did I observe any child that crossed the boundaries by taking more than fair share of the food served up, and I did not witness any competition over food. However, conflicts did exist:
When a child becomes too aggressive [and does not leave for the others] I give him a separate plate. (F22)

[These days] children fight over the plate because of lack of food. Now they fight each other, so they eat with the parents to control this. So unless guest comes to our house they share plate with us. (Z12)

Food was not used in disciplining children in any way, neither as reward nor its withdrawal as punishment. The link between hunger and sickness was a constant worry, greater than the need for enforcing obedience:

I don’t punish my children by food, they may get sick from hunger. When they are disobedient they are not allowed to enter the house, then when they come in I give them food but not talk to them, and my face is unkind – [this is] for older children. For smaller ones I just tell them not to do it again. (Z03)

I don’t think I will ever punish them by taking their food because they might get sick. (Z02)

The parent’s authority was not pressed upon children by forcing them to eat food they disliked or did not want. At the same time, as everyday family meals were restricted by the availability of food items to a small number of dishes, and foreign influence was insignificant and limited to other Ethiopian, mainly northern, dishes, children were hardly ever challenged to explore new kinds of food.

Young children often stopped eating before the dish was finished and although they were encouraged, they were never forced, to eat more. In general, children were thought to know how much food they needed:
We encourage them to eat by themselves but do not force them. The children cannot express their internal feeling so we don’t force them. [When they don’t like the food] we don’t force them, maybe we can prepare food they like. (F06)

They can stop themselves but we don’t stop them. When they get full they stop by themselves, they don’t eat more than they need. (F06)

7.3.3 Can children’s food improve?

Several of small-scale strategies, aimed not so much at improving household economy as enhancing children’s access to better nutrition, were discussed in interviews and group discussions. Building on my evolving understanding of the factors impacting on children’s nutrition, I proposed these strategies for exploration and discussion. The emphasis was on exploring those possible adjustments of practice that were within the reach of the households, and for which significant improvement in their economic circumstances was not a prerequisite. Some of the proposed strategies were considered unsuitable or impractical, but others were deemed promising, by the participants.

More nutrients and better absorption:

Group discussion participants explored avenues through which a more diverse diet could be provided for children, and which allowed children’s bodies to make better use of the nutrients in the food. Producing a greater diversity of plant and animal foods was a desire shared by all households. The main obstacles to diversifying crops were farm sizes and the dependence on rain to water the plants. The difficulty of watering, which involved carrying jerry cans of water from a river or queuing up
for it a standpipe, was more significant for horticulture than for field crops, and most gardens were seasonal:

We do not water the garden, [it is watered] only by rain; even for drinking we can’t get water easily. (F07F)

In our village there is not enough water for gardening….If we had an opportunity to get enough water supply in the village we could grow necessary kinds of vegetables and we could use it not only for our children but we could also produce some for cash. (GD20130408)

The most frequently used animal-source foods were dairy products. Nevertheless, increasing the number of milking cows in households was not an easy proposition, mainly due to the investment it would have required and the shortage of fodder. Eggs could have been added to children’s diet if the households did not rely on them for generating the small amounts of cash that paid for other daily expenses. Discussions about whether the practices of keeping chickens could be improved, producing more eggs and birds for market, as well as for households use, generated much interest. The most important aspect was the protection of chickens from predators and disease by building enclosures: the debate about this led to quite specific technical details and exposed some of the social layers of the matter:

This chicken house could also solve our problems among the neighbours. When one neighbour woman spreads grains to dry, the other neighbour’s chickens eat it, then there is conflict. But how can we get the tools and materials to build it? (GD20130408)
Even if the k’ebele [administration] cannot organise us [to build enclosures], at least they should give us the necessary materials. We can build it by ourselves. [This will be useful] not only for ourselves, we could be also a role model for the others. (GD20130408)

The possibility of changing food preparation methods was another topic in the discussions about improving the nutrition content of meals. However, given the strong adherence to already existing meal types, the shortage of cooking fuel, and the narrow range of equipment in the kitchens, mainly the method of soaking of some of the ingredients prior to cooking was explored. The practice of soaking dry legumes for a short time before roasting was known to the participants, but applying this method to maize or maize flour was not. After some deliberation a few women started to experiment with this method in the preparation of porridge and k’ita:

How can we prepare k’ita with soaking the flour? It may be also difficult for porridge. Is it possible to add on it a little bit dry flour [for the right consistency] before cooking? (GD20130415)

It is possible to make k’ita with enset leaf. From the maize flour we cannot squeeze all the water out [after soaking]. But it is possible to make it [wrapped in] enset leaf. (GD20130408)

Coping with regular seasonal food shortages:

As discussed in Chapter 5, in many households access to food for the whole family was reduced, both in terms of quantity and diversity, for a significant length of the year. While children were, as much as possible, sheltered from the seasonal food
shortages in the vast majority of the families, it was inescapable that at least the quality of their nutritional intake would suffer, and therefore the topic of whether and how the severity of the ‘hungry months’ could be diminished was discussed eagerly.

Several strategies to address the impact of seasonal food shortages were considered, some focusing on decision-making, others on technologies. Decision-making around the use of the resources a household produced or had access to, followed a set of priorities. Participants acknowledged that these priorities did not ensure that children had ongoing access to appropriate and enough food:

In our area no one has experience with putting money into the bank account for his children, or keeping 3 or 4 quintals of grain for children to be used for hard months. All the household members together eat what the farm produced until it finishes … during harvesting period we don’t have the practice to save money or grains specifically for the children. (GD20120121)

We don’t plan [ahead] for a long time for children’s food. When we have got enough money from the fattened ox we buy one ox and other calf or bullock: we prefer to raise animals instead of saving our money. (GD20130408)

Some families practiced a degree of planning and made sure they had money or grain and other produce saved for celebrations and ceremonies. The heads of virtually all families were members of the savings associations, or iddirs, which assisted the households that experienced catastrophic loss, and when ceremonies were held, but the coverage of iddir membership did not extend to the regularly occurring crises of food shortage. When prompted during group discussions, participants agreed that their household practice of planning and saving, as well as the function of the iddirs,
could in theory extend to ensuring that they could afford good food for the children during the ‘hungry months’:

There are many people who save money before wedding or circumcision ceremonies. [For children’s food] we did not try yet but we will try to save in the future…to put aside money before we prepare a ceremony, it is a very good idea. (GD20130412)

To set up iddir for the hard months? It is very good idea. We didn’t think to set up this kind of association…There are people who contribute money or grains for holidays. So it is possible to start iddir for hard months, use the same method. (GD20130416)

Technologies for safe storage and for preserving food were discussed as well. Participants recognised the need for better ways of storing grain. While they mentioned the traditional Wolayta grain silos, and observed those constructed by other ethnic groups, people preferred keeping grain in their houses, and liked the concept of the proposed double sacks.

The main method of preserving food was by drying, with or without salt and spices. This technology was used for meat, chilies and legumes, as well as for certain root vegetables. The discussion groups contemplated the possibility of preserving fruits and vegetables this way, stimulating quite keen interest for both for household and commercial use:

For our people the drying of meat, preparing k’want’a, is not unknown. Everybody knows how to prepare k’want’a. About fruit drying: it is very good idea. Because these fruits are used by our people carelessly. They become rotten and we throw it
out. So this method may solve this problem. We want to try it in practice.

(GD20130409)

In your country maybe dry fruit is well known at market. But in our village no one knows about it. So how can we start to make a business? (GD20130416)

Children’s access to resources

The concept that in a large family all resources needed to be divided into smaller parts was well recognised. Parents understood that the competing priorities multiplied with many children and were concerned about it. A young mother described this as her reason for using contraception:

To use family planning I have a reason. At this time I have four children… To buy clothes for one child, the cost is about 200 – 300 Birr minimum. Imagine if I went to buy clothes for these four children, how much money I need! So we decided to use family planning, then after five years we will discuss it, and decide what to do then [about having another child]. In the meantime we try to improve our life situation. (Z08)

There was no hesitation about the values of family planning. Controlling the number and spacing of children was perceived beneficial for not only reducing the competition for resources within the household but also for protecting the mothers’ health. Still, family planning was framed in the persistent argument of rainfall as the ultimate cause of the families’ difficulties:

It is a very good idea to balance what we produce and our family size. But …if there is no rain we can’t balance our product with our family size….also, the idea
to make gap between children. It is very important for children’s need and mother’s health. (GD20130416)

7.3.4 Priorities for children

Children’s well-being, seen holistically and including their health, happiness, education and a promising future, was a high priority in all households. As parents were aware of the significant role ‘good food’ played in children’s health and development, much of the efforts in meeting children’s needs was focussed on providing the best food possible:

Unless a family has enough money to raise its children, the children don’t get medical treatment or school materials and necessary foods. (GD20120121)

It is good to always give for the children special food. But they share the adults’ food because we cannot always prepare them special food. We all know what a good thing is for our child but the problem is lack of income. We feed any kinds of special food only when we get it. (GD20111210)

Food purchases and meal preparation reflected this priority. Food items listed in the weekly market recalls were mostly for meals for the family, but some items, such as fruit, were specifically for children. The timing and frequency of meals, as discussed earlier, responded to children’s needs, and the way food was prepared often considered their preferences for mild flavour and soft consistency. While acknowledging the efforts families made, traditional healers, as well as Peer Mothers and Health Extension Workers actively encouraged mothers to generate cash income in order to buy more diverse food for their children, and some of their advice was as much about livelihood as about health and nutrition:
I advise them to prepare the best thing for their children by reducing the adults’ needs. Actually it is difficult, but I advise the mothers: even if they can’t fulfil the best and all things for their children, they have to do their best, even if they have to work as day labourers. (FPM)

Even though they are poor I advise them: ‘if you don’t have enough money why don’t you sell firewood or grass for cattle, to feed your child better’? (BTH)

The length and severity of the ‘hungry months’, occurring regularly in most households, was often exacerbated by social obligations, and children and adults alike suffered from the resulting food and cash shortage (this aspect of household priorities and decision-making is discussed in Chapter 4). During the ‘hungry months’ the quantity and diversity of food further diminished, however, virtually all participants asserted that children were sheltered, as much as possible, from the effect of household food shortage, even at the cost of reducing the amount and frequency of the adults’ meals:

There are times when we reduce [our own meal] and give our part to the children. (F11)

How could we use it for ourselves?! We give the usual amount to the children, even sometimes our own food. (Z12)

We give the food to our children. We [the adults] can forget our hunger by talking with neighbours and friends. But the children can’t resist hunger like adults. (Z14)

The Health Extension Workers confirmed the effectiveness of this attitude:
In our area people have good awareness for children’s needs. In the hard months [when they ran out of their own supplies] they buy from market – they feed them the same food as in other months. In 2000 – 2009 – 2010 there was big problem, no rain; but children did not get hurt. There was no difference in terms of the number of children sick during those hard months. (A1H)

Nevertheless, it was not possible to completely eliminate the impact of food scarcity on the children. Children may have received sufficient amount of food to ease their hunger for a while but not enough to feel full throughout the day:

We reduce the children’s amount. At the time when I give them [the children] their meal they get full but they can’t get the second time [second serving]. When we have enough food in the household – I give them whenever they ask for food. When there is food shortage they can’t get food between the meals. The adults may eat twice a day, but children can’t resist, so I will prepare them at least a small amount of food. (Z08)

Treatment for illness

High priority was also placed on getting treatment for illness. Leaving a child’s illness untreated was seen unacceptable, and parents or other caregivers took steps often involving debt or financial risk to ensure that children get treated, either by traditional healer or at the health post. Treatment at the health post, in general, was considered more expensive and more effective than traditional practices:

When it is possible we take them to the clinic. But some parents, those who cannot afford medical treatment, they try to treat their child by preparing traditional
medicine until he or she becomes healthy. Without it the child is sick for a longer time, or dies. (GD20111210)

When [the children] are sick even a little bit I take them to the health post, and they get healthy as soon as I take them. (F19F)

When the parent says: I will take my sick child to the clinic when I get money tomorrow or the day after tomorrow, the child can die in this gap [of time]. (GD20120121)

**Education**

Education was very high on the list of priorities, and it required financial output as well: children needed school supplies and socially acceptable clothes. These needs were often met before improving food diversity, in spite of the strong awareness of how children’s food was lacking. Investment in livestock was a risk management, as well as a savings strategy, which covered the costs of these non-food items:

[When we sell livestock] we spend on our children’s school necessities, and on household food. But we don’t use it to buy diverse food for our children. (D20130415)

We sell it [the superfluous yield] and get goat, sheep, chicken…but very few people have extra harvest, most don’t. We buy little cows and oxen for savings, if next year’s harvest is not good we sell these and buy what we need for children – school materials, uniforms, pens, pencils, books, shoes. (GD20120208)
Completing a certain level of school education was seen as a condition to a good future for children, for both boys and girls, although as girls married earlier, in reality they had less chance to finish many years of schooling. Responses regarding what a ‘good future’ would actually entail were focussed on financial security, and in many cases this meant salaried job, regardless of the gender of the child. The second quote below is from an old man who got all his seven surviving children educated to tertiary degree:

Since I lost my chance, I want them to learn, complete all grades. (F07) Initially I was a poor person; I passed many struggles, I ploughed the field, not much change [improvement]. [From the missionaries] I heard that if someone educates their children, the children become great persons. I also saw it happen in other family, so I decided to do the same, with sacrifice. I also did not want my children to have the same struggle. I have one daughter, she is educated too. (F38)

Social status

Other investments into the children’s future, in order to ensure a desirable social position in the society they were growing up in, also demonstrated great concern for the children’s well-being. Introduction into the church the family belonged to and religious education required contributions to the church. Circumcision of girls continued in many families although it was considered a ‘harmful custom’ by the Ethiopian government and some people in the villages:

During old times our grandparents assumed if a girl is not circumcised as a child, she will break things in the home when she is married. Even though this is a part of bad culture, they still do it in hiding. (FPM)
Circumcision ceremonies for boys and girls were accompanied by celebrations and feasts. A large portion of the households’ assets were invested in these ceremonies, often at great cost to the financial and food security of the household. In order to reduce the impact several of the family’s children, at a range of ages, were circumcised at once. The quote below summarises what parents wished to provide for their children and the future they hoped the children would achieve:

First of all I have a dream for my children to grow better. Then I want to send them to the school. As I mentioned, the first ten years I want to grow them especially well, if God helps me. Then [they will] serve in church in different activities. Become government worker after education. (Z09)

7.3.5 Children’s future

The subject of what the future may bring was raised in an open manner, without prompts regarding what aspects of the future should be included. Responses strongly focussed on ensuring the economic security of the children and the family. While many people voiced their vulnerability and helplessness against the forces of nature and society, their trust in God’s wisdom and generosity gave them comfort and hope:

We only beg God to give us good rain, beyond that there is no other opportunity to change our lives. (Z14)

Today if I have got one cup of milk for my child I don’t want to worry for tomorrow. For tomorrow God knows....(GD20120121)
My children’s future? I know only one thing: my children are healthy and happy so I don’t think about it. It is from God that they are healthy and happy, so I don’t worry about whether they are fat or strong. (Z03)

Nevertheless, not all intervention was left to God. The important role parents played in preparing children for the future was emphasised by several participants. Contemplating the picture of the future, parents hoped that they would be able to better fulfill their children’s needs, and that their children would grow up to a life less difficult than their own. In every household parents and grandparents hoped that the generation of children of the study period would have different alternatives for livelihoods than themselves. Indeed, most parents envisioned a life either away from the village, or with diverse livelihoods, often independent from farming. Attaining good education was critical in achieving these goals:

If God give me the strength and if I live long I will teach my children. I will teach them how to buy and sell things, how to be a merchant. (Z08F)

I don’t have any other hope than sending them to school – there is not enough land. Unless they learn at school now, in the future life will be difficult for them. So the only way is school. I don’t have enough fields for them. (Z07F)

First thing: what I wish for my children to be is honest, whether for God or for government. I want to see their lives improve, whether they become merchants or by other kinds of work; I want to see them in good life situation. And by God, for my grandchildren I wish first of all to be a well-educated generation, send them to school, and after that to get good work like government job. And I advise them to have strong personality. (Z16)
Working for the government was seen as the key for ensuring stable income and affluent future for the next generation, as well as for the parents who expected that their children would support them in their old age:

I want [my children] to get government job, the girls too…And with time they may support me. (F07)

I wish for all my children that I can send them to school and they will get good government work, and help themselves and their family. (Z09F)

There were some contradictions regarding the emphasis on education. While in most households parents voiced the high importance on schooling, some participants thought this was only rhetorical, and raised doubt about the degree to which people prioritised their children’s education. And in reality, many parents relied on their children’s help during the busy seasons of farm work:

The children are made to work in the field and the house, and parents don’t think about their education, their future. There are days when they miss school because of work. (MRA)

My oldest child: even when I need his help and ask him to miss school he does not want to, but I force him. (F03)

Others suggested that regardless of the family’s aspirations, the children’s future was determined by their parents’ level of education, perpetuating the socio-economic difference between families in the community. This, however, contradicted the path some families chose, making significant sacrifices to school their children:
Some people here are illiterate, others are educated. The next generation follows
the parents…Children will follow their parents’ education. Parents who are
educated will get their children educated. So the difference between the two sides
will remain. (W41)

7.3.6 The main points of this section

Children’s well-being and ensuring a good future for them was considered a high
priority in all families. Parents made sacrifices to shield their children from the
effects of food insecurity and illness, and invested large proportions of the family’s
assets in the children’s future through education and ceremonies.

While the responsibility for supplying children with food and other necessities was
divided between the parents, decisions about food purchases and food preparation
was the women’s domain. The tasks of raising children to become valuable members
of society were also shared between the parents, but again the mothers took on more
immediate roles. Food processing and preparation, as well as mealtimes offered
opportunities for teaching children about adult life, social traditions and gender roles,
however, the meals boys and girls ate were always identical. Food was never used
for disciplining purposes, neither for reward nor for punishment.

7.4 Chapter summary

Observation, interview and group discussion data showed that households and
caregivers made great efforts to ensure age-appropriate infant and child feeding
practices. Children’s needs, including meeting their nutritional requirements, were prioritised in the households. Social norms, as well as traditional and non-traditional knowledge supported these aspirations, however, according to the widely shared view, lack of physical and financial resources thwarted the parents’ efforts.

This chapter concludes the findings of the study, and is followed by the discussion of the results.
PART THREE: DISCUSSION AND CONCLUSIONS
The previous chapters presented my findings, mainly relying on my field research and incorporating some secondary data. Chapter 3 presented a brief history of the people and the place and introduced the physical and social landscape. Chapter 4 focussed on the elements of the social, economic and cultural environment that were critical to the availability of and access to food in the households and directly affected both food quantity and diversity. Chapters 5 and 6 gave detailed accounts of the physical and social aspects of family food in the villages, and Chapter 7 brought the focus to the food and feeding practices of young children, and the underlying knowledge and norms.

In this chapter I highlight some particular findings and discuss them with a focus on the research question: how the factors and features described earlier impacted on the food and nutrient intake of young children, through what mechanisms and processes, and with what possible avenues for positive change. Particular attention is given to the local views assessing the adequacy of practices around children’s food and nutrition, and to those strategies that parents thought were suitable for positive change. The application of the Children’s Food and Nutrition Security Framework for assessment and action concludes the chapter.

8.1 Introduction

This study set out to explore the explanations for chronic malnutrition of children under five years of age in two villages in southwest Ethiopia. During an extended period of fieldwork, I explored how people framed their thinking and actions...
regarding the ways they fed their children; what constituted family food and which factors influenced it; what rules, norms, customs, beliefs and practices impacted on how and what food children accessed within the household; and how people utilised formal and informal social structures in order to improve their children’s food security. Identifying the goals and priorities set by local families, and the barriers they confronted, revealed much about how they saw their own agency in improving their children’s nutrition.

During the second round of group discussions (see Image 56 and 57) I shared ideas with the study participants about potential avenues for positive change that emerged in the course of the data generation and analytical processes. Some of these were rejected as not viable, but others attracted positive responses and even experimentation. These ideas and the participants’ responses are included in the discussion.

Before beginning this chapter it is useful to reiterate the concepts that form the foundation of the discussion. The more recent definitions of food and nutrition security emphasise the fundamental importance of meeting dietary needs in terms of nutrients beyond ensuring access to sufficient amounts of safe food. Accordingly, I consider the following amended definition appropriate in relation to young children: food and nutrition security for all infants and young children within the households is achieved when they have physical and social access to sufficient, safe and nutritious food, which meets their dietary needs and food preferences for growth, development and an active and healthy life, at all times (Gross et al., 2000).
For the development of conclusions for this study, as discussed in Chapter 2, I modified the Household Food and Nutrition Security Framework, developed by and used in the work of several authors (Ericksen, 2008; Mathys & Gardner, 2009; Renzaho & Mellor, 2010; Weingärtner, 2005; Woller et al., 2011). The central query of this study is children’s food and nutrition security, and the modified theoretical framework is conceptualised to be scaled down from household level as the unit of analysis to the level of individuals, in this case children under five years of age. At this scale, instead of population, the household represents the contextual environment where the dimensions of availability, access and utilisation exist and operate.

The three parts of this section synthesise the three main aspects of what and how young children were fed: firstly, family food, on which young children depended beyond breast milk; secondly, a broad interpretation of child feeding practices, including a range of household behaviours; finally, those social, economic and policy structures that directly affected families’ and children’s food and nutrition security. Utilising the theoretical framework I argue that all three dimensions of food and nutritional security – the availability of, access to and utilisation of nutrients – were found to have deficits and weaknesses. Other research found that many of these have parallels in other populations, strengthening the applicability of this study. I conclude that some of these shortfalls and vulnerabilities can be reduced through small-scale community and household-based strategies.
The intricate connections between food production, household food security and children’s nutritional status have been interrogated by authors approaching nutrition from the perspectives of social science. They concluded that the “[l]inks between child nutritional status and the availability of household resources are far from direct” (Hampshire, Casiday, et al., 2009, p. 758). My study found a similarly complex picture regarding food and nutrient availability.

The amount and type of food that entered the households and was the principal source of nutrition for infants and young children in addition to breast milk, was a product of the local food system, defined by the climatic, socio-economic and historic factors of the study site. The day-to-day supply of food and nutrients for children was largely dependent on a household’s food security. Food and nutrient availability was characterised by two central inadequacies: low diversity and weak stability. These inadequacies had potentially severe implications for the growth and development of infants and young children. Figure 9 shows a part of the conceptual framework to illustrate the elements of the discussion of food and nutrient availability for young children.
Figure 9  Availability of food and nutrients

The food system

Food systems are conceptualised as a complex set of activities, ranging from production to consumption, involved in providing food and nutrients for sustenance and health (Ericksen, 2008; Sobal, Kettel Khan, & Bisogni, 1998). At the study site, the bulk of the principally plant-based diet was produced on the household’s own farm. Plant foods included staple foods, mainly maize, and some fruits, vegetables, spices and herbs. The role of livestock as everyday food source was limited to dairy; meat entered household meals only during holidays and ceremonies, and eggs and
honey were rarely consumed. Most of the food items that were purchased at the market were produced locally or in the region, with the exception of some ingredients such as cooking oil or salt. Climatic, socio-economic and historic factors, described in Chapters 3 and 4, formed the predominant constraints of local food production, which in turn had the greatest impact on food availability.

Smallholder mixed subsistence farming practice was the prevalent form of agriculture at the study site. This type of farming system is typical of many areas of Sub-Saharan Africa, and is considered risk-prone and particularly vulnerable to climate change (Mortimore, 1989; Morton, 2007). The reliance of local agriculture on rain was a significant uncertainty factor for the production of both plant–based and animal-source foods. It was a common perception that the timing, amount and distribution of the rains had become unreliable, and this impacted on the quantity and diversity of crops and horticultural products, as well as the availability of fodder and water for livestock.

Agriculture was relatively recently established in the study area, as the growing population pressure of the highlands forced families to first establish farming outposts, and later villages in the lowlands, which were until then sparsely inhabited due to the threat of malaria (Tessema, 2008). The local food system was stretched beyond its limits and most households did not produce enough food to meet their needs. For this the unpredictable weather patterns, shortage of productive assets and less than optimal agricultural practices were held responsible. Population growth
continued to be high, and the absence of primogeniture\textsuperscript{66}, which saw the division of fields between all sons in each generation, resulted in the fragmentation of fields. Consequently, the majority of households relied on farmland for most of their food and cash needs that was smaller than half of what farmers considered adequate. The most important productive assets, in addition to land, were draft animals. However, many farmers did not own a pair of oxen, required for the typical methods of cultivation in the villages.

Risk management and coping strategies, as well as changes in farming practices, mitigated the deficiencies of the food system. Traditional practices, such as the sharing and leasing of productive assets, offered farmers opportunities to share oxen, extend the size of fields they cultivated, and to raise livestock in a risk and profit sharing arrangement. Agricultural practices, mainly due to improved knowledge and the use of inputs, were changing; nevertheless, the increasing productivity of the fields did not match the demand.

At the consumption end of the food system, a break in the monotony of the meals of a given day was a consequence of immediate access to ingredients rather than of planning. In an environment with no electricity and therefore no refrigeration, food was prepared freshly several times a day. Ingredients other than grains for the meals were usually harvested on the day, even if they were from the market. Flour used in the meals was commonly milled in small amounts, to cover the household’s needs for only few days. The freshness of these ingredients was likely to ensure a

\textsuperscript{66} Primogeniture is the right, by law or custom, of the firstborn (most commonly male) child to inherit the entire estate, to the exclusion of younger siblings (http://en.wikipedia.org/wiki/Primogeniture; 20 December 2014)
comparatively small loss of nutritional value, a positive factor in terms of the availability of nutrients (Ball, 2006; Lee & Kader, 2000; Reddy & Love, 1999).

**Food in the villages**

There was very little difference between households in terms of what food was served at daily mealtimes. Family food in the two villages was virtually identical, and meal structure and patterns were essentially the same in all households. The main variation was the regular inclusion of low-fat dairy and seasonal legumes according to wealth status.

The basis of nearly all meals was maize. Legumes were seasonal and were represented in a small proportion of meals. Without a condiment, made of leafy greens and minimal amounts of oil and fresh spices, the meal was not considered adequate for nutritional and sensory satisfaction, but it became a luxury during the ‘hungry months’ and families often prepared and consumed the staple food alone.

The range of foods in the study area was not fundamentally different from what was described by researchers in other parts of Ethiopia. Kifleyesus (2002) described a predominantly plant-based diet amongst the Agroomba in the north of the country, consisting of staples, pulses and some vegetables, and rarely including dairy or flesh foods. Selinus and co-authors found a similar food regime in the Rift Valley (Selinus et al., 1971), where the main staple was maize, people consumed insignificant amounts of fruit and vegetables, and meat was only eaten on important occasions.
The diet and the meal patterns found at the study site had fundamental similarities to those in other parts of Africa. The staple-and-condiment structure of meals is considered the most conventional in Sub-Saharan Africa, particularly in rural areas, and in most African regions staple cereals contribute the bulk of dietary energy (Oniang'o et al., 2003). The typical African diet is low in fat (MacIntyre, Kruger, Venter, & Vorster, 2002) and the fat and oil content is mainly of plant origin. Consumption of animal-source foods is low due to cost and, in some regions, to food beliefs and taboos, many of which relate to foods of animal origin (Fessler & Navarrete, 2003) and much of the protein in the diet derives from plant sources. This is, however, not unique to Sub-Saharan Africa: studies found low and, in many places, decreasing consumption of animal protein throughout the developing world (Bwibo & Neumann, 2003; Delgado, 2003; Neumann, Harris, & Rogers; Tontisirin et al., 2002; Yeudall et al., 2007). Additionally, low levels of fruit and vegetable intake has been documented throughout Sub-Saharan Africa (Faber, Phungula, Venter, Dhansay, & Benadé, 2002; Labadarios et al., 2005; MacIntyre et al., 2002; Ruel, Minot, & Smith, 2005).

Wild harvested foods played a very limited role in the households at the study site. This was partly due to the circumstance that only small areas of uncultivated land were left where remnants of forest were still growing, and partly to the low esteem in which wild fruits were held. In contrast to my observations, in other parts of Ethiopia and of Sub-Saharan Africa a greater portion of everyday food is sourced from wild plants. An ethnobotanical study carried out in a neighbouring area of southern Ethiopia found a considerably higher use of wild plant food (Balemie & Kebebew, 2006). In their study Asfaw and Tadesse (Asfaw & Tadesse, 2001) identified 203 edible wild plants consumed by some groups in Ethiopia; many of these are also
known and used in other parts of Sub-Saharan Africa. Grivetti and Ogle (Grivetti & Ogle, 2000) quote a wide range of studies carried out throughout Africa, describing many places where wild fruits and vegetables are significant parts of the common diet. The authors argue that in many cases the contribution of these foods include essential micronutrients augmenting a diet that would otherwise be deficient.

The context of household food security

While acknowledging that household food security was one of the critical factors of the diversity and consistency of the availability of food in the households, it is beyond the scope of this study to engage with the entirety of this subject. The inquiry was limited to those aspects of household food security that directly affected food availability for young children, and therefore were the subjects of data collection. Particular attention was paid to those facets that could potentially be changed by the households by drawing on their own or the community’s resources including livelihoods and traditional social mechanisms, or by relying on social protection and transfers. Although some authors define the concept of livelihood as a system (Niehof, 2004), or as the complex range of social institutions and access to services in addition to cash and in-kind income (Ellis, 1998), in this discussion I use a narrower interpretation of livelihood, referring to farm, off-farm (both agricultural), and non-farm incomes.

Agricultural livelihoods were the main source of income that supplied the cash needed for food purchases and to cover other household expenses. Livelihood diversity in general and opportunities for non-farm income generation in particular, were marginal. Study participants firmly stated that with higher cash income they
would purchase better foods for their children. However, the direct link between livelihoods and nutrition security is debated in the literature. Ladd (2013) argues that the assumption that better livelihoods would lead to better nutritional outcomes found no unambiguous evidence, and the connection between the two is often dependent on context, for example, gendered income control (Hoddinott & Haddad, 1995; Quisumbing & Maluccio, 2003) or income available for food expenses (Baer & Madrigal, 1993). Nevertheless, it is established that livelihood diversification offers benefits of increased income levels and improved risk management (Berhanu, Colman, & Fayissa, 2007; Carswell, 2002; Niehof, 2004).

Similarly, increased food security may not translate to improvements in nutrition. For example, increased staple production could improve general food security but does not inevitably improve nutritional status (Ladd, 2013). Still, the association between food security, adequate dietary diversity and nutrition security is gaining more and more attention in development and academic literature within Ethiopia, as well as in the developing world (Fentahun & Hager, 2009; Gross et al., 2000; Remans et al., 2011; Yeudall et al., 2007).

Significant government and NGO programmes assisted household food security in the study site. Long-term food security improvement is the objective of the Ethiopian Government’s Productive Safety Net Programme, which targets food insecure households and pays daily wages in return for labour in community infrastructure projects. The projects themselves, such as roads, erosion control, and storm water harvesting, also aim at improving food and livelihood security (Gilligan et al., 2009; Sharp, Brown, & Teshome, 2006). A major reforestation project implemented by World Vision Ethiopia contributed to positive changes in farm productivity, water
supply and the financing of community grain bank and grain mill facilities (Brown, Dettmann, Rinaudo, Tefera, & Tofu, 2011).

Although the improvement of food security in the study area, as a positive result of the government and NGO development programmes, was acknowledged, people were still strongly relying on social networks and traditional associations for support during crisis and extraordinary resource needs.

Traditional informal or semi-formal associations, which are important representations of social capital, operated in the villages. Their role was to smooth the shocks and stresses caused by crisis or extraordinary cash needs in a member household, and to assist with larger investments. These social institutions have a long tradition at the study site, as well as throughout Ethiopia, and among their strengths are the members’ high degree of loyalty to, and faith in the organisation, and their ability to assist with members’ problems without external experts (Veerakumaran, 2007). The significance of self-help financial groups in low-income countries all over the world is increasingly acknowledged; beyond operating as rotating savings and credit associations in some regions, they also function in the areas of social security and resource distribution, and in mobilising resources for public investment (Bouman, 1995; Handa & Kirton, 1999; Kimuyu, 1999). In addition, several microfinance institutions also offered savings and credit products in the study area to an increasing clientele. The operations and achievements of these organisations are well documented in the professional and academic literature (Doocy, Teferra, Norell, & Burnham, 2005; van Rooyen, Stewart, & de Wet, 2012). Both traditional and microcredit finance institutions encouraged and supported a more considered and future oriented approach to financial planning, and played an important role in
investment opportunities, thus potentially strengthening the household’s economic resilience.

The benefits gained from the system of sharing productive assets, and from the traditional savings and insurance societies for household risk management, was undisputed by the study participants. In contrast, the virtues of the custom of reciprocal obligations between and within families during ceremonies was questioned by many participants, who felt that much needed resources were drawn away from the households, even if with a promise of return. Similarly, the extent to which household resources were directed to celebrating important holidays and ceremonies was questioned by the study participants and attracted some criticism, however, more harshly from non-household participants, such as government bureaucrats and village leaders – people who could afford to celebrate these events without threatening the food security of their households.

Regardless of the institutions of formal and informal assistance, the primacy of smallholder farming livelihood with its precarious outcomes, and the dearth of opportunities to diversify the livelihood portfolio, led to regular periodic food insecurities in the households. Families devised a range of coping strategies to respond to food shortages, including reducing food intake – this is further discussed in the section on access to food. As Yared Amare, in his monograph on household strategies and food security, maintains: “peasants are not passive victims of this seasonal disjuncture; they implement seasonal coping strategies that balance the need to maintain their economic and food security” (1999, p. 123). These coping strategies, combined with various aid and welfare programmes, kept Wolayta households, to a degree, buoyant but not sustainably secure.
Breastfeeding and transition to family food

The two main sources of food and nutrients for infants and young children were breast milk and family food. Breastfeeding of infants was universal; every mother in the sample reported having breastfed all of their children. The commencement of breastfeeding within hours after birth and exclusive breastfeeding in the first six months was virtually universal. In this regard the mothers’ statements seemed to contradict the Health Extension Workers’ claims that colostrum was not given to newborns. The 2011 Ethiopian Demographic and Health Survey (Central Statistical Agency [Ethiopia] & ICF International, 2012) found that 51.5% of all mothers in Ethiopia and 66.5% in the SNNPR commenced breastfeeding within 1 hour after birth, and 80.2% and 91.5%, respectively, within a day. The higher rates in the south seem to support the mothers’ claims. Review of the literature on the initiation of breastfeeding shows that in some populations where a custom of discarding colostrum is reported, including in northern Ethiopia, mothers in reality often discard only a small portion of it (Rogers et al., 2011).

While a small number of mothers gave herbal concoctions to their newborns, all were aware of this being a potentially harmful practice. These findings are in contrast to what some studies found in other parts of Sub-Saharan Africa where water or food supplements breast milk routinely from a very early age (Onofiok & Nnanyelugo, 1998; Sanghvi, Jimerson, et al., 2013; Vahtera et al., 2001).

At the study site, with the cessation of exclusive breastfeeding after the age of around six months, food and nutrients available for infants, with the exception of breast milk, were largely identical to what were available for the family. Aside from
breast milk, children as young as one year old were mainly eating food that was prepared for the family and the only ‘special food’ that could be classified as complementary food was liquid porridge. In terms of preparation methods and ingredients, liquid porridge was not different from what constituted family food, as it was most commonly maize flour boiled with water. The Health Extension Workers and the Alive and Thrive Project volunteers recommended that liquid porridge for infants should be made from the flours of a variety of grains and legumes, but it was difficult to ascertain the diversity in actual practice. From the data it seemed that mothers struggled to obtain those ingredients they did not otherwise used for family food. That complementary food was almost identical to what was prepared for the rest of the family was not unique to the study site; researchers observed similar practices in other areas of Sub-Saharan Africa (Gibson, Ferguson, & Lehrfeld, 1998; Hotz, Gibson, & Temple, 2001; Lartey, 2008), and in poor Asian countries (Gibson et al., 1998; Perlas & Gibson, 2005; Sanghvi, Jimerson, et al., 2013).

Together with an increasing reliance on family food, young children continued to receive breast milk usually until they reached two years of age, and often for three to four years. Naturally, food that was believed unsafe, as they represented choking or infection hazard, such as maize kernels or raw meat, was avoided.

There was a general understanding of the connection between health, growth and development, and food and nutrition, but the special nutritional needs of infants and young children were considered only in some of the daily meals. The preparation of liquid porridge for infants, and children getting arera with meals more often than adults, were two examples.
The diversity of family food

One of the key inadequacies that characterised the availability of food and nutrients for children in the households was low diversity. Low diversity was associated with the local food system which, to a large extent, determined what types of food items were available. However, it was also linked to the degree of food insecurity, whether actual or threatening, of the households. Farmers focussed on the production of staples to meet the food-energy needs of their families, and the small size of the farming fields and low input use further reduced the possibility of producing a diversity of food crops.

This focus on staple production was reinforced by external pressure. The Ethiopian government had embarked on an economic growth program which aimed at significantly increasing agricultural productivity in five years (Federal Democratic Republic of Ethiopia, 2010). Although the goals included the expansion of fruit and vegetable production, according to the data most of the support for farmers concentrated on the production of grains and pulses and, to a somewhat lesser extent, large livestock. The emphasis on staples is not unique to Ethiopia: agricultural policies throughout the developing world stress the importance of the production of staples that supply energy and protein, and micronutrient outcomes either do not exist or are secondary amongst their goals (Tontisirin et al., 2002).

All study participants were acutely aware of the inadequacy of the food diversity for children and adults alike, but stressed that they were limited by poverty. To obtain those food items the farms did not produce, a variety of food items were purchased at the market on a daily or weekly basis. These items were mainly selected for their
value and preference as family food, and only infrequently as ingredients of meals specifically prepared for young children.

Cash for making these purchases stayed considerably below the level that would have made families feel secure, and for many people to spend it on food purchases, beyond what was believed to be essential for the immediate needs of the household members, was unthinkable. These two main constraints, the restricted variety of the food produced by the farmers, and their inability to buy those items that they did not produce, resulted in severely limited food diversity available for the households, particularly for the children.

Irrespective of whether produced or bought, I found a heavy reliance on maize-based foods for all family meals. Under one third of the meals included vegetables, mostly green leaves; dairy was served with less than one quarter, and legumes with only 10% of the meals. Of the total of 159 meals described in the daily recalls, only two included fruit.

The lack of diversity and variety in the daily food is not unique to the study area. Arimond and Ruel (2004) found low dietary diversity in surveys of eleven developed countries, six from Sub-Saharan Africa, two from Asia and three from Latin America. Among these countries Ethiopia had the second lowest dietary diversity. Many studies throughout the world document the inadequacy of diet in poor households, characterised not only by caloric deficit but low dietary diversity (for example Demment, Young, & Sensenig, 2003; Frison et al., 2006; Johns & Eyzaguirre, 2007). In communities similar to the study site, where agricultural production largely defines food availability, the food system sets out the boundaries
of diversity. An example is a study in the Bolivian Andes, where the participants directly connected the low diversity in their children’s food to the low diversity in agricultural production (Jones, Cruz Agudo, Galway, Bentley, & Pinstrup-Andersen, 2012).

The stability of family food

Seasonality, regular periodic food shortages, and recurring catastrophic crop failure were characteristics of the food supply in all households. They directly affected the quantity and quality of food available for the children and imposed inferior food choices for extended periods of time. Modifying food consumption through reducing portions, frequency and diversity is a widely-documented set of coping strategies in food insecure households (Devereux, 2001).

Crop failure, often accompanied by livestock loss, was attributed mainly to climate irregularities by the study participants. The maize-based mixed farming system, practiced in the study villages, is one of the 15 most vulnerable agricultural systems in the world in terms of its susceptibility to drought (Hyman et al., 2008). Hyman’s study also found that the most vulnerable systems are associated with the highest rates of stunting in children.

Even in successful years virtually all households experienced regular food shortages of varying lengths, referred to as the ‘hungry months’, most commonly at the time of the year when the new maize crop was maturing. This was in a great part attributed to the small size of fields, especially in relation to family size: most farmers were unable to produce enough crops to fulfil their families’ needs, much less to produce
surplus. This lack of surplus in the yearly cycle of food production prevented the accumulation of reserves that could be saved for difficult times - one of the threads in the intricate web of vulnerability (Adger, 2006; Hussein, 2002), and there were no significant cash savings in the households to ease the food scarcity. Interestingly, interviewees differentiated between poverty and food shortage: poverty was invariably explained by changing rain patterns, whilst the annual food shortage was attributed to the inadequate size of fields.

Some practices and behaviours within the households impacted on the stability of food availability. Allocating a significant proportion of resources to celebrations and ceremonies exposed the family to food shortage, and lengthened the ‘hungry months’ later in the year. The immediate effect of decrease in the availability of food and nutrients was thought to be offset by gains in status and dignity. Investment into social capital is one of the household strategies, observed by other researchers as well, that aim to minimise the long-term impacts of food shortages (Baro & Deubel, 2006). This type of resource allocation also represents what Oka, in the differently marginalised society of a refugee camp, identifies as “agentive consumption”: the prioritising of desired over essential consumption (Oka, 2014, p. 25).

Another example of the household practices that exacerbated food shortages and lengthened the ‘hungry months’ was the inadequate storage of crops. Post-harvest losses are well researched and documented in the development literature. Many studies discuss the quantitative loss in storage caused by rodents and insects, as well as the loss of quality in farm produce – the deterioration of nutrients and caloric value (Golob et al., 1999; Gwinner, Harnish, & Muck, 1996; Kader, n.d.). In his study on post-harvest losses of maize in Africa, Tefera (2012) observes that the
highest proportion of loss happened during harvest and drying, followed by on-farm storage. In addition to these issues – and unmentioned by other studies – domestic livestock inflicted quite significant damage on the stored food stock at the study site.

The seasonality of vegetables and fruits posed a different challenge. No knowledge of, or access to, certain preserving technologies aggravated the short seasonal availability of fresh fruits and vegetables, and this had great impact on the constancy of food diversity and variety. Preserving technology was limited to drying and fermenting, and the use of these methods often reflected the value of the food to which they were applied. The lengthy processes of drying spices and meat, and the fermenting of dairy and enset products, allowed their safe and tasty use for a long time. These practices produced highly valued items, such as k’want’a, k’ibe, k’och’o or bulla\(^67\), however, these were not meant for immediate household use but as essential ingredients in festive meals or for sale. People understood that with no refrigeration many food items, such as livestock products, vegetables and fruit, lost their quality and value very quickly, yet no other preserving methods and technologies that exist in other food cultures were found at the study site. A likely explanation for this is the lack of sizeable surplus in many food products. As well, the simplicity of food containers until recent years did not allow for sealed storage. Sugar had been a rare and expensive commodity, hardly used in the households for consumption; therefore its role in preserving had not developed.

Food preserving technology is more widely developed in some regions in Sub-Saharan Africa. In East Nigeria the Igbo people use smoking, frying, salting, roasting and blanching to extend the useful life of food items (Anonymus, n.a.). In many

\(^{67}\) Dried meat, butter, and two types of starchy food extracted from the enset plant
regions lactic fermentation of various products is a long-standing tradition (Oyewole, 1997). Mwaniki (n.d.), in her report to the UN Office of the Special Advisor to Africa, stressed the importance of adequate food storage and preservation at household level for food security, in particular to reduce the impact of seasonality in the availability and pricing of food. Many development and food security initiatives promote food preserving. However, they tend to emphasise the value-adding aspects and income generating opportunities of various products and related technologies (Jespersen, 2010; Ohiokpehai, Linus, Kinyua, Kamau, & Wasilwa, 2013) or focus on the benefits of these technologies on food safety (Mensah, 1997), and pay less attention to their direct potential in the households for increasing food diversity and reducing the impact of seasonal food shortage.

The consequences of low diversity and weak stability

This study did not undertake a nutritional analysis of the actual food that people ate. However, as similar diets and nutrition outcomes in similar populations have already been well documented (for example Faber & Wenhold, 2007; Frison et al., 2006), I use the results of these studies to support my argument regarding the nutritional inadequacies of the local diet.

Two baseline studies were carried out for an intervention in infant and young child feeding practices in the area surrounding the research site. Both of these surveys documented low dietary diversity among the children, with similar results: only 7.2% of children age 6-23 months, and only 4.6% of children age 6-11 months, met the minimum dietary diversity requirements (Mekonnen & Demessie, 2010). Their
findings concur with my inferences about the low diversity of food available for young children, drawn from meal observations and descriptions.

The studies also found levels of stunting associated with age: Mekonnen and Demessie (2010) report 23.6% stunting among 6-11 months and 40.2% among the 12-23 months old children; in a similar sample Ali and colleagues found that 40.2% of children between 6 and 24 months, and 53.5% of children between 24 and 60 months of age were stunted (Ali et al., 2011). This suggests the decreasing adequacy of the diet, possibly as the relative amount and frequency of breastfeeding – the single source of non-plant derived protein and fat in the diet of the majority of young children - declines.

The energy requirements of growth represent a significant portion of the total energy demands in the early period of children’s lives, and low-fat diets, with less than 25% of energy from fats, are shown to adversely affect weight gain and longitudinal growth in young children (Food and Agriculture Organization, 2008). While their total energy needs may have been met, the diet of young children, including those who were breastfed and were older than 6 months, was likely to be low in fats and fatty acids. As the only non-breast milk dairy product regularly available was skim sour milk, their diet was poor in dairy fats, and no other animal-source food was available for the vast majority of young children throughout the year as part of daily meals.

Once they were weaned, young children’s diet was also likely to be poor in terms of offering adequate essential amino acid mix and overall protein intake. Protein sources were predominantly plant-based; the most significant were maize and,
seasonally, a limited variety of legumes. Stunting in children has long been associated with protein deficiency. However, not only linear growth but weight increase and the development of the body and its organs in infancy and childhood require an amino acid supply that is different from that in adulthood (Food and Agriculture Organization et al., 2002). The limitations of protein and amino acid intake of the children at the study site were another likely source of growth and development setbacks.

Young children have greater micronutrient needs relative to energy needs, therefore they require increased micronutrient density (World Health Organization & Food and Agriculture Organization of the United Nations, 2004). Food available for young children was likely to be deficient in critical micronutrients, some throughout the year and others seasonally. This ‘hidden hunger’, the subclinical levels of micronutrient deficiency, affects a large proportion of poor populations in the developing world, with the gravest effects on women and children (Kennedy, Nantel, & Shetty, 2003).

The inconsistencies in food availability compounded the negative impacts of low dietary diversity. During the periods of food shortage children were exposed to reduced energy intake and reduced food diversity, and therefore the availability of some macro and micronutrients, already in short supply, further diminished. The episodes of periodic food shortages were of significant lengths of times in relation to a young child’s everyday needs, and were likely to have cumulative effects.

In her paper on under-five children’s nutrition in Mali, Adams (1994) explores the impacts of the seasonal variation in the food supply on child health and development.
She attributes the seasonal changes in child growth velocity to the seasonality of food supply, as well as to the constraints mothers faced in allocating time for child care, an issue that the mothers in the site of this study did not raise, as their workload did not have strong seasonality. Adams observes that the long-term consequences are unclear; however, a more recent study of Hodginott and Kinsey (2001) concludes otherwise. In a Zimbabwean study they found that children age 12-24 months lost 1.5 to 2 cm of growth in the aftermath of a drought and argue that transitory events such as a few months of food shortage will affect children for the rest of their lives.

The main points of this section

The local food system and the food security of households were primary determinants of the availability of food in the households. The food that infants and young children were given was identical to, or a thin version of the maize-based food the rest of the family ate. Family food was characterised by low diversity and weak stability, with likely consequences of low and uncertain availability of key macro and micro-nutrients.

The findings of surveys conducted adjacent to the study site, which report high levels of stunting, and studies carried out in similar populations linking food systems, food diversity and the linear growth and development of young children, support my argument that the availability of food for infants and young children at the study site did not provide all and enough of the nutrients they needed for healthy growth and development.
Having explored the aspects of availability of food and nutrients for infants and young children in the section above, another dimension of children’s food and nutrition is discussed next: the issues of access to food and the social aspects of food and meals.

8.3 Children’s share of family food – access to food and nutrients

Availability was a critical limitation of children’s access to food and nutrients: only what was available could be accessed. In this section I consider the food culture and the milieu in which their meals took place and the principal factors that determined their access to food and nutrients (beyond availability), and conclude by summarising the characteristics of access. I reason that the main determinants of access to food and nutrients were caregiver behaviour, as well as intra-household competition for, and allocation of resources. I also argue that a comparatively positive picture emerged from my field data in regard to how available food was utilised to benefit young children through active feeding practices, favourable meal frequency and meal sharing, and prioritising and protecting their well-being during crises, as well as women’s power and participation in decision-making about household resources. Figure 10 illustrates the elements of the discussion of young children’s access to food and nutrients.
Food hierarchy and traditions

Food choices entail a hierarchy of preferred foods, as well as a list of items that are avoided or prohibited. The high prestige of certain foods is conferred by long tradition, or by contemporary influence, and often but not always their economic, sensory or assumed nutritional values. In the Wolayta villages, butter was a traditionally revered substance, and flesh foods, especially raw beef, were highly prized. A different set of preferences granted higher status to ferenj foods, which commonly originated in the developed world, echoing the preferences and
symbolism Platte found in Northern Nigeria in “the role of certain items as a metaphor for a ‘new way of life’” (Platte, 2004, p. 174).

Study participants stated that their food choices were first and foremost driven by household means, but food choices were also defined by a set of perceived values attached to food items, dividing them into ‘good’ and ‘bad’ ones. ‘Good’ implied diverse, healthy, strengthening foods, and monotonous food or items that caused illness were considered ‘bad’. Traditional foods were claimed to give strength and health, while ferenj foods were considered generally superior in terms of nutritional benefits and flavour. Also observed in other research (Negash & Niehof, 2004), long-maturity crops, such as enset and livestock products, also commanded an appreciation that reached beyond the economic value of investment.

The food taboos and restrictions observed in the study area were virtually identical to those found in other areas of Ethiopia, with the exception of the rules of fasting. The Orthodox tradition, followed by a large proportion of the country’s population, observes an extensive number of fasting days, aiming at minimising evil “stemming from human aggressiveness, power and pride” (Knutsson & Selinus, 1970, p. 967). In the predominantly Protestant households of the study site, fasting rules were much less restrictive and fasting was not required of children under the age of seven or eight years, even in the few Orthodox Christian households.

Food taboos formed another set of restrictions, many of which have persisted for millennia. Food avoidances, like those at the study site, typically have socio-religious associations (Simoons, 1994) and most frequently focus on animal-source foods, mainly flesh. The general avoidance of eating pigs, donkeys and horses, dogs
and cats, as well as insects, wild animals and certain types of fish, is followed by the entire population of Ethiopia. Other taboos are more localised to certain parts of Ethiopia, and often include a wider range of potential food sources (Lyons, 2007; Selinus et al., 1971). However, no local food taboos particular to the study site were identified by the participants.

**Wolayta cuisine - food for special times**

Food culture connects the food system to the structure of the family and society and is a powerful expression of culture and identity. Beyond biological nutrition, meal sharing traditions provide essential social nourishment within the household, extended family and the community. In the food culture of rural agricultural people, the direct link between producer, cook and consumer allows for a relationship to food that is fundamentally practical: it ensures an understanding of its finite nature and limitations, and it also creates vital personal and social connections.

‘Haute cuisine’ – an elaborate culture of preparing food, in which “food becomes a medium for aesthetic expression” (Rozin, 2005, p. S108), was a wonderful feature of Wolayta culture, and had a strong presence in the villages of the study site. Its existence there seemed less of a result of social class differentiation, which is the case in some food cultures (Goody, 1982, in Lyons, 2007), than of the rhythm of the yearly cycle of agriculture, the sense of abundance after harvest, and the use of surplus food for social gain (Hayden, 1998). In the Wolayta villages the preparation of distinctive dishes was mostly driven by religious calendars and family ceremonies, and it was the hierarchy among the days of the year rather than among social groups that called for marking certain events by specific meals.
There were some circumstances when rich meals were offered to individuals, and this food was not to be shared. Special attention was paid to the food for women during and for several weeks after childbirth, and for sick people, including children. When choosing food for sick people the main goal appeared to be to entice them to eat at least some food. Accordingly, their wishes were carried out in food choices, regardless of the nutritional value of the food. Traditionally high prestige foods, which were believed to carry health and nutritional benefits, were prepared for women during labour, and in the first weeks of nursing. The practice of selective provision of food, including restriction and avoidance rules, to women during pregnancy and childbirth and to sick children, has been documented in other populations as well (for example, Choudhry, 1997; Jintrawet & Harrigan, 2003; Kapil, Sood, & Gaur, 1990).

The special attention paid to the diet of people during critical times implied willingness to direct special resources to fulfil special needs and, in addition to the traditions of fine cuisine, suggested that the inadequacy of everyday meals was a result of lack of resources rather than a lack of ability to distinguish between rich and poor food quality.

**Children took part in commensality**

The pattern of three daily meals at the study site was similar to the meal patterns in other parts of Ethiopia (Kifleyesus, 2004). It consisted of a smaller meal in the morning, and two larger meals, one at midday and another in the evening. Three daily meals formed the predominant meal pattern in most of the cultures of Sub-Saharan Africa, in agricultural and urban societies alike (Faber, Smuts, & Benadé,
Chiva suggests that this originated in “the regularity and rhythmicity of harvest societies” (Chiva, 1997, p. S23). The number of daily meals, however, was reduced at the study site during the times of food shortage, just like in other parts of Africa (Fouere et al., 2000).

The fundamental features of family meals were similar in all households regardless of household wealth, composition, size or location and they usually included the children. The custom of serving food first to the men and guests and leaving the women and children last, often confining their food intake to what is left by the others, has been observed in many other places within Ethiopia, as well as throughout the African continent (Kifleyesus, 2002; Knutsson & Selinus, 1970; Mwangome, Prentice, Plugge, & Nweneka, 2010). By contrast, in the Wolayta households at the study site men, women and children ate together, and shared the same food. The meal sharing etiquette required that regardless of gender, people were treated with particular respect firstly according to age and secondly to guest status. This custom directed sequence rather than amount or quality of food: it prescribed who would be the first person to take a portion of the food and thus giving signal to the others to start eating.

No gender bias was evident among the children in terms of access to food at the study site. This observation concurs with studies that considered nutritional outcomes for girls and boys in several Sub-Saharan African countries. They conclude that, unlike in parts of Asia and North Africa where boys’ needs are prioritised, in those countries a pro-girl trend exists in nutrition outcomes (Medhin et al., 2010; Svedberg, 1990, 1996; Ueyama, 2007). Although in his paper Klasen

Sharing food was a custom that was never questioned. Eating alone was considered undesirable, even sad, and in public places strangers joined each other at tables to avoid eating by themselves. The nuanced rules and importance of commensality were imparted upon children from a very early age, and mealtimes were, as Fischler points out, scenes of children’s socialisation: “one of the obvious functions of commensality (one of its effects, if one worries about teleology) is socializing individuals into specific rules involving cooperation” (2011, p. 538). Starting at a young age, children observed the adults’ behaviour, listened to their conversation, and witnessed the courteous interactions, good companionship and calm voices surrounding the meals. They also absorbed the rituals and rules of meal sharing, were demanded respect and self-discipline, and learnt about their gender roles as grown men and women.

**Caring for children during mealtimes**

Not eating alone, amongst other things, also presented young children with the challenge of competition for food. Depending on the size of the family and the age difference between the siblings, they often shared a plate with two or three more children, or with the entire family of several people. Parents were aware that young children were at disadvantage when competing for food with older, stronger and sometimes hungrier siblings, and employed strategies to protect and assist them. A
strategy to reduce competition was giving children their own separate servings, or letting them share with another of the younger ones.

The tone of communication with children, as well as of the interactions children observed between adults, was always calm and gentle. When they were eating, often without the rest of the family, children were not left unattended: the mother stopped working and sat down with them, even if she was waiting for her husband to have her own meal. Mothers paid close attention to the youngest children during mealtimes, providing direct assistance and supervision to make sure they got enough food. Mostly the mother, but many times the father or a grandparent took on the role of feeding young children. Similar attentiveness was observed during breastfeeding, when the mothers stopped what they were doing, often handing over the task at hand to an older girl child or a friend. Attentive and responsive feeding practices have been shown to impact on children’s nutritional status by other research (Bégin, Frongillo, & Delisle, 1999; Engle, Bentley, & Pelto, 2000; Nti & Lartey, 2007).

The fluidity of time spent with the children and the steady attention that the mothers turned toward them was made easier by the fact that women in these Wolayta villages were not expected to contribute great amounts of time to farm work. This was similar to other areas in Ethiopia (Bekele & Drake, 2003), but different from many poor rural areas throughout the world, where women’s work in subsistence farming produces, or contributes to, the daily food for the household (Dioula, Deret, Morel, du Vachat, & Kiaya, 2013; Moore & Vaughan, 1987; Mwangome et al., 2010; Shipton, 1990; Sutherland et al., 1999; Vidal, 2013).
Although the whole family ate together at the end each day, the day-time mealtimes and meal frequency were flexible, adjusted to men’s work in the fields and to children’s needs. Mothers served food to older children to suit their school schedule, and younger children were given food several times a day, often on demand. Infants were breastfed whenever they showed signs of hunger or restlessness as a result of the understanding that young children suffered more severely from hunger than the adults. In spite of the norms and concerns about not allowing a ‘long gap’ between children’s meals, the findings of the Alive and Thrive baseline survey found that just over half of children age 6-23 months received the minimum meal frequency (Mekonnen & Demessie, 2010).

Withdrawal of food was never used as punishment: parents were more worried about their children’s health than their behaviour. It was not used as reward either, as in other populations (for example Puhl & Schwartz, 2003; Vereecken, Keukelier, & Maes, 2004). However, some luxury items, usually foreign or sweet foods and drinks, were given as comfort, infusing them with a meaning of hierarchy and symbolism (Moore, 1957).

**Allocation of resources**

Significant resources were directed to high-value foods on special occasions, mostly for the social benefits gained in sharing during celebratory feasts. The expense of these feasts was substantial, according to several study participants even extravagant, and it was considered a threat to household food security further along in the yearly cycle. At the same time, allocating resources towards the food of sick people or new mothers was never scorned.
Young children’s daily food did not attract the kind of sacrifice ceremonies and holidays did, although their health and well-being was a stated priority of the parents. In their paper on the nutritional vulnerability of young children in Niger, Hampshire et al. discuss how mothers fail “to direct high quality foods towards young children” (2009, p. 141), and identify the social, economic and cultural factors that influence household decision-making, several of which my findings correspond with. As with the Nigerien families, in the two Wolayta villages the prioritising of household expenses focussed on longer-term investments, both material and social. Buying livestock, a risk management and savings strategy, was the preferred and most frequent way of capitalising cash surplus. Livestock were liquid assets, the sale price of which could be spent on food or turned into social capital by paying for ceremonial obligations or debt. Investment in social capital and into strengthening the children’s future social status through circumcision ceremony and church membership was a strategy that parents considered more beneficial in terms of the rates of return than the gains from small amounts of daily food. As well, buying clothes and school supplies for the children, and thus contributing to their education, was prioritised over food diversity or high quality food.

My findings differ from the Nigerien study, however, in that in the Wolayta villages women claimed to have greater bargaining power. To this point I return later. Another difference was that the protection of children from the effects of food shortage was a social norm observed by virtually all households. Shielding children during the ‘hungry months’ was found in other parts of Ethiopia (pers. comm. Dr Mesfin Beyero, September 2011) and Sub-Saharan Africa, for example in Ghana, where children and the elderly had two daily meals in lean times, even when the rest of the household ate only once (Hesselberg & Yaro, 2006).
The knowledge base of decisions

I found clear understanding of the link between quality and quantity of food and the health and development of children among the study participants. Most episodes of illness were associated with the lack of appropriate food, and some diseases were directly attributed to hunger and poor food diversity. Hunger, experienced even for short periods, was identified as the main cause of illness in children. Although attributing illness directly to the experience of hunger or lack of ‘good food’ may be questioned from a biomedical perspective, this explanatory model represents “cultural knowledge concerning health and illness problems… constructed from peoples’ direct experiences within ecological settings of food scarcity” (Blum et al., 2004, p. 197). At the same time it is consistent with the clinical understanding of the underlying links between health, illness and nutrition (Müller & Krawinkel, 2005). It needs to be noted, however, that the parents’ assessment of their children’s nutritional status seemed inaccurate at times, especially in the case of sick children. Similar issues were reported by Christiaensen and Alderman (2004) in Ethiopia on a national scale.

I found that parents were aware of the contribution of many food types to the health, growth and development of their children. There was consensus about the inadequacy of the young children’s diet, and the main concern was the lack of diversity, not the quantity of food, which participants considered generally sufficient in times when there was no food shortage. Though all women were aware of the recommendations regarding breastfeeding and the optimal timing of the introduction of solid foods (based on the Health Extension and Alive and Thrive programmes, which disseminated information founded on the WHO guidelines), it was difficult to
ascertain the actual rates of compliance. When describing ideal complementary foods, mothers placed great emphasis on the importance of culturally highly valued food items for all aspects of nutrition: growth, strength, energy and protection from illness.

While according to the study participants a diversity of staples was the most essential, a variety of energy-dense and animal-source foods were also considered as crucial for strength, energy and growth. Protective foods included fruits, vegetables and some herbs, with liver and butter given the highest merit followed by vegetables containing high levels of Vitamin A and garlic. The micronutrient-rich moringa (FAO, 2011; Oduro, Ellis, & Owusu, 2008), however, was vastly undervalued. The frequency with which children should receive the particular food items was contested between the participants: daily food consisted of staples and legumes, milk or arera, and garlic; fruit and vegetables were not considered necessary every day although dark green leaves were in fact part of the daily diet. Contradictions surrounded meat for children under four or five years of age. Although it was commonly acknowledged as necessary for young children, meat was often not included in the free lists of important foods for this age group and several interviewees maintained that it was inappropriate for small children. Restrictions on meat intake for young children are not unusual in Sub-Saharan Africa; for example, similar practices, based on cultural beliefs, were found in South Africa and Ghana (Appoh & Krekling, 2005; Kruger & Gericke, 2003).

In general, in spite of the mothers’ low educational attainment, my findings suggest a higher level of practical nutrition knowledge than was found by the Alive and Thrive baseline study (Mekonnen & Demessie, 2010), conceivably due to the education
work carried out during the year between the two studies. As well, the questions of
the baseline survey were limited to a few food items and practices, whilst the
qualitative methods I used elicited a wider range of considerations. Two elements of
my findings stand out as strong evidence regarding the parents’ knowledge of what
would have constituted adequate diet for their young children. Firstly, young
children’s diet in the past, described as much richer in animal-source foods, was
being referred to as the ‘good food’, eating which children grew faster and were
healthier and stronger. Secondly, the mothers described detailed food-based
strategies with which they would respond to signs of malnourishment, although they
acknowledged that this treatment required rich foods, for which they would have
found it difficult to allocate resources.

The main source of knowledge regarding food, nutrition and child feeding practices
was the mother’s mother and, according to trained child nutrition volunteers and the
mothers themselves, there was no great gap between the traditional knowledge and
the advice given by Peer Mothers and Health Extension Workers. Reliance on the
respect of the grandmothers’ experience and their influence in passing on child
rearing knowledge was successfully harnessed in a programme in Senegal (Aubel,
Touré, & Diagne, 2004). A study in a region in Ghana concluded that mothers’
practical nutrition knowledge had greater impact on nutrition outcomes than their
level of formal education, a social determinant often assumed to be decisive for
children’s nutritional outcomes (Appoh & Krekling, 2005). The authors warn that
linking maternal nutritional knowledge with child nutritional outcomes is not
straightforward and not unanimous: they note that in various studies opposing
findings were supported by disparate variables in linking maternal knowledge and
anthropometrics.
Power in household decisions

Women in low-income countries have different strengths of bargaining and decision-making power and it is well established in the professional and academic literature that their power is a potent social determinant of child health and nutrition (Hampshire, Panter-Brick, et al., 2009; Richards et al., 2013). I found that in the Wolayta villages, husbands and wives had a considerably well-balanced distribution of power in negotiating decisions about the allocation of household resources.

Women’s bargaining power was underpinned by two aspects of the household and family structure. Firstly, land ownership, although ambiguous in terms of private or state tenure, belonged to a farming household, and not directly to the men, in spite of being passed down along male descendent lines (Kebede, 2002; Tessema, 2008). In general, household assets were seen as shared within the nuclear family. Secondly, in this Protestant community divorce was rare, and traditional mechanisms were in place for conflict resolution between women and their husbands. The custom of caring for and protecting women for up to four months after childbirth further substantiated the mutually appreciative household arrangements, although full observance of this custom, as in other areas of Ethiopia, largely depended on the economic standing of the family (Hanlon, Whitley, Wondimagegn, Alem, & Prince, 2009).

With regards to food availability, women’s decision-making power and bargaining position within the households seemed strong and they at least participated in, but mostly directed the nutrition-related choices. Indeed, none of the mothers I interviewed stated that they could give better food to their children if they were free
to decide. Instead, they attributed nutritional shortcomings to the poverty of the household, and never implied that their husband misused any of the household resources. They acknowledged the critical role their husbands played in providing the household with all necessities, including food stuffs and cash, and expressed their desire to contribute to this by generating cash income. This division of responsibilities disagreed with Desai’s findings, quoted by Engle, Castle and Menon (1996, p. 627), stating that in large parts of Africa "women and children tend to provide much of their own food with relatively low contribution from the father". While the gender roles and responsibilities are complex and dynamic in the agricultural production systems (Quisumbing & Pandolfelli, 2010), female farmers’ work tend to contribute more directly to household food production in other parts of the developing world than in the Wolayta villages (Ibnouf, 2011; Jones et al., 2012; Udry, 1996; Vidal, 2013).

Although the men were responsible for producing the food crops, women were much in charge of what had been harvested and stored, and the decision to sell any part of the stock was negotiated between husband and wife. Women had command over dairy products, and the cash that was generated by selling them. Women decided what food they would prepare next, and they made most of the market purchases, although this in many households required daily negotiations for small amounts of cash held by the men. In fact, in the study area much of the everyday cash transactions were carried out by women, mostly the mothers but often daughters. The considerable fluidity regarding money I found in the Wolayta households is not unique in Sub-Saharan Africa and questions the commonly held perception that draws strong links between women’s direct access to cash and their children’s nutritional status (O’Laughlin, 2008).
Although social norms required that they consult their husband before they spend money, in practice mothers were free to seek immediate professional help for their sick children if they judged the case urgent. They had the authority to allocate household resources towards the treatment, usually by borrowing cash that their husbands paid back later. This was in contrast to the findings of numerous studies that showed that “a major barrier to care-seeking beyond the home is the need for mothers to get the permission of their husbands to seek care outside of the home and, in particular, spend money in the course of that care” (Colvin et al., 2013, p. 70).

Mothers were in the position to apply their nutritional knowledge without hindrance from their husbands, in contrast to what was observed in other parts of Africa (Mwangome et al., 2010). However, living in the compound of their in-laws, under the watchful eyes of their mother-in-law, they often had to negotiate the influence of old traditions against contemporary advice, and the different interests and priorities of the extended family, not unlike in other traditional cultures (Engle et al., 1996; Mwangome et al., 2010; Richards et al., 2013).

Family size had a direct impact on access to food and nutrients in the households at the study site. Family planning was promoted in village meetings, and a growing number of families took advantage of the contraceptive implants available at the health post (Olson & Piller, 2013). Although some women were worried about the side effects of the implant, it was agreed that the benefits for the family, in particular for the already existing children and the mother, outweighed the risks. To use contraception was a decision negotiated between husband and wife. Men’s involvement in family planning is not unique to the study site, and other studies found positive attitudes in men regarding the use of contraceptive to regulate fertility.
(Maharaj, 2001). A study surveying men’s position regarding family planning in 18 developing countries found that the desired family size did not significantly differ between men and women, with the exception of West Africa (Bankole & Singh, 1998), where men preferred a larger number of children. Research by the World Health Organization (Cleland, Ndugwa, & Zulu, 2010), however, found a greater approval rate of contraceptive use among women than what they predicted their partner would have.

The main points of this section

I suggest that the findings of this study are supported by what Jones and his colleagues (Jones et al., 2012, pp. 1673-1674) argue, namely that “it is not clear that insufficient knowledge or poor attitudes and perceptions about IYCF are the most important limiting factors to improving how young children are fed and cared for in low-income settings”.

Children accessed family food in an attentive, supportive and protective atmosphere, in a daily meal structure that sought to meet their needs in terms of meal frequency and timing. Although there were competing needs to be met utilising the finite resources of the household, the negotiations around decisions were underpinned by a relative balance in gender relations and bargaining power.

A rich tradition of local cuisine and the use of food in building social cohesion in the family and community, while fundamental in establishing the social and cultural status of children, often diminished food resources for the reminder of the year. In

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68 IYCF refers to Infant and Young Child Feeding
summary, while on one hand household decisions favoured children’s well-being and future, this was not through allocating resources towards a diverse diet of high-value foods, in spite of the significant knowledge of the linkage between food, nutrition and health.

Following discussion of the factors and characteristics of the availability of, and access to food for young children in the households, the next section examines the third dimension of their food and nutrition security: the factors that determined the utilisation of food and nutrients, and the features that characterised it.

8.4 Providing good food for healthy children – the utilisation of food and nutrients

Utilisation of the food available and accessible is mediated by the ability of the child to benefit from the nutrients in it, and this is primarily determined by the child’s health and the bioavailability of the nutrients in the food. The political, socio-economic and biomedical context of child health is a vast field beyond the scope of this study, which focuses on household decisions and behaviours. The parents’ understanding about health, their efforts in preventing illness and their care-seeking for treatment for their sick children are important factors in children’s health. Food technology, including the preparation and storage of meals, has critical impact on absorption of key nutrients. I found that practices relating to both factors – health seeking and food technology – were less than optimal, and argue that opportunities existed at the household level to improve the bioavailability of nutrients and the
children’s ability to absorb them. Figure 11 illustrates the elements of the discussion of the utilisation of nutrients in the diet young children.

Figure 11 Utilisation of food and nutrients

Knowledge of child health and development

Children’s health was considered fragile and, as pointed out before, much of this fragility was perceived as nourishment-related. It was commonly held that hunger or lack of appropriate food weakened children and made them susceptible to disease, especially malaria. Malarial illness was considered the most prevalent of all health problems for adults and children alike, and people thought it was unlikely that any child would be untouched by it. Aside from malaria, various diseases of the digestive system and intestinal parasites frequently affected children, and though sore throat
and tonsillitis were reported to occur often, respiratory illnesses in children were thought to be less common. Data of the 2011 Demographic and Health Survey (Central Statistical Agency [Ethiopia] & ICF International, 2012), specific for the region, seems to concur with the local perception about the frequency of different diseases: 6.8% of children under five years had symptoms of respiratory infection in the two weeks prior to the survey, compared to 16.4% of children in the same age bracket and time frame having diarrhoea.

A range of symptoms and culturally defined diseases were identified by the mothers and the traditional healers that may or may not have their equivalents in biomedical classifications. For the most part, illness in children, as well as in adults, was seen as a result of weakness, most often attributed to hunger or sun exposure, and at times to other reasons, which allowed germs, parasites or other bad influences to defeat the person’s health.

These parental observations find evidence in the child health literature, and a multitude of studies conclude that the associations between children’s anthropometric status, and morbidity and mortality, is significant, in particular for diarrhoea, malaria and pneumonia (for example, Caulfield, de Onis, Blössner, & Black, 2004; Rice, Sacco, Hyder, & Black, 2000). Yet, Caulfield and colleagues warn that the relationship between malarial illness and nutrition is not straightforward, although evidence shows that micronutrient deficiencies, and undernutrition in general, increase the burden of malaria morbidity in young children (Caulfield, Richard, & Black, 2004, p. 60). To further this point, Hughes and Kelly argue that there is “surprisingly slender good evidence that immunity to parasites is
dependent on macronutrient intake or body composition” (2006, p. 577), and that it is particular micronutrient deficiencies that impair immunity.

The timely growth and development of children was a concern among the participants, although small stature or developmental delays did not attract the same urgency of response than illness did. Christiaensen and Alderman (2004) suggest a plausible explanation for this attitude: parents’ assessment of their children’s growth status was subjective and relative to the environment, namely the child’s peers.

The complexity of the relationship between illness and deficiency in macro and micronutrients was mostly invisible to the caregivers: the children experienced and expressed being hungry, but there was no mechanism to signal for the lack of particular nutrients, for example, zinc or iron. The urgency of hunger may have in fact been unhelpful in the sense that, in spite of their understanding about ‘good food’, it focussed the parents’ efforts on the quantity of food (to make sure children were content) rather on its quality (the diversity and bioavailability of nutrients).

Care-seeking

High priority was placed on getting treatment for illness, proven by how strongly treatment costs featured in the discussions about household budgeting. A set of signs, such as fever, loss of appetite or lethargy, were followed up and caregivers took steps to seek treatment as soon as they were certain that the child was unwell, often after consulting the neighbours. Women frequently asked for advice from each other, most likely within the group of peers; they rarely turned to their mother-in-law although commonly she was the only grandmother living near the children, and in
reality her influence was often quite powerful. The actual task of taking the child to
the health post or the traditional healer was left for the father unless he was away.

Home remedies were mainly limited to the use of herbal teas for digestive problems.
Traditional healers were often consulted, although they declined the treatment of
some diseases and referred children to the health post when they suspected they had
malaria, or when they thought their knowledge was insufficient. This suggested a
subtle hierarchy in how the healers were placed, and placed themselves, in the order
of the healing professionals. In their systematic review of over 100 studies on care-
seeking in Sub-Saharan Africa, Colvin et al. (Colvin et al., 2013) observe a similar
progression from home remedy to traditional healer to health facility as the severity
of the child’s symptoms increase.

My data suggested a sense of urgency to seek treatment for a child, especially when
there was fever and therefore suspicion of malaria. This seems to contradict the
findings of the 2011 Demographic and Health Survey (Central Statistical Agency
[Ethiopia] & ICF International, 2012) according to which in the region, only under
one quarter of the young children who had fever in the two weeks prior to the survey
were presented at a government health facility. The Demographic and Health Survey
also found low rates of seeking treatment at health facilities with other symptoms:
parents sought treatment for approximately one third of children with diarrhoea or
symptoms of respiratory infection were taken to a government health facility, and
4.5% of the latter received antibiotics (Central Statistical Agency [Ethiopia] & ICF
International, 2012). A possible explanation for the difference between the norms or
expressed intention and the statistics of health facility visits is that fevers occur
frequently in childhood, and parents may consider only high or persistent fever
serious enough to warrant a response, as found in a malarial area of Zambia (Baume, Helitzer, & Kachur, 2000).

It is a limitation of my study that it did not test actual behaviour against expressed norms and intention in regards to parental actions when a child showed symptoms of illness. I observed sick children taken to the health post, often by their fathers, in Wolqá. The other village did not have a health post and I could only speculate about how that may have affected families seeking treatment for their children. It has been, however, observed by researchers that distance to the health care facility is a barrier in care-seeking (Baume et al., 2000; Colvin et al., 2013; Mbagaya, Odhiambo, & Oniang'o, 2005). Nevertheless, I suggest that my findings show parental knowledge and understanding that treatment of these childhood illnesses was urgent and important.

Prevention of illness

The prevention of illness is an important dimension of health-seeking practices and two aspects of it, the services provided by the Health Extension Programme and household behaviour, are discussed below.

Mothers stated that all of their children were fully vaccinated and received all appropriate doses of Vitamin A and deworming. The Alive and Thrive baseline survey (Ali et al., 2011), based on combining mothers’ reports and immunisation card data, found that around 25% of children in the 12-23 months age bracket were fully immunised in the SNNPR survey sites, with a significant dropout rate for both the Polio and the PENTA (combination of five vaccinations) vaccines. The
proportion of children under 2 years who received Vitamin A or deworming treatment within the previous six months was also lower than the mothers’ perception: 38% and 24% respectively (Mekonnen & Demessie, 2010). This contradiction is important from the point of view that believing that their children received all age-appropriate immunisation fostered a passive attitude among the parents, which was likely to be augmented by the nature of the campaigns. Furthermore, if parents wanted to get the immunisation their child missed, there was no simple remedy to the situation.69

Severely malnourished children were identified during vaccination campaigns or when they presented at the health post with illness, and were given therapeutic food supplements. Some of these supplements found their way to the village market, and while none of the mothers participating in this study acknowledged selling what they received for their malnourished children, several reported buying the fortified porridge mix sometimes to enrich their children’s liquid porridge. Selling fortified supplements is not unique for this setting: it is a coping strategy, applied in other parts of Sub-Saharan Africa as well, which turns aid rations into currency to buy food for the whole the family, or to buy social capital (Casiday, Hampshire, Panter-Brick, & Kilpatrick, 2014).

Most households had a bed net over the main bed, supplied by the Health Extension Programme and World Vision, rationed one per household according to the study participants. It was unlikely that all family members slept in the protection of bed nets considering the size of households. A 2004 survey of bed net use found an

69 Each child was issued a health card on which HEWs recorded vaccinations. This card was in Amharic. I did not sight any of the cards, an omission which was not possible to rectify in retrospect.
average of approximately 2.5 people slept under one net in rural areas of Ethiopia (Baume & Marin, 2007), where the average household size was over five (Central Statistical Agency [Ethiopia] & Macro, 2006). The efficacy of the bed net, even if untorn, was questionable bearing in mind that crowding pressed some people against the net and exposed their skin to mosquitoes. Baume and Marin (2007) stress that while sleeping under bed net was not universal, families who had nets gave priority to children under five and to women of reproductive age. Many studies focus on the use of insecticide impregnated bed nets, but it has also been found that vectors are active outside the houses after dusk and early morning (Killeen, 2014), and young children, once awake and outside, which is where they spend most time, often wearing very little clothing, have no protection from mosquito bites.

Good hygiene is an important strategy for preventing infectious diseases. Hand washing before and after meals, carried out as a ritual with water poured over the hands, was not a result of modern learning at the study site, but an old tradition that was observed in every household, at each meal, for all people who participated in it. It was important not to soil the shared meal, but also to pay respect and prepare the body for taking the blessing of nourishment, hence the rinsing of the mouth at the same time. If soap was used at all, it was commonly after the meal, to remove the grease and food smell from the fingers.

The traditions of hand washing, as well as taking meals from a shared plate with fingers, exist throughout Ethiopia, and hand washing prior to eating is carried out at unusually high rates in Ethiopia when compared to other developing countries (Vivas et al., 2010). A hand hygiene study, carried out with rural school children in northern Ethiopia, concurs with my observations about the low use of soap before
meals; it also found that while 99% of children washed hands before meals, only under 15% washed hands after defecating (Vivas et al., 2010). Other studies about hand washing after latrine use or after handling solid waste found similar results (Mengistie & Baraki, 2010; Scott, Curtis, Rabie, & Garbrah-Aidoo, 2007). These results suggest that the reason for washing hands is not related to the threat of infection, and environmental health knowledge did not penetrate the household practices.

Food hygiene had similar limitations. The preparation of food was always preceded by the careful rinsing of the hand and the utensils and dishes used in cooking and serving, but again, this was done without detergent. The traditional methods of priming the pots that milk was soured in were likely to control the bacteria involved in the fermentation. The fermentation process itself, which milk, butter and *enset* pulp underwent, inhibited harmful bacteria and improved the food safety of these items (Holzapfel, 2002; Mensah, 1997; Oyewole, 1997). Meal leftovers, especially roasted kernels and flat bread, were kept covered between mealtimes with loose open-weave fabric, which did not provide full protection from flies.

Food hygiene was compromised by the proximity of livestock in the homes. Cows were kept in the same space where food preparation took place on the floor, and though their waste was cleaned out several times a day, they attracted flies. Chicken and sheep had virtually free range in the houses and accessed stored food stuffs. As well, grains and spices were dried on the ground or on low benches. This type of human-livestock cohabitation and its impact on human health in Africa is well documented (Omudu & Amuta, 2007; Rwego, Gillespie, Isabirye-Basuta, & Goldberg, 2008; Shirima et al., 2010).
Children were often seen snacking on wild fruits while playing outside. Eating wild fruits was discouraged because it was thought they caused diarrhoea or worms; it is just as likely that the dirty hands of the children were the culprits. The unlined latrines, which were constructed near most homes with no hand washing facility, open defecation, which was especially frequent among children, and the handling of the infants’ waste, often just wiped away by an older sibling or the mother before returning to other tasks, were all potential sources of disease transmission. In summary, food could easily come into contact with animal or human waste, and this presented a range of health risks.

Village workshops were held to raise awareness for the methods to prevent the transmission of diseases, such as malaria, HIV and AIDS, and tuberculosis. Although many mothers understood that some of the illnesses were spread by human-to-human transmission, separation of sick and well people within the households was difficult, most particularly because of the crowded sleeping arrangements, in particular under the bed net, and the sharing of food brought people into close proximity. I saw no efforts made to separate sick children from the others, and if their food was kept apart it was for the prioritising of the sick child rather than the protection of the healthy ones.

Food preparation and meal composition

In poor communities, particularly in areas with a predominantly plant-based diet, malnutrition has been attributed not only to the insufficient amount, but also to the poor nutritional quality of food (Hotz & Gibson, 2007). Unlocking the nutrients in the food so they are available for the human body is a prerequisite for effective
utilisation. This is a historic function of food technology and preparation methods, beyond their economic, aesthetic and social roles (Wahlqvist, 2003). As referred to earlier, in Wolayta cuisine sophisticated recipes and preparation methods existed, including the complex fermentation processes of dairy and enset. However, in this discussion I focus on daily meals, as these comprised the most substantial source of nutrition for children.

Antinutrients found in plant-based foods are shown to reduce the availability of nutrients, and to directly affect growth (Thompson, 1993). Maize, the main staple in the study area, contains phytate and other antinutrients, such as tannins and polyphenols, which are potent inhibitors of the absorption of essential micronutrients. Some tannins also reduce the digestibility of starches (Awada, Hady, Hassan, Ali, & Babiker, 2005; Hotz & Gibson, 2001; Montagnac, Davis, & Tanumihardjo, 2009). Furthermore, research has confirmed that the high fibre content of unrefined maize flour decreases fat and protein absorption, as well as of vitamins and minerals (Baer, Rumpler, Miles, & Fahey, 1997). Legumes, another locally significant affordable food type, have the potential of providing good-quality protein, and are also rich in vitamins and some minerals. However, the utilisation of these nutrients is inhibited by the antinutritional factors found in legumes: phytates, polyphenols and enzyme inhibitors (Abd El-Hady & Habiba, 2003).

It was unlikely that in the Wolayta households everyday staples were processed with methods that reduced antinutrient and fibre content, as recommended by nutrition research (Michaelsen et al., 2009). The preparation of ordinary, everyday meals was simple, and meals were assembled from a small number of components relatively quickly. The unrefined flour of maize, or occasionally of another grain, was
customarily cooked for a shorter time than the green leafy vegetables completing the meal: kale or moringa was boiled in various amounts of water for up to 30 minutes, while porridge or flat bread took between 15 and 20 minutes to cook. Women did not use techniques of soaking, germinating or fermenting with grains, although dry peas were soaked sometimes for about 20 minutes before roasting.

Michaelsen and colleagues (2009) suggest that in cereal-dominated diets, similar to those at the study site, it is essential to address the shortage of animal-source foods. These contain no antinutrients and fibres and provide high-quality protein, as well as high levels of minerals that are critical for growth. While a plant-based diet is not necessarily inadequate, at the study site it would be difficult to achieve a satisfactory nutritional regime, considering the reduced diversity, questionable adequacy of energy intake, and the presence of some antinutrients in the meals, due to the preparation methods. Therefore, small amounts of animal-source foods in regular supply would provide essential protein and important micronutrients.

The complete absence of meat in daily meals and poor or irregular intake of vitamin C, both enhancers of the absorption of iron (Hambidge, 2010), represented further inadequacies in the diet. The balance of other micronutrients, whose synergies or competition may have considerable impact on nutrient absorption (Fardet & Rock, 2014; Jacobs, Gross, & Tapsell, 2009), was likely to be far from ideal considering the low diversity of available food.

Based on the nutrition research referred to above it is safe to assume that given the ingredients and the preparation methods of daily meals in the households, the
bioavailability of essential macro- and micronutrients was compromised by the presence of antinutritional factors.

**The main points of this section**

Children were thought to be vulnerable to disease, and the strongest causal connection, made by the parents, was to the quantity and quality of food. Indeed, children were often sick, and parents had a limited set of tools for the prevention of illness in their children. Although strategies such as bed net use, and hand and food hygiene were promoted in the villages, actual household practices and parents’ behaviour reflected traditional perceptions about what caused illness, and household resources were not prioritised towards investing into items that supported these strategies.

Meal composition and preparation methods did not unlock the full nutritional potential of food ingredients, and the bioavailability of nutrients fell far short of effective and efficient use of the available food.

In summary, vulnerability of health and low bioavailability of nutrients in food characterised the utilisation of food that was available and accessible for young children. While not always aligned with biomedical science, the parents’ knowledge regarding health and illness, and the urgency with which they sought care and treatment for recognised symptoms, formed a foundation that initiatives to improve child health could build. Parents’ understanding that the better the children were fed the less likely they would get sick was an asset, but their definition of ‘better food’
was not nuanced, and their focus on hunger instead of on certain foods could have been an impediment.

8.5 Forward paths

Traditional food culture was strong at the study site, and it was wholly entwined with the economic paradigm, as well as with social structures such as culture, identity and gender. As a consequence, any change strategies need to be inclusive and comparatively conservative. Strong precedence was given to children’s well-being and it was expressed in the desire to provide, amongst the other priorities, better nutrition for them. While how participants thought to mobilise knowledge and resources to achieve this was often unclear, they did not express a desire to learn more about nutrition: they seemed quite confident in their knowledge and did not think that knowing more would enable them to do better in practice.

During my second research period at the study site, after presenting my findings, possible paths for positive change were identified and discussed with group participants. The topics of these discussions were structured around the main dimensions of children’s food and nutrition security, and the suggestions were clustered around the determinants and characteristics of each of the dimensions. During these discussions I found that some of the recommendations roused interest and enthusiasm, but others were met with hesitation or rejection.
Availability of food and nutrients

The two main shortcomings of availability, as discussed earlier, were inadequate diversity and weak stability. Many aspects of food diversity were associated with the low productivity and diversity of local food production, with its main limitations of farm size and irregular rainfall. Improving these factors was largely beyond the households’ capacity with the exceptions of horticultural food production and small livestock, such as poultry farming.

Many families grew vegetables and fruit in the gardens around the houses, and the work involved was shared between the household members. Here the limiting factors were water, the supply of which already required significant time investment, mostly from women and children. Obtaining tools, seedlings and seeds were also mentioned as problems. The nutritional significance of local leafy vegetables (Uusiku, Oelofse, Duodu, Bester, & Faber, 2010) was not well understood. Garden production was considerably less supported by the Agricultural Extension programme than field crops despite ample evidence that investment into horticultural production is an effective way of increasing nutrient diversity (Laurie & Faber, 2008; Müller & Krawinkel, 2005), and that it is often more likely to improve nutritional outcomes than interventions supporting increased food production (Berti, Krasevec, & FitzGerald, 2004).

Participants agreed that better success rates could be achieved for raising and keeping chickens if they were protected from predators, and discussions about the possible technical solutions created great interest among the men and women alike. More chickens surviving could result in more eggs becoming available for children,
and more cash income, through selling the eggs or chicken, to buy a diversity of other food items. As well, chickens were the only livestock that were small enough to be worth slaughtering for ordinary family meals in a place without refrigeration, but this proposition was a cultural as opposed to a technical challenge, as it affected the high status of chicken meat.

This type of poultry keeping, including the role of women in looking after them, is widespread in Sub-Saharan Africa, although men’s interest in poultry is growing as the difficulties in keeping large livestock increase (Gueye, 2000; Kitalyi, 1998). Many development programmes focus on improving the breeds and health of chickens (Mtileni, Muchadeyi, Maiwashe, Chimonyo, & Dzama, 2012); however, these interventions are beyond the realm of household decision-making. Simple appropriate technologies for increasing egg and meat productivity was trialled in African counties with success (Khalafall, Abdel Aziz, & Elhassan, 2006; Kichou & Bouslikhane, 2006).

Other aspects of food diversity, for complementary food for infants, as well as for family food, were tied to purchases, and cash shortage was presented as an almost unsurmountable barrier in the way of improvement. Group discussion and interview participants were very doubtful about having viable options to more diversified livelihood and thus increasing the household’s cash income.

Changes in the practices of the allocation of household resources, including planning and saving some of the surplus explicitly for the ‘hungry months’, less lavish celebration of ceremonies and holidays, and using cash saving methods through microfinance institutions and traditional associations like iddirs, were options and
ideas that people thought were worth giving more consideration. These strategic changes would offer the opportunity of maintaining a more even distribution of available resources throughout the yearly cycle, and reducing the length and negative effects of the period of food shortage. The success of microfinance institutions in the developing world, and in Ethiopia in particular, is well documented (Bekele, 2009; Doocy, Norell, Shimeles, & Burnham, 2005), although some authors question the benefits (van Rooyen et al., 2012). The independent and inclusive iiddirs are “well placed as models to broaden insurance provision and other developmental activities in these communities” (Dercon, De Weerdt, Bold, & Pankhurst, 2006, p. 685), and include in their functioning explicit food security strategies.

The topic of community facilities to support families during food shortage, for example community grain banks, was also discussed. In one of the villages the forest cooperative had just finished the construction of a grain warehouse. At the time of my field work its benefits were limited to cooperative members, but the whole community hoped that it would improve their food security. Community grain banks have been established in various parts of Africa and India, and many are successful in reducing the vulnerability of agricultural populations and improving their food security through a cooperative-managed mechanism that provides in-kind savings and credit facilities (Bhattamishra & Barrett, 2010).

Many participants agreed that the storage methods of their crops were not optimal, but this issue did not attract much interest or attention. On the other hand, the potential of preserving fruits and vegetables was recognised as one of the strategies that could lengthen the availability of a diversity of food items. Food preserving technologies have been advocated, mainly emphasising their promise as livelihood
opportunity beyond the benefits of increasing food safety and shelf life and preserving much of the micronutrients of food (Miller & Welch, 2013; Mwaniki, n.d.). At the study site the only techniques that could be utilised given the local food technology were drying and fermenting. Solar food dryers have been successful across the world, as well as in other parts of East Africa (Practical Action, n.d.). Suggestions of experimenting with fruit drying were followed up, and at least one woman was successful in producing a batch of sun-dried mangoes for her children. The potential of drying fruit as a livelihood activity generated much interest among the women.

Access to food and nutrients

Young children accessed food in a calm and responsive milieu, and were encouraged and helped while eating. The critical aspects of their access to nutrients were the household’s priorities and the consequent allocation of resources. Women’s time was one of the vital household resources for children’s access to food and nutrients. The flexibility in the timing of meals for young children and the relatively adequate frequency of meals was partly due to the distribution of responsibilities within the households. The household and child focus of their work allowed women to stay at home, ensuring adequate access to food for the children, not merely in the timing and frequency of meals and in the availability of their mother’s full attention.

This important factor needed to be considered when women’s livelihood diversity was discussed. Indeed, although women expressed desire to engage in income generation, their priorities were concentrated on the direct care of the children and their own income was to be secondary to the men’s, for whom income generation
through livelihood activities was the foremost duty. Mothers were not keen on taking on work that interrupted the rhythm of their child caring activities, and referred to social norms governing mothers’ choices, which stressed the importance of timely and frequent meals, and paying special attention to young children. Improvements in meal frequency, however, were tied to food availability, and thus to income, locking families into having to make unsatisfactory choices. These sentiments find resonance in other studies, where researchers argue that maternal time allocation for productive and reproductive activities needs to be considered in its broad and detailed context in the formulation of development and intervention strategies (Hampshire, Casiday, et al., 2009; Piperata & Mattern, 2011; Ruel & Alderman, 2013).

Allocating food and financial resources specifically for young children throughout the year would require a change in the meal sharing practice. The importance of this was understood by the parents, but they felt they had no capacity to improve the meal quality for their young children without improving food for the entire family. The exceptions were adding skim milk to children’s meals, and giving them a snack when they asked for food. However, during discussions about the forward planning of surplus use, including the decisions about the customary reciprocity at celebrations, participants agreed that there could be opportunities for prioritising children’s nutritional needs, although no specific path was outlined.

None of the above access-related discussions sparked interest to make immediate plans for action. However, one aspect of resource allocation attracted intense attention: the number of children and the consequent competition for household resources. Family size has been identified as a determinant of household food security in the developing world (for example, Maharjan & Khatri-Chhetri, 2006;
Olayemi, 2012), and in Ethiopia as well (Eneyew & Bekele, 2012). Olson and Piller (2013) call Ethiopia’s family planning an emerging success story, referring to the ninefold increase in contraceptive use and the drop in fertility rate from 7.0 to 4.8, between 1990 and 2011. Family planning was promoted in the villages and several household participants used contraceptive devices. Thus family planning was not a new idea at the study site. Still, the men and women of the mixed discussion groups spent a relatively long time discussing the idea of balance between resources and family size, and on my subsequent visit to a household with two wives and a total of 12 children I saw that particular page of the feedback booklet (See Image 9) pasted on the wall inside.

Utilisation of food and nutrients

Participants examined possible changes in the realms of child health and nutrient bioavailability during the group discussions. Similar to family planning, the existing practices and possible improvements regarding the prevention of illness in children, while not new ideas, were discussed with much interest. However, unlike family planning, which required decision and then straightforward action, taking steps based on the ideas that were discussed about disease prevention seemed have more complex barriers. The cultural models of health and illness were constructed differently from the biomedical models, and therefore strategies that did not conflict with customary practices raised less friction. However, from the participants’ point of view their poverty was the main barrier.

Purchasing additional bed nets for the household was considered impossible due to the high costs. Prevention of disease transmission by keeping sick children and their
food, dishes, blankets and clothes apart seemed very hard, especially considering local perceptions regarding the causes of illness. Developing a practice of hand washing using soap before meals, although people were aware of this being promoted by the Health Extension programme, conflicted with traditions and was hindered by the additional expense. There was a general perception that kitchen hygiene was adequate.

The concepts of bioavailability and absorption of nutrients were challenging for the participants of the group discussions. However, the idea of soaking of maize flour before preparing porridge was received with much interest, in particular because it was the experience of many people, adults included, that the maize-based meals were difficult to digest. Women experimented with the recipes and found ways to produce the right consistency necessary for the customary meals. The results were not tested for nutritional benefit, but based on research in a similar food culture this could be a method for improving bioavailability.

Pioneering research by Gibson, Hotz and their colleagues in West Africa showed that simple, affordable and culturally acceptable adjustments in food technology can significantly increase the bioavailability of nutrients in cereal-based diets (Gibson, Yeudall, Drost, Mtitimuni, & Cullinan, 2003; Hotz & Gibson, 2007). They found, for example, a simple soaking method, easy and practical for household use in rural Malawi, removed over half of the phytate content (Hotz & Gibson, 2001).

Changing meal composition to improve nutrient synergy was seen as a difficult step to take, mainly because of food availability limitations. If households had the means, due to food preferences some of these changes would have taken place already; the
knowledge of why this would be so important may become a further incentive for action.

The main points of this section

This section discussed avenues that could lead to improved food and nutrition security for young children. Two main opportunities existed for reducing the inadequacy of food diversity: more emphasis on horticultural production and improved small livestock farming, which were both in the realms of women’s responsibilities and authority. Increasing the stability of food and nutrient supply involved the introduction of new food technologies, improved livelihood diversity, and utilising traditional and non-traditional community facilities for savings and financial planning.

Women’s increasing role in off-farm livelihood activities could potentially be detrimental to young children’s access to food and nutrition. Reprioritising household resource allocation for a better balance in favouring young children within the family over cultural obligations within the community was considered a necessity, although difficult to execute. Reducing the competition for household resources by limiting family size and spacing childbirths was a strategy that was gaining footing in the study area.

The importance of preventing illness in children so they can better utilise the nutrients in the food they received was well understood but some aspects of it the participants considered adequate. Additional measures for hygiene or malaria prevention were limited by the households’ means. New food preparation techniques
to improve the bioavailability of nutrients generated much attention, but their introduction would require changes in food culture that may take time to be accepted.

Many of the opportunities and strategies that were discussed and found promising required not only technical and social support but also changes in cultural attitudes at household, community and policy level.

8.6 Chapter summary

In this chapter, the study’s findings were discussed using the structure and elements of the conceptual framework developed for children’s food and nutrition security, and in the context of professional and academic literature. The determinants and characteristics of the three main dimensions of children’s food and nutrition security at the study site were explored, followed by a discussion about opportunities and strategies for positive change.

In the next and final chapter of this thesis, I present my conclusions and recommendations for the use of the results of the study, as detailed in previous chapters and discussed above.
CHAPTER 9

CONCLUSIONS AND RECOMMENDATIONS
This study used ethnographic methods to answer the research question:

How is child malnutrition explained in two southern villages in Ethiopia, according to local perceptions?

I listened to the local voices describing the experiences and realities of the individuals and households who participated in the study, and observed their actions and behaviours. With their help I gained an understanding of many of the historic, social, cultural, economic, environmental and physical factors explaining young children’s food and nutrition security in the study area.

The objectives of the research outlined a learning process at the end of which it would be possible to identify paths for improvement. These objectives were largely met. This thesis provides a thorough description of the food families rely on for everyday nourishment, as well as the food for infants and young children and the feeding practices through which they access it. It also discusses local concepts and knowledge regarding child health and development, nutrition and food, and the understanding of how these are linked. And finally, it gives an account of the perceptions and attitudes of parents and other community members concerning their role and agency in improving the food and nutrition of children.

This closing chapter presents the conclusions of the process of exploration, and some suggestions for applying what was learnt. The conceptual framework is discussed briefly, followed by the three main dimensions of children’s food and nutrition security, closing with recommendations and some general comments. In the recommendations for practice I do not include those that require policy change or
reach beyond the capacity of the households and community, as my aim was to identify appropriate and accessible local strategies.

9.1 The conceptual framework

Larger-scale welfare policies and their operational strategies have remote and intangible statistical projections, and their implementation methods are often mismatched to the realities and experiences of households and families. As a community development worker, I found that one of the most difficult tasks was attempting to translate policy and funding guidelines into a scaled down and well-defined picture of the community’s future, with a clear path of actions for change, to which the community would not just agree, but engage with and for which it is ready to make sacrifices.

The conceptual framework for children’s food and nutrition security, developed for this study, brought the focus of investigation from population to household level, and it explored the possible paths of small scale action, by the family or the community. The framework (see Figure 12 on page 454) supported the processes of data collection and analysis. It highlighted linkages and helped form a set of ideas for possible strategies. These were presented to the community for consideration. While this by itself, as part of my study agenda, was not a participatory process, I suggest that the framework may be a useful tool for participatory practice in other instances.
9.2 Availability of food and nutrients for young children

The intricate context and activities that surround the availability of food and nutrients for young children, were found to converge on two determinants: the food system and household food security. In the rural agricultural community of the study site, these two determinants were in constant interaction with each other, although not in a hierarchical relationship: household food security was relying on the local food system but was not entirely dependent on it, and elements of the food system were impacted on by the extent of household food security.

From the findings of this study two clusters of characteristics emerged that were significant for the description of the availability of food and nutrients: the inadequacy of food diversity and the absence of stability in availability. These shortcomings were well understood by the study participants.

Opportunities for improving some aspects of these characteristics, and thus the availability of food and nutrients for young children, were interrogated during the feedback discussions. Some of my recommendations were met with interest and enthusiasm, others with hesitation or rejection. For example building chicken enclosures, improving the long-term storage methods of staples, and drying fruit were considered very good ideas, which sparked discussions and in some cases
Figure 12  Children’s food and nutrition security framework
experimentation. Increasing the horticultural production of fruit and vegetables, and improving the economic planning of the household were also seen as necessary and probably viable ideas, while increasing livelihood diversity was beyond the scope of what people thought they could change.

Recommendations for practice

I suggest that a coordinated approach of the Agricultural and Health Extension Programmes supporting small-scale appropriate technology projects has the potential to improve food diversity and better year-round availability. Utilising the methods of participatory action research these projects will develop knowledge, skills and technology for keeping small livestock, for crop storage, and for preserving fruits and vegetables. As well, small technical solutions that assist in suppling water for the households, such as water carts, will make horticultural production more feasible.

Strategies that increase livelihood diversity are fundamental for improving household income and resilience. However, many opportunities require income generation away from the village. This is a difficult proposition for farmers and women with young children. Training opportunities therefore need to consider the local market’s demand for skills.

Information that is made available for parents about the nutritional values of food items, as well as support for improving skills in planning practices for household economy, will extend the knowledge base of decision-making about resources. Opportunities to achieve this exist through utilising the already existing traditional
and development network structures, such as *iddirs*, the microfinance institutions and the Alive and Thrive volunteers.

### 9.3 Young children’s access to food and nutrients

Exploration of the dimension of access produced three categories of determinants: competition for resources, resource allocation and caring behaviour. In the first category I examined the competing interests of the household members for finite household resources, and the competing priorities the household as a unit faced, for example those created by cultural imperatives. In the second category the decision-making processes for the allocation of resources, as well as the power relationships of household members in relation to directing resources and food towards the young children, were interrogated. Finally, within the category of caring behaviour I explored the behaviours around food sharing and supervision of young children’s food intake.

Three main clusters of characteristics emerged from my findings: the milieu of meals, which showed relatively appropriate age-adjusted meal frequency and flexible meal times, as well as a warm and inclusive meal sharing environment of social learning. The second characteristic, the protection and prioritisation of children’s food needs, varied: some aspects were favouring children’s food and nutrition needs while others prioritised longer-term social investments. Finally, the presence of active, attentive and gentle feeding practices in regards to infants and young children was evident.
Family planning, and thus not increasing the competition for household resources, was the only actual change action that was deemed directly viable in the dimension of access. Other potential paths, such as prioritising children’s food over social obligations, or increasing meal frequency, were seen as merely a possibility. Norms and practices of caring for children were in conflict with the desire for extending women’s income generation opportunities.

**Recommendations for practice**

Skills development in economic planning for the household, referred to earlier, should also stress the importance of prioritising children’s needs, in particular their short and long term nutritional needs, in the decisions about allocating household resources.

More support and information needs to be made available for families considering, as well as practicing, family planning, possibly through creating a network of trained volunteers similar to the Peer Mothers.

Child nutrition programmes operating in the area often undervalue the caregivers’ knowledge and practice. A programme that builds on the existing social norms, attitudes and perceptions of prioritising children’s needs and positively acknowledges and supports the attentive feeding practices and the understanding about the importance of the timeliness in giving children food, will further improve children’s access to food and nutrients.
9.4 Young children’s utilisation of food and nutrients

I explored the dimension of utilisation through two determining angles: parents’ health seeking knowledge and practices, and household food technology. For children’s health outcomes, the health care system and other organisational support was fundamental. However, in this framework I focus on household behaviour and opportunities.

In terms of how children utilised the food and nutrients they accessed, two main characteristics emerged: firstly, their health was fragile, and the parents’ health seeking behaviour was in several – but far from all - aspects deficient.

The conflicting – traditional and biomedical - cultural models of health and illness made people uncertain about choices in health seeking practices, such as preventative and care-seeking actions for particular diseases, and personal and food hygiene. Although food technology was also deeply culturally embedded, participants reacted with a degree of openness to the ideas of introducing changes in food preparation practices.
Recommendations for practice

I suggest that education to improve the knowledge and skills of caregivers in preventing infections in young children needs to give thorough explanations for the causes of diseases. As well, important topics for focus are protection from mosquitoes, toilet hygiene and separation of sick and well children.

Through appropriate technology, as referred to above, more water could be made available at the households for personal hygiene. Soap needs to be promoted, and possibly subsidised, as a non-luxury item.

I also suggest that appropriate and accessible information about nutrient availability in food items, and about food synergies in meals, have to become available to all caregivers. As well, utilising the methods of participatory action research, improved food preparation techniques need to be developed that reduce the antinutrient content of food that people have access to, and which are suitable for the food culture. In order to be acceptable, these techniques should be appropriate for the existing kitchen equipment and should not require major shifts in meal patterns and meal sharing customs.

9.5 Recommendations for further research

In the previous sections several participatory action research opportunities are described to develop appropriate technologies for small livestock keeping, water carts, crop storage, food preserving and food preparation. Evaluation of the success
or otherwise of these projects would provide information that is applicable in many other areas of Ethiopia and Sub-Saharan Africa.

Another recommendation for research is the assessment of the impact of food technology changes on the bioavailability of essential nutrients. While there is pioneering research in West Africa showing that acceptable and feasible changes in food preparation technology improve the bioavailability of nutrients in customary food, no similar studies have been conducted in the region in which my field work was carried out.

There is a dearth of literature about the nutrient contribution of breast milk to young children’s diet in poor households, where it is the only non-plant source food they receive daily. Studies that measure the nutritional value of continued breastfeeding into the third and often fourth year of the child’s life could help mothers and child nutrition programmes focus on strategies that are viable and culturally appropriate.

Investigating the effectiveness of local methods of food preserving is also recommended. Preserving methods impact on food safety and availability, as well as may have significance in generating livelihood opportunities.

9.6 Concerns

Throughout the world, urban food cultures are changing faster than those maintained in rural areas, in great part because they are more removed from food production and more exposed to global and commercial influences. Changes in family food at the
study site did not follow the patterns prevalent in many other parts of the world, including the more urban or affluent areas in Sub-Saharan Africa, where the diets are shifting towards higher energy density, reduced carbohydrate complexity, as well as increased fat intake (Bourne, Lambert, & Steyn, 2002; Popkin, 2004). Neither have physical activity levels been diminishing at the time of field work in the villages, where livelihoods were predominantly agricultural, and most work and transport was carried out without mechanisation.

At the study site, transitioning from unprocessed foods and food scarcity to processed foods and relative (although possibly nutritionally unbalanced) abundance was likely to be several years away. Nonetheless, the availability of certain processed food items already in the shops, the improving road network and public transport, and access to electricity within a few years, are factors that could be expected to change lifestyles and food ways, especially if they go hand in hand with economic growth and improved livelihoods over the coming decades.

The emphasis on staples as ‘real’ food, and the aspiration for a diet diverse in grains and that includes more meat and dairy, suggested that condiments, vegetables and fruit were seen as mere flavourings or embellishment. This perception requires attention, for the potential implications of the perceived importance of diversity in staples may impact on food choices and, as a consequence, on the entire family’s nutritional well-being in light of the projected – or hoped-for – livelihood improvements. Regardless of how incongruous it may sound given the current nutritional problems, chronic diseases and overweight are threats that nutrition policy and practice need to consider.
9.7 Closing comments

However deeply ingrained food culture was in the villages in terms of food preparation methods and food choices, the study data showed that caregivers were aware of the shortcomings of the diet and of the need for improvement. As well, they demonstrated a reasonable understanding of the connection between health and nutrition and a willingness to embrace change in some household practices.

I argue that in addition to the large-scale programmes of the Government of Ethiopia and international and local NGOs aimed at agricultural productivity and population health, there are opportunities for small projects, targeting livelihood and cultural practices and tailored to the local context. Supporting local and innovative solutions in the realms of food culture and livelihoods these project have potential to promote changes that would lead to improved nutritional outcomes for infants and young children, and possibly for the entire community.
LIST OF REFERENCES


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APPENDICES

APPENDIX A: MAPS

A1  Political map of Ethiopia and the location of the study site

A2  Topographic map of Ethiopia and the location of the study site

A3  The administrative regions of Ethiopia
A1 Political map of Ethiopia and the location of the study site

(Source: http://www.nationsonline.org/oneworld/map/ethiopia-political-map.htm)
A2 Topographic map of Ethiopia and the location of the study site

(Source: http://www.ezilon.com/maps/images/africa/Ethiopia-physical-map.gif)
A3 The administrative regions of Ethiopia

APPENDIX B: RESEARCH ETHICS APPROVAL

B1  Human Research Ethics Committee, Menzies School of Health Research, Approval

B2  Ethiopian Health and Nutrition Research Institute, Approval

B3  Human Research Ethics Committee, Menzies School of Health Research, Extension
22nd February 2011

Ms Anna Szava
Menzies School of Health Research
1A Ware Street
BURRA SA 5417

Dear Ms Szava,

Re: HR-10-1481 - Why not family food? Local views on the factors affecting child malnutrition in Southwest Ethiopia.

Thank you for your email communication dated 22nd February 2011 which provided evidence of support from World Vision Ethiopia and signed by the National Director Mr Tenagie Lemma. This support letter has been noted and placed on file.

Approval is conditional upon the following issues of concern being addressed:

1. Please forward a copy of your ethics clearance from the Ethiopian Ministry of Health when available.

Once approval has been granted by the Ministry of Health, and we have been provided with evidence of this approval, you will be issued with letter certifying full ethics approval by the Human research Ethics committee of the NT Department of Health and Menzies School of health Research.

Please note that research activity cannot commence in Ethiopia until clearance has been received from the Ethiopian Ministry of Health. Furthermore, this Committee will defer to the final decision made by the Ethiopian Ministry of Health.

Yours sincerely

Dr Michael Nixon
Chair
Human Research Ethics Committee
of NT Dept of Health and Menzies School of Health Research

The Human Research Ethics Committee of NT Department of Health and Menzies School of Health Research (HREC) is constituted and operates in accordance with the NH&MRC National Statement on Ethical Conduct in Human Research (2007).

B1 Human Research Ethics Committee, Menzies School of Health Research, Approval
Subject: Approval of Project Proposal

I would like to congratulate you and your group that your Research Proposal entitled, Why not Family? Local views on the factors affecting child malnutrition in Humbo Woreda, Southwest Ethiopia have been examined and approved for its scientific and ethical merits by our Scientific and Ethical Review Committee.

Sincerely yours,

CC:-
Public Health Emergence Deputy Director /PHEM /
EHNRI

B2 Ethiopian Health and Nutrition Research Institute, Approval-1
COMMENT OF SERC

The above entitled project has been reviewed and was found to be scientifically valid and ethically clear. The research project is expected to generate evidence based information of socio-cultural factors regarding child malnutrition.

DECISION

APPROVED [X]  NOT APPROVED [ ]

SIGNATURE OF THE SERC MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
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<tr>
<td>1. Eshetu Lemma</td>
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<td>2. Aregash Samuel</td>
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July 13, 2011

B2 Ethiopian Health and Nutrition Research Institute, Approval-2
COMMENT AND FINAL DECISION OF THE INSTITUTE’S DIRECTOR


APPROVED [ ] NOT APPROVED [ ]

NAME
SIGNATURE
DATE
20 November 2014

Ms Anna Szava
Menzies School of Health Research
62B King Street,
Mile End SA 5031

Dear Ms Szava,

HREC Reference Number: 2010-1481
Project Title: Why not family food? Local views on the factors affecting child malnutrition in Southwest Ethiopia

The Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (HREC) thanks you for taking the time to complete and return your annual progress report for the above project.

The report has been reviewed and noted. Continued ethical approval is granted for the above research project. This approval will be ratified at the next meeting of the HREC.

Please note that this approval applies only to research conducted after the date of this letter.

As a reminder, the approved project timeline is: 22/07/2011 – 31/07/2015. An annual progress report or final report is required on or before the 31/07/2015.

APPROVAL IS SUBJECT TO the following conditions being met:

1. The Coordinating Principal Investigator will immediately report anything that might warrant review of ethical approval of the project.

2. The Coordinating Principal Investigator will notify the Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (HREC) of any event that requires a modification or amendment to the protocol or other project documents and submit any required amendments in accordance with the instructions provided by the HREC. These instructions can be found on the Menzies’ website, or by clicking here.

3. The Coordinating Principal Investigator will submit any necessary reports related to the safety of research participants (e.g. protocol deviations, protocol violations) in accordance with the HREC’s policy and procedures. These guidelines can be found on the Menzies’ website, or by clicking here.

4. The Coordinating Principal Investigator will report to the HREC annually and notify the HREC when the project is completed at all sites using the specified forms. Forms and instructions may be found on the Menzies’ website, or by clicking here.

B3 Human Research Ethics Committee, Menzies School of Health Research, Extension-1
5. The Coordinating Principal Investigator will notify the HREC if the project is discontinued at a participating site before the expected completion date, and provide the reasons for discontinuance.

6. The Coordinating Principal Investigator will notify the HREC of any plan to extend the duration of the project past the approval period listed above and will submit any associated required documentation. The preferred time and method of requesting an extension of ethical approval is during the annual progress report. However, an extension may be requested at any time.

7. The Coordinating Principal Investigator will notify the HREC of his or her inability to continue as Coordinating Principal Investigator, including the name of and contact information for a replacement.

8. The safe and ethical conduct of this project is entirely the responsibility of the investigators and their institution(s).

9. Researchers should immediately report anything which might affect continuing ethical acceptance of the project, including:
   - Adverse effects of the project on subjects and the steps taken to deal with these;
   - Other unforeseen events;
   - New information that may invalidate the ethical integrity of the study; and
   - Proposed changes in the project.

10. Approval for a further twelve months, within the original proposed timeframe, will be granted upon receipt of an annual progress report if the HREC is satisfied that the conduct of the project has been consistent with the original protocol.

11. Confidentiality of research participants should be maintained at all times as required by law.

12. The Patient Information Sheet and the Consent Form shall be printed on the relevant site letterhead with full contact details.

13. The Patient Information Sheet must provide a brief outline of the research activity including, risks and benefits, withdrawal options, contact details of the researchers and must also state that the Human Research Ethics Administrators can be contacted (telephone and email) for information concerning policies, rights of participants, concerns or complaints regarding the ethical conduct of the study.

14. You must forward a copy of this letter to all investigators and to your institution (if applicable).

This letter constitutes ethical approval only. This project cannot proceed at any site until separate research governance authorization has been obtained from the CEO or Delegate of the institution under whose auspices the research will be conducted at that site.

Should you wish to discuss the above research project further, please contact the Ethics Administrators via email: ethics@menzies.edu.au or telephone: (08) 8946 6987 or (08) 8946 6866.

B3 Human Research Ethics Committee, Menzies School of Health Research, Extension-2
The Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research wishes you every continued success in your research.

Yours sincerely,

Dr William Majoni
Human Research Ethics Committee
of the Northern Territory Department of Health
and Menzies School of Health Research
NHMRC Registration No. EC00153
http://www.menzies.edu.au/page/Research/Ethics_approval/

This HREC is constituted and operates in accordance with the National Health and Medical Research Council’s (NHMRC) National Statement on Ethical Conduct in Human Research (2007). The processes used by this HREC to review multi-centre research proposals have been certified by the National Health and Medical Research Council.
APPENDIX C: CONSENT DOCUMENTS

C1  Consent Form (English)
C2  Consent Form (Amharic)
C3  Consent Form (Wolaitta, Latin alphabet)
C4  Participant information sheet (English)
C5  Participant information sheet (Amharic)
C6  Participant information sheet (Wolaitta, Latin alphabet)
INDIVIDUAL CONSENT FORM

YOU CAN SAY NO!

PROJECT TITLE: FAMILY FOOD FOR YOUNG CHILDREN
LOCAL UNDERSTANDINGS OF THE FACTORS AFFECTING CHILD MALNUTRITION IN SNNPR, HUMBO WOREDA

PRINCIPAL INVESTIGATOR: ANNA SZAVA, CHARLES DARWIN UNIVERSITY AUSTRALIA

I, _______________________________ of _______________________________
hereby consent to participate in a study undertaken by _______________________________
of _______________________________

I understand that the purpose of the research is:

TO RECORD PARENTS’ AND CARERS’ DESCRIPTION OF

- WHAT AND HOW CHILDREN UNDER FIVE YEARS OF AGE EAT,
- WHAT ARE THE FOOD CUSTOMS RELATING TO THIS AGE GROUP, AND
- HOW IMPROVEMENTS COULD BE MADE.

I agree to participate in:
- Observations [ ] yes [ ] no
- Individual interviews [ ] yes [ ] no
- Focus group discussions [ ] yes [ ] no

I agree to my accounts or actions being recorded on:
- Audio tape [ ] yes [ ] no
- Photographs [ ] yes [ ] no

I state that:
- The aims, methods, anticipated benefits, and possible risks of the study have been explained to me

C1 Consent Form (English)-1
by ________________________________

- I voluntarily and freely give my consent to participate in this study.

- I understand that analysed results will be used for research purposes and may be shared with the World Vision and reported in scientific journals.

- In any report or published material no one will be able to recognise what I did or said.

- I can decide what information to give and what information not to give.

- I am free to withdraw at any time during the study for any reason. If I stop participation, I can decide about the information I already gave:
  - it can be returned to me or destroyed at my request, OR [ ]
  - I allow the researcher to use it, OR [ ]
  - I will review it and decide what I want to do after that. [ ]

Participant
signature__________________________ Date________________

_____  ____
Witness
Printed name________________________
Signature__________________________
Date______________________________

Interpreter
Printed name________________________
Signature__________________________
Date______________________________

C1 Consent Form (English)-2
 Consent Form (Amharic)

ΛΆΝΥΡΜӨӨ ыйлмаса!

ፓርዎት እወለት - የኩል ማን ወንድ ይንፈስ ዝምን ያልማት ያሉት ሰባት በማወቅ የኩል ማን ወንድ ከጣራት የእንፈስ ያላቸው እንወስ ያለት

ፓዎ እንድ: - እና እን ወርድ ያርድ ይስታች ከክፈላል ከመገኝ

እን ሲቋል እራ የእንስ ከማስ ከመገኝ

ፓዎ እንድ ገ ትክፈል ወንድ ከ........................... የስታች እንወስ ከመገኝ:

ታ ችል የእን ወንድ የእንስ ዋና ከላይም

 ➢ ከተባለጆች ወንድ ይካ ማን ወንድ ማን ከካድ ከላይም
 ➢ ከሆ ወንድ ከወ ግ የእን ወንድ ይካ ማን ከልያም
 ➢ ከስት በስት ማን የእን ወንድ ይወስ ወንድ ከልያም

ታ ከስት በስት ከላይም እንወስ ከመገኝ:

 ➢ የንሱ ሳጋ በናር ጥት ከላይም እንወስ ከመገኝ
 ➢ የንሱ ሳጋ ያስታች እንወስ ከመገኝ
 ➢ የንሱ በስት ከላይም እንወስ ከመገኝ

እን ወንድ ያሩ ከላይም እንወስ ከመገኝ ከላይም እንወስ ከመገኝ -

 ➢ የግብ ወቅ ወንድ ከላይም እንወስ ከመገኝ
 ➢ የግብ ወቅ ያስታች እንወስ ከመገኝ

- የግብ ወቅ ወንድ ያስታች እንወስ ከመገኝ ከላይም እንወስ ከመገኝ

- መን ወንድ ያስታች እንወስ ከመገኝ ከላይም እንወስ ከመገኝ

- የግብ ወቅ ያስታች እንወስ ከመገኝ ከላይም እንወስ ከመገኝ

- የግብ ወቅ ያስታች እንወስ ከመገኝ ከላይም እንወስ ከመገኝ

- የግብ ወቅ ያስታች እንወስ ከመገኝ ከላይም እንወስ ከመገኝ

C2 Consent Form (Amharic)-1
C2 Consent Form (Amharic)-2
PILGGETTAN MAADETTIYAGEETU MAAYETAA GITSIYA

MAAYETTIKKE GAANAWUKKA DANDDAYETTEES!

PROJEKIFFIYA HUUPHE QOFAY:- So asaa giddon qeerii naatu qummaa giigisuuwawu imettiya loyttexelaa T/T/D/M Wolayta Zooniyan Humbbo allaannan qeerii naatu mucurettida kattaa qaxuwatuwa xee-liya heeraa xee-laa.

WAANNA PILGGIYAY:- Anna Szava, Charles Darwin Yunveresttiya Ausstiraliyya.

Taani..........................Hapilgettaan Shaakkanaawu.........................maayettaas.

HA PILGGETTA HALCHCHOY:- Yeelidaageetinne dichchiyageeti:-
  o Issuwappe bdi Ichchashu laytya gakkanaawu de’iya naati aymiyakkonne waatiimiyakko?
  o Ha layttaara oyyettida mizuuwa eeshsay aymalakkonne?
  o Qassi waatid loyttanaakkonne de’iya xee-laa be’anaassinne akekanaassi gidiyogaa akekasi.

Kallidi imettida doorotun shaakkanaassii maayettyays:-
  o Xelli be’uwan (Soo gakkanaawu biidi be’yogaan).
    □ Maayettaas □ Mayettikke
  o Issuwa issuwa oyochchiyogan
    □ Maayettaas □ Maayettikke
  o Citaan tobbiyogaan
    □ Maayettaas □ Maayettikke

Ta immiyo qofay woykko oosoy kallidi imettida oyetuni oyyettana mala maayettaas:-
  Cenggurussa dufiiyo teeppiyan
    □ Maayettaas □ Taayettikke
  Eeshuwa (Pottuwa) denttiyogan
    □ Maayettaas □ Taayettikke

Pilgetta halchchoy, maarajjii shishshuwaabaay, pilgettappe beettanawu dandayiya maadooynne qofooeyya meetiyo ..........................qoncddogaddan eraassi.
  o Ha Pilgettan ta maayeteaninne ooninne woliqantennani ta koshhan shaakkanaawu/maaddetanawu/maayetassii:-

C3  Consent Form (Wolaitta, Latin alphabet)-1
Consent Form (Wolaitta, Latin alphabet)

- Pilgetta oossayi kuyettiyode shiqqidda ubba maaraajay saynissawe giddiya oosotussi pe'navu danddayiyoggatuwaninne world vizhiniyawu immettanawu danddayiyogatuwaan akkekkassi.

- Aayi oogiyaanikka ta immiido maaraajya aayife kuuyettidi xaatettidi shiqqiiyoode ta yootidogadani woyyko ta immidoogadani oonine erenna.

- Aayi maala maaraajya immanawu koshshiyabakkonne ayi maala immenani agaan a koshshiyakko ta maccanawu danddayayissi.

- Pilgettay oosettiyo wodiyan ay saatiyaninne gidikko ay wodiyanikka pilgetta shakkiyogaa qanxxan danddayiyogattuwan maatay tawu dees.

- Pilgettay oosettiyyode ayi woodiyanikk aayiba gassuuwanikka pilgetta shakkiyyogapppe (maadettiyyogapppe) agaanawu tawu maattayi dees.

- Maadetiyyogapppe agayichchikko ta immiido maaraajya kalliya oggeetun maaccanawu danddayayissiii:
  - Ta immido maaraajay ta oyshaddani guuye simmanawu danddayeesii woyyko teeqqetanawu danddayeesii.
  - Pilgiyyagge goo'tanawu immanawu danddayees.
  - Zaara qotaada zarawanu danddayayissi.

MADETIYAGGA PARAMAAA........................... GALASSA..............................

MAARKKA BIRSHSHIYAGA
Sunta........................... Sunta............................
Parama........................... Parama............................
Galassa........................... Galassa............................

C3 Consent Form (Wolaitta, Latin alphabet)-2
PARTICIPANT INFORMATION SHEET

PROJECT TITLE: FAMILY FOOD FOR YOUNG CHILDREN
LOCAL UNDERSTANDINGS OF THE FACTORS AFFECTING CHILD MALNUTRITION IN SNNPR, HUMBO WOREDA

MAIN RESEARCHER: ANNA SZAVA, CHARLES DARWIN UNIVERSITY AUSTRALIA

The project is part of my work for a PhD degree. It is supported by World Vision Ethiopia and World Vision Australia. Funding is provided by my University and World Vision Australia.

ASSOCIATE RESEARCHERS: (local Research Assistants)

PURPOSE OF THE STUDY: TO RECORD PARENTS’ AND CARERS’ DESCRIPTION OF

- WHAT AND HOW CHILDREN UNDER FIVE YEARS OF AGE EAT,
- WHAT ARE THE FOOD CUSTOMS RELATING TO THIS AGE GROUP, AND
- HOW IMPROVEMENTS COULD BE MADE.

Many children in this region, and all over Africa, grow slower and remain smaller than children in other places. Often they are sick, and when they grow up they may not be strong and healthy adults.

Food aid is available from time to time, but only for some children, sometimes difficult to get it, and they are unreliable.

This study is conducted so we better understand how household food is used to benefit the children’s health, especially the ones under five years of age.

You can help us by participating in this study. It is the parents and people who look after these young children, who know most about what they eat. We would like to hear you explain us the customs and rules guiding children’s food. We would like to know what you think are the best ways of feeding children, and why there are differences between the best ways and what actually happens.

BENEFITS OF THE STUDY:

This study will be useful in making it easier for parents to feed their young children food that helps them become strong and healthy adults. Your village, as well as other villages in the area and beyond, can benefit from this study because of the knowledge that will be recorded.

World Vision Ethiopia and World Vision Australia, who are working in the villages, would like to know how they can improve their programmes, and this study will be able to give them information for that.

Some of the parents may want to learn more about good food for children, and this study will be able to help with those education programmes.
It is NOT part of the study to give food to the households or to the children.

WHAT DO WE ASK YOU TO DO?
If you decide to take part in this study you will have choices how to participate:
Observations involve that the researchers go to your house and watch you preparing food, and during meal times. You will be asked not to do anything differently from how you usually do it. They take notes and if you agree they take photographs. This will happen about six to eight times, over a period of six months. An interpreter will help the researcher.
Individual interviews are conversations, when the researcher asks you to talk about the topics described earlier. It is possible that you will be asked to participate in more than one interview. The researcher will take notes and, if you agree, will record the interview on tape. The interviews may take about 1.5 hours and you can decide where it will take place. An interpreter will help the researcher.
Group discussions will be run with the participation of five to eight people, and the researcher will ask that the members of the group discuss some of the topics outlined earlier, and will ask some questions to help the discussion. The researcher will take notes and, if you agree, will record the discussion on tape. The group may be asked to participate in more than one discussions. The group discussions may take up to 2.0 hours and the group can decide where it will take place. An interpreter and assistants will help the researcher.

DISCOMFORTS AND RISKS:
There are no specific risks linked to this study. You may become uncomfortable when discussing some topics, or when the researcher is doing observation at your home. You can stop the researcher any time if you decide that you do not want to participate.

CONFIDENTIALITY:
All participants will be given a code identity in the notes, so your name will not appear in the reports. Your actions, accounts and views recorded in observation notes, on tape or with cameras will not be identifiable to others than those who were present.
Confidentiality agreements will be made with all local members of the research team – researcher, research assistants and interpreters – and within the participants groups, not to reveal information and views given within during the group discussions.
Notes, tapes and all other records will be stored in a locked cupboard either in the field office. Computer files will be accessible with password only.

WHO ARE THE PARTICIPANTS?
We are working in two villages in the Humbo District. We are looking for households with two children under five years of age, one of whom is between 6 and 18 months.
We would like to include households that have land or garden and some that don’t, ones where the head of the family is a woman and ones where it is a man, some wealthier families and some poorer ones, and families that belong to different religions.
We are looking for about 10 households for observation in this village, and about 50 people altogether for interviews and group discussions.
PARTICIPATION:
You are free to decide to participate. There will be no harm to you or your family if you decide not to participate.
You are free to withdraw from the study at any time, in which event your participation in the research study will stop immediately. You can decide what the researcher will do with and all information you already contributed:
- it can be returned to you or destroyed at your request, OR
- you can allow the researcher to use it, OR
- you can review it and decide what you want to do after that.

RESULTS OF THE STUDY
Reports will be produced from the results of the study, one for World Vision Ethiopia and Australia supporting the research, one for your village in your language, and one for the researcher’s university degree. Before finalising the reports the results will be discussed with you and the other participants, with the help of interpreters, to make sure that all the information is there, and that all is accurate.
You will be able to get a copy of the village report, in your language, for your household.

PERSONS TO CONTACT:

WITH QUESTIONS:
If you have any questions about the study please contact the researcher. An interpreter will help you raise your concerns and questions if required.
Anna Szava
World Vision Ethiopia, Humbo ADP
Ph: 0922 750 600
anna.szava@gmail.com

WITH COMPLAINTS:
If you have concerns or complaints about the research please contact

Ethiopian Health and Nutrition Research Institute
Ministry of Health
Dr Cherinet Abuye
PO Box 1242
Addis Ababa
Ethiopia
Ph: 0112756310
cherinetabuye@yahoo.com

THIS INFORMATION SHEET IS YOURS TO KEEP
C5 Participant information sheet (Amharic)-1
Participant information sheet (Amharic)-2
C5 Participant information sheet (Amharic)-3
PILGGETTAN MAADETTIYAAGEETU MARAJJA QITSIYA

Piroojekittiya huuphe qofaay: so asaa giddon qeeri naatuussi quma gigissuwwawu imettiya loytti xecella T/T/D/M wolaitta zoniyaan humbo allanani naatu muccuetida kattaa qaxuwwatuwwa xeceliya heera xecela.


Pilggetta maddetiyaay: ..............................................................

Ha pilggetta halchchoy: yelidaagetinne dichchiyageeti :-
- Issuwwappe bidi ichchashu laytta gagkanawu de’iyya naati ay miyoonaa waati miyoonaa?
- Ay maala qumma qommoy ettassi haani?
- Waatidi gigissiddi de’akko etawu de’iyya xecela be’a naasa.

Daro naati ha dalgga manttiyaninne ubba Afrikaa biyttan de’iyya naati dichchan haraasageetuppe guys ee attaosoona. Qassi banntta yeeelagatetta layttankka tishsha gidokkonanne harggossona.

Katta maadoy wodiyaappe wodiyan guj guj biikkonne muliya gakkiyagaay keena giddenna.

Ha pilggetta qosettiyo dichchiyageetinne yelidaagetii payatettassi injjetiyanne keehiyya kattaa gigissuwwanne muussaa gid ieti eriyanne qoppiyro etawu de’iya eray aymalakkonne eranaasa.

Ha pilggetta bettii shaaikkiiyogan inttii nuna maaddiite. Yelidaagetinne dere asay ha yelagata hagaappe kase ayba miziyakko loyttid ereeta. Hegaa gishhawuu qeeri naatu muussaa meeziyananne quma gigissuwa maraa nussi birshshidii yootana malla koyettees.

Qeerinaatu muussaa lo’o gee giide inttqoppiyro aybakkonne ha’T de’iya muussay ha ogiyappe aybin dummatiyakko yootana malla koyayssii.

Pilggetta Maadwee

Inte heeren de’iya yelidaa keettiti hegaadankka inte matan beettiya hara heerati ha pilggetta maadettoasona. Gaasaykka haxinaatiya era xeeiliyagee xaaftetti woyko mazagabetti uttees. Hapiilggetta yelidageeti banta naata metootennan,

C6  Participant information sheet (Wolaiatta, Latin alphabet)-1
payatettaniinne minoteettan dochchanawu maaddiy qumaa gigissuwanne muussaa eranawu maadees.

Ha pilgetay ethopiya world vizhiniyanne australiya world vizhine heeran banetta oosuwa oottanawu halchhuwa kessiyode naqaasha gididi maddees.

Issi issi yelidaageeti/dichchiyaageeti/banetta naatussi lo’o qumay aybakko eranawu koyiyagetussi maadees.

- Ha pilgettay ooseetiyode naatussi qumaa immanaassa woykko shishshanasssa gidenna.
- Ha pilgetta shaakoyooogan (maaddeetiyogan) qanxeetiyaa mish de’naa.

**Intteepe ayibii naagetti?**

Ha pilgettaa shaakkanawu koyikko dumma dumma dooro ogeti de’oosona:

1. **Neeliyogaan:**

2. **Issuwa Issuwa oyshatta:**

3. **Citaan tabbiyogaa:**

**Injjetenna hanotattanne qohuwa**

Ha pilgettaara ogiitidi aybina qooy gatiyooy bawaa. Ha pilggeeta ente shaakkiyo saatiyan enteeyo injjetanna xayikko pilgetta intte koyiddo woddidiyan essana danddayeeta.
**Ammanaatuwa**

Ha pilgetta shiishshiyo saatiyaa ooninne ha pilgetta shaakkiya asassi sunttay immetteessippe attin intte sunttay xaafttena.

Intte qalaqaa teeppiyan duuqqikkonne intte eeshuwa ekkikonne he wodiyaa inttenaara de'yyaa asappe harri ooninne be'enna woykko siyenna.

Ha ammanaato maayetay oosettiyooy heeran de'ya pilgettaa shaakkiyaa ubbatuura pilgiiyagarraa gidees. Pilgiietta shaakkiyageeti tobbiyo qofaa marajjaa oosinne odenna maala.

Xuuufiyan gidin teepiyan haaratunka ohettiya marajjati minttidi naagettoosona. Komppiterian uttiyaageetikka pilgiiyagaappe attin haray dooyennadan quippettoosona.

**Ha pilgetta shaakkiyageeti Onnee?**

Ha pilgiiyay oosettiyooy humbbbo allanani na'u qabalettuuna. Hegattunka inchchashu layttappe garssaa na'u naatti de'yo keettaanne de'ya naatuppekka issoy usoppun aginappe biidi tammanne hosppun aginaa gakkawu de'yyaaa giddana koshshes. Issi issi qabaliyape taamu kettii dooretossona (koyeteessi) qoddani ishshsatama giiidiyaa asaata oyichanauw halchchida.

**Maadeeta**

Maaddetiya yaraa giddanawu intte sheniyanii maccawanu dandayeetta. Ha pilgiietta shakkin shakkkana xayininika inttenaa giddinkka intte so asaa gakkiyaa qohetti de'nya.

Intte koyiddo saatiyaa maadeeta agganawu dandayeetta. Pilgiietta woodiyan pilgiiyagee intteppe ekkiido maarraja teeqannawu koyikko:

- Ta oysaa marajjay zareetees woykko teeqetanaawu danddayayiissi.
- Pilgiiyagee bawu go'tana maala sheniyya mimmannawu danddayayiissi.
- Zaari qoppiddi zaaranawu danddayayiissi.

**Pilgiietta Afiiya**

Ha pilgiiettaa marajjaappe shiicqya riipporttiyappe issoy Toophiyya world vishiniyassii, issoy Austiraliyyawr world vishiniyassis, issoy inttee qabaliya aysiyi gadaawassi, issoy piligigaan unberesltiyyasinnne payayetetaa xeeliya teqwametussi gakkkees.

Pilgiietty wuriid kuuyettanaappe kasetidi imettida (sheeqida) marajiyy ubbay like gidiyogaada intteenaraanne hara maadetttidgeetura tobbi osettee. Wurssettaan duuqettidaage woloytattuwan woykko amarattuwaan birshshettin demmana dandayeeta.
Intte oyshatuuss:
Ha pilgetta xeelliyagan intteeyoo aybaa oyshay de’kkonne pilggiyagaa kaallidi de’ya qalatun demmana danddayeeta:-
Anna Szava
E-mail: - anna.szava@gmail.com
World vizhine tooophyiya
Mobayillee :- 0922750600
Qassinkka gujuwan intte shshiyoy oyshatussi birshshiyagee intteena maaaddana danddayees.

Intte maayettibeennabay de’kko:-
Pilgettaa xeeliyagan aybbinne inttiyo mittetinnabay de’kkko:
Toophiya payyatettaanne qattoo pilgetta teqwuamiya
Payyatettaa ministeriya
D/r Cherinet Abuye
P.s qooday 1242
Addis Ababa
Toophiya
Silkkee 0112756310
E-mail:- cherinetabuye@yahoo.com

woyikko
World vizhine Toophiya
D/r Sisay Sinamo
Silkkee-0911510988
E-mail:- sisay_sinamo@wvi.org

HA MAARAJJA WORAAQTAY INTTEEAGAA!
APPENDIX D: EXAMPLES OF PROTOCOLS

D1   Group Discussion: Children’s health; feeding practices

D2   Group Discussion: Health and nutrition; income generating opportunities

D3   Group Discussion: Food types and their roles in nutrition
PREPARATION FOR GROUP DISCUSSION 1

16 Oct 2011

1. **Anna:** introduce ourselves

2. **Endale and Abebech:** project information and consent

3. **Anna:** the names of participants and the age of their children

4. **Anna:** roles - who is doing what in our team
   a. Abebech will be sitting with you and ask you to think about a topic or questions, and then she will ask you to **discuss** it with each other
   b. Endale will sit in the back and will take notes and one of two photographs
   c. Tsehay will sit behind Abebech and quietly explain to Anna what the discussion is about, and translate from Wolayta to English
   d. Anna will sit next to Tsehay and listens, takes notes and may ask some questions

5. **Anna:** rules - how to do the discussion
   a. this discussion is not talking with us but with each other
   b. we would like you to talk about your **experience** and **ideas**
   c. it is good to say when you **agree** or **disagree** with each other
   d. it is important that everyone participates and has a chance to speak
   e. if you don’t understand a question please tell us so we can explain it better

6. **Abebech:**

   first we would like to have a discussion about the illnesses of small children, under five years of age
   a. what are the illnesses children have in this area?
   b. you mentioned these illnesses: (list what illnesses the women talked about)
   c. are there any other illnesses that you forgot to mention?
d. how do you know when a child is sick?

e. are there any other signs of illness that you did not mention yet?

f. what do you think is the cause of some of these illnesses?

g. is there a difference between how you feed a sick child and how you feed a healthy child?

h. first let the women talk about it, and then ask:

i. is there a special food or drink for sick children?

j. is there a food or drink sick children must not get?

k. do you give more or less food to a sick child?

l. is there any additional important thing you would like to mention about children’s sickness?

m. Anna: thank you

7. Abebech:

now we would like to hear your ideas about good food for small children

this is not about what you do but what you think is the best practice!

a. what are the best foods for children, to make them healthy, strong and growing?

b. do you think children’s food needs to be better?

c. would it be difficult for you to make it better and why?

d. is there any additional important thing you would like to mention about the food for small children?

e. Anna: thank you

8. Anna:

thank you. Did you enjoy the conversation?

would you be interested in having another meeting like this to talk about the food families eat in this area?

we need to set a time for the new GD and for individual interviews; and have to make sure that we know where these women live

GROUP DISCUSSION 1 PREPARATION OCT 15 2

D1 Group Discussion: Children’s health; feeding practices-2
PREPARATION FOR GROUP DISCUSSION 4

18 Jan 2012

1. **Anna:** introduce ourselves
2. **Endale and Almaz:** project information and consent
3. **Anna:** the names of participants and the age of their children
4. **Anna:** roles - who is doing what in our team
   a. Almaz will be sitting with you and ask you to think about a topic or questions, and then she will ask you to **discuss** it with each other
   b. Endale will sit in the back and will take notes and one of two photographs
   c. Tsehaye will sit behind Almaz and quietly explain to Anna what the discussion is about, and translate from Wolayta to English
   d. Anna will sit next to Tsehaye and listens, takes notes and may ask some questions
5. **Anna:** rules - how to do the discussion
   a. this discussion is not talking with us but with each other
   b. we would like you to talk about your **experience** and **ideas**
   c. it is good to say when you **agree** or **disagree** with each other
   d. it is important that everyone participates and has a chance to speak
   e. if you don’t understand a question please tell us so we can explain it better
   f. the questions and the discussion is about food for children under the age of 5

20 mins
6. **Almaz:**
   a. Please talk about how you see the nutritional status of children - the condition they are in as a result of what they eat - in this village, generally:
      - Do they grow as fast as healthy children grow?
      - Do they start walking and talking in good time?
      - Do they resist illness?
      - Do they play and laugh?
      - Do they have appetite?
   b. What do you think the causes are for those who fall behind, who don’t grow and develop well?
      - In your opinion what are the causes of poor nutritional condition?
   c. What do you think, how will change for improvement happen?

   **Anna:** thank you

7. **Almaz:**
   People whom we interviewed told us that the children need better food
   - Mainly they said that the children need more diverse food
   - People told us that the main reason for not being able to improve children’s food is a lack of economic ability
   - We will talk about what happens during those times when the families are in better economic situation and they don’t face a “lack of ability”
   a. What are the times of the year when there is more money around?
   b. When you have a larger amount of money in your household what is it spent on?
   c. Is it imaginable (can you consider) that the family will put some of that money aside so that they can provide better food for their children for a longer time? using up the money slowly-slowly?
   d. Is it imaginable (can you consider) that the family will put some of the money aside to make sure that there is money for the harder months of the year?

   **Anna:** thank you
8. **Almaz:**

we made a list of the possible income generation activities in this area and put each activity on a card

if you can think of an activity we forgot please let us know

   a. this is for the whole group: from the cards please choose the ones that are possible in this village

   b. now each of you: from these activities please choose one that you think would be the best or the easiest way for you to generate income

   c. now each of you: please tell us why did you choose that card?

        now please put the cards back and

   d. each of you: please choose the card of the activity that you think would be the most difficult way for you to generate income

   e. please explain, why did you choose that card?

**Anna:** thank you

9. **Anna:**

thank you. Did you enjoy the conversation?

would you be interested in having another meeting like this to talk about the food families eat in this area?
PREPARATION FOR GROUP DISCUSSION 5
18 Jan 2012

1. **Anna:** introduce ourselves

2. **Endale and Almaz:** project information and consent

3. **Anna:** the names of participants and the age of their children

4. **Anna:** roles - who is doing what in our team
   a. Almaz will be sitting with you and ask you to think about a topic or questions, and then she will ask you to **discuss** it with each other
   b. Endale will sit in the back and will take notes and one of two photographs
   c. Tsehaye will sit behind Almaz and quietly explain to Anna what the discussion is about, and translate from Wolayta to English
   d. Anna will sit next to Tsehaye and listens, takes notes and may ask some questions

5. **Anna:** rules - how to do the discussion
   a. this discussion is not talking with us but with each other
   b. we would like you to talk about your **experience** and **ideas**
   c. it is good to say when you **agree** or **disagree** with each other
   d. it is important that everyone participates and has a chance to speak
   e. if you don’t understand a question please tell us so we can explain it better
   f. the questions and the discussion is about food for **children under the age of 5**

20 mins

D3 Group Discussion: Food types and their roles in nutrition-1
6. **Almaz:**

I spoke with many women in this village about food for children. During the interviews they talked about how children need different kinds of foods for growing well and resisting illness. They also need foods that give them energy.

   a. what do those children look like who don’t have all these foods? what happens with them?
   
   b. what do parents do when they recognise these signs?
   
   c. in your opinion do the children need to eat special food even when they are old enough to eat the same food that the adults eat?
   
   d. if yes, why?

   **Anna:** thank you

7. **Almaz:**

You have a lot of knowledge about good food for children. Please talk about whom did you learn from about how to look after your children and how to prepare good food for your family.

   **Anna:** thank you

8. **Almaz:**

now we would like to hear your ideas about the food which are important for children to develop in a healthy way

based on the interviews we did with many women in the woreda we prepared a list and put the name of each food on a card

   a. please put these cards in groups according to those three things we talked about earlier:

      1. helps children grow
      2. protects them from illness
      3. gives them energy

   b. now please take each group and put the cards in the order of importance, from the most important to the least important
9. Almaz:

from talking with you we know that it is difficult for most households to provide the children some of the foods which you consider most important

a. from the most important foods which are the ones that you are not able to give your children regularly? please select those from the cards

b. which ones are possible to produce in this area?

what stops you from producing it yourself?

c. some of this food does not grow here, so you will have to by it, so you need money

what are the income generation opportunities for families here?

can you think of any new way to generate income?

what stops you from doing it?

10. Anna:

thank you. Did you enjoy the conversation?

would you be interested in having another meeting like this to talk about the food families eat in this area?
APPENDIX E: EXAMPLES OF INTERVIEW CHECKLISTS AND GUIDES

E1 General interview checklist

E2 Farm Extension Agent interview questions

E3 Father interview questions

E4 Grandfather interview questions

E5 Grandmother interview questions

E6 Health Extension Worker interview questions

E7 Mother interview questions

E8 Peer Mother interview questions

E9 Small Entrepreneur interview questions

E10 Traditional Healer/Birth Attendant interview questions

E11 Village Leader interview questions
Individual interview checklist and guides

(Draft)

Household informants
Interviews: these topics will be raised during 4 – 5 individual interviews with the main informant of ea. household.

Record:
- Household ID/interviewee code ID
- Consent given
- Date and time
- Other people present if applicable
- Research Team members
- Location (if not home)

Topics (not actual questions)

Family food
The interview guide for this topic will be based on observational data. Interviews on this topic will serve to clarify, explain and interpret what is seen and recorded in the households during observation. People’s description of their own food will help understand the choices, decisions and attitudes regarding family food. The questions will be finalised with the Field Research Team, and will explore:
- What is in the pots and bowls in the households on a daily basis?
- How diverse is the food and what are the limitations?
- How is it prepared?
- How is family food distributed and eaten, and what social and cultural meanings do meals have?
- Who remains hungry and why?

How do children access family food?
As above, part of the interview guide for this topic will be based on observational data, to clarify, explain and interpret what is seen and recorded in the households during observation. However, some questions will explore the social norms and knowledge base which guide the feeding of young children. The questions will be finalised with the Field Research Team, and will explore:

- Are there special foods made for young children, and what are they?
- How are young children fed, when and how many times a day?
- How is their food intake monitored and controlled? (including what children access outside the household)

**What are the ideals and norms of feeding young children?**

Part of the interview guide for this topic will be based on observational data, to clarify, explain and interpret what is seen and recorded in the households during observation. Some questions will explore the social norms and knowledge base which guide the feeding of young children. The questions will be finalised with the Field Research Team, and will explore:

- What is the explanation, what are the reasons, for the observed child feeding practices (food choices, preparation methods, feeding times and frequencies, meal arrangements)
- What is the ideal practice for feeding young children? (break down for different age brackets)
- How far is the actual practice from the ideal and how is the deviance explained?
- Where do the rules and knowledge about how young children have to be fed come from? (from whom do women learn, who has authority, influence and information)
- To what degree are customs and rules that guide what children eat, followed?
- Are there any rules and beliefs that the interviewee is not sure about, and why?

**How are household resources directed to children?**

The questions will be finalised with the Field Research Team, and will explore:

- What are the main livelihood activities and their approximate contribution to the family budget?
- How are decisions made for producing and obtaining food for the family? (crops, gardens, livestock, purchases)
- Does more food for the household mean more for the children?
- Does more food mean better food?
- What are the most often occurring risks for food security?
- How are decisions made about competing needs?

**How do caregivers utilise ongoing development programmes to improve their children's nutritional security?**

The questions will be finalised with the Field Research Team, and will explore:

- Do livelihood programmes improve access to food resources and in what way?
How do caregivers see possible paths of improvement?
The questions will be finalised with the Field Research Team, and will explore:

- What is caregivers’ assessment regarding the nutritional and health status of their children?
- How do they see the connection between food and health?
- What do they think are the main barriers in improving child nutrition?
- What do they think their role could be in improving child nutrition?

Other key informants
One individual interview with each key informant

Record:

- Household ID if applicable/interviewee code ID
- Consent given
- Date and time
- Other people present if applicable
- Research Team members
- Location

Topics (not actual questions)

Village elders
Narrative interviews about changes in

- family food,
- natural environment,
- agricultural and other livelihood opportunities,
- vulnerabilities and risk management practices,
- social organisation and authority at family and community level,
- customs and knowledge regarding the health of young children,
- knowledge transfer.

Fathers and Grandmothers
Their views on

Interview Checklist

Anna Szava

E1 General interview checklist-3
• where the local knowledge regarding child nutrition comes from,
• decision making roles in the families,
• their roles and agency in improving the children’s nutritional status.

Village leaders
Their views on
• where the local knowledge regarding child nutrition comes from,
• decision making roles in the families,
• agricultural and other livelihood opportunities,
• vulnerabilities and risk management practices.

Health professionals (traditional and western medicine-trained) and educators (school, religious and vocational)
Their views on
• where the local knowledge regarding child nutrition comes from,
• customs and knowledge regarding the health of young children,
• their own roles and agency in improving the children’s nutritional status.

Market-stall and store merchants
Their views on
• seasonal changes in food availability and food prices,
• frequently bought food and other items that are not produced locally,
• food and other items produced locally for cash income.

Government officials and NGO project staff
Their views on
• where the local knowledge regarding child nutrition comes from,
• agricultural and other livelihood opportunities,
• vulnerabilities and risk management practices,
• how and whether livelihood programmes improve access to food resources.
INTERVIEW QUESTIONS

AGRICULTURAL EXTENSION WORKER

1. what is your opinion about the food security situation of this area?
   a. is it possible at all to make it food secure?

2. what are the main barriers for increasing food production?
   a. food crops
   b. livestock as food source

3. what is the main duty of the agricultural extension worker?
   a. do you provide training?
   b. do you provide inputs? are they free?
   c. is there a nursery under your supervision?

4. what organisation supervises your work?
   a. where do you get your training?
   b. where does the funding for your position come from?
   c. where does the funding for your activities come from?

5. in your opinion, regarding agricultural skills, what are the strengths of the people here?

6. in your opinion, regarding agricultural skills, what are the weaknesses of the people here?
INDIVIDUAL INTERVIEW QUESTIONS (ver2)

FATHER

Household code ID

Date

Interviewee

Field visit

F. Farming

1. please describe the yearly cycle of the work you do on the field

2. do you think your field is big enough for your family?
   a. if you had more field would you be able to do all the work it needs?
   b. do you do share farming on other’s field?
   c. do you do contract farming?
   d. the field you do share or contract farming on – does that family have too much field? why do they share it with you?

3. do you have any share arrangements with livestock?

4. why do most farmers grow maize in this area?
   a. did you ever grow another grain?
   b. can you tell me about it? what? how successful?
   c. did you ever chose to grow cash crop instead of maize?
G. Garden

1. do you grow any food around your house?
   a. vegetables
   b. spices/herbs
   c. fruit or other trees?
2. do you think the garden contributes much to your family’s food?
   a. more food?
   b. more diversity?
   c. cash?
3. who does the work?
4. do you use water? how?
5. do you know any household who have such a garden?
6. what do you think you would need in order to grow food in a garden?

H. Carbon project

1. is your family a member of the carbon project cooperative?
2. have you seen any benefit for your family already?
   a. what?
3. at the start what did you expect how would it help your family in the future?
   a. are you satisfied with what happened so far?
   b. do you have any comments?
4. if you are not a member, what do you think about the benefits other people may get?
B. Child food

1. do you think children in this area are eating well?
   a. please explain why you say this
   b. do the children in this area need more food?
      1. please explain what makes you think they don’t have enough?
   c. do you think they may need different food?
      1. please explain what do you think they need different food

2. can hunger cause illness?
   a. what kind of illness?
      a. can hunger cause weakness?
         1. what part of the body?
   b. can hunger reduce children’s ability to learn in school?
   c. can hunger cause bad behaviour?
C. Norms

1. Please tell me about what the most important responsibilities are for a mother?
   a. And for a father?
2. From whom can you get information from about good food for children?
3. Are you ever worried about how your child is growing, or that maybe he is not strong and healthy enough?
   a. What makes you worry?
   b. Do you talk with anyone about it?
   c. With whom?
   d. Please give us an example when this happened
      1. What was the problem?
      2. What advice did you get, and from whom?
      3. What did you do?
4. What do you hope, what might change to the better in the near future?
5. What are you worried about that might change to the worse?
6. What do you think you can do to improve your family’s economic situation?
   a. To make sure that your family has enough food?
   b. To improve the kind of foods your family eats?
7. How do you see the future of your children?
8. FQ7 are social obligations ever devastating?
   a. What is happening in this area regarding weddings and funerals: debt or sale of productive assets?
   b. How much of the HH income is going to these associations?
   c. Are there similar collections for difficulties during illness, death of livestock, or other bad fortune?
d. are there saving groups for the hungry months of every year, or the recurring drought years?

D. Economic environment

1. is your family getting any NGO support?
   a. sponsored child?
   b. farm extension and farm resources
   c. anything else?
   d. do you think the support helps you solving your problems?

2. is anyone in your household a member of a group or association?
   a. who and what association?
      1. saving club
      2. farmer association
      3. church group
      4. working group
      5. other
   b. did your family ever receive help from these groups or associations?
      1. when and what help?
   3. if your family was in a very difficult situation and there was no food in the house where would you go for help?
### Father Interview Questions

1. Can you rely on some other family members to help you when your household has food shortage?
   - 1. Your wife’s family?
   - 2. Your father and mother?
   - 3. Your brother?
   - 4. The wife of your brother?

2. When there is a shortage of food in your household can you ask for help from your neighbours?

3. When there is economic difficulty in your household what do you do to solve it?

4. Do you have regular income?
   - a. If you had regular income, let’s say weekly, what would be the best thing to spend it on?
   - b. We heard that people get income by selling what they produce or retailing. Is there any other income generating activity in this village?

5. Are there any families in the village who, according to your opinion, are in better economic situation than your family?
   - a. What do you think is the reason?
   - b. Can you follow what they did?

6. In this area what are the reasons for food shortage?

7. Where does your market money come from?
   - a. Is there a weekly or monthly budget, a plan to spend on food?
   - b. Who decides what food and how much to buy?
   - c. Who decides what other small things to buy? e.g. soap, lamp oil, firewood, pots and plates
   - d. How do you make decision about bigger things? e.g. clothes, furniture, animals, new roof
WHY NOT FAMILY FOOD?  
FIELD, ETHIOPIA

e. if your child is sick who decides to take him to the health centre or not?

9. do you ever buy food for yourself from a restaurant, teahouse or the market when you are in the town (Humbo, or Soddo, or Kolchoho)?
   a. does your wife ever buy food for herself from a restaurant, teahouse or the market when she is in the town (Humbo, or Soddo, or Kolchoho)?

10. what are the job opportunities in this village
   a. with microfinance is there other way than retailing that people undertake to earn some money?
   b. could you think of something else that could be a good idea?

M. Market

1. did you go to the market in the last 7 days?
2. which market and when?
3. was there anything you wanted to buy but could not find it?
4. was there anything you planned to buy but it was too expensive?
5. what did you buy?
   coffee  bula or koch’o
   coffee leaves  tomato
   cheese  beans
   cabbage  peas
   fruit  spices
   carrot  taro or cassava
   beet root  sugar
   milk  salt
   butter  oil

6. is there a weekly budget for market shopping?

INTERVIEW QUESTIONS ver2  FATHER  NOV 29  7

E3 Father interview questions ver 2-7
a. coffee – how much do you spend on coffee weekly?

b. on maize weekly?

c. on vegetables?

d. on milk or milk products?

e. is there sometimes any cash that does not go directly into buying food?
   1. how often does this happen?
   2. what is it spent on?

f. when you don’t have enough money to buy everything you planned what
   how do you prioritise your shopping? what do you leave out and what is that
   you must get?

A. Family food

1. in the last 7 days how many times did you eat
   a. meat
   b. eggs
   c. milk product
   d. cabbage
   e. moringa
   f. carrot
   g. beans, peas or shiro
   h. other grain than maize

2. for Mesqel which of the customary cultural foods was your family not able to
   prepare?
   a. why?

3. these questions will be about the food your own household produces
   a. plant source: what do you produce in your field?
1. how long will this year’s harvest be enough for your family?
2. how long is it usually enough for?
3. do you have any other crop? what is it? how long that will be enough for your family?
4. do you put in a second crop?
5. is your land big enough to feed your family?
6. do you have moringa tree? where? how many?

b. animal source: do you produce any milk or eggs?
1. if yes, how much milk/day? how many eggs/week?
2. if yes, how many days a week does your family eat this (milk or eggs)?
3. if not, would it be possible for your family to produce eggs for your own use? how?
4. would it be possible for your family to produce enough milk for your own use? how?

c. do you sell any of what you produce?
1. what do you usually sell?

d. can you give me an example?
1. what and how much you sold?
2. how much money did you get?
3. what did you buy for the money?

4. did you receive any food aid or child food supplement during the last year?
   a. what and why?
   b. did you sell any of this?
   c. how long did it support your family?

5. in your household does everyone get full when they finish the meals?
   a. when there are two wives where does the husband eat, with which wife?

6. please tell me about a time when there was not enough food for your family?
a. when did this happen last time? and before that?

b. when there is not enough food how do you share it? which family members will eat less than in normal times?
   
   1. those who get less food than usual: do they remain hungry after the meal?

c. when there is food shortage in the household is the number of meals reduced?

d. FS1: in the last 30 days was there a day when your family did not have food in the house at all?

e. FS2: in the last 30 days was there a day when you could not prepare any of the food you usually make? and had to eat something worse?

f. what are the most difficult months of the year in terms of food shortage? how many months?

7. what did you eat when you were a child?

   a. what foods did you eat every day?

   b. what foods did you eat once a week?

   c. is there a big difference between how your family eats now and how your childhood family ate?

8. when you were a child, was your family, your parents, in a better situation then you are now, in terms of food?

   a. what do you think is the reason for the difference?

   b. did your family have enough food?

   c. when you were a child were you often hungry after a meal?
INDIVIDUAL INTERVIEW QUESTIONS

GRANDFATHER (ver2)

<table>
<thead>
<tr>
<th>Household code ID</th>
<th>Interviewee</th>
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</thead>
<tbody>
<tr>
<td>Date</td>
<td>Field visit</td>
</tr>
</tbody>
</table>

A. Past and future

1. When did people settle here?
   a) where did they come from?
   b) why did they come here?

2. What did this palace look like when you were a child? or when you came here?
   a) what happened since then? how did it change?
   b) are there any remaining places that stayed like they were in the old times?

3. Did the way people work in the fields and look after the livestock change since you were a child?
   a) what is different?
   b) what is the same?
   c) what is your opinion about the differences?

4. What is your opinion about food security in this area?

5. What are the main limitations for food production in this area?

6. What are the main limitations for income generation in this area?

7. Are you a carbon project cooperative member?
   a) what benefits do you expect from the project for your family?
   b) what benefits do you expect from the project for your village?
   c) what benefits have you seen so far?

8. How do you see the future of your children?
   a) and your grandchildren?
**B. Family**

1. How many children do you have?
   a) how many boys and girls?
   b) where do they live?
   c) how much school did they complete?

2. Do all your sons have fields?
   a) where did they get it from?
   b) in your opinion is it enough for their family?
   c) in your opinion how large a field should each family have in this area?

3. Do you give them advice about working in the field?
   a) when to plough and seed
   b) what crop to grow
   c) when to sell or buy grain?

4. Do they help you with your work in the field? how?
   a) do they help each other with working in the field? how?

5. Are social obligations ever devastating?

**C. Garden**

1. Do you grow any food around your house?
   a) vegetables
   b) spices/herbs
   c) fruit or other trees?

2. Do you think the garden contributes much to your family’s food?
   a) more food?
   b) more diversity?
   c) cash?

3. Who does the work?
4. Do you use water? how?
5. Do you know any household who have such a garden?
6. What do you think you would need in order to grow food in a garden?
7. What is the season (when do you harvest)
   - taro
   - cabbage
   - potato
   - sweet potato
   - onion
   - carrot
   - tomato
   - beetroot
   - mango
   - banana
   - papaya
   - lemon
   - guava
INDIVIDUAL INTERVIEW QUESTIONS

GRANDMOTHER  ver2

Household code ID
Date
Interviewee

C  Old times

1. did you have a big family when you were a child?
   a. how many sisters and brothers did you have?
   b. did your grandparents live with you?

2. please tell me about the food you ate when you were a child?
   a. did you eat different food than what the families in this area eat now?
   b. what was the difference?
   c. what foods did you eat every day?
   d. what foods did you eat only once a week?
   e. what foods did you only eat on holidays?

3. when you were a child, was your family, your parents, in a better situation then you are now, in terms of food?
   a. did your family have enough food?
   b. did they have good food?
   c. what do you think is the reason for the difference?

4. did your own children eat the same food as what you used to eat when you were a child?

5. when you visit your grandchildren do you see any difference between what food they get and what you used to eat as a child?

6. is there a difference between how the food was shared with your parents and brothers and sisters, and how your grandchildren sit down to eat?
24. what was this area like when you were a child? or when you came here?
   a. what crops were growing?
   b. was there any forest?
   c. what animals did people raise?
   d. were there more animals?
   e. did people have enough crop every year?
      1. if not, why?
      2. what did they do when there was a food shortage?
   f. who helped those families that ran out of food?
      1. neighbours
      2. family or relatives
      3. village or church group
      4. NGO
      5. government

D Norms

1. from whom did you learn about feeding children?
   a. where else did you get information from?
   b. do you do anything differently from how you were told to do?
   c. what and why?

2. are you ever worried about how your grandchild is growing, or that maybe he is not strong and healthy enough?
   a. if you are, do you talk with anyone about it?
   b. with whom?
   c. can you give us an example when this happened?
      1. what was the problem?
      2. what advice did you get, and from whom?
3. what did you do?

3. can you tell me about what the most important responsibilities are for a grandmother?
   a. for a mother?
   b. and for a father?

4. in your opinion what is the cause of
   a. stomach illness
   b. diarrhoea
   c. malaria
   d. common cold

25. do you think young women know enough about how to raise children well?
   a. if not, what makes you worry?

E Change

1. what do you hope, what might change to the better in the near future?

2. what are you worried about that might change to the worse?

3. could families in this area do anything differently in the next years
   a. to make sure that your family has enough food?
   b. to improve the kind of foods your family eats?

A Child food

1. are there special foods, herbs or spices for the children’s
   a. growth
   b. strength
   c. eyes
   d. stomach
<table>
<thead>
<tr>
<th>E5 Grandmother interview questions ver 2-4</th>
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<tbody>
<tr>
<td>WHY NOT FAMILY FOOD?</td>
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<tr>
<td></td>
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<tr>
<td>1. do you ever ban them from eating?</td>
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<tr>
<td>a. or when they don’t like the food?</td>
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<td>b. do they get different food when they</td>
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<td>don’t like what the others eat?</td>
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<td>2. is there any time when mothers stop</td>
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<td>their child when the child is eating?</td>
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<tr>
<td>a. eats too much?</td>
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<tr>
<td>b. eats the wrong food?</td>
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<td>c. does not leave for the others?</td>
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<td>3. is the child’s behaviour affected by</td>
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<td>what food he eats?</td>
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<td>4. when a child is misbehaving do mothers</td>
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<td>ever take away his food?</td>
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<td>5. please tell me about what causes</td>
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<tr>
<td>hunger?</td>
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<tr>
<td>a. can hunger cause illness?</td>
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<tr>
<td>1. what kind of illness?</td>
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<td>b. can hunger cause weakness?</td>
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<tr>
<td>1. what part of the body?</td>
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<td>c. can hunger reduce children’s ability</td>
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<tr>
<td>to learn in school?</td>
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<tr>
<td>d. can hunger cause bad behaviour?</td>
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<td>6. at what age did you completely stop</td>
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<tr>
<td>breastfeeding your children?</td>
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<tr>
<td>a. at what age did you start giving</td>
</tr>
<tr>
<td>them other food than breast milk?</td>
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<tr>
<td>b. at what age did you stop making</td>
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<td>special food for them so they ate</td>
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<td>what the other family members?</td>
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<tr>
<td>c. did you stop breastfeeding when you</td>
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<td>became pregnant with your next child?</td>
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<td>d. did you breastfeed more than one on</td>
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<td>your children at the same time?</td>
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B Family food

1. today’s
   a. breakfast
   b. lunch
   c. mekse

2. yesterday’s
   f. breakfast
   a. lunch
   b. mekse
   c. dinner

3. in the last 7 days how many times did you prepare or use
   1. meat
   2. eggs
   3. milk product
   4. cabbage
   5. moringa
   6. carrot
   7. beans, peas or shiro
   8. other grain than maize

4. do you prepare any of these foods differently than the other women in the village?
   a. can you explain how?

5. when you were younger and your children were small at what meals did the whole family eat together?
   a. describe how they were sitting
   b. who were sharing plates
   c. who served the food and in what order
   d. what was on each plate/in each cup
   e. how many times a day did your family eat usually?
6. please tell me about a time when there was not enough food for your family?
   
a. when did this happen last time? and before that?

b. when there is not enough food how do you share it? which family members will eat less than in normal times?
   
   1. those who get less food than usual: do they remain hungry after the meal?

   2. when there is food shortage in the household is the number of meals reduced?

c. FS1: in the last 30 days was there a day when your family did not have food in the house at all?

d. FS2: in the last 30 days was there a day when you could not prepare any of the food you usually make? and had to eat something worse?

  e. what are the most difficult months of the year?

     1. was this always like that?

21 what are the reasons for food shortage in this area?
INTERVIEW QUESTIONS

HEALTH EXTENSION WORKER

1. what are the main duties of a HEW?
   a) do you do HH visits?
   b) what is the purpose of your visits?
   c) what topics do you address?
   d) how long have you been a HEW?
   e) how many HHs do belong to your area?
   f) what other benefits do you see for yourself beyond the pay?

2. what are the main points of your child nutrition advice?

3. what do you recommend regarding the diversity of food?
   a) do you explain why diversity is necessary?
   b) do you explain about the value and importance of food groups and certain foods?

4. what are the questions mothers ask?

5. do they give you any feedback about the nutrition advice they received?
   a) they followed it or not
   b) they liked it
   c) it was useful

6. what do you think about the advice and recommendations you give?
   a) is there difference between what you recommend and what is mothers do?
   b) why?

E6 Health Extension Worker interview questions-1
7. do you think children in this area are growing and developing well, in a healthy way?
   a) please explain why you think so
   b) in terms of statistical information what is the actual nutritional status of the under 5 children in the village? how can I get a copy of the statistics?

8. in your opinion what is the main problem regarding the food the children in this area eat:
   a) is it not enough? do they remain hungry?
   b) or is it not good enough? do they not get the important types of food they need for health and growing?
   c) or is it not diverse enough? do they not get enough variety, all of which is needed for health and growing?

9. disease
   a) sharing cups and food, and sleeping in close quarters means that infectious diseases spread easily – is germ theory understood in the households?
   b) according to the interviews the connection between under nutrition and disease is understood – but are there preventative steps taken to avoid exposure (sleeping with net, food hygiene, personal hygiene, keeping sick people away)?
   c) why are children discouraged from eating wild fruits?

10. generally, do you think there are some things that parents could do differently, even though they have very little income and small fields?
    a) what are these?
    b) what do you think holds people back from doing these?

11. are there any cultural rules or beliefs about feeding or raising children that you think are important to know about in your work?
    a) please tell me about these

12. how widely is family planning practiced?
    a) do families make a connection between the size of field and the size of family?
b) how common is that a man has more than one wife?

13. some details:

a) how many times a day should mothers prepare special food for their young child?
   1. what should the special food be?
   2. what is actually happening?

b) at what age should children start eating family food?
   1. what is actually happening?

c) what are the foods small children are not allowed to eat?
   1. why?
INDIVIDUAL INTERVIEW QUESTIONS (ver4)

MOTHER

Household code ID
Date
Interviewee

M. Market

1. did you go to the market in the last 7 days?
2. which market and when?
3. was there anything you wanted to buy but could not find it?
4. was there anything you planned to buy but it was too expensive?
5. what did you buy?

- coffee
- coffee leaves
- cheese
- cabbage
- fruit
- carrot
- beet root
- milk
- butter

- bula or koch’o
- tomato
- beans
- peas
- spices
- taro or cassava
- sugar
- salt
- oil
A. Family food

1. today’s
   a. breakfast
   b. lunch
   c. mekses

2. yesterday’s
   a. breakfast
   b. lunch
   c. mekses
   d. dinner

3. in the last 7 days how many times did you prepare or use
   1. meat
   2. eggs
   3. milk product
   4. cabbage
   5. moringa
   6. carrot
   7. beans, peas or shiro
   8. other grain than maize

4. FQ5 is there a weekly budget for market shopping?
   a. coffee – how much do you spend on coffee weekly?
   b. on maize weekly?
   c. on vegetables?
   d. on milk or milk products?
WHY NOT FAMILY FOOD?  
FIELD, ETHIOPIA

1. how often does this happen?
2. what is it spent on?

f. when you don’t have enough money to buy everything you planned what how do you prioritise your shopping? what do you leave out and what is that you must get?

11. these questions will be about the food your own household produces
a. plant source: what do you produce in your field?
   1. how long will this year’s harvest be enough for your family?
   2. how long is it usually enough for?
   3. do you have any other crop? what is it? how long that will be enough for your family?
   4. do you put in a second crop?
   5. is your land big enough to feed your family?
   6. do you have moringa tree? where? how many?

b. animal source: do you produce any milk or eggs?
   1. if yes, how much milk/day? how many eggs/week?
   2. if yes, how many days a week does your family eat this (milk or eggs)?
   3. if not, would it be possible for your family to produce eggs for your own use? how?
   4. would it be possible for your family to produce enough milk for your own use? how?

b. do you sell any of what you produce?
   1. what?
   2. when?
   3. what is usually bought from that money?

INTERVIEW QUESTIONS ver4  MOTHER  NOV 29  

E7  Mother interview questions ver4 clean-3
28. in a really good year do you harvest enough maize to last until next harvest?

12. did you receive any food aid or child food supplement during the last year?
   b. what and why?

13. at what meals does the whole family eat together?
   b. please describe where they sit
   c. who are sharing plates
   d. who serves the food and in what order
   e. what is on each plate/in each cup
   f. does everyone get full when they finish the meals? at what time of the day do you eat the biggest meal?
   g. when there are two wives where does the husband eat, with which wife?

14. please tell me about a time when there was not enough food for your family?
   b. when did this happen last time? and before that?
   c. when there is not enough food how do you share it? which family members will eat less than in normal times?
      3. those who get less food than usual: do they remain hungry after the meal?
      4. when there is food shortage in the household is the number of meals reduced?
   d. FS1: in the last 30 days was there a day when your family did not have food in the house at all?
   e. FS2: in the last 30 days was there a day when you could not prepare any of the food you usually make? and had to eat something worse?
   f. what are the most difficult months of the year in terms of food shortage? how many months?

15. what did you eat when you were a child?
   b. mother
      3. what foods did you eat every day?
      4. what foods did you eat once a week?
c. father

3. what foods did you eat every day?
4. what foods did you eat once a week?

d. is there a big difference between how your family eats now and how your childhood family ate?

16. when you were a child, was your family, your parents, in a better situation then you are now, in terms of food?

b. what do you think is the reason for the difference?

c. did your family have enough food?

d. when you were a child were you often hungry after a meal?
B. Child food

1. Please tell me about what you think are best or most important foods for children? Foods that make them strong, healthy and growing? – Not what you do but what you think is the best practice
   a. For babies under 2 years of age
   b. For children between 2 and 5 years
   c. For older children
   d. Do boys and girls need different food?
      1. What is the difference?

2. Do you think children in this area are eating well, are they given good food?
   a. Please explain why you say this

6. 
   d. Do children get food outside the household
      1. From neighbours
      2. At the house of other family member
      3. At the family’s own household
      4. When they are at the market

31. At what age did you completely stop breastfeeding your children?
   a. At what age did you start giving them other food than breast milk?
   b. At what age did you stop making special food for them so they ate what the other family members?

32. Are your children vaccinated?
   a. Do they get vitamin A?
   b. Deworming tablets?
**FQ**

1. how could you improve your children’s food?
   a. what other foods would you give to your small children (under 5) if you could have access to it?
   b. in your opinion would it be possible for you to produce any of it?
   c. do small children get meat? from what age? how is it prepared?
   d. do small children get egg? from what age? how is it prepared?

2. supplementary feeding
   a. did you stop breastfeeding when you got pregnant with the next child?
   b. mothers say special food is made for under 2s - is it made every day? how many times a day is it given to the child?
   c. what is the special food that is made?
   d. once supplementary feeding started do children always get breastfed on demand? do they ever get sent away?

3. regarding nutritional advice
   a. what is the advice you get from the peer mother and from the HEW’s?
   b. do you agree with it?
   c. can you follow it? if not why?
   d. what do you know about the concept of “nutrition”?
   e. what do you know about the value or importance of certain foods?
      1. what are the foods that help children grow?
      2. what are the foods that make them strong? run around happily?
   f. what is the difference between how you feed your child and how other mothers feed theirs?

4. what do you think about your children’s development?
   a. do you think your child is too small for his age? (big, normal, small)
   b. do you think your child is too thin for his age? (fat, normal, thin)
   c. how do you know your child is healthy? what are the signs?

INTERVIEW QUESTIONS ver4 MOTHER NOV 29 7
10. in your opinion what is the main problem regarding the food children eat?

d. is it not enough? do they remain hungry?

e. or is it not good enough? do they not get the important types of food they need for health and growing?

f. or is it not diverse enough? do they not get enough variety, all of which is needed for health and growing?

g. what do you think you can do in your family to change this
C. Norms

1. Please tell me about what the most important responsibilities are for a mother?
   a. and for a father?

3. From whom did you learn about feeding children?
   a. Where else did you get information from?
   b. Did it ever happen that you got different advice from two different people?
      Maybe one person said one thing and the other the opposite on the same issue?
      1. Please give an example?
      2. What did you do?
      3. Is there another example you can tell me?

4. You said you mostly learnt from....
   a. Do you do anything differently from how you were told to do?
   b. What and why?

5. Are you ever worried about how your child is growing, or that maybe he is not strong and healthy enough?
   a. If you are, do you talk with anyone about it?
   b. With whom?
   c. Please give us an example when this happened
      1. What was the problem?
      2. What advice did you get, and from whom?
      3. What did you do?

6. What do you hope, what might change to the better in the near future?

7. What are you worried about that might change to the worse?

8. Do you plan to do anything differently in the next few months or years
   a. To make sure that your family has enough food?
   b. To improve the kind of foods your family eats?
9. In your opinion what causes
   a. stomach illness
   b. diarrhoea
   c. malaria
   d. common cold?

10. **FQ12**
    a. sharing cups and food, and sleeping in close quarters means that infectious
diseases spread easily – is germ theory understood?
    b. connection between under nutrition and disease is understood – but are there
preventative steps taken to avoid exposure?
    c. why are children discouraged from eating wild fruits?

26. How often are your children sick?
   a. which child is the healthiest?
   b. which child is the strongest?
   c. what do you think causes the difference?

21. What are the reasons for the food shortage in this area?
D. Social environment

22. is your family a member of the carbon project cooperative?
   a. what benefits have you seen so far?
   b. what benefits do you expect for your family?
   c. what benefits do you expect for your village?
   d. if not a member, what do you think about the benefits?

1. is your family getting any NGO support?
   a. sponsored child?
   b. farm extension and farm resources
   c. anything else?
   d. do you think the support helps you solving your problems?
      1. please explain how?

2. is anyone in this household a member of a group or association?
   a. who and what association?
      1. saving club
      2. farmer association
      3. church group
      4. working group
      5. other
   b. did your family ever receive help from these groups or associations?
      1. when and what help?
   c. are there saving groups for the hungry months of every year, or the recurring drought years?
   d. how much of the HH income is going to these associations?
7. **FQ7** are social obligations ever devastating?
   a. what is happening in this area regarding weddings and funerals: do people get into debt or have to sell livestock?
   b. are there similar collections for difficulties during illness, death of livestock, or other bad fortune?

3. please tell me about how neighbours help each other
   a. can you describe when and how?
   b. can you rely on your neighbours when there is food shortage in your family?

4. can you rely on some other family members to help you when your household has food shortage?
   a. would your husband’s family help?
   b. when there is a shortage of food in your household can you ask for help from
      1. your mother-in-law
      2. your brother-in-law?
      3. the wife of your brother-in-law?
      4. the other wife of your husband?

8. **FQ11** what support can women have once they are married?
   a. do they have ongoing connection with their birth-family?
   b. can they rely on them for help? for advice?
   c. or is it only the neighbours beside the husband’s family?
   d. if there is a conflict between husband and wife who represents the wife’s interest?

5. where does your market money come from?
   a. who decides what food and how much to buy?
   b. who decides what other small things to buy? e.g. soap, lamp oil, firewood, pots and plates
   c. how do you make decision about bigger things? e.g. clothes, furniture, animals, new roof
d. if your child is sick do you decide yourself to take him to the health centre or not?

1. can you pay the fees at the clinic? or the cost of transport if you have to go to the hospital?

2. where do you get the money from?

6. do you ever buy food for yourself from a restaurant, teahouse or the market when you are in the town (Humbo, or Soddo, or Kolchobo)?

   a. does your husband ever buy food for himself from a restaurant, teahouse or the market when he is in the town (Humbo, or Soddo, or Kolchobo)?
G. Garden

1. Do you grow any food around your house?
   a. vegetables
   b. spices/herbs
   c. fruit or other trees?
   d. who does the work?
   e. do you use water? how?

2. do you know any household who have such a garden?

3. what do you think you would need in order to grow food in a garden?

4. do you think the garden contributes much to your family’s food?
   a. more food?
   b. more diversity?
   c. cash?
INTERVIEW QUESTIONS

PEER MOTHER

1. what is the main duty of a peer mother
   a) do you do HH visits?
   b) what is the purpose of your visits?
   c) what topic do you address?
   d) is it a paid position?
   e) how long have you been a peer mother?
   f) how many HHs do belong to your area?
   g) how did you get recruited?
   h) what other benefits do you see for yourself beyond the pay?

2. what are the main points of your advice?

3. do you think children in this area are growing and developing well, in a healthy way?
   a) please explain why you think so

4. what are the questions mothers ask?

5. do they give you any feedback about the advice they received?
   a) they followed it or not
   b) they liked it
   c) it was useful

6. what do you think about the advice and recommendations you give?
   a) is there difference between what is recommended and what is mothers do?
   b) why?
7. what do you recommend regarding the diversity of food?
   a) do you explain why diversity is necessary?

8. some details:
   a) how many times a day should mothers prepare special food for their young child?
      1. what should the special food be?
      2. what is actually happening?
   b) at what age should children start eating family food?
      1. what is actually happening?
   c) what are the foods small children are not allowed to eat?
      1. why?

9. generally, do you think there are some things that parents could do differently, even though they have very little income and small fields?
   a) what are these?
   b) what do you think holds people back from doing these?

10. are there any cultural rules or beliefs about feeding or raising children that you think are important to know about in your work?
    a) please tell me about these
INTERVIEW QUESTIONS
SUCCESS STORY

1. in your opinion what are the opportunities for income generation in this village
   a. for men
   b. for women

2. what skills would be useful for young people to get in order to be able to generate income
   a. for men
   b. for women

3. do you know any people in the village who could be role models as successful entrepreneurs?
   a. merchant
   b. commercial crop
   c. fattening or breeding livestock
   d. transport – people or goods
   e. preparing and selling food or coffee
   f. hair
   g. clothes – making or repairing
   h. house building, fence building
   i. pottery
   j. wood work – doors and windows, furniture, boxes, coffin
   k. metal work – tools, doors and windows, pots
   l. car or motor repair
   m. shoe repair
   n. healer and birth attendant
   o. teaching some skills to people, helping students to prepare for exam
   p. other
4. do you consider yourself successful in your income generation activities?
   a. what activities do you (and your family) do for income generation?
   b. is it more than one thing?
   c. how did you start?
   d. what are your future plans?
INDIVIDUAL INTERVIEW QUESTIONS

TRADITIONAL HEALER

Household code ID

Date

Interviewee

1. I was told that you are a woman with special knowledge in helping people with illness.
   a) what is the name for someone who does this kind of work?
   b) what age groups do you treat when they are sick?
   c) do you attend women when they are pregnant?

2. At the group discussion in Herut’s house you mentioned 7 diseases in children that you treat. I would be interested to hear about each of them.
   a) name
   b) cause
   c) treatment
   d) success

3. Last time we talked about the 7 diseases in children. In addition to that what other illness in children do you treat?
   a) intestinal problems?
   b) injuries?

4. Do parents bring their children to you when they are worried about them because they don’t grow well or they are not happy and play like other children?

5. Are there special foods, spices or treatments for children’s
   a) growth
   b) strength
   c) eyes
d) stomach

e) cleverness, ability to learn

f) protect them from illness

g) good behaviour

6. Whom did you learn your knowledge from?
   a) are you teaching a younger person who will continue your work?
   b) is it only women (not men) who do this kind of work in this area?

7. Do you think young women know enough about how to raise children so they are healthy and strong?
   a) if not, what makes you worry?

8. Do you give any advice to mothers regarding good food for children?
   a) if yes, what are the main points?
INDIVIDUAL INTERVIEW QUESTIONS

VILLAGE LEADER

1. what are the strengths of the village, of the people here?
2. what are their weaknesses?
3. what are the main barriers of development?
4. is this village developing sustainably?
5. what can you tell me about the current situation in the village, regarding
   a) income generation
      1. men
      2. women
   b) agricultural development
   c) commercial development
   d) skills development
   e) what skills are useful here for young people to get
      1. men
      2. women
6. what were the most significant positive changes in the last few years?
7. what were the most significant setbacks in the last few years?
8. what is your vision for the future of this village?
   a) economic development
   b) educational development
   c) infrastructure
APPENDIX F: GLOSSARY OF FOOD INGREDIENTS AND MEALS

F1   Glossary of food ingredients

F2   Glossary of meals
<table>
<thead>
<tr>
<th>Grains</th>
<th>English</th>
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<td>t'ef</td>
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<td>dagusa</td>
<td>malduwa ['?]</td>
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<td>bak'olo</td>
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<td>malduwa ['?]</td>
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<tr>
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<td>malduwa ['?]</td>
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<td>pasta</td>
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<td>pastaa</td>
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<tr>
<td>Ethiopian black barley</td>
<td>t'k'ur gebs</td>
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<td>Hordeum irregulare</td>
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F1 Glossary of food ingredients – 2
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<td>t'enaadam</td>
<td>telotiyaa</td>
<td>Ruta graveolens L.</td>
<td>coffee, berbere mix, stomach medicine</td>
<td></td>
</tr>
<tr>
<td>Spices (cont)</td>
<td>English</td>
<td>Amharic</td>
<td>Wolaitta</td>
<td>Latin</td>
<td>use and other comments</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>coriander green</td>
<td>coriander seed</td>
<td>dimblal</td>
<td>kororima</td>
<td>leaf coffee, medicine</td>
<td></td>
</tr>
<tr>
<td>koseret (herb)</td>
<td>koseret</td>
<td>kosoret</td>
<td>kosoretiaa</td>
<td>Lippia adoensis</td>
<td>butter, to wash milk pot, berbere mix, shro</td>
</tr>
<tr>
<td>rosemary</td>
<td>yet'bs k'mam or yet'bs k'tal</td>
<td>tefesiyamata</td>
<td>roasting meat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cabbage seed</td>
<td>gomenzar</td>
<td>santaiyipiyaa</td>
<td>Brassica nigra L. Koch</td>
<td>for rubbing the mit'ad</td>
<td></td>
</tr>
<tr>
<td>long pepper</td>
<td>t'mz</td>
<td>Piper longum L</td>
<td>wet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nutmeg</td>
<td>gewz</td>
<td>wet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>linseed</td>
<td>telba or fet'o</td>
<td>telba</td>
<td>for medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sesame</td>
<td>selit'</td>
<td>selitiya</td>
<td>for ftft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>artemisia sp related to wormwood</td>
<td>ariti</td>
<td></td>
<td>leaf coffee, medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>thyme</td>
<td>t'osgn</td>
<td>zimbanuwa</td>
<td>tea, leaf coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>salt</td>
<td>ch'aw</td>
<td>met'ine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>small chili (dried)</td>
<td>mitmita</td>
<td>barbariya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>large chili (dried)</td>
<td>berbere</td>
<td>barbariya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spice mix with chili</td>
<td>berbere</td>
<td>barbariya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>oil</td>
<td>zeyt</td>
<td>zayitiyya</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

F1 Glossary of food ingredients – 8
<table>
<thead>
<tr>
<th>Drinks</th>
<th>English</th>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Latin</th>
<th>use and other comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>coffee</td>
<td>buna</td>
<td>tuke, tukiyaa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tea</td>
<td>shay</td>
<td>shayyaa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>water</td>
<td>wuha</td>
<td>hatta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>honey wine, mead</td>
<td>t'ej</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dark ale</td>
<td>t'ela</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>roasted barley drink</td>
<td>keneto</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F1 Glossary of food ingredients – 9
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>injera</td>
<td>budena</td>
<td>a flat thin bread resembling a pancake prepared from teff/barley/sorghum [made with a sourdough culture] [most authentic or prized is from teff; it is cooked on top of a flat clay pan with fire underneath, covered for a few minutes with a cone-shaped cover made of grass and dung]</td>
<td>every meal</td>
<td>injera</td>
</tr>
<tr>
<td>beso</td>
<td>banigaa tikiyaa</td>
<td>food prepared from flour of roasted barley with hot (not boiled) water, a thick version is prepared with salt and butter [this meal is uncooked]</td>
<td>breakfast</td>
<td>porridge</td>
</tr>
<tr>
<td>beso juc</td>
<td></td>
<td>[roasted barley mixed with water and sugar into liquid]</td>
<td>for sick people (malaria)</td>
<td>porridge</td>
</tr>
<tr>
<td>ch’bt’</td>
<td></td>
<td>a handful of thick beso made into a longish lump with fingers and palm [means handful]</td>
<td>expensive, in Humbo mostly used during holidays</td>
<td>staple</td>
</tr>
<tr>
<td>bulla</td>
<td>ettimaa</td>
<td>[white liquid extracted from the pseudostem of enset plant and made into a cake-like paste]</td>
<td>in Wolayta Zone, during the year, it is mostly used in highland areas, but important holiday food in lowlands too</td>
<td>porridge</td>
</tr>
<tr>
<td>k’och’o</td>
<td>uncca</td>
<td>[fermented food stuff from decorticated corm of enset plant; also bread made of qoch’o]</td>
<td></td>
<td>staple, k’ita</td>
</tr>
<tr>
<td>ganfo</td>
<td>shendera</td>
<td>prepared from boiled flour of teff/barley/wheat or maize, and then [often very spicy] butter is added</td>
<td>breakfast</td>
<td>porridge</td>
</tr>
<tr>
<td>k’inch’e</td>
<td>qinch’e</td>
<td>cracked barley, oats or wheat, boiled and then mixed with butter or oil, and salt</td>
<td>breakfast</td>
<td>porridge</td>
</tr>
</tbody>
</table>

F2 Glossary of dishes – 1
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>frfr</td>
<td>fitafito</td>
<td>[torn-up injera with spices and butter or oil added; variations with meat, egg, vegetables, potato...]</td>
<td></td>
<td>injera</td>
</tr>
<tr>
<td>k’ita</td>
<td>oita</td>
<td>unleavened flat bread prepared from teff/wheat/maize or barley [it is cooked uncovered on a flat clay pan with fire underneath]</td>
<td>in Wolayta it is almost always made of maize</td>
<td>qita</td>
</tr>
<tr>
<td></td>
<td></td>
<td>prepared from maize flour [and water], is shaped into a small ball [like ch’bt’] and boiled with kale or haleko [moringa]</td>
<td>regular dish, the haleko or kale are prepared with oil, garlic and spices if the household can afford these</td>
<td>staple, vegetable, stew</td>
</tr>
<tr>
<td>k’olo</td>
<td>shasha</td>
<td>roasted cereal and legumes often made from barley, wheat beans, chickpeas</td>
<td>in Wolayta it is always maize, sometimes with some legumes added</td>
<td>staple, snack, legume</td>
</tr>
<tr>
<td>nifro</td>
<td>kokka</td>
<td>boiled cereals and legumes, often made from barley, soyabean, wheat, beans, peas</td>
<td>in Wolayta it is always maize, sometimes with some legumes added</td>
<td>staple, snack, legume</td>
</tr>
<tr>
<td></td>
<td>muchuwa</td>
<td>prepared from bulla, spices and butter</td>
<td>a crumbly food, kneaded into balls with the fingers when eaten</td>
<td>porridge</td>
</tr>
<tr>
<td>ch’ko</td>
<td>banigaa gurduwa</td>
<td>[snack food made of barley and butter]</td>
<td></td>
<td>porridge, snack</td>
</tr>
<tr>
<td>abila</td>
<td>ailiba</td>
<td>mixture of barley flour and milk</td>
<td></td>
<td>porridge</td>
</tr>
</tbody>
</table>

**F2 Glossary of dishes – 2**
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants' description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>shro wet</td>
<td>watiya</td>
<td>stew [sauce] prepared from flour of roasted peas. It is also prepared in different types called alicha (without pepper) and k’ey (with pepper)</td>
<td>eaten with injera; alicha is mild and light, k’ey is spicy and red</td>
<td>stew</td>
</tr>
<tr>
<td>dinich bedata</td>
<td>donuwaane data</td>
<td>food prepared from boiled sweet potato and da’afa, and eaten with k’ita</td>
<td></td>
<td>staple</td>
</tr>
<tr>
<td>boye</td>
<td>boiyaa</td>
<td>prepared from boiled root of the plant called boye, the preparation is similar with boiled sweet potato</td>
<td>seasonal food</td>
<td>staple</td>
</tr>
<tr>
<td>godare</td>
<td>boyinna</td>
<td>prepared from boiled root of the plant called godare, this is also similar with boye</td>
<td></td>
<td>staple</td>
</tr>
<tr>
<td>poshamu, poshamuwa</td>
<td></td>
<td>prepared from the flour of maize with boiled water, milk, spices and butter, and it is eaten with boiled milk or coffee that has butter</td>
<td>it is mostly holiday food, also for sick people, or children who need fattening</td>
<td>porridge</td>
</tr>
<tr>
<td>bilanduwa</td>
<td></td>
<td>prepared from boiled haricot beans and k’och’o or with flour of maize</td>
<td>very common food; two kinds of preparation, one by boiling, the other by sauteing (little water added); both with some oil, garlic, k’ariya, shallot and other spices, if available</td>
<td>porridge</td>
</tr>
<tr>
<td>shiferaw</td>
<td>halakuwa</td>
<td>prepared from leaf of moringa tree and eaten with k’ita</td>
<td></td>
<td>stew</td>
</tr>
<tr>
<td>posese, fosese</td>
<td></td>
<td>maize flour dough, shaped into small balls and boiled with kale or moringa leaf [same as kurkufa]; other version is a porridge with moringa leaves mixed into it</td>
<td>prridge, vegetable, stew</td>
<td></td>
</tr>
</tbody>
</table>

F2 Glossary of dishes – 3
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants' description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>uncca bilanduwa</td>
<td>it is almost similar with bilanduwa [maybe another name for the same]</td>
<td></td>
<td>porridge</td>
<td></td>
</tr>
<tr>
<td>sikwar dinich k’ik’il</td>
<td>shukariyaa</td>
<td>[soup] prepared from boiled sweet potato and eaten with data</td>
<td>staple</td>
<td></td>
</tr>
<tr>
<td>dat’a</td>
<td>mix of mitmita [fresh], butter, salt, ginger, onion, garlic and other spices; a dip of paste-like mixture and mostly eaten with k’urt’ [it is prepared using grinding stone]</td>
<td>also with boiled tubers</td>
<td>paste</td>
<td></td>
</tr>
<tr>
<td>k’urt’</td>
<td>kaye ashuwaa</td>
<td>raw meat mostly eaten with dat’a or awaze [similar paste] and bread or injera</td>
<td>meat</td>
<td></td>
</tr>
<tr>
<td>difo dabo</td>
<td>dabuwa</td>
<td>bread prepared from wheat flour and yeast with bigger size. It may take one hour [this bread is baked]</td>
<td>I saw this bread baked on a steel pan on charcoal fire, covered with a steel basin; or wrapped in enset leaves and then covered; the same dough is sometimes steamed in a colander - but none of this is really Wolayta bread</td>
<td>leavened bread</td>
</tr>
<tr>
<td>ereta</td>
<td>prepared from flour of maize or barley and cooked as porridge, and mixed with milk or butter (mostly prepared for children under 2 years)</td>
<td></td>
<td>porridge</td>
<td></td>
</tr>
</tbody>
</table>

F2 Glossary of dishes – 4
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>shameta</td>
<td>prepared from roasted barley flour and water; its structure is like a juice [mitmita added?]</td>
<td>porridge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t'ibs</td>
<td>t'il'a ashuwaa [prepared by stir-frying meat with oil and/or clarified butter, qarya and onion, sometimes rosemary] and eaten with da'a or mitmita</td>
<td>meat, stew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>muk’</td>
<td>liquid porridge made of grain [same as ereta?]</td>
<td>porridge</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Holiday dishes**

<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>k'ik'il</td>
<td>doyissa</td>
<td>prepared from boiled meat [with bone] and with much soup</td>
<td>meat, soup</td>
<td></td>
</tr>
<tr>
<td>shorba</td>
<td>chambaa</td>
<td>[soup] prepared from the fat or the meat, cabbage, much butter and spices (data or pepper); this is commonly prepared in Wolayta, but in other places soup is prepared from cracked barley or a mix of vegetables</td>
<td>meat, soup</td>
<td></td>
</tr>
<tr>
<td>muchuwa</td>
<td>ingredients: bulla, butter, spices, salt; preparation: first bulla roasted on mit'ad, then water sprinkled on it; water is boiled in a pot and between water and bulla a leaf of enset is placed; then bulla is put on and cooked for at least for 30 minutes; then water, butter, spices, garlic and salt mixed together and boiled separately; this is added on the boiled bulla; finally it is put on the tray for eating</td>
<td>porridge</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>baccira (bach'ira)</td>
<td>ingredients: k'ocho flour, arera, butter, spices and salt boiled together; first arera, butter, spices and salt boiled together; the roasted k'ocho flour mixed together with these and cooked</td>
<td>porridge</td>
<td></td>
<td></td>
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</table>

F2 Glossary of dishes – 5
<table>
<thead>
<tr>
<th>Amharic</th>
<th>Wolaitta</th>
<th>Research assistants’ description [with my additions in brackets]</th>
<th>[use]</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>piccata</td>
<td>piccata (pich’ata)</td>
<td>prepared from cassava; first boye is boiled and ground (on grinding stone), then in another pot butter, milk or arerea, chilli, onion, garlic and spices boiled together and mix with the ground boye; then ready to eat</td>
<td></td>
<td>porridge</td>
</tr>
<tr>
<td>santa wotaya</td>
<td>santa wotaya</td>
<td>first gomen boiled and ground on grinding stone, then it is mixed with spices, onion, garlic, small amount of ginger and salt, and is ground again with these materials; then it is cooked with butter</td>
<td></td>
<td>stew, paste</td>
</tr>
<tr>
<td>dat’a</td>
<td>dat’a</td>
<td>for holidays is prepared with much butter, and can be prepared with bile or without bile</td>
<td></td>
<td>paste</td>
</tr>
<tr>
<td>zilzil t’ibs</td>
<td>zilzil t’ibs</td>
<td>meat cut zigzag into thin long strips and prepared as t’ibs</td>
<td></td>
<td>meat, stew</td>
</tr>
<tr>
<td>qoch’qoch’uwa</td>
<td>qoch’qoch’uwa</td>
<td>first meat and gomen is boiled together then pepper, onion, garlic, ginger are ground together and added to boiled meat and gomen; salt and butter is also added; it is like a soup, people first eat the meat then eat the liquid with spoon</td>
<td></td>
<td>soup</td>
</tr>
<tr>
<td>ashuwaa t’it’a</td>
<td>ashuwaa t’it’a</td>
<td>zilzil t’ibs is roasted on fire, not on mit’ad or frying pan but on the hot embers when the flames are gone; it is served with k’ocho, k’ita and dat’a</td>
<td></td>
<td>meat</td>
</tr>
<tr>
<td>ashuwaa shayeta</td>
<td>ashuwaa shayeta</td>
<td>roasted meat but it is roasted in the leaf of enset on mit’ad; mostly food prepared for pregnant women, also it is holiday food</td>
<td></td>
<td>meat</td>
</tr>
<tr>
<td>logomo</td>
<td>logomo</td>
<td>made of bulla, butter, cheese and spices, cooked and mixed for days, served in layers</td>
<td></td>
<td>wedding food, porridge</td>
</tr>
</tbody>
</table>

F2 Glossary of dishes – 6
### APPENDIX G: IMAGES ON ATTACHED CD

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Field team</td>
</tr>
<tr>
<td>2</td>
<td>Kitchen observation with field assistant (photo by other field assistant)</td>
</tr>
<tr>
<td>3</td>
<td>I could not observe unobserved</td>
</tr>
<tr>
<td>4</td>
<td>Group discussion about food for children; moderator first from left</td>
</tr>
<tr>
<td>5</td>
<td>Group discussion about livelihoods; moderator first from left</td>
</tr>
<tr>
<td>6</td>
<td>Group discussion; form left to right: main facilitator, translator, moderator and participants (photo by observer)</td>
</tr>
<tr>
<td>7</td>
<td>Example of feedback poster: food diversity</td>
</tr>
<tr>
<td>8</td>
<td>Example of feedback poster: livelihoods</td>
</tr>
<tr>
<td>9</td>
<td>Example of feedback poster: family size</td>
</tr>
<tr>
<td>10</td>
<td>Feedback discussion</td>
</tr>
<tr>
<td>11</td>
<td>Highlands, from where people migrated to the study site</td>
</tr>
<tr>
<td>12</td>
<td>Nearly unpassable roads; my transport between the villages</td>
</tr>
<tr>
<td>13</td>
<td>Office construction</td>
</tr>
<tr>
<td>14</td>
<td>Main street, Wolqá</td>
</tr>
<tr>
<td>15</td>
<td>Compound with traditional and new houses</td>
</tr>
</tbody>
</table>
Image 16  Two neighbouring family compounds

Image 17  Young maize crop

Image 18  Ploughing after the first rains

Image 19  Boy taking cattle to water

Image 20  Productive garden during the rainy season

Image 21  Barber

Image 22  Small shop on the main street of Wolqá

Image 23  Mature enset plants

Image 24  Cow in the kitchen

Image 25  Food preparation on the floor of the semi-open kitchen

Image 26  Chopping board and woven tray

Image 27  Hand washing before food preparation

Image 28  Grinding stone

Image 29  Preparing dat’a on the grinding stone

Image 30  Girl pounding roasted coffee. Please note: the man in the kitchen, whose leg is in the picture, is the interpreter.

Image 31  Fireplace with three stones and kitchen utensils

Image 32  Pot with lid and stirring stick

Image 33  Mixing dough for k’ita (flat maize bread) and feeding the fire
Image 34  Shaping the disks of k’ita

Image 35  K’ita cooking on the mit’ad (round clay griddle)

Image 36  Roasting maize kernels for nifro

Image 37  De-stemming the moringa leaves

Image 38  Preparing maize dumplings for kurkufa

Image 39  Kurkufa: boiled moringa leaves and maize dumplings

Image 40  Chilli and spice mix drying in the sun

Image 41  Maize cobs drying after harvest in the fork of a tree

Image 42  Storage shelf – cot - inside a round hut

Image 43  Rocking the clay pot with sour milk in it, to make k’ibe

Image 44  Decanting k’ibe, to be washed and added to the already collected amount in the yellow container

Image 45  Farmer and labourers sharing a meal

Image 46  Family with three children having midday meal: moringa and k’ita

Image 47  Older children’s meal served separately in a family of six children

Image 48  Moringa and k’ita; a meal for two adults and a child

Image 49  Meal arranged on plate: k’ita and moringa stew

Image 50  Girl pouring hand washing water for her father

Image 51  Children wash their hands before a meal
Image 52  Example of active feeding: child in mother’s lap

Image 53  Man feeding his grandson

Image 54  Example of active feeding: children sitting on the ground, youngest one on a stool

Image 55  Example of active feeding: youngest child seated on table

Image 56  Feedback discussion about family size and household resources

Image 57  Feedback discussion about food diversity
APPENDIX H: PARTICIPANT CHARACTERISTICS
<table>
<thead>
<tr>
<th>HH participant ID</th>
<th>Person who participated from HH</th>
<th>Number of observations</th>
<th>Number of interviews</th>
<th>Number of group discussions</th>
<th>Gender/age of children</th>
<th>Have field</th>
<th>Have other job</th>
<th>Livestock holding</th>
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<td>2 not living here, G25y, G30y, G15y, G10y, B15y</td>
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M=mother, G=girl, Y=yes, N=none, F=father, B=boy, N=no, GM=grandmother, Y=year, ?=no data, OF=grandfather, m=month
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<thead>
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<th>Person who participated from HH</th>
<th>Number of observations</th>
<th>Number of interviews</th>
<th>Number of group discussions</th>
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<th>Have field</th>
<th>Have other job</th>
<th>Livestock holding</th>
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<tbody>
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<td>G3y, B18m</td>
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<td>M seasonal merchant</td>
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<td>N</td>
<td>1 ox</td>
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<td>5</td>
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<td>G5y, G3y, G8m</td>
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<td>Y (me and my son)</td>
<td>M small retail</td>
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<td>N</td>
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M=mother  
F=father  
GM=grandmother  
OF=grandfather  
G=girl  
Y=yes  
N=none  
B=boy  
N=no  
y=year  
?=?no data  
m=month