BOATS TO BURN

BAJO FISHING ACTIVITY IN THE
AUSTRALIAN FISHING ZONE

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Thesis submitted for the degree of
Doctor of Philosophy in Anthropology

Faculty of Law, Business and Arts

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November 1999
THESIS DECLARATION

I hereby declare that the work herein, now submitted as a thesis for the degree of Doctor of Philosophy at the Northern Territory University, is the result of my own investigations, and all references to ideas and work of other researchers have been specifically acknowledged. I hereby certify that the work embodied in this thesis has not already been accepted in substance for any degree, and is not being currently submitted in candidature for any other degree.

Natasha Stacey
ABSTRACT

Under a Memorandum of Understanding (MOU) between Indonesia and Australia, traditional Indonesian fishermen are permitted access to fish in a designated area inside the 200 nm Australian Fishing Zone (AFZ). However, crew and vessels are regularly apprehended for illegal fishing activity outside the permitted areas and after prosecution in Australian courts, their boats and equipment are destroyed and the fishermen repatriated to Indonesia. This thesis is an ethnographic study of one group of Indonesian maritime people who operate in the AFZ. It concerns Bajo people who originate from villages in the Tukang Besi Islands, Southeast Sulawesi. The study explores the social, cultural, economic and historic conditions which underpin Bajo sailing and fishing voyages in the AFZ. It also examines issues concerning Australian maritime expansion and Australian government policies, treatment and understanding of Bajo fishing. The thesis considers the concept of “traditional” fishing regulating access to the MOU area based on use of unchanging technology, and consequences arising from adherence to such a view of “traditional”; the effect of Australian maritime expansion on Bajo fishing activity; the effectiveness of policy in providing for fishing rights and stopping illegal activity, and why Bajo continue to fish in the AFZ despite a range of ongoing restrictions on their activity.

It is concluded that because of a lack of ethnographic insight and poor understanding of the issues there are serious inconsistencies in Australian policies and for the most part, they have been ineffective. The concept of “traditional” fishing, which regulates access to the 1974 MOU area for Indonesian fishermen is problematic, it ignores cultural dynamism and does not reflect the reality of Bajo fishing. Recent changes in Bajo fishing activity are in direct response to Australian maritime expansion and other broader local and global processes of influence. Continuing illegal Bajo fishing activity occurs as a direct result of the ineffectiveness of the 1974 MOU, as well as economic consequences arising from the apprehension and destruction of boats. Other historical, social-cultural and economic reasons also motivate continued Bajo fishing activity in the AFZ. Alternative approaches to managing a traditional Indonesian fishery in the AFZ are required and a more anthropologically informed approach should be taken. A new agreement should afford specific access rights to Bajo fishermen who have fished in the north Australian region since the early decades of this century.
ACKNOWLEDGEMENTS

I would like to thank a great many people and institutions who over the years, have directly and indirectly contributed to bringing this thesis to fruition. Paul Clark from the Museum and Art Gallery of the Northern Territory in Darwin inspired my initial interest in Indonesian fishing in the north Australian region. I am grateful to him for sharing his interest with me, his constant enthusiasm and passion for things maritime, and many hours of discussion over the years. My heartfelt thanks goes to my Supervisor, Dr Ian Walters for his enduring support and advice during the years it has taken to complete this thesis, and for detailed comments and suggestions on numerous drafts. Special thanks is due also to Dr. Sandra Pannell and Dr. Andrew McWilliam for taking time out of their hectic schedules to read and comment on an earlier draft of this thesis.

During my candidature I was supported by a Postgraduate Research Scholarship from the Northern Territory University (NTU). Field research in Indonesia and Australia was made possible by a number of grants for Postgraduate Research from the Faculty of Arts, Northern Territory University; Winifred Cullis Grant, International Federation of University Women, Geneva; Postgraduate Scholarship, NT Branch of the Australian Federation of University Women; Field Research Grant, North Australia Research Unit, Australian National University (ANU), and a Field Research Grant, Australian Centre for International Agricultural Research and ANU Eastern Indonesian Fisheries Project. An Asian Studies Library Award from the Commonwealth Department of Employment, Education and Training and ANU allowed me to visit libraries in Canberra. I am most grateful for the financial assistance provided by these institutions.

In Indonesia, field research was carried out under the auspices of the Lembaga Ilmu Pengetahuan Indonesia and under the sponsorship of Universitas Haluoleo (UNHALU) in Kendari, Southeast Sulawesi. I thank the Rector and staff of UNHALU for their support.

I would like to express my deep gratitude to people in the communities of Mola and Mantigola in the Tukang Besi Islands and in Pepela on Roti Island, who permitted me to live in their villages and supported my research during 1994–1995 and 1997. I thank them for accepting me into their communities, for their hospitality, generosity and kindness which made field research an enjoyable and memorable experience. I am particularly indebted to Pak Akmad, Ibu Mambi and their children with whom I lived in Mola. I would also like to thank Pak Hassan.
and his family with whom I lived in Pepela. The research assistance of Pak Kasmin from Mola Selatan on a number of occasions during fieldwork in Mola is gratefully acknowledged.

I would like to thank the dozens of people from Mola, Mantigola and Pepela who patiently provided their time and offered information during field research. Following the convention in anthropology, in most instances throughout this thesis, I have used pseudonyms to protect the identities of informants. I therefore cannot identify the real names of the many people who I would like to thank. I would however like to acknowledge the following individuals: Pak Gunda, Pak Mbaga, Pak Bilaning, Pak Pallu, Pak Harun, Pak Gudang, Pak Panghasi, Pak Mahating, Pak Mpeno, Pak Kiramang, Pak Nurdin, Pak La Ode Ndoke, Pak Subbung, Pak Badolla, Ibu Runnia, Ibu Muna, and Pak Talla. I am also grateful to the Bajo boat captains and crew operating in 1994, in particular Pak Nasir for allowing me to sail on his perahu; Pak Kaharra, Pak Kariman, Pak Acing, Pak Mudir, Pak Dudda, Pak Goseng, Pak Idrus, Pak Hasim, Pak Usman, and Pak La Musa. I would also like to thank Pak Nasseng of Sulamu for offering information on Bajo history and the captains and crews of apprehended boats in Darwin and Broome who allowed me to interview them during such stressful times.

Pak Alimaturahim, Director of Yayasan Sama (a non-government organisation) and his family and staff in Kendari offered support for this research, provided information and assisted in helping me land softly into Mola. I thank them for their friendship and insight into Southeast Sulawesi Bajo culture. I would also like to acknowledge the assistance provided by the Director of PT Sumberguna Makasarnusa in Ujung Pandang regarding the trade in marine products in Indonesia. On a number of occasions during fieldwork in Indonesia, Gwen and Peter Deacon in Kupang, and Allaster Cox and Susila Selvaraja in Jakarta, put me up. I thank them for their exceptional hospitality and the G&Ts. In Jakarta Allaster Cox and Andreas Vecchiet from the Australian Embassy, Department of Foreign Affairs and Trade, supplied me with copies of maps and publications. They also allowed me to accompany an official delegation during a visit in Southeast Sulawesi.

I would also like to acknowledge the assistance provided by the following individuals and organisations during the course of my research: Professor Pirn Schoorl in Holland for providing copies of his published and unpublished material on Southeast Sulawesi; Nick Burningham from WA Maritime Museum for information on Indonesian watercraft technology; Dan Dwyer for information on Indonesian fishing activity in the AFZ; Gus Bottrill for access to his unpublished material; Dr. Ian Crawford for access to his PhD thesis; Dr. Greg Acciaioli
and Ester Velthoen for providing copies of unpublished papers; George and Virginia Hilliard in Sydney for information on Robin Hilliard; CSIRO Division of Fisheries, Hobart for providing me with a copy of the 1949 Warreen Survey Log and to Alan Pearce, Division of Marine Research, Perth, for going out of his way to locate visual material associated with the Survey and providing me with copies, and Bruce Wallner and Kevin McLoughlin, Bureau of Rural Sciences, Canberra for copies of their unpublished report.

In Darwin, staff from Foreign Fishing Operations, Australian Fisheries Management Authority (AFMA) in particular Colin Mellon, Mick Munn, Roy McKay and Raymond (Doc) Doherty have at various times over the years provided information on Indonesian boat apprehensions and allowed me to interview Indonesian boat crews in Darwin harbour. Daryl Rolf and Nigel Scullion, Barefoot Marine Security, provided the transport to visit Indonesian fishermen in Darwin harbour. Des Pike from Parks Australia, Darwin provided extensive information on Indonesian activities at Ashmore Reef National Nature Reserve. Pak Argus Sardjana, Pak Mochtar and Ibu Tien also provided information on Indonesian apprehensions. Staff from the NT Legal Aid Commission also supplied information. Thanks to all these people.

In Broome, Les Garbellini, Greg Gaynor, Mike O’Dea, Michael Ferris, and Colin Ossel from WA Fisheries Department provided information on Indonesian boat boardings and apprehensions. They also provided me with office space during a visit to Broome and took me to visit Willie Creek Detention Centre. Volunteer staff at the Broome Historical Museum went out of their way to assist in my enquiries and allowed me access to their files. In Perth, the WA Australian Customs Service located a file from 1957 and generously supplied me with a copy. Philip Vincent from Perth supplied information on Broome fishing cases and Chris Majors provided information on Bajo communities at Sampela and LaHoa. In Canberra, Stuart Fitch from AFMA went out of his way to attend a request for information. Staff from the Department of Foreign Affairs in Canberra supplied information on Indonesian fishing activity and maritime borders between Australia and Indonesia. Again, thanks to everyone.

Other individuals provided assistance in other ways and I would like to thank staff and fellow postgraduate students in Anthropology at NTU for comments during my NTU Anthropology seminar presentations; Usha Dasari of the Museum and Art Gallery of the NT, Elaine Glover and Catherine Robinson of the NTU Library for assistance in literature searches and fast-tracking inter-library loans; Professor James Fox from ANU for advice and support for this project in its preliminary stages; Bu Wilson for company and discussions during an earlier field
trip to Pepela; Dr. Margaret Florey for linguistic and fieldwork advice; Dr. Mark Donohue for some basic Sama language training in Mola; Gabriella Nonino in the UK for translating some German references; James Bennett and Pak Tedjo for assistance with translating some of my tape recordings; Dr. Helen Lawrence and Dr. David Lawrence for advice, accommodation and support in both Darwin and Canberra. I would like to acknowledge the technical assistance provided by Silvano Jung, Diane Pearson and Chris Devonport at NTU in helping me produce some of the maps and figures in this thesis. I also thank staff from the Australian Surveying and Land Information Group Maritime Boundaries Program in Canberra for providing some of the maps used in this thesis.

I would like to thank my parents for their love, for always providing encouragement in my endeavours and for being genuinely interested in my research. I am very grateful to members of my family for recent financial support which enabled me to finish this project. Finally, my sincere gratitude goes to my husband Didier, for his generous love and support both in the field and in Darwin, for supporting me financially during the last few years and for generally hanging in there for so long. He deserves a medal.
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<td>Australian Fisheries Service</td>
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<td>Australian Fishing Zone</td>
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<td>ANCA</td>
<td>Australian Nature Conservation Agency</td>
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<td>Department of Immigration and Multicultural Affairs</td>
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<tr>
<td>DPIE</td>
<td>Department of Primary Industries and Energy (renamed Agriculture, Fisheries and Forestry - Australia)</td>
</tr>
<tr>
<td>EEZ</td>
<td>Exclusive Economic Zone</td>
</tr>
<tr>
<td>JSCFADT</td>
<td>Joint Standing Committee on Foreign Affairs, Defence and Trade</td>
</tr>
<tr>
<td>JSCT</td>
<td>Joint Standing Committee on Treaties</td>
</tr>
<tr>
<td>MAGNT</td>
<td>Museum and Art Gallery of the Northern Territory (ex- NT Museum of Arts and Sciences)</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>nm</td>
<td>nautical mile</td>
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<tr>
<td>NT</td>
<td>Northern Territory</td>
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<tr>
<td>Abbreviation</td>
<td>Full Name</td>
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<td>--------------</td>
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<tr>
<td>PFSEL</td>
<td>Provisional Fisheries Surveillance and Enforcement Line</td>
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<tr>
<td>RAAF</td>
<td>Royal Australian Airforce</td>
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<tr>
<td>RAN</td>
<td>Royal Australian Navy</td>
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<tr>
<td>WA</td>
<td>Western Australia</td>
</tr>
<tr>
<td>WAMM</td>
<td>Western Australian Maritime Museum</td>
</tr>
</tbody>
</table>
Notes

A Note on Typefaces

In this thesis different typefaces are used to indicate different languages. Words in *italics* indicate the Indonesian language, **bold** indicates the Sama language.

Presentation of Texts

In this thesis, Bajo narrative texts are presented as English translations. I have translated texts (from either *Sama* or *Indonesian*) into a more readable English, rather than providing a literal translation. Where it is felt necessary to emphasise certain aspects, I provide a direct quote in either the *Sama* or *Indonesian* language.

Currency Conversion

Throughout this thesis the value of the Indonesian *rupiah* and the Australian dollar has been calculated at a rate of $A1 = Rp1,600; the rate during the main period of fieldwork in 1994 and 1995.

Nautical Mile

1 nautical mile = 1.85 kilometers
Chapter 1
INTRODUCTION

This thesis considers contested rights of access over fisheries resources between Indonesian fishermen and the Australian nation state in the Timor and Arafura Seas. The imposition of international maritime borders between Australia and Indonesia has created a situation of conflict between various groups of Indonesian fishermen seeking access to traditional fishing grounds and the nation states’ secure and sovereign integrity of a border regime. This conflict is exemplified by the dozens and sometimes hundreds of Indonesian fishing vessels apprehended for illegal incursions into Australian waters each year.

The thesis is an ethnographic study of the sailing and fishing voyages undertaken by one group of eastern Indonesian maritime people who operate in waters now Claimed by Australia. It concerns Bajo people (also known as “Bajau” or “Bajau Laut” and by generic terms “sea nomads” or “sea gypsies” who originate from the villages of Mola and Mantigola in the Tukang Besi Islands, Southeast Sulawesi, as well as Bajo from these communities who have recently migrated and settled in the village of Pepela on the island of Roti in East Nusa Tenggara. These Bajo belong to a much larger ethno-linguistic group known as the “Sama-Bajau” who are found in scattered settlements in Indonesia, the Philippines and Malaysia.

Issues: Indonesian Fishing Activity in Australian Waters

For at least three centuries diverse groups of fishing peoples from islands now part of the archipelagic nation state of Indonesia, have engaged in seasonal voyages to fish in the plentiful coastal and offshore waters, reefs and islands in the Timor and Arafura Seas region off northern Australia. This activity is focused on the collection of a range of marine products including trepang, shark fin, turtle shell, trochus shell and reef fish some of which command high prices on international markets in Southeast Asia.

Since the early decades of this century, but particularly since the 1950s, Australia has successfully carried out a series of sovereignty claims and maritime territorial expansions culminating in a 200 nautical mile (ran) Fishing Zone, legitimated under the 1982 United Nations Convention on the Law of the Sea (UNCLOS HI). These claims have gradually encroached on the traditional fishing grounds of a number of distinct groups from Indonesia and turned Indonesian sailors of the open seas into trespassers and illegal fishermen. (All
voyages to Australia are undertaken by males. Thus the term fishermen is used. It is used in preference to the term “fisher” which is a North American mammal).

The Australian government has undertaken measures to recognise some form of prior fishing rights and to regulate ongoing access for Indonesian fishermen in offshore waters now under Australian control. Under a Memorandum of Understanding (MOU) signed with Indonesia in 1974, Australian authorities allow traditional Indonesian fishermen to operate within an area incorporating a number of offshore reefs and islands in the western region of the Timor Sea located in the outer zone of the 200 nm Australian Fishing Zone (AFZ). Access to the area is limited to “Indonesian traditional fishermen using traditional methods and traditional vessels consistent with the tradition over decades of time, which does not include fishing methods or vessels utilising motors or engines” (Agreed Minutes of Meeting Between Officials of Australia and Indonesia on Fisheries 1989). However, this arrangement has largely failed to address issues of marine resource management, recognition of fishing rights and to prevent illegal activity outside the permitted areas.

Australia's response to these illegal incursions has been to adopt a series of policy strategies aimed at deterring Indonesians and to protect fisheries resources. These policies take the form of apprehension of boats and crew found operating illegally in the AFZ, prosecution, confiscation of boats, catch and equipment, jail terms for repeat offenders and repatriation of fishermen to Indonesia at Australia's expense. Complementary to this approach, a series of educational visits by Australian officials to provinces of eastern Indonesia has been undertaken to inform Indonesians of the maritime boundaries existing between the two countries and where Indonesian fishing is permitted inside the AFZ. This costs Australian taxpayers millions of dollars each year. However, the most controversial feature of Australian policy is the burning of Indonesian fishing boats declared forfeit by Australian courts (Fox 1998). Despite these strategies, Indonesian fishing continues.

The issues are complex. They are an entangled web of legal, political, economic and historical trajectories. Over the last decade, the issues have at times posed a serious impediment to diplomatic relations between Australia and Indonesia (Campbell & Wilson 1993:6). They continue to pose a serious challenge for both countries: to devise suitable and appropriate policy and management responses.
For some years a number of Australian commentators have argued that the shortcomings of Australia's policy and treatment of Indonesian fishermen are due, at least in part, to a lack of culturally sensitive insight and understanding (Campbell & Wilson 1993; Van der Spek 1995; Fox 1998). This has also been supported by a Joint Standing Committee on Foreign Affairs, Defence and Trade (JSCFADT) inquiry into illegal Indonesian fishing in Australian waters. In the view of the Committee “if there are deficiencies in some aspects of Australia's handling of the problem of illegal fishing they were probably caused in part at least by a lack of knowledge about complex social and economic situations in eastern Indonesia” (JSCFADT 1993:129).

Commentators have suggested there is a limited acknowledgement and understanding of the diversity of ethnic groups fishing in Australian waters. Generally Indonesian fishermen “assume an inherent, inalienable Indonesian identity” in Australia (Pannell 1993:72). They are categorised as one homogenous group and all prosecuted in the same fashion without any regard to the historical specifics of activity in northern Australia (Fox 1998:134). In fact, Campbell and Wilson (1993) have demonstrated there are at least five different Indonesian fisheries operating. These involve a number of ethnically distinct populations using a range of technologies possessed of differing historical antecedents.

It has further been argued that there are serious problems with the MOU arrangements and the definition of traditional fishing encapsulated within it. This definition restricts access to the allowed areas based on “traditional” technology, and ignores the dynamic aspects of culture change (Campbell & Wilson 1993; Fox 1998). Furthermore, Australian authorities continue to develop and enforce their policies without a clear understanding of the complexities, the subsequent social and economic impacts of the policies, and the relationship of these to continued legal and illegal fishing activity (Campbell & Wilson 1993; Fox 1995a, 1998).

The issue of traditional Indonesian fishing has been further complicated over the last decade by a series of waves of illegal fishing activity involving a number of opportunistic groups of people from Indonesia who generally do not demonstrate a history of fishing activity in the Timor and Arafura Seas. Consequently, recent Australian government effort and focus on Indonesian fishing has been on the “problem” of illegal fishing and “solutions” to minimise or prevent illegal intrusions (Fox 1992; Reid 1992; JSCFADT 1993; Wallner & McLoughlin 1995a:33), and the current impact of Indonesian fishing on Australia's marine resources (Wallner & McLoughlin 1995 a, 1995b). While over-exploitation of some resources in the
Arafura and Timor Seas is a matter of concern, the problems faced by the fishermen have generally been ignored. The attention has focused on surveillance, apprehensions, prosecution and boat forfeiture rather than on alternative management responses.

Alternative approaches are required. These involve both short and long term strategies (Russell & Vail 1988; Campbell & Wilson 1993; JSCFADT 1993; Fox 1998). These in turn involve identification of different groups of Indonesian fishermen in order that suitable arrangements and treatment can be devised for each group since the different fisheries “present separate problems for which different measures are needed” (JSCFADT 1993:117). This calls for investigation of the historical, social, cultural and economic organisation of each fishery active in Australian waters (Campbell & Wilson 1993:193; JSCFADT 1993:117; Fox 1995a:x). To date, no detailed ethnographic research has been conducted and this lack of ethnographic insight continues to mar Australian policy decisions (Van der Spek 1995). This thesis provides a beginning. It examines “what is actually happening on the water” (Cordell 1989:5) with regard to Bajo fishermen from Southeast Sulawesi.

**Aims and Questions**

The aim of this thesis is to examine the social, cultural, economic and historic conditions which underpin legal and illegal Bajo activity in the Australian Fishing Zone. It presents an analysis of the history of voyaging, continuity and change in patterns and organisation of voyaging, the material culture of fishing, voyaging economics, along with Bajo world views and rituals associated with boats and fishing activity.

I also examine issues concerning Australian maritime expansion and Australian government policies, treatment and understanding of Indonesian fishing with particular regard to the Bajo. I set this examination within the context of the dynamics of culture change and continuity in a situation of interaction between small groups and international resource politics (Marcus & Fisher 1986; Clifford 1988).

The thesis addresses four main questions. Firstly, what effect has Australian maritime expansion and the 1974 MOU agreement regulating access for Indonesian traditional fishermen to areas of the AFZ had on Bajo fishing activity? I show that as a result of restrictions to activity, their fishery underwent considerable change from the late 1980s.
However, this did not happen in isolation. This dynamism is examined through analysis of the interrelationship between Bajo responses to Australian maritime expansion and the 1974 MOU, and wider external forces of the domestic and international trade in marine products impinging on the Bajo. I doing so, I show the Bajo are part of a modern world system. The Bajo are contextualised local people in a global framework (Marcus & Fischer 1986; Clifford 1988). They have adopted new technology and interact with the wider domestic and international economies in creative and enterprising fashion.

Marcus and Fischer (1986) have stated the need for anthropology to embed local cultural worlds in larger impersonal systems of political economy. They argue that “‘outside forces’ in fact are an integral part of the construction and constitution of the ‘inside’, the cultural unit itself, and must be so registered” (Marcus & Fischer 1986:77). In this anthropological project the purpose is not just to provide a description based on a “measurement of change” in Bajo fishing but instead to acknowledge the Bajo as being in a situation of flux, and accommodation of cultural continuity within broader processes of influence (Marcus & Fischer 1986:78).

Theoretically, the material culture of fishing provides an excellent opportunity to study the dynamics of culture change in a situation of interaction between small local socio-economic groups and the developing state. The socio-cultural unit is deeply embedded in the conventional frames of ethnographers (Marcus & Fischer 1986) and needs radical reworking within the political economic contact of national and international resource politics. Transformations in material culture will provide insights into issues of encapsulation and culture change among peoples previously categorised as ahistoric (Wolf 1982), oriental (Said 1979) or “traditional”.

Secondly, I consider the notion of “traditional” in relation to Bajo fishing activity in the AFZ. Access to the 1974 MOU area for Indonesian fishermen is defined by the use of “traditional” or unchanging technology over time. What are the direct and far reaching consequences of this concept of traditional fishing contained in the 1974 MOU? By exploring the consequences of this, I argue that the old fashioned way of encapsulating cultures as “traditional” or static ignores cultural dynamism. I will demonstrate that while Australia and Indonesia continue to enforce policy towards traditional fishermen as something frozen in time, the Bajo are in fact demonstrating cultural dynamism in response to a range of local and international forces.
I also examine the implications of invoking this particular interpretation of “traditional” and a corresponding tendency to dichotomise “traditional” with other terms used to describe the Bajo fishery such as “modern”, “commercial” and “subsistence” in light of Bajo dynamism. I show that because of changes in Bajo fishing activity, and an adherence to entrenched notions of “traditional” fishing activities as static, subsistence orientated and noncommercial, the Bajo are no longer considered to be operating “traditionally” but “commercially”. I demonstrate that from the beginning, Bajo fishing activity in the AFZ has been a commercial activity. In addition, I examine how such views have resulted in misunderstandings and inconsistencies in Australia’s treatment of Indonesian fishermen. Furthermore, it appears this has hindered attempts at providing solutions to the issues concerning traditional Indonesian fishing activity in the AFZ. Drawing on contemporary anthropological approaches I examine how an alternative to this discourse of the immutable, primitive “traditional” can bring constructive insights and clarity to the situation.

Thirdly, the study also addresses the question: why do the Bajo continue to fish both legally and illegally in the AFZ? Through an examination of the effectiveness of Australian policy, namely the 1974 MOU and the policy of deterrence, I explore why illegal fishing continues. I argue that the 1974 MOU and the apprehension, prosecution, confiscation and destruction of boats not only do not deter illegal fishing, but in fact are actually responsible for further illegal fishing activity.

I also explore other historical, socio-cultural and economic motivations for continued fishing and sailing despite Australia’s maritime expansion. Fishing and sailing continue despite loss of access to traditional fishing grounds, despite technological restrictions, boat apprehensions and confiscations. In doing so, I present evidence to reject claims that fishing activity is driven only by lucrative economic reasons and resource depletion in Indonesian waters (JSCFADT 1993:128). My work reveals other motivations.

The final question investigated in this thesis concerns future management of Indonesian fishing activity in the AFZ. Previous research by scientists from both the social and biological sciences, working both in academia and government, agree that the most suitable options for sustainable management of marine resources in the MOU area and for more equitable conditions for traditional fishermen, rest on a re-negotiation of the 1974 MOU and a revised definition of traditional fishing, and on more appropriate regulation and access for the different groups of traditional fishermen through forms of licensing (Russell & Vail 1988:139–143;
Reid 1992:8; Campbell & Wilson 1993:186; Wallner & McLoughlin 1995a:34, 1995b: 121; Fox 1996:174, 1998:130). The first step in this process involves identifying the fishermen “who can demonstrate an historic interest in these waters” to whom “priority access rights should be granted” (Wallner & McLoughlin 1995a:34). The study asks: do the Bajo have a historic interest in the AFZ?

**Concepts of “Traditional”**

A central theme of this thesis is concerned with a clash existing between ways of encapsulating cultures as “traditional”. I set this clash in the context of recognition of so called traditional societies as part of wider systems, not isolated cultural entities.

In the last three decades, Western writing has been criticised for the “distorted way that it constructs and presents alien societies” (Carrier 1992a: 195). This debate stems largely from Edward Said's *Orientalism* (1979), although criticisms had been made previously (eg. Asad 1973). One criticism of Said's is the way the Orient has been portrayed in essentialist terms - where the West has presented alien societies as static and simple, isolated from Western influence (Carrier 1992b:3). Fabian (1983) was also at the forefront of these criticisms. In *Time and the Other*, Fabian articulates these notions in his historical critique of how the Other has been distanced in space and time from Western culture. Fabian (1983:31) calls this denial of common Time the “denial of coevalness”, which positions the Other in another time, or out of time, from the West. This process has developed partly from 19th century evolutionary schemes, which placed all societies in a developmental sequence of progress, “a temporal slope…a stream of Time - some upstream and some downstream” (Fabian 1983:16). This discourse holds that societies passed through stages of development from the “savage” to the “civilised”. Terms used in “temporal distancing” (Fabian 1983:71) like “primitive” or “traditional” came to refer to less technologically developed societies who were untouched, static survivals of the past. From these discourses arose corresponding dichotomies and the tendency to discuss societies in terms of dichotomies such as progress - stagnation, development - underdevelopment and modernity - tradition (Fabian 1983:144). Despite widespread tendencies to dichotomise cultures in these ways, there must be a realisation that Others themselves have histories (Wolf 1982) and exist in the same time and space as ourselves.
Much anthropological writing about so-called “traditional”, “native” or “indigenous” societies across the globe, has been “traditionalist” (Fabian 1983; Marcus & Fischer 1986; Carrier 1992b; Miller 1994:59; Merlan 1998:3). This “traditionalism” according to Merlan (1998:231) is the process of “the reproduction of idealized representations of native societies as they allegedly are, in the terms of how they supposedly were”. These “traditionalist” accounts of indigenous peoples “support a vision of the world in which at least some portions of it, some peoples of it, remain customary, unchanged, and therefore different from ‘us’, inherent and unreflective in their relation to their ‘culture’” (Merlan 1998:4).

For over a decade, anthropology has “involved itself in a thorough-going critique and rejection of static models of culture” (Scott 1993:322) and shown that tradition is not some static condition unchanged through time. In an influential book by Hobsbawm & Ranger (1983) it was argued that traditions were not fixed to be passed down through generations from time immemorial, but could be recent in origin - as recent as a few years old. The “invention of tradition” (Hobsbawm & Ranger 1983) and “the invention of culture” (Wagner 1975) and other analytical frameworks point to processes whereby people actively formulate and codify their tradition. Furthermore, “there is no traditional baseline of unchanging homeostasis” from which to measure tradition, “nor is there any one-sided change caused by colonialism and modernisation” (Hviding 1996:29). Rather, “in encounters with colonial and other ‘modern’ powers, so-called traditional systems tend to generate creative responses to the challenges from afar” (Hviding 1996:29).

As Marcus and Fischer (1986:78) note,

Most local cultures worldwide are products of a history of appropriation, resistances, and accommodations. The [present] task…is…to revise ethnographic description away from [a] self-contained, homogenous, and largely ahistorical framing of the cultural unit toward a view of cultural situations as always in flux, in a perpetual historically sensitive state of resistance and accommodation to broader processes of influence that are as much inside as outside the local context.

Much of the earlier debate on the concept of tradition has largely focused on studies outside Australia. In studies on Pacific societies there has been a burgeoning literature on the subject of tradition and custom since the publication of the issue of *Mankind* “Reinventing Traditional Culture: the Politics of Kastom in Island Melanesia”, edited by Keesing and Tonkinson (1982).
There is an extensive literature on the subject examining developments in the study of tradition and its construction and relationship to culture, history, politics, nationalism, and identity in the Pacific and Oceanic region.

In an overview of developments in the “invention of tradition” literature since 1982, specifically in regard to Oceania, Tonkinson (1993:598) explores aspects of tradition “that continue to offer useful avenues for further research…in light of what we know about it as a complex and ramifying domain of meaning, discourse and action”. In his view he concluded “tradition is most effectively conceptualised as a resource employed (or not employed) strategically by certain (but not all) of a community's members” (Tonkinson 1993:599). This approach is particularly useful in places like Australia and North America, where the nation state demands indigenous minorities “present their claims to rights and resources largely in terms of 'traditional’ validatory criteria, such as kin group affiliation, land tenure principles, religion and language” (Tonkinson 1993:603).

In Australia recent contested and politicised notions of tradition have been borne out in issues between Aboriginal Australians and the wider Australian society over heritage sites, land and sea rights and native title. In 1992, an Australian High Court decision known as the Mabo decision recognised the existence of native title and indigenous ownership of the land and in doing so abandoned a 200 year old legal fiction that Australia was terra nullius “a land without owners” at the time of British settlement. Native title claims require claimants to demonstrate “traditional law and custom”.

In a more recent paper, Tonkinson (1997) analyses issues surrounding the complexities of tradition and the politics of interpretation with regard to the controversy over an event known as the Hindmarsh Island Bridge Affair in South Australia. This concerned a proposed bridge development, issues of protection of an Aboriginal heritage site, the existence of a secret women's tradition, and fabrication of that tradition among the local Ngarrindjeri people of the area. In the Hindmarsh affair, among other things, much debate “hinged upon whether or not people focused on the distant past as some kind of legitimising baseline for the existence of tradition” (Tonkinson 1997:11–12) and politicisation of the innovation of tradition. A number of issues emerge from Tonkinson's paper and the larger debate surrounding tradition and rights in Australia that are of relevance here. They parallel issues surrounding Indonesian fishing.

According to Tonkinson (1997:12),
Adopting a perspective on tradition that conceptualises it as a resource, strategically deployed by groups of people in the defence or furtherance of their interests, raises larger political issues, particularly in societies like Australia where indigenous cultures coexist with a dominant nation state. For example, it poses a considerable challenge to law-makers: how to frame and implement heritage and similar legislation so as to take account of the dynamism inherent in indigenous constructions of tradition and the variety of pressures that influence the nature and trajectory of these constructions. The difficulty here is the tension that exists between the need to ensure some degree of flexibility - to allow for the dynamism inherent in these constructions of tradition - and legal requirements for sufficient boundedness or closure to allow legislators to formulate widely applicable criteria for assessing ‘significance’.

These issues have been played out in Australia previously with regard to the Coronation Hill debate (Merlan 1991). There, against popular opinion of non-Aboriginal Australians that Aboriginal culture is “ancient and unchanging” (Merlan 1991:341), the emergence of contemporary new traditions were labelled as “suspect” and “inauthentic” (Tonkinson 1997:12). In addition, Tonkinson goes on to say,

attacks such as these are especially likely when emergent traditions threaten in any significant way the interests of governments or the private sector, and potentially large financial returns are seen as endangered by successful invocation of Aboriginal heritage legislation (Tonkinson 1997:18).

In Australia, there remains a “lack of public awareness” of the dynamism inherent in Aboriginal culture and that “the inevitable transformations through time are due partly to powerful external forces that have sometimes been imposed, and certainly engendered, them” (Tonkinson 1997:19). This poses significant challenges for anthropologists and the anthropology profession to elucidate “the realities of cultural dynamism” (Tonkinson 1997:20) to the dominant society and those practitioners directly involved in heritage and native title and their role as “cultural translators” (Tonkinson 1997:20). The same applies to Indonesian fishing, and realisation of this by government and policy makers is an important step in dealing with the issue.
Contention over notions of “traditional” regarding indigenous hunting rights are found in other parts of the world. For instance, ongoing contention exists between Inuit in the Arctic and anti-sealing groups over what constitutes “traditional” Inuit seal harvesting activity (Hovelsrud-Broda 1997). Inuit are permitted to harvest seals provided they are hunted by “traditional” methods, not employing “modern” technology (e.g. rifles, snowmobiles, outboard motors) and that the skins are for “subsistence” trade not sold for cash (Hovelsrud-Broda 1997:17). Animal rights groups have argued that cash and the use of modern technology has removed Inuit hunting from its traditional context. Hovelsrud-Broda (1997:22) notes that for the Inuit “tradition pivots on reliance upon seals and not on the type of technology they employ in seal harvesting”. Moreover, such a perspective does not reflect the reality of contemporary Inuit hunting communities, their tool kit, and the reality of change. Generally, for Inuit groups the harvesting of seals is “an element of continuity with the past” (Hovelsrud-Broda 1997:22). However, while they retain many “traditional” customs they also modify others or create new ones in response to a changing social and economic environment (Hovelsrud-Broda 1997:30). For the Inuit, tradition cannot be something fixed in time; “traditions are kept, invented, and reinvented” (Hovelsrud-Broda 1997:30). Such is the case with all cultures.

Various interpretations of the concept of “traditional” such as those levelled at Aborigines and other indigenous peoples elsewhere have been made in regard to Indonesian fishermen by Australian authorities. This discussion of “traditional” and the tradition versus modernity dichotomy is intended as an introduction to a major theme of this thesis. In later chapters, I examine these notions and implications in more detail in relation to Bajo fishing rights in Australian waters.

**Significance of Research**

It is remarkable that despite the long and continuous presence of Indonesian maritime populations in the north Australian region and the identification of the complex series of problems and issues associated with Indonesian fishing activity in the AFZ and subsequent recommendations (e.g. Russell & Vail 1988; Campbell & Wilson 1993; JSCFADT 1993; Wallner & McLoughlin 1995a; Fox 1998), it has not inspired longer term research strategies and analysis. There has been very little ethnographic research among the various fishing groups from Indonesia active in the AFZ. The major contributions to the study of Indonesian fishing in the AFZ have stemmed from research conducted in Australia examining Australian sources such as historical and archival material, State and Commonwealth government files and
reports, or through interviews conducted with apprehended fishermen while held in Darwin in the Northern Territory (NT) or Broome in Western Australia (WA) (Burningham 1989a; Fox 1992, 1993; Reid 1992; Campbell & Wilson 1993; Wallner & McLoughlin 1995a; 1995b), or at Ashmore Reef (Crawford 1969; Russell & Vail 1988). The exception to this is a recent article by Fox (1998) based on interviews with apprehended fishermen in Darwin as well as short term field research among fishing communities from the island of Roti.

This lack of ethnographic research is even harder to believe when Australia has been energetic in expressing its concerns over increased illegal fishing activity and resource depletion in the AFZ. Perhaps more importantly, the fishermen themselves have been ignored in the whole process of debate and discussion regarding their livelihood and rights. This present study of Bajo sailing and fishing is designed to begin to fill this void. It provides the first detailed ethnographic study of one group of Indonesian fishermen active in Australian waters.

The current study has practical value for a greater understanding by the Australian public and government sectors of the Indonesian maritime sector, and issues concerning traditional Indonesian fishing activity in the AFZ. The thesis will also serve to contextualise Bajo fishing activity within the wider issue of traditional Indonesian fishing in the north Australian region.

**Why Study the Bajo?**

The Bajo were chosen as the focus of this study over other groups of Indonesian fishermen operating in Australian waters for a number of reasons. I was strongly influenced by Campbell and Wilson's (1993) research results which represented the most detailed study to date concerning Indonesian fishing in the AFZ. In their pioneering analysis of the different Indonesian fisheries operating in the AFZ, based on Australian sources, Campbell and Wilson (1993:191) concluded “there is every reason to believe” Bajo from the Tukang Besi Islands had been fishing for shark in the Timor Sea, before the area was claimed as part of Australia's 200 nautical mile Fishing Zone in 1979; an area from where they are now excluded. Campbell and Wilson (1993:191) argued there is a Strong case” to consider this “Traditional Shark Fishery” as a “traditional fishery with respect to Australia”. Bajo could thus be given traditional rights and access to the AFZ, through the licensing of boats. However, they stated, “hard evidence” for such a claim was not available at that time in Australia, for it would require “ethnographic study in Indonesia”, covering the “whole social, economic and cultural organisation” of the fishery (Campbell & Wilson 1993:193). Such research would then provide
the necessary information to assess, design and implement more appropriate conditions under which a traditional fishery could operate in the AFZ, including technological considerations and a management framework (Campbell & Wilson 1993:193).

The Bajo of the Tukang Besi Islands and Bajo from other areas of Indonesia are one group among a number of different Indonesian maritime populations operating both in Australian and Indonesian waters in the Timor and Arafura Seas. Bajo are also found operating in the Arafura Sea region and are often apprehended for illegal fishing activities (in motorised boats) in the AFZ. Other groups of fishermen such as those from the islands of Roti, Madura, and Raas do not operate in such a widespread area as the Bajo. By focusing on one ethnic group which is representative of a larger group of Bajo fishermen found operating in the AFZ, the research results will have a much wider contribution to the current issues of Indonesian fishing activity in the AFZ.

Field Work in Indonesia and Australia

In November 1992, a few months before beginning my PhD, I made a brief reconnaissance visit to Indonesia including Kupang (Timor), Pepela (Roti), Maumere, Wuring and Pemana Besar Island (Flores). Here I was able to meet fishing communities whose members were active in the AFZ and to start thinking about choosing a research site. I began my candidature in March 1993 and studied Indonesian language Level 1 at NTU during first semester. In July–August 1993, I studied Level 2 Indonesian intensively for one month at Nusa Cendana University in Kupang. After the course, I visited the village of Pepela, and the Maumere region in Flores again and then travelled to Kendari and the village of Mola at Wanci island, in Southeast Sulawesi. I decided to focus my research on the Bajo from the villages of Mola and neighbouring Mantigola at Kaledupa Island in the Tukang Besi archipelago who, based on initial investigations, had been fishing in the north Australian region for decades. I studied Indonesian intensively again at Nusa Cendana University in Kupang in December 1993–January 1994, and during the Christmas break visited Pepela for the third time. My LJPI research permit was approved and I left Darwin in May 1994, and via Jakarta, Ujung Pandang, Kendari, Bau Bau, I finally arrived in Mola on 21 May 1994.

My main ethnographic research was conducted during approximately 11 months fieldwork in Indonesia between May 1994 and April 1995. This period was roughly divided into three phases, corresponding to Bajo patterns of voyaging. I initially spent the first two months in
Mola (May–July 1994) accompanied by my husband. Harun, the local primary school teacher and Yayasan Sama representative in Mola, who I had met on my previous visit, put us up for the first few days in his small house and helped find a house for ourselves amongst his neighbouring relatives. Akmad and his wife Mambi agreed to rent their house to us, while they and their children (3–5 depending on number of sons absent) lived in the kitchen which was in effect a small thatched hut with a veranda around two sides, large enough for a cooking, eating and sleeping area, connected to the back of the house by a wooden walkway. Mambi and her daughter Ruhaya agreed to cook for us and kept us on a delicious but continual diet of fish and rice.

The wooden house was built on stilts over a foundation of coral rock, officially located in desa (village) Mola Utara but physically located roughly in the centre of the settlement of Mola Utara and Mola Selatan on the sea side. The house could be reached from the island of Wanci by negotiating coral rock and concrete pathways. From the house, the main parts of the village could be accessed by foot and other parts of the village could be easily reached by canoe. From the house I had a good view of the main village anchorage and thus an excellent position to keep visual track of the comings and goings of watercraft, travellers, traders, fishermen and families.

It was an ideal time to start my research into Bajo fishing voyages, as preparations were beginning for the forthcoming east monsoon fishing season. In addition, Akmad is a boat owner and captain and had been sailing to the north Australian region, all over Indonesia and further to Singapore and Malaysia for many years. He was an excellent source of information.

No-one spoke English in Mola and I conducted my conversations in Indonesian which rapidly improved as time went on and I developed a specialised fishing - sailing vocabulary in the local form of Indonesian spoken in the region. I also learnt a small collection of Sama language stock phrases and words. This increased over the 11 months.

I was assisted for the first month of my research by Kasmin, a Mola Bajo who had recently graduated from Haluoleo University in Kendari, but who did not speak English. Kasmin was able to translate Sama language into Indonesian for me on the spot. He also translated my tape recordings, helped conduct a census, clarified material, generally helped organise visits to people, and transported me around the village by canoe.
During the first weeks of fieldwork, I conducted a basic census of all the households in Mola Selatan and Mola Utara to determine types of boats owned and by whom. This provided information to begin investigations into which Bajo were involved in fishing voyages to the north Australian region. It is unmotorised wooden boats called perahu lambo that are used to undertake voyages. It became obvious that many of those Mola Bajo involved in current and past fishing voyages to the region lived in Mola Selatan and that there were strong kinship ties between boat owners and captains and crew. I focused initially on each perahu lambo and owner, making life histories of each boat and owner and also accessing pass-books of some boats which recorded past sailing activities and destinations. I made a photographic record of most perahu. Preparations were underway for the forthcoming shark fishing season and I had discussions with captains and crew members collecting information on forthcoming voyage preparations, economics of voyaging, crew organisation, fishing gear and shark fishing practices. I participated in rituals moving boats from the sheltered village waterways to the harbour, and in ceremonies marking the departure of perahu from Mola to Pepela. I also conducted interviews and discussions with past and current boat captains and crew about past and current sailing - fishing patterns. I began collecting oral history about the Bajo and about Bajo voyaging to the north Australian region, as well as information about boats and crew previously apprehended for fishing illegally in Australian waters.

During this first period, I made a short visit to the island of Kaledupa, to the village of Sampela, another Bajo settlement, only for half a day, and to Mantigola for a couple of days, collecting similar information about boat, owners, captains and crew as I had done in Mola. I also had the opportunity to interview Bilaning, the oldest Bajo living in Mantigola, about Bajo history, past fishing activities and origin stories. Other information about Mantigola Bajo and past and current fishing activities was collected during the second stage of research in Pepela, or during visits by Mantigola Bajo to Mola during the third stage of research. During fieldwork, I did not have an opportunity to visit the two other Bajo settlements in the Tukang Besi Islands - La Hoa, the third Bajo community at Kaledupa Island or LaManggau at Tolandon near Tomia Island.

By late July some of the Mola and Mantigola perahu and crew had left for Pepela, including some family of boat owners, captains and crew. Unfortunately, I had to leave Mola on 25 July and return to Darwin because my husband was suffering from a severe bout of Dengue Fever. This did not prove to be so much of a problem since I had planned to go to Kupang and
Pepela around this time (but by boat) and Kupang is quite accessible from Darwin. After three weeks in Darwin, I flew to Kupang and arrived in Pepela on 27 August. By this time, most of the Mola and Mantigola Bajo perahu crew and some families had relocated to Pepela for the east monsoon fishing season. The Bajo were surprised to see me again and were terribly concerned about the health of my husband who joined me 6 weeks later. In Pepela I lived at the local guest house, (where I had stayed on previous occasions) from 27 August to 5 December, punctuated by a few short visits to Kupang for supplies and on one occasion a 10 day rest. The guest house was the most ideal place to live, with my own room, a place to work at night and meals cooked for me. I had little trouble settling in as I was already familiar with Pepela and some members of the permanent community from previous visits, as I was with many of the Mola and Mantigola Bajo.

Since my research was focused on the Bajo rather than the local Pepela community, I spent much of my time in and around Bajo houses in the eastern end of the village and on Tanjung Pasir, the Bajo hamlet built on the beach. I began by keeping records on the movement of all the Bajo perahu operating out of Pepela. This was quite a challenge since there were over 60 Bajo crewed perahu and even more Pepela perahu along with boats from other areas including Oelaba (west Roti) anchoring in Pepela harbour. I tried to talk with as many Bajo perahu captains and crew either on their perahu on return from fishing trips, on the beach or in their houses. I collected information on the patterns of shark fishing, sailing routes, the economics of voyaging, marketing and trade in shark fin and crew organisation. I also talked to some Pepela perahu owners, captains and crew about their past and present fishing activity. I accompanied some crew to the traders’ premises and observed the trade in shark fin, patron-client relations, as well as consulting the traders on separate occasions. I also conducted a small census of Bajo houses and households in Pepela. I spent many hours talking with Mola and Mantigola Bajo on their perahu in the harbour in between voyages, about those voyages and about their experience with Australian Navy patrol vessels and officers. I also talked with the Bajo women and children on the Tanjung settlement waiting for the men to arrive home from fishing trips, or from Darwin or Broome. The three months in Pepela were punctuated by busy and slow periods, in some instances for example, 30 or 40 perahu would return in a space of a few days and the same number would leave again. During some periods there were only a handful of perahu crews in Pepela and often the harbour was quite deserted. During such times, I spent many mornings and afternoons talking and gossiping with Pepela and Bajo women. During fieldwork, while keeping records of the entire Bajo sailing fleet operating
during the season, I focused my data collection on boat captains and crews who departed Mola for Pepela and returned to Mola at the end of season.

I experienced some difficult periods particularly in late 1994 when a number of Bajo and Pepela boats and crew I had worked with over the previous months were apprehended for illegal fishing activity and taken to either Darwin or Broome. This was very upsetting for me personally, when most of the boats were under threat of possible forfeiture and destruction, to say nothing of the severe financial loss the fishermen and their families would suffer. This was particularly so since I was familiar with the economic situation of some Bajo men and their families. The situation also caused a degree of angst among both the Bajo and Pepela community, among whom a handful of men thought I should be actively assisting those apprehended crews by getting them released. Rumours were rife. The issue was also complicated by a series of stories that I was issuing fishing permits to the Bajo to fish exclusively in the AFZ! These rumours had stemmed from talks I had had with a Bajo trader, based in Dobo (Aru Islands) who was trying to obtain fishing permits for boats registered in his Cooperative to fish along the Australia - Indonesia border. The confusion and rumours did not last long, after I, with the assistance and support of a number of Pepela and Bajo men, again explained my situation.

During one of three main periods when there was virtually only a handful of perahu left in Pepela in between voyages, I made a short visit to the village of Sulamu, near Kupang, and interviewed Nasseng, a respected Bajo elder originally from Mola but now living in Sulamu. I was very happy finally to have the opportunity to do so as the Bajo continually told me he was the one who knew all the Bajo history (diet tahu semua).

By late November, some Bajo perahu and families had left Pepela and returned to the Tukang Besi Islands. On 5 December, my husband and I joined Sumber Jaya, an unmotorised Bajo perahu lambo, captained by one of my main informants, and sailed from Pepela, through the Maco Strait and Flores Sea to Mola over one week. There were 17 people on board, including one other woman, the sister of the captain. I was able to observe sailing methods and skill and experience in part, some aspects of what it is like to be at sea on a perahu lambo. On arrival in Mola, the Bajo were quite surprised that the weak white orang barat (foreigners) had survived the journey, and from this time onwards, we were accepted even more than previously.
I had a well needed break over Christmas and New Year in Toraja in the mountains and rice fields of South Sulawesi (change of scene) and arrived back in Mola via Ujung Pandang and Bau Bau on 9 January 1995 for the final stage of the field research. I lived in the same house as the previous year. Shortly after arriving in Mola, I had to return to Bau Bau (a gruelling 5–7 hour trip by canoe, ferry, canoe, and bus), to attend a meeting with representatives from Mola. This was one of a number of educational meetings concerning illegal Indonesian fishing activity in the AFZ held in Indonesia that month with representatives from Australian and Indonesian Government departments. After the Bau Bau meeting, the village head held a meeting in Mola Selatan to convey the Australian message and hand out maps. I was invited to talk and explain the maps.

With the west monsoon season, and generally a non-sailing (shark) season, I was able to follow up queries with perahu owners, captains and crew about the previous season's fishing, and in some cases apprehension. For some Bajo, particularly those who had been successful the previous season, the west monsoon months were a rest period. Others worked for local bosses, fishing for live fish at local and distant coral reefs, while some fished locally, weather permitting, and carried out maintenance work on their perahu. During these months, many social activities were organised, including dance (joget) parties as well as circumcision of boys and girls prior to and following Ramadan, the fasting month during February and early March. During the last three months, I focused my enquiries on perahu construction and associated ritual. I also undertook discussions with boat builders and ritual experts in Mola, observed boat building and the launching of a perahu (built for a motor). I also talked to a number of other ritual experts and Bajo elders about past voyaging activities, Bajo world views, fishing ritual, healing rites, and collected more oral history on voyages to the Timor Sea. During some of the time Kasmin, my research assistant, was able to work with me again. I collected information about types of boats previously built and sailed by the Bajo, fishing techniques used in Australian waters, and participated in a trip to a local offshore reef to observe a net fishing technique. I also participated in local fishing and collecting around Mola, visited the market, but generally spent little time on the land; often only going to the land once a week.

During the course of this study, I did not rely on only a handful of main informants but tried to obtain a broad picture. Thus I spoke to and collected information from many people, both in Mola, Mantigola and Pepela. However, the majority of information came from a core group of perahu owners and captains, predominantly from Mola Selatan, many of whom were related
and very respected, skilled and knowledgeable sailors. I had very detailed discussions with these men and came back to them for clarification and elaboration. I also spent many hours with two Mola perahu ritual experts, and a handful of other Mola ritual experts and elders. I consulted with the local government leaders and their staff and the local Bajo primary school teacher. Most typically, I usually spent the mornings and afternoons out visiting and talking to people in their houses or on their boats, and wrote my field notes in the late afternoons and evenings. Often in the evenings our house was frequented by neighbouring elderly men and women, our neighbours and host family, who recounted their experiences to me over glasses of iced orange cordial and Indonesian clove cigarettes. I cross-checked information with different captains and crew, and my research assistant provided clarification, as did Akmad, the male head of the house we lived in.

I left Mola on 4 April and stopped in Kendari for a week to obtain an exit permit and to talk with Alimaturahim from the Yayasan Sama, then spent a few days in Ujung Pandang investigating the trade in shark fin with one of the largest traders in marine products. I then flew to Jakarta, submitted my final report to LIPI and met with representatives from the Australian Embassy to discuss Indonesian fishing in the AFZ. I returned to Darwin on 24 April 1995, feeling odd in the empty streets and quiet suburban neighbourhoods.

I made a return visit to Mola for three weeks during late January – early February 1997, which included a short visit to Sampela and Mantigola. During this trip, I was able to check and clarify material previously collected.

Other field work was conducted in Darwin between 1993 and 1999 interviewing Indonesian perahu crews (some of whom I knew quite well) held in Darwin harbour for illegal fishing activity. They included Bajo from Mola, Mantigola, and Pepela, as well as Pepela crews, along with Bajo, Butonese, Bugis, Rotinese, Alorese and Madurese crews from other areas of Indonesia. I made a photographic record of most of the Indonesian vessels that have been apprehended and brought to Darwin. Usually, I was allowed to go and talk to captains and crew on their boats only after their court hearings were finished.

The Australian Fisheries Management Authority (AFMA) officers in Darwin also provided information about Navy and Fisheries activities and Indonesian fishing in the AFZ, and I accessed AFMA Fisheries Files at the Darwin office. I attended some court hearings in Darwin and spoke to Legal Aid staff and had access to court transcripts. I also gathered material and
consulted with staff from Parks Australia (ex Australian National Parks and Wildlife Service and the Australian Nature Conservation Agency) concerning Ashmore Reef National Nature Reserve. I have also had numerous discussions with officials and staff from the Department of Foreign Affairs and Trade (DFAT) and the Department of Primary Industries and Energy (DPIE) in Canberra.

I visited Broome for one week in November 1995 and accessed WA and AFMA Fisheries Files and records as well as visiting the Broome Historical Museum and Willie Creek Detention Centre. I also obtained information regarding Broome perahu apprehensions from the WA Fisheries office during the duration of this study.

**Sources on Indonesian fishing in Australian waters**

The origins and history of Indonesian voyages and activity in the north Australian region from the early 17th century to the early 1900s have been the subject of quite detailed archaeological research. The major work on the Macassan trepang industry is Macknight (1976). More recent archaeological research on Macassan visits to the NT is that by Mitchell (1994) and archaeological investigations have begun into Macassan activity in WA (Morwood & Hobbs 1997).

The main literature sources on diverse groups of fishermen from Indonesia who have fished in the northwest Australian region from the early decades of this century until the late 1960s include: newspaper reports; an unpublished compilation of material by Bottrill (1993); State and Commonwealth archival sources cited in these works as well as in Bach (1955) and Bain (1982), both of whom devote some attention to foreign fishing and poaching activities as a sideline issue to the northwest Australian pearling industry in the early decades of this century; a Biological Log from a 1949 Commonwealth Scientific and Industrial Research Organisation (CSIRO) Fisheries Research survey in the Timor Sea (CSIRO 1949), and associated material; Serventy's (1952) subsequent article; an account by Lind (1994), a past resident of the Kimberley region in Western Australia; Australian Customs Service File (ACS 1957) concerning the apprehension of an Indonesian perahu in 1957; and sections of Crawford's (1969) doctoral thesis.

There is also a range of material stemming from research based on Indonesian fishing vessels held in Museum collections around Australia. The Australian National Maritime Museum
(ANMM) has a Madurese perahu *lete lete* (*Sekar Aman*) and associated fishing equipment in its collections. Articles and reports have stemmed from research about *Sekar Aman* and other Madurese voyages to the Timor Sea region (Mellefont 1988, 1991a, 1991b, 1997; Scott 1988). The Western Australian Maritime Museum (WAMM) acquired a perahu *lambo*, the *Sama Biasa* from Pepela which was confiscated and donated to the Museum in 1980 along with other collections of fishing equipment. This has been the subject of research concerned with perahu *lambo* boat building traditions (Bumingham 1989b). The Museum and Art Gallery of the Northern Territory (MAGNT) probably has the largest ethnographic collection of Indonesian watercraft and fishing material culture in Australia. Some of the boats (*Karya Sama; Tujuan*) in the collection were confiscated for illegal fishing activity and subsequently donated to the Museum. One boat has been the subject of detailed research (Stacey 1992). A paper surveying some of these Indonesian fishing vessels held in Australian Museum collections has also been published (Stacey 1997).

From the early 1970s, the major sources on Indonesian fishing activity in Australian waters are reports and records from various State and Commonwealth government departments. These include files and databases of boat apprehensions and prosecutions from the Western Australian Fisheries Department in Broome (cited in literature as AFS Indonesian Database and WA Fisheries Files), the Foreign Fishing Operations Branch of the Australian Fisheries Management Authority at the Northern Territory Department of Primary Industries and Fisheries in Darwin (cited in literature as NT Fisheries Files); the Australian Fisheries Management Authority in Canberra; Parks Australia boarding and patrol reports from Ashmore Reef; material and reports by the Department of Foreign Affairs and Trade, including a compendium of information compiled in 1988 (DFAT 1988); as well as media reports and omer published material.

Research into the issue of Indonesian fishing activity was undertaken as a consultancy by staff from the MAGNT to investigate the impact of Indonesian fishing activities at Ashmore Reef National Nature Reserve for the Australian National Parks and Wildlife Service (Russell & Vail 1988). The subsequent report summarises historical data on traditional Indonesian fishing activities at Ashmore Reef and provides an analysis of the various groups of Indonesians visiting the region during the years 1986–1988. The report also covers information collected from interviews with 13 perahu crews and captains present at Ashmore Reef during their fieldwork. The report also presents population data on products exploited by Indonesians. The
authors make a number of recommendations for future management of Ashmore Reef and a traditional Indonesian fishery in the AFZ. There is also a report on Indonesian fishing at Cartier Island (McCarthy 1989).

A recent as yet unpublished report by the Fisheries Resources Branch of the Bureau of Resource Sciences, Department of Primary Industries and Energy, Canberra, assesses the nature and extent of Indonesian fishing activity in the AFZ based on an analysis of information from various government departments (Wallner & McLoughlin 1995a). A summary of this report has also been published (Wallner & McLoughlin 1995b). The report determines the impact of Indonesian fishing on the marine resources in the AFZ and makes recommendations for future management of the fisheries resources, ways of improving the information base, and alternative strategies to deal with traditional Indonesian fishermen operating in the Memorandum of Understanding area (Wallner & McLoughlin 1995t).

Maritime Nomads

Barth (1987:x) has noted that studying nomadic populations can pose difficulties and create extra demands for anthropologists. These demands can take on an added dimension for ethnographers working in “wet places...among coastal peoples with a propensity for travel” and in an environment that is sometimes “antithetical to the settled” (Hviding 1996:5). Perhaps this is why so little ethnographic research has been carried out among Bajo populations of eastern Indonesia. However, this situation is not confined to the Bajo alone. Emmerson (1980) and Sandbukt (1984) point out that given the geographical nature and maritime history of island Southeast Asia, it is surprising that so much past research has focused on inland communities. With regard to Melanesia, Hviding (1996:4) also points out that “despite an impressive record of ethnographic documentation of nearly every comer of the region, Melanesia's coastal peoples have remained conspicuously underrepresented on the ethnographic map”. Hviding (1996:6) ponders on this “territorial bias” in Melanesian (and Pacific) ethnography and poses the question “Could it be that ethnographers’ own reluctant attitudes toward the sea, stemming in part from urban or inland backgrounds, have played a considerable role in fostering a terrestrial bias in Melanesian ethnography?” This is particularly true for eastern Indonesia where there is a marked shortage in the number of anthropological studies on maritime - fishing societies compared with agricultural populations in the region (Macknight 1980:120; Fox 1995a:xi).
Since the early part of this century there have been several studies on specialised fishing communities in Southeast Asia (eg. White 1922; Fraser 1960; Sopher 1977). The best known is Firth's (1946) pioneering and classic anthropological work *Malay Fishermen: Their Peasant Economy*. He drew attention to the peasant nature of fishing economies and characteristics of dependence on external markets, capital investment, production and labour in the organisation of fishing, systems of credit and distribution, and social relationships surrounding economic transactions. In addition he briefly mentioned the ritual acts and beliefs that accompany the various stages of fishing. More recent studies have been those by Spoehr (1980) which examines the impact of technological change on small and middle scale commercial fisheries in the central Visayas in the Philippines.

There has been very little anthropological research carried out in Southeast Sulawesi, and in particular the Tukang Besi Islands. Moreover, most of this material does not deal with Bajo communities but focuses on the language and history of land based groups (eg. Schoorl 1985, 1991a, 1991b, 1994; Donohue 1995). Apart from a number of studies concerned specifically with Tukang Besi Island Bajo watercraft (Burningham 1989b, 1993, 1996), and research by Matsuzawa (1993) who spent a few months in Mola investigating historical migration patterns of Bajo in reaction to European colonisation of Southeast Asia, no detailed ethnographic research has been conducted among the Bajo communities found in this chain of isolated islands. Indeed little long term anthropological research has been carried out among other Bajo communities found widely scattered throughout eastern Indonesia (Lapian & Nagatsu 1996:57).

The most detailed work regarding Bajo in eastern Indonesia is *The Sea Nomads*, by Sopher (1977), originally published in 1965. This is essentially a geographical descriptive analysis of the various boat nomad groups of Southeast Asia, based on published and unpublished sources, largely dating from pre - 1950s, dealing with their migrations and origins, particular mode of life and cultural relationships. A section is devoted to the Bajo of eastern Indonesia describing the economy, distribution and socio-political relationships, as well as a fairly comprehensive review of historical sources concerning Bajo in eastern Indonesia. It highlights the economic niche of Bajo in the region and relationship with Bugis and Makassarese in South and Southeast Sulawesi and the wider ranging sea faring and commercial fishing activities of the Bajo in the historical period (Sopher 1977:156). However there is no mention of Bajo communities in the Tukang Besi Islands. At that time Sopher (1977:156) wrote “the analytical
study of these inter-related but far-flung Bajau communities of Eastern Indonesia has not been written”. This largely remains true today.

In contrast, the Sama-Bajau language groups found in eastern Borneo and central-southern Philippines have been the subject of numerous anthropological, linguistic and historical studies since the 1960s. See for example works by Bottignolo (1995), Casino (1976), Keifer & Sather (1970), Kurais (1975), Martenot (1981), Nimmo (1972, 1986, 1990a, 1990b), Pallesen (1985), Sather (1971, 1978, 1984, 1985, 1995, 1997), Carol Warren (1980, 1983), James Warren (1971). Among this research, however, only a few works are concerned with the nomadic sailing and fishing practices of the Sama-Bajau in any detail. My PhD research has a broader relevance to this large ethno-linguistic group in Southeast Asia. The various groups of sea nomads commonly referred to as Orang Laut (sea people) found in the western regions of the Indonesian archipelago have received more attention than the Bajo in the eastern region of Indonesia (eg. Lapian 1979; Sandbukt 1982; Wee 1988; Lenhart 1993, 1995a, 1997; Chou 1994, 1995, 1997).

Published research in the last 30 years concerning Bajo in Indonesia covers a variety of subjects and is generally confined to smaller projects not stemming from extended research. A number of publications are concerned with the origins, dispersion and economic-political roles and relationships between Bajo and the more dominant Bugis and Makassarese populations from South Sulawesi (eg. Pelras 1972; Fox 1977a; Reid 1983; Velthoen 1997a, 1997b). In a recent book by Sather (1997) a valuable coverage of the history and settlement of Bajo in Indonesia is provided. The anthropologist Francois Zacot conducted research among Bajo in north Sulawesi in the early 1970s. Zacot's (1978) paper is concerned with a general lifestyle description and Bajo identity and ethnicity as a minority group in an ever changing modern world. Harold Broch, who carried out field research in 1978 on the island of Bonerate in the Flores Sea (South Sulawesi), where there is a Bajo community, has published a number of articles, dealing with cultural variation, resource management and utilisation, women's economic roles and gender, and ethnic differentiation and integration (Broch 1981, 1985, 1987, 1988). The linguist, Verheijen (1986) published a valuable monograph on the Sama language spoken in the Lesser Sunda Islands which includes notes on Sama settlements in this region, lists of scientific names, terms for flora and fauna and vocabularies. Djohani (1995, 1996) has written about coral reef management, conservation issues and the impacts of tourism on Bajo communities within the Bunaken Marine Park in North Sulawesi. This represents a
recent trend in Indonesia (and other Asia-Pacific countries) in applied research in the fields of customary marine tenure and community based management of marine areas, particularly in the Maluku region (eg. Zerner 1994a, 1994b; Pannell 1996, 1997). In addition, this research has fostered greater knowledge about the ways in which coastal peoples conceive of the marine environment and interactions with spirits believed to inhabit particular marine localities and implications for resource management (eg. Polunin 1985; Zerner 1994a, 1994b). Such works have been useful in investigating Bajo cultural constructions of the marine environment and relationships between spirits and fishing success.

Two international conferences have been held on Sea Nomad communities in Southeast Asia. The first was hosted by the Indonesian Institute of Sciences in Jakarta in 1993 and the second by the Bajau Arts and Cultural Association and the Sabah Foundation in Kota Kinabalu in 1995. Unfortunately, the proceedings have not been published to date. A few papers were directly concerned with the history of Bajo in eastern Indonesia (eg. Pelras 1993; Velthoen & Acciaioli 1993), the ecological and socio-economic implications of Bajo coastal foraging strategies in north Sulawesi and north Maluku (Akimichi 1993), and some specifically with Bajo voyaging in the AFZ (Fox 1993; Wilson 1993). In 1995, one paper by Collins (1995) was concerned with Bajo communities found in Maluku and I presented a paper on preliminary research findings (Stacey 1995). For a complete coverage of papers and topics from these conferences, see Lenhart (1995b) and Lapian & Nagatsu (1996).

Coinciding with the first conference, an exhibition was held at the National Museum in Jakarta “Wisdom from the Sea: The Bajau Experience”. A catalogue was published for the exhibition (Saint 1994). The research for the exhibition was conducted among Bajo communities in North Sulawesi and most of the material culture exhibited came from the same region. Acciaioli (1996) has written a paper on his analysis of the exhibition in regard to the Year of Indigenous Peoples, Indonesian nationalism and indigenous wisdom.

**Perahu Lambo**

In general there has been very little anthropological research conducted in Indonesia concerning the sailing, fishing and trading activities of the six main maritime populations: Bajo, Bugis, Butonese, Makassarese, Madurese, and Mandarese. Each maritime population build and sail a distinctive type of perahu to engage in a range of maritime activities. Bajo fishing voyages to the north Australian region are undertaken in a type of boat called lambo.
Previous studies have focused on *lambo* built and sailed by Butonese and the technological aspects of design, construction and sailing ability of *lambo* and its development and role within the perahu trading economy of Indonesia (e.g. Dick 1975a, 1975b; Horridge 1979a, 1985, 1986a; Hughes 1984; Bumingham 1989b; Evers 1991; Southon 1995). It has only been relatively recently that the Bajo have been acknowledged in the literature as builders and sailors of *lambo*. Hughes (1984:33,161,167) in his analysis of the trading activities of the Tukang Besi Islanders made passing remarks about the economic activities of Bajo from Mola and Mantigola. He mentioned Bajo built and sailed *lambo* for hunting turtle and had previously carried out some trading activity utilising *lambo*. Bumingham (1989b), who drew attention to the *lambo* building tradition of the Tukang Besi Islanders, alluded to the influence of traditional forms of Bajo watercraft on *lambo* technology. Leiber (1992) also published a paper on boat building and navigation among a number of ethno-linguistic groups from South and Southeast Sulawesi that included data about Bajo *lambo* from the village of Mola. The most recent and comprehensive work to date on *lambo* is an excellent but unfortunately unpublished manuscript by Bumingham (1996). Although his work focuses more on *lambo* technology, he gives a detailed analysis of the historical and geographical origins of perahu *lambo*, a survey of regional and local styles of *lambo* that broadens previous knowledge of *lambo* boat building communities other than Butonese and outside Southeast Sulawesi including the Bajo, as well as details on construction ceremonies, and patterns of trade and fishing. In addition, Bumingham (1996) provides an alternative view to previous preoccupation in the literature by authors such as Gibson-Hill (1950), Horridge (1979a, 1986a) and Hawkins (1982), concerning criticisms of *lambo* as a flawed mixture of western and indigenous technology and its effectiveness as a trading vessel. The majority of perahu *lambo* in eastern Indonesia are used as cargo carriers or trading vessels. The Bajo use the *lambo* almost exclusively for fishing rather than trading. This thesis represents the first major study of the *lambo* as it is used for fishing purposes.

In his paper concerning the study of perahu and maritime traditions in Indonesia and possible frameworks for research, Macknight (1980:120) noted the research conducted by Dick (1975a, 1975b) that incorporated the study of the perahu trading industry in Indonesia into a broader framework investigating interactions between technological change, political developments and economics. Macknight (1980:120) also stated that “little work had been done am how a builder or sailor views his prau in any deeper sense” and refers to the “abundant hints” in the literature from South Sulawesi (Collins 1936, 1937; Pelly 1975; Horridge 1979b) that “some form of personality is assigned to a prau” during its construction similar to houses (Errington 1979).
Macknight noted that it would be interesting to know more about the cultural distribution of such beliefs and mentions work by Barnes (1974) on ideas about boats in Lamalera, a whaling village on the island of Lembata (East Nusa Tenggara). Since this survey by Macknight, Horridge (1986b) published an article on Indonesian perahu and canoe ceremonies and underlying beliefs dealing broadly with a number of different ethnic groups and boat types. Mellefont (1988) has also written about Madurese ceremonies associated with perahu leti leti.

The most significant anthropological study to date into eastern Indonesian maritime populations is research undertaken by Southon (1995) who examined the social meanings and values underlying the sailing and trading economy in the village of Lande on Buton. Southon examines how the Butonese represent the activity of sailing and trading through an analysis of the symbolic associations surrounding the social organisation of the perahu economy, boat building rituals and in the physical structures of houses and boats. Southon (1995:1) argues that “the perahu, as well as being a means of livelihood, expresses ideas about the social and cosmic order, and is the main focus of political processes in the village”. A number of issues emerge from Southon's analysis of the symbolic associations between houses and boats. Southon (1995:93) shows how in Lande “the boat is symbolically modelled on the house, and how both houses and boats express certain ideas about the roles of men and women”. In addition, he shows how “the boat is represented as a person, the result of conjugal relations between husband and wife” (Southon 1995:93) and how perahu in Lande are an expression of spiritual and political power.

Southon's work provides a useful framework for investigation into similar ideas on how boats are conceptualised by the Bajo. Of particular relevance here is how the Butonese in Lande regard the boat as a person and how two rituals performed during the construction of the boat - the joining of the keel sections and the drilling of the navel in the keel, symbolically represent the conception and birth of a child. Also of comparative relevance it the idea of how in Lande, the navel of the perahu is the point of attachment of the soul of the perahu and how success in trading and safety at sea are believed to derive from the power of the navel.

The terms *semangat*, *nyawa* and *roh* (Endicott 1970:48) and their cognates are widely used in Indonesian and Malay societies to refer to different aspects of the soul. Much of the literature examining *semangat* in Indonesian societies has been concerned with ideas about spiritual power and politics, and debate concerning the various manifestations and interpretations of *semangat*. A discussion of these issues in the anthropological literature can be found in

**Chapter Outline**

Chapter 2 provides the descriptive setting to Bajo communities from the Tukang Besi Islands and Roti Island. I chart a brief linguistic, cultural and historical background to the larger ethno-linguistic group, known as the Sama-Bajau. A description of the physical and cultural environment, demography and economy of the Tukang Besi Islands is followed by a description of the Bajo villages. In order to understand the close relationships existing between villages, I provide a discussion of the history of Bajo arrival, settlement and migration in the Tukang Besi Islands. This provides a temporal background to the history of Bajo voyages to the Timor Sea. I also provide a description of the village of Pepela on the island of Roti and its Bajo settlement.

Chapter 3 discusses the cultural, social, spiritual and economic maritime world of the Bajo. It offers an overview of the Bajo cosmology and religion as a background to later discussions on perahu ritual and symbolism, sailing and fishing ritual and taboo. The wider relationships between Tukang Besi Bajo and other Bajo groups in eastern Indonesia and subsequent mobility are discussed along with their local and distant - shore economic activities. The last section is concerned with Bajo perahu lambo used to undertake voyages to the AFZ. It examines the history, design and technology of Bajo perahu lambo and associated perahu symbolism and ritual.

In Chapter 4, I examine the history of Bajo voyages to the north Australian region from the early decades of the 20th century to the 1970s using Bajo oral history accounts and personal recollections of past voyaging, along with Australian archival material. In doing so, I show that current Bajo voyaging is not a recent phenomenon and provide some approximate and some definite dates of fishing activity throughout this period. In addition I show that Bajo voyaging has from the beginning been a commercial venture connected to a wide trade in marine products. I also illustrate that a common Bajo history concerning past voyaging partly contributes to a current continuation of Bajo voyaging in light of recent restrictions imposed on them.
Chapter 5 examines the complex developments in Australian maritime expansion and government responses, in the form of policy, legislation and agreements to Bajo and other Indonesian fishing activity in Australian waters. It begins with a historical perspective on late 19th and early 20th century sovereign claims over offshore reefs and islands in the Timor Sea. A discussion of official Australian perspectives on the purpose and level of Indonesian fishing in the northwest region during the period 1950s–1970s is provided. This is then contrasted with evidence of fishing activity by Bajo and other groups of Indonesian fishermen. Perspectives from the time were important influences on later policy responses. The complex series of Australian and Indonesian maritime expansions and claims, as well as policy and legislative developments between 1968 and 1989 directed at Indonesians are then considered. Particular attention is given to the 1974 Memorandum of Understanding, surveillance and enforcement measures, the establishment of Ashmore Reef National Nature Reserve and subsequent restrictions on Indonesian fishing activity in the Timor and Arafura Seas. The establishment of a 200 nm AFZ, new arrangements for traditional Indonesian fishermen agreed to in 1989, as well as a dramatic increase in illegal fishing activity by several other discrete groups of Indonesian fishermen and Australian responses to this activity, had a significant impact on policy towards illegal Bajo fishing. I trace developments in Australian policy responses to illegal Bajo and other Indonesian fishing between 1985 and 1993, which resulted in the policy of apprehension, forfeiture and destruction of perahu as a solution to deter further illegal activity. Administrative arrangements and conditions developed in the apprehension and detention of Indonesian fishermen in Darwin and Broome are also discussed. The final section draws attention to other government initiatives and responses to the problem of illegal Indonesian fishing in the AFZ since 1993.

Chapter 6 investigates Bajo patterns of voyaging in the north Australian region during the late 1960s and early 1990s. The first section establishes and examines broad patterns of voyaging from the late 1960s–early 1970s through the late 1980s from ethnographic texts. The second section analyses how the Bajo perceive restrictions on their fishing activity in the 1970s and 1980s. Bajo sailing and shark fishing patterns altered significantly in the late 1980s and early 1990s. The final part of this chapter examines the complex set of interrelated factors that initiated change, namely, changes in the trade in marine products in Indonesia and Pepela and a dramatic increase in the price of shark fin, and Bajo responses to Australian maritime expansion and the new arrangements adopted in 1989 regulating access for traditional fishermen in the AFZ.
Chapter 7 and Chapter 8 are concerned with sailing and shark fishing practice and activity during the 1994 season. Chapter 7 provides an account of the various stages of preparations undertaken for voyages in Mola and Pepela, along with aspects of social relations and roles of captains, crews and boat owners. An analysis of the Bajo perahu fleet operating out of Pepela in 1994 and boat ownership, patterns and methods of fishing, navigation, and fishing grounds is also provided. It also examines rituals and beliefs associated with boats and sailing and fishing activity in the AFZ that are undertaken prior to departure and during fishing activity and the implications of these social - cultural conditions for continued Bajo fishing activity in the AFZ. Chapter 8 investigates the economics of shark fishing. It discusses the trade in shark fin in Pepela, credit arrangements in Mola and Pepela to finance voyages; shares systems for dividing the profits from fishing voyages and earnings from shark fishing and variables affecting returns. It examines economic reasons why Bajo continue to fish in the AFZ, and whether the apprehension and confiscation of boats, equipment and catch is effective in deterring illegal activity;

Chapter 9 offers a critique of Australian policy responses to Indonesian fishing activity. It examines of the concept of traditional fishing contained in the 1974 MOU and drawing on anthropological literature, examines notions underlying this particular view of “traditional” as static, timeless, non-modern and non-commercial. The implications of invoking this view of “traditional” are examined in light of recent changes in Bajo fishing activity by focusing on a specific case of Bajo fishermen apprehended for illegal activity in 1997. In doing so, I show how Bajo are considered to no longer be operating “traditionally” but “commercially”; there are profound misunderstandings and inconsistencies underpinning Australia's treatment of Bajo fishermen; and that this interpretation of “traditional” appears to provide justification for the ongoing policy of apprehensions and confiscations of boats. I also examine the effectiveness of the 1974 MOU and other policies adopted to deter illegal fishing activity. I argue that these policies have, for the most part, been ineffective, and discuss other options, approaches and responsibilities for allowing traditional Indonesian fishermen continued access to exploit marine resources in the AFZ.

Chapter 10 brings together the major issues raised throughout the thesis.
Chapter 2

THE BAJO: CULTURAL BACKGROUND, SETTLEMENTS, AND HISTORY

Introduction

This chapter provides the setting to Bajo communities from the Tukang Besi Islands and Roti, who undertake seasonal voyaging to the north Australian region. I begin by charting a brief linguistic, cultural and historical background to the larger ethno-linguistic group to which the Bajo belong. The second section provides a broad overview of the Tukang Besi Islands covering the environment and geography, administration, cultural groups, and economy as a background to the broad physical and cultural environment of the Tukang Besi Bajo. The five Bajo villages are then described. In the fourth section, I provide a description of the history of Bajo arrival and settlement in the Tukang Besi Islands. In order to understand the close relationship among the Bajo villages in the Tukang Besi Islands, namely Mola and Mantigola, I discuss the migration and movement of Bajo from Kaledupa to Wanci islands during the Kahar Muzakkar Rebellion in the 1950s.

To further complicate matters, some Bajo from communities in the Tukang Besi Islands have, since the late 1980s, recently migrated and settled in the village of Pepela on the island of Roti from where they undertake voyaging in the AFZ. In the last section, I provide a description of the geographical, cultural and historical background of the village of Pepela and introduce the Bajo settlement there.

The Sama-Bajau

Found scattered throughout mainland and island Southeast Asia there exist three major groups of people who are commonly and generically referred to in the literature as “sea nomads”, “sea people” or “sea gypsies” (Sopher 1977). These three broad ethno-linguistic groups are the Moken, the Orang Laut and the Sama-Bajau. Each group is geographically, linguistically and culturally distinct and has developed a range of modes of adaptation in the rich maritime environment and island ecosystems of Southeast Asia (Sather 1997:320–328).
The Bajo of eastern Indonesia are a sub-group within the largest group of sea nomads known as the “Sama-Bajau”. As well as nomadic boat dwellers and former boat nomads, Sama-Bajau also includes shore and land based peoples (Sather 1997:2).

Sama-Bajau speakers comprise what is arguably the most widely dispersed ethnolinguistic group indigenous to insular Southeast Asia. Sea-nomadic and much more numerous strand and settled Sama speakers live scattered, and in most areas interspersed with one another, over a vast maritime zone 3.25 million square kilometers in extent, stretching from eastern Palawan, Samar, and coastal Mindanao in the north, through the Sulu Archipelago of the Philippines, to the northern and eastern coasts of Borneo, southward through the Straits of Makassar to Sulawesi, and from there over widely dispersed areas of eastern Indonesia (Sather 1997:2).

It is estimated there are between 750,000 and 900,000 speakers of Sama-Bajau in Southeast Asia (Sather 1997:2) (see Map 1). A comprehensive survey has never been conducted in Indonesia, however, it is estimated there, Sama-Bajau speakers number between 150,000 and 230,000 (Sather 1997:3).

Map 1: Area in which Sama-Bajau speakers are found in Southeast Asia

The Sama-Bajau language is a discrete subgroup of Austronesian within the Western Malayo-Polynesian language family. It is comprised of 10 languages and numerous dialects (Pallesen 1985). The Sama language spoken in Indonesia appears to be closely linked to the Southern
Sama language spoken along the coast of Sabah, offshore islands and in the Sulu archipelago of the southern Philippines (Sather 1997:9–10). In Indonesia, there appears to be a degree of mutual intelligibility across the region. Despite some dialectal differences there is only “small divergence on a dialectal level” (Verheijen 1986:26–27) and Indonesian Sama “is only one language” (Noorduyn 1991:6).

The term Sama-Bajau is used as a composite label to cover all the languages spoken by members of this group and one which incorporates the most commonly used exonyms by outsiders and terms of self-designation used by the speakers of Sama-Bajau (Pallesen 1985:43). Most Sama-Bajau speakers refer to themselves as Sama or a'a Sama, “Sama people” (Sather 1997:5). In the Philippines, Malaysia and Indonesia a host of names are used by outsiders including cognate terms “Bajau”, “Bajo” (and variations of spelling such as Badjao, Badjo, Badjaw, Bajaw) and “Bajau Laut”. In addition to these, the term “Samal” is also employed in the Philippines for the most sedentary living speakers of Sama-Bajau (Sather 1997:5).

In Indonesia, these terms appear to have come into regular usage in the historical period. The Bugis term for these sea people was “Bajo” and according to Velthoen (1997b:2), Dutch observers tended to follow local usage. Thus the cognate terms “Bajo” and “Bajau” (with variations in spelling eg. Bajos, Badjoos) appear in Dutch and later English historical accounts from the late seventeenth century and early eighteenth century onward (for example see Fox 1977a, and references in Sopher 1977: 143–156; 158–161; 296–307; Reid 1983:126). The term “Bajau” subsequently became established as a generic name for Sama-Bajau speakers among English observers (Sather 1997:6–7).

In the Indonesian language (Bahasa Indonesia) “Bajau” is the official designation as a general ethnic label for Sama-Bajau speakers (Acciaioli 1996:25). In addition “Bajau” has come into currency in Indonesia (and Malaysia) among Sama-Bajau themselves (Pallesen 1985:43; Acciaioli 1996:25; Sather 1997:5).

In this thesis I have preferred to adopt the term “Bajo” rather than “Bajau” or “Sama” for a number of reasons: it is the more commonly used exonym for Sama speaking peoples in eastern Indonesia, and in particular in Sulawesi and East Nusa Tenggara; it is the term most commonly used by scholars writing about eastern Indonesian Sama-Bajau speaking peoples; it is familiar among Australian government officials and in literature regarding Indonesian fishing
in the AFZ (as opposed to the term Sama). I use the term Sama to refer to the language spoken by Bajo peoples of eastern Indonesia (Baong Sama or Sama language).

**Origin and Dispersion of the Sama-Bajau**

The most comprehensive work to date regarding the origin and dispersion of Sama-Bajau language groups is Pallesen's work, *Culture Contact and Language Convergence* (1985). Based on linguistic evidence Pallesen constructed a dispersion hypothesis for the Sama-Bajau languages from the Southern Philippines region. Around the beginning of the 9th century, speakers of Pro to Sama-Bajau dialects lived in the area of the Basilan Strait, in the Zamboanga area of south Mindanao and along the coast of Basilan Island in the northern part of the Sulu Sea (Pallesen 1985:117). A number of groups split off during this early period and by the eleventh century, further dispersion began with a group moving southwest through the Sulu Archipelago and along the north-eastern coastal areas of Borneo, where further dispersion of groups occurred (the North Borneo and Jama Mapun groups), with the “forward wave” of the Indonesia Bajau group moving down the eastern Borneo coastline (via Tawau and Tarakan) (Pallesen 1985:121). Sather (1993a:218) argues that the southward movement of Sama speakers in the southern Sulu and Borneo regions was “accelerated” by the expansion of maritime trade after the founding of the Sulu Sultanate in the fifteenth century. From the eastern coasts of Borneo, or possibly directly from southern Sulu (Sather 1997:15), Sama speakers spread southward into the Makassar Straits arriving along the coasts of Sulawesi and spreading outward into other parts of Indonesia sometime before the beginning of the European period in the region (Pallesen 1985:121; Sather 1997:15).

Origin myths, stories and legends found among the Bajo in Sulawesi (and among other Sama-Bajau in Sabah and Sulu) cite Johore in Peninsula Malaysia as an original homeland from where the Bajo dispersed, bringing them to South Sulawesi and subsequent relations with kingdoms of Luwu, Gowa and Bone (Pelras 1972:157; Sopher 1977:141; Zacot 1978:26; Reid 1983:125; Pallesen 1985:5; Sather 1993b:31, 1997:17). The Tukang Besi Bajo have versions of similar stories. One version I collected concerns a Bajo princess or heavenly girl originating from Johore, who, after being separated from her family was washed up in South Sulawesi, and later married the Prince of Makassar giving birth to four sons who ruled the regions of Gowa, Bone, Luwu and Soppeng. In linking their origins with centres of power, Johore “the most prestigious of all Malay kingdoms” (which preceded the powerful Sulu Sultanate), and later to successive political powers of Luwu, Gowa and Bone, Sather (1997:17–18) argues
that “these myths have more to do with political ideologies and the subordination of maritime peoples in a succession of sea-orientated trading states than they do with actual migrations or literal origins”.

The earliest evidence of the presence of Bajo in Sulawesi is the mention of a people called “Bajo Sereng” (Moluccan Bajo) in the major narrative epic from South Sulawesi, the La Galigo cycle (Pelras 1996:74). This reference apparently relates to the role Bajo may have played in relations between maritime powers of South Sulawesi and the Moluccas (Pelras 1996:74). According to Pelras (1996:56), this text probably dates from the fourteenth century at the time of the dominant kingdom of Luwu.

European historical records document the presence of Bajo in South Sulawesi in the sixteenth and seventeenth centuries. In an early record from 1511, the Portuguese, Tomé Pires, documents the likely presence of Bajo in the Makassar region (Pires 1944 in Reid 1983:127; Pelras 1996:17). Admiral Speelman, the “conqueror of Makassar” (in 1666–1667) remarked on the Bajo living on small islands in the Makassar region. They collected turtle shell as tribute to the King of Makassar and “must always be ready to go with their vessels in any direction they are sent” (Speelman 1670 1:43 quoted in Reid 1983:126). By the late 1670s, the Bajo were reported in north-eastern Sulawesi in the Manado area (Valentijn 1724–1726, v.1, p. 66 in Sopher 1977:300).

As skilled sailors and maritime specialists, the Bajo played an important role in the rise of Makassar (State of Gowa) to a political and economic power in eastern Indonesia during the 16th and early 17th centuries, and later with the powerful Bugis kingdom of Bone. For these dominant maritime states, the Bajo were their explorers, messengers, naval powers and exploiters of sea products that were trading commodities on international markets (Reid 1983:124–129; Collins 1995:14).

Dispersion and later settlement of Sama speaking boat nomads from the southern areas of Sulawesi to the east and south into eastern parts of Indonesia over the last three centuries appears to have been closely linked to Bugis and Makassarese political and commercial expansion and migration in the region and the development of an archipelago - wide trading network in marine products, particularly trepang and turtle shell, which ranged as far as the northern coasts of Australia (Fox 1977a; Sopher 1977:144; Sather 1993a:218; Velthoen & Acciaioli 1993). Boat dwelling appears to have declined during the nineteenth century,
having given way to a more shore based existence (Sopher 1977:144). According to Sopher (1977:144), the trade in trepang and turtle shell that dominated Bajo economic activity historically in eastern Indonesia and locations of collecting grounds of these products is an important factor in the distribution of Bajo in the region.

In eastern Indonesia, Sama speakers are now found distributed widely from east Kalimantan, and Sulawesi across to Maluku and south along the Lesser Sunda Islands (see Map 2). The majority of Sama speaking communities are found in scattered settlements along coastal areas of Sulawesi and offshore islands. In South Sulawesi settlements are found around Ujung Pandang (Makassar) and in the Spermonde islands; along the coast in the Gulf of Bone and offshore at Sembilan Islands (Pelras 1972), as well as on small islands in the Flores Sea (eg. Selayar, Tanah Jampea, Bonerate, Karompa). In Southeast Sulawesi settlements exist at Kabaena, Muna, Buton and Tukang Besi Islands, on islands in the Tiworo Straits, in Kendari Bay and at the island of Wowonii, and to the north at La Solo. In Central Sulawesi settlements exist along the east coast and in the Salabanka islands (Tomascik et al 1997:1221), Banggai and Togian archipelagos. In North Sulawesi, around the Gulf of Tomini, Gorontalo and Manado districts, scattered communities exist (Zacot 1978). It is also reported there are communities of Sama speakers near Balikpapan in eastern Kalimantan and on islands off the east coast of Kalimantan (Sather 1997:4; Tomascik et al 1997:1219). In North Maluku, Bajo communities exist on the Sula Islands (Taliabo, Senana and Sular), on islands in southern Halmahera, at Gala, Jo Ronga, Kubi, Katinawe, and Dowora islands, (Teljeur 1990:204), as well as in the Bacam archipelago, on Obit island and Kayoa islands (Collins 1995:16). In East and West Nusa Tenggara communities can be found in Lombok, Sumbawa, Flores, Adonara, Lombok, Pantar, Timor, and Roti Islands and on small offshore islands located near to these larger islands (Verheijen 1986) (see Map 2)
Map 2: Location of Bajo communities in eastern Indonesia

The majority of Sama speakers in eastern Indonesia now live in pile house settlements built over the water in coastal areas, the littoral zone and on the land. Small numbers of boat dwellers remain along the coasts of eastern Sulawesi, particularly to the north of Kendari at La Solo and around island groups in Central Sulawesi. The number of remaining boat dwelling people in Indonesia is unknown but it is estimated that a few hundred families remain (Alimaturahim 1994, pers. comm.). Despite abandonment of permanent boat dwelling and a more sedentarised lifestyle in houses some Bajo still spend short and extended periods of time at sea living on boats pursuing fishing activities. The degree to which they engage in maritime orientated lifestyles and economic pursuits centred on inshore and distant shore marine environments, varies across Bajo communities. As well as fishing and aquaculture, Bajo engage in boat building, trading, collection of forest products and some land based farming.

While the Sama language is the main language used and spoken by the Tukang Besi Island Bajo among themselves, many also speak Bahasa Indonesia with varying degrees of competency. Indonesian language reading and writing skills are an important skill for a boat captain, who must in his capacity as captain be able to complete administrative papers such as surat jalan (travel pass) and other sailing papers for himself and his crew. Many Bajo are multilingual and speak the Tukang Besi language (at the local market transactions are normally carried out in Tukang Besi) and some speak other Muna-Buton languages, Bugis, Makassarese
and trade-Malay languages, reflecting the wide variety of people they come into contact with through maritime and trading activities and also kinship ties.

Many Bajo, but particularly the younger generation are given a Bajo name and an Islamic name at birth. They commonly prefix their Bajo names with the title ‘Si’ (a person marker) for both male and female, for example Si Akmad or Si Marni.

The Tukang Besi Islands: Environment, Demography and Economy

The Tukang Besi Islands (Kepulauan Tukang Besi) previously formed part of the realm of the Sultanate of Buton, and since 1964, have been part of Propinsi Sulawesi Tenggara (Province of Southeast Sulawesi) which comprises four administrative Kabupaten (regency) - Kendari, Kolaka, Muna and Buton. The capital of the province is the sprawling town of Kendari, located on the shores of Kendari Bay in the south-east of mainland Southeast Sulawesi (see Map 3). The Tukang Besi Islands come under the administrative unit of the Kabupaten of Buton, with its capital at Bau-Bau, and are divided into four kecamatan (sub-district): kecamatan Wangi Wangi; kecamatan Kaledupa; kecamatan Tomia and kecamatan Binongko (Map 4).
The Tukang Besi Islands are located east-southeastward of the island of Buton in the north eastern part of the Flores Sea. They arise from a submarine platform that extends...
approximately 200 km along a northwest-southeast axis. Most of the platform lies at depths of about 1000 m and is 125 km wide and contains numerous atolls, raised islands and reefs (Tomascik et al 1997:754).

The Tukang Besi chain is composed of five main inhabited islands: Wanci, Kambode, Kaledupa, Tomia and Binongko, and a number of small mostly uninhabited islands (see Map 4). The coastlines of these coral limestone islands are surrounded by rocky and sandy beaches, mangroves, mud flats, sea grass beds, barrier, patch and fringing reefs, forming a complex ecosystem supporting a prolific array of marine life. The islands experience a tropical monsoonal climate with fairly constant day-time temperatures usually reaching around 30°C. The chain of islands lie adjacent to an extensive offshore coral reef system (60,000 hectares), with a range of reef habitats, forming one of the largest reef systems in Indonesia. Due to the reefs’ high marine biodiversity, the Tukang Besi archipelago was declared a Marine National Park in July 1996 by the Directorate General of Forest Protection and Nature.

Known as the “Wakatobi (Tukang Besi) Marine National Park” (Taman Nasional Laut Wakatobi) (“Wakatobi” is an acronym for Tukang Besi - using the first two letters of the four largest islands) it includes all the reefs and islands in the archipelago and covers 1.39 million hectares (13,900 km²). It is the second largest designated marine protected area in Indonesia and is targeted for institutional management with development of a management plan underway (Stanzel & Newman 1997).

The 1994 government census gives a total population of the Tukang Besi Islands of 73,251 people. The kecamatan of Wangi Wangi has the largest population with 34,081 inhabitants, followed by Kaledupa, Tomia and Binongko (see Table 1).

<table>
<thead>
<tr>
<th>Wangi Wangi</th>
<th>Kaledupa</th>
<th>Tomia</th>
<th>Binongko</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>34,081</td>
<td>14,379</td>
<td>12,948</td>
</tr>
</tbody>
</table>


As relative newcomers to the islands, the Bajo are a minority, representing approximately 10% of the population, amongst the majority ethnic group, the mostly land dwelling Tukang Besi people or “Butonese”. A general description of the Tukang Besi people and their language “Tukang Besi” can be found in Donohue (1995). In addition to the Tukang Besi people and the Bajo, there are also small numbers of peoples who come from other places in Sulawesi
(Bugis and Muna-Buton peoples) as well as Javanese living in the region. With one or two exceptions the population is all Muslim.

Like their land-based neighbours, the Bajo often identify themselves or are identified by others as *orang Buton* or Butonese. This label can be somewhat misleading giving an impression that the person or people in question actually come from the island of Buton rather than one of the Tukang Besi chain. As Fox (1995b:5) notes, this practice relates to “historical allegiance rather than ethnic identity” dating from the time of the Buton Sultanate which once claimed the Tukang Besi Islands and its residents as part of its realm (Fox 1995b:5). Butonese includes a number of sub-ethnic groups from Buton, and neighbouring islands in Southeast Sulawesi.

The Tukang Besi people are well known throughout Indonesia and beyond as “daring seafarers, shipbuilders and maritime traders” (Evers 1991:147). This maritime orientated economy has developed largely because these relatively infertile islands can only support a limited amount of small-scale seasonal agriculture, mainly during the west monsoon. During the dry or east monsoon season the mainstay of the economy rests on maritime-related activities. Trading routes can range from as far as Singapore, Malaysia, Java and Irian Jaya. A range of cargoes are carried, usually obtained outside their home islands, particularly from Maluku and Java and includes timber, salt, tubers, second hand clothes, copra and spices.

The major foods grown on the islands include cassava, sweet potato, corn, cocoa, cashews peanuts, vegetables, coconuts, and fruit. Spices were grown on the island in the past but currently only small quantities of nutmeg are grown on Tomia. Livestock reared include goats, chickens, some ducks and cattle on Kaledupa. Rice and other seasonal foods are imported to the islands from other parts of Southeast Sulawesi. Fish is a staple part of the local diet and economy. The Tukang Besi Islanders engage in local fishing activities for consumption and sale. Bajo communities on the islands also supply fish to their land-dwelling neighbours.

The Tukang Besi islands are only accessible by boat, and passenger ferries operate from Buton and Kendari. Small inter-island motor boats transport people and goods between the islands. On the islands themselves, the main mode of transport is by foot or motor bike. Each island has at least one car, often used to transport people to and from the local markets.

The *kecamatan* of Wangi Wangi incorporates Wanci and Kambode islands (see Map 4), and smaller uninhabited islands on the east and south sides of Wanci Island. There are 16 villages
(desa) within the Kecamatan. Kambode island has three villages, two desa, Kapota and Kabita and the dusun (hamlet) of Kolo, and has a population of 2,699. The largest number of people are concentrated on the western and central part of Wanci island.

Nowadays, the capital of Wanci is located in the metropolitan Wanse - Pongo area. The mam market was in Pongo but a few years ago was shifted to Mandati I which borders with the edge of Mola Utara, and is accessible by land or sea, and Bahasa Wanci, a local dialect of Tukang Besi, is the linga franca used at the market by Wanci and Bajo people. As well as fresh fruit, vegetables, fish, grains and other foodstuffs, a number of small shops sell new clothes, general goods, building and fishing materials. Second-hand clothes are also sold cheaply at the market. The Kecamatan office, Military and Police, local community health clinic, post office, radio-telegram office (in 1994–1995 there were no phones), junior and senior high schools and a losmen (guest house) are all located around the main football field in Pongo. The main harbour area fronts Wanse, Pongo and Mandati II. There is a pier constructed of coral rock and it is the main arrival and departure area for watercraft. A new pier (made of coral rock) was under construction in 1995 from Mandati I, not far from the northern boundary of Mola Utara which will service the Pelni passenger ships that plan to stop at Wanci in the future on their route between Ambon and Bau Bau.

Wanci can be reached by a number of routes, all long and arduous journeys. From Bau Bau, the capital of Buton, buses travel to the village of Lasalimu on the eastern coast of Buton, usually a 3 hour trip. From here a Wanci based ferry and more recently a passenger speed boat travel daily (weather permitting) between the islands, usually a 2–3 hour trip. Femes also operate directly from Kendari to Wanci (approximately a 16 hour trip) usually once or twice a week, weather permitting. There is an asphalt road between Wanse and Mandati I and the rest of the island's roads are dirt and coral rock narrowing in some areas into small tracks.

The old capital of the vassal state of Kaledupa was Buranga, and now Ambeua is the official capital of the Kecamatan which includes Kaledupa Island and nearby islands of Hoga, Lintea and Tiwolu, the last two being uninhabited. There are 10 desa on Kaledupa. Daily transport operates between Wanse and Ambeua in a small motor boat; the trip takes around 2–3 hours depending on wind and sea conditions.

The island of Hoga is located just to the north of Buranga. There are coconut plantations on Hoga, utilised by the Bajo who also fish the coral reefs surrounding the island but
because of the lack of fresh water supply it remained uninhabited. In 1992, the local government constructed a traditional style Butonese house on the island to attract tourists to stay and visit the islands. In 1995, this building was taken over as a base for activities by Operation Wallacea (OW), a project run by a United Kingdom based ecological consultancy in partnership with the Jakarta - based Wallacea Development Institute. The project is a conservation orientated volunteer based scientific research program. The project invites fee paying tourists to join two to six week expeditions to the island where they are trained and supervised to survey the coral reefs (Stanzel & Newman 1997). OW is working with the Indonesian government to design and implement a management plan for the Marine Park using data collected. Before the activities of OW there was virtually no tourism in the archipelago. With the newly created marine park, and activities of OW at Hoga, publicity for the Tukang Besi archipelago has increased both nationally and internationally and plans for development are underway (Stanzel & Newman 1997). Not only are the coral reefs being promoted for their unique biodiversity but the local Tukang Besi and Bajo people are also being marketed as sites for cultural tourism.

The kecamatan of Tomia includes Tomia, Tolandono, Lintea and Sawah Islands. The capital of Tomia is Waha and there are eight villages on the island as well as a small community on Tolandono. Binongko is much drier and more desolate than the other islands (Burningham 1996) and as well as maritime trade, the Binongko people engage in black smithing, particularly the manufacture of parang blades (similar to a machete) which are regarded as some of the finest in the Sulawesi region. “Tukang Besi” (from Malay meaning “black smith” is named after the Binongko craft of black smithing.

**Bajo Settlements in the Tukang Besi Islands**

There are five Bajo communities in the Tukang Besi Islands: the largest is the settlement of Mola, on the island of Wanci which is divided into two villages: Mola Utara (North Mola) and Mola Selatan (South Mola). On the island of Kaledupa, there are 3 villages, Mantigola, Sampela and La Hoa, and on the island of Tolandono, near Tomia, the village of La Manggau. It is Bajo from the villages of Mola Selatan, Mola Utara and Mantigola who mainly undertake seasonal voyaging to the north Australian region and this thesis is primarily concerned with these villages, and in particular Mola Utara and Mola Selatan where most fieldwork was undertaken.
The Villages of Mola Utara and Mola Selatan

The settlement comprising two abutting villages of Mola Utara and Mola Selatan is located in the shallow inshore waters on the south-west coast of Wanci Island, approximately 2 km from Wanse (see Photo 1 and Figure 1). The settlement extends from the littoral zone outwards into the coastal waters. Running parallel to the coast, the settlement stretches approximately 800 m in length and at the furthest point extends approximately 400 m seawards. On the seaward side the settlement extends further out on the northern and southern ends than the central area which provides an anchorage for boats.

Photo 1: The Villages of Mola Utara(left) and Mola Selatan(right). Wanci Island.
The water settlement consists of rows of houses, built either directly on coral rock foundations or on wooden piles over the water, with each row generally separated by waterways or canals of various widths. Houses and sections of the villages are connected by tenuously placed wooden planks or lengths of bamboo above the water or raised bridges (with varying degrees of danger for the unaccustomed anthropologist), between coral foundations, or sections
constructed of coral rock and concrete. Some of the older sections of the village have larger sections of coral rock foundation in front of houses. The village is accessible from the land by two main arterial coral rock pathways near to the village office (Kantor Desa) and mosque in Mola Selatan and Mola Utara. There are also arterial footpaths running parallel to the main waterways. Every house has access to the sea. The oldest section of current day Mola is in what is now central Mola Utara. Older residents claim that Mola was originally built quite a distance from the land, and before permanent walkways were built (in the period after the 1950s & 1960s), as children they had to swim or travel by dugout canoe to attend school.

Bajo travel around the village by foot or canoe but some of the more recently constructed houses to the north and south are accessible only by canoe. Travel by canoe is often the fastest and easiest method of moving around the settlement and is competently undertaken by skilled Bajo of all ages (see Photos 2–5).
Photo 3: Women transporting water by canoe

Photo 4: Houses lining a narrow canal in central Mola Utara.
Tidal movements range up to 2.5 m. They flush most parts of the village of the household rubbish and personal waste. However in some sections of the village, particularly in central Mola Utara, where houses are built very close together and waterways are narrow, the tidal movement is insufficient to carry away all the rubbish and waste.

During low tide, particularly neap tides, a profound stench permeates the village. At times of very high tides and strong winds and storms, all houses manage to remain above water, although the coral rock foundation may be a few centimetres to half a meter under water in some locations.

Mola is the largest Bajo settlement in the Tukang Besi Islands and possibly one of the largest in Indonesia. Mola was originally one village but in 1981, due to a growing population was divided into two villages, Desa Mola Utara and Desa Mola Selatan (Figure 1). Each desa is divided into two dusun (hamlet). Mola Utara has a total population of 1,963 and Mola Selatan has a slightly larger population of 2,315. Roughly half are male and half female, living in 338 and 388 houses respectively (see Table 2). In some cases there is more than one family living in a house, so these figures do not reflect the number of families. Mola Utara is much smaller
in size (2.30 km\(^2\)) than Mola Selatan (6.00 km\(^2\)) but higher in density. High rates of in and out seasonal migration mean population numbers fluctuate, particularly during the east monsoon season between the months of July to December when males engage in voyaging and families and extended relatives resettle in Pepela for the duration of the fishing season. Moreover, since Bajo people often spend extended periods of time away from Mola engaged in other activities it is difficult to obtain exact population numbers.

Table 2: Population and number of houses in Mola.

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>No. of houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mola Utara</td>
<td>981</td>
<td>982</td>
<td>1,963</td>
</tr>
<tr>
<td>Mola Selatan</td>
<td>1,158</td>
<td>1,157</td>
<td>2,315</td>
</tr>
</tbody>
</table>

Source: Kantor Statistik, Kapubaten Buton (1994a:9) and 1994 field survey.

The Mola population is predominantly Bajo, but some intermarriage takes place with the Tukang Besi people, Butonese, Bugis, Makassarese and Maluku people and with Bajo from other areas of Indonesia.

There appears to be a distinct difference in the population between Mola Utara and Mola Selatan. The oldest section of settlement is in central Mola Utara and according to the Bajo many of the original inhabitants of Mola were Bajo who came directly from settlements or boat anchorages in Buton. Most of the current population of Mola Selatan aged over 40 years old, were born in or came from Mantigola in the late 1950s. Some elderly Bajo reported they were born at sea on small boats called a soppe. Among this older generation, some of those born in Mantigola, had parents born in places like Kulingsusu, Pasar Wajo, La Goro, or Bisaya in Buton or from the island of Kabaena, located to the west of Buton. Others have parents who were born in Oenggai in Roti or in Kabir in Pantar Island. Most of the current younger generation Bajo were born in Mola.

The Mola Bajo have no territorial right or claim to the body of water in which they build their houses. Only the coral rock foundations and the houses built there or over the water are privately titled. Houses are constructed from a variety of materials; wood, brick or thatched palm leaf panels, with roofs of asbestos, tin and thatched palm, built on piles either directly over the water, or on coral rock foundations. Under some houses, part of the coral rock foundation has an area not filled in and is used as holding pens for turtle which they have caught, or as a rubbish dump. Many of the wooden houses are actually houses purchased from
Tukang Besi people, particularly from Kaledupa. These houses, made up of panels can be disassembled, transported by boat and reassembled. They are relatively inexpensive compared to building a new house. Typically, a thatched hut, with a wooden or bamboo slat floor, is built at the back of the house, which serves as a cooking area. Since it is often the coolest part of the house it is used as a general purpose area. But in smaller houses, the sleeping rooms and cooking area are contained in the one structure. Some houses have small huts built on piles over the water for a toilet and one toilet is often used by a number of families. Bathing is most commonly conducted outside, using fresh water stored in ceramic jars or jerry cans. It is also common for the Bajo to wash first in sea water next to the house and rinse off with fresh water. Some houses have a separate hut for a washing area or newer style brick houses have a bathroom.

Since 1989 fresh water has been pumped from the land through pipes and there are a number of satellite holding tanks where water can be collected. Some houses in the central part of the village have water pumped directly to their houses. More commonly however, women and children collect water from either a well located near to the centre of Mola Utara in Mandati I, buy water from others, or travel by canoe to Kapota village (Kambode Island) to collect water which is of a better quality. However, water is a problem for Mola and women spend long hours each day collecting it in plastic containers, transporting it in canoes to their houses (see Photo 3).

Much of the village has electricity, available from late afternoon till around 6.00 am in the morning and on Sunday afternoons. While not every household has its own television, communal TV viewing is a popular pastime and about four houses (belonging to Hajis) had parabolas (satellite dish) in early 1995, obtaining international television channels.

There is a Primary school (Sekolah Dasar Mola Utara) located on the land in Mandati I. Attendance is irregular, there is a high level of illiteracy, and very few complete Junior and Senior High School. Parents who place a high value on education and have the financial means (and often family contacts), often send their children to school in Bau Bau or Kendari. At the time of my fieldwork, around twenty young Mola Bajo adults had completed some form of Tertiary education, at Universities in Bau Bau, Kendari and Ujung Pandang.

The villages of Mola do not have their own local Government Health Clinic (Pusat Kesehatan Masyarakat) and the nearest clinic and medical aides are located in Mandati I, while there
is a resident medical practitioner in Pongo. There is no hospital on the island, the nearest being in Bau Bau or Kendari. The Bajo cemetery is located on the small rocky island of Otoue located to the south of Mola.

Mantigola

The settlement of Mantigola is built on sandbanks and reef flats in shallow waters on the western side of Kaledupa island approximately 400–500 m from the mangrove-lined strand area of desa Horuo (see Photo 6 and 7). The village is only accessible by boat. From Ambeua, Mantigola can be reached via a one hour walk. Administratively the dusun of Mantigola is part of desa Horuo which has a total population of 1,342 people, with the population of Mantigola around 600–700 people. Like Mola, the settlement experiences fluctuations in population numbers.

Photo 6: The settlement of Mantigola located offshore from desa Homo, Kaledupa Island.
Evidence of a larger population residing at Mantigola in the past can be seen by lonely coral foundations dotted in the waters surrounding the settlement and the distance between existing houses. Mantigola is favoured by the Bajo for the large lagoon situated in the centre of the village which serves as a deep anchorage (see Photo 8). Unlike Mola, there are only a few walkways around Mantigola and it is mostly necessary to travel around the village by canoe, depending on the tides. Houses are similar to those in Mola, constructed of a variety of materials built either on wooden piles directly above the water or on coral rock foundations (see Photo 9). There is no electricity and water must be collected in jerry cans from a well on the land at Horuo and transported by canoe. The isolation of Mantigola makes it difficult to obtain fresh food and household goods and women usually buy food from Horuo or walk to the main market area in Ambeua. The Mantigola Bajo bury their dead on the land to the right of Horuo.
Photo 8: The large lagoon in the centre of Mantigola.

Photo 9: Low tide in Mantigola.
Sampela

Sampela is located approximately 400 m from the mainland on the north-eastern side of Kaledupa near to Sampuawatu (*desa* Lau Lua). Administratively it is a *dusun* and part of *desa* Lau Lua. The population of Sampela is around 1,200 people, living in about 210 houses (Chris Majors 1998, pers. comm.). The village is quite small in physical size in contrast to Mola and Mantigola, with houses built similarly and most of the village is accessible by foot over walkways and bridges. There is no electricity or fresh water; it must be collected from wells and transported by canoe from Kaledupa. Rates of immigration and emigration are lower for Sampela than other Bajo villages. Sampela is reported to be a very poor Bajo village compared to Mola and Mantigola.

La Hoa

The *dusun* of La Hoa is located on the eastern side of Kaledupa and is administratively part of the *desa* of Langge, which has a total population of 1,771 and 447 households. La Hoa is the smallest Bajo community at Kaledupa, comprising about 15 houses (Chris Majors 1996, pers. comm.).

La Manggau

The *dusun* of La Manggau is located on the northern tip of Tolandono Island not far from Waha, the capital of Tomia Island and has a population of around 500–600 people. The settlement is administratively part of *desa* Waiti. The hamlet actually comprises a small number of Bajo families as well as Tomia people. There are approximately 10–15 Bajo houses built above the water on the seaward end of the settlement. Their houses are accessible to the land, where the Tomia people live.

History of Bajo Arrival and Settlement in the Tukang Besi Islands

Village elders from the Bajo communities at Mantigola and Mola narrate stories of their ancestors’ entrance to the Tukang Besi Islands via the island of Buton, during the 19th century. I consulted with two village elders in Mola and Mantigola about the Bajo arrival and initial settlement in the Tukang Besi Islands. Bilaning was one of the oldest Bajo men in Mantigola, probably in his 80s. He passed away in late 1994. Mbaga was also one of the oldest Bajo men in Mola Selatan and a contemporary of Bilaning, and he died in May 1996. Both these men told me the first Bajo settlement or congregation area for boat dwelling Bajo in the Tukang
Besi Islands was on Kaledupa at Lembonga, located near to the present day settlement of La Hoa on the northern side of the island, not far from Buranga, the old capital of Kaledupa island. Later many Bajo moved to the other side of the island to what is now present day Mantigola, to fish during the east monsoon, returning to the other side of the island at the onset of the west monsoon. The establishment of Mantigola came with the Bajo asking the government (Sultan of Buton) for a permit to build houses at Mantigola, because it was closer to the offshore reefs than Lembonga.

A Bajo man from Mantigola told me the name Mantigola apparently comes from the words *menanti gula* which means “to wait for sugar” in Indonesian. The story behind its name is interesting in light of the Tukang Besi - Roti Island connections. Apparently, Binongko traders sailed to Roti to buy *gula air* (sugar from the lontar palm) which was carried back to the Tukang Besi Islands and sold to Bajo and land people at the site of present day Mantigola. Binongko traders certainly have a long connection with Pepela and the local Rotinese population. Some of the first maritime settlers in Pepela were Binongko men.

I was able to compare the snippets of oral history from Bilaning and Mbaga concerning the Bajo arrival and settlement in Kaledupa with a record made by Kasmin, a Bajo from Mola Utara, who graduated in 1993 from Haluoleo University with a teaching qualification. In his minor thesis (Kasmin 1993) he documents the story of the arrival of the Bajo in Kaledupa, based on interviews with a number of elderly men in Mola and Mantigola, including Bilaning and Mbaga. I have translated the relevant sections from the thesis, from Indonesian into English:

Before the Bajo came to the Tukang Besi Islands they lived in Pasar Wajo [south coast of Buton]. Sometime in the 1850s, several perahu *bidu'* and perahu *soppe* left to survey the condition of the Tukang Besi Islands. They found the islands to be in a very strategic location and with rich seas possible for development. After that, they returned to Pasar Wajo to request a permit from the Sultan of Buton; they were given a permit to move to live in the Tukang Besi Islands. The Bajo people who moved to the Tukang Besi Islands were led by two *punggawa* [leader], Puah Kandora and Puah Doba. They sailed in groups in several perahu with several heads of family in each perahu. They first stopped at Lia on Wanci Island. Not long after they moved to Lembonga in the northeast part of Kaledupa, and there they lived on
their perahu **bidu** or **soppe** and caught fish and gathered other kinds of sea products, and at that time they still lived moving from place to place. During the northeast season they moved to the southwest part of Kaledupa, known by the name **Kampung Mantigola** and they returned to Lembonga during the west season. The arrival of the Bajo people in the Tukang Besi islands was welcomed by the Government and the local society and they asked for a permit to build houses in Mantigola in the 1850s. (Kasmin 1993:32–33).

According to Sopher (1977:151,268) in the nineteenth century, the headman of each Bajo group had the title of **punggawa** (a word of Sanskrit origin), the customary title of chiefs or leaders amongst the Bajo-Bugis, or Bajo owing allegiance to Bugis or Makassar princes. Pelras (1996:332) states that in the nineteenth century the Bugis used the term to mean a military chief or ship's captain. According to the Mola Bajo, Puah Doba was Bugis and also called Daeng Nyirrang, who had married a Bajo woman. Bajo often state “**orang Bugis saudara kita**” (Bugis are our brothers), illustrating the close ties between the two groups.

During the 19th century the original capital of Wanci Island was at Lia Togo located on the southern end of the island. The village is situated atop a ridge and has commanding views from lookouts of the surrounding sea and islands, particularly Kaledupa. Presumably the location was chosen for safety from slave raiders and pirates. Apparently most of the Wanci population lived in the higher regions of the island and settlement along the coast was relatively recent, probably dating from after the slave-raiding period. The central market and commercial area previously operated from Lia Mawi on the coast. Mola Bajo told me a small Bajo community existed at Lia Mawi during the nineteenth century. Sometime during the Dutch colonial period, the capital was moved to the Wanse-Pongo area (Donohue 1994:4). It is unclear whether the old Bajo settlement in present day Mola Utara was established at the same time as the administrative centre was moved to Wanse-Pongo from Lia, or whether it existed prior to this. Juda from Mantigola also informed me that the original inhabitants of Mola came from the villages of Lagoro and Lasalimu on the eastern coast of Buton. Until the 1950s, Mantigola was the largest Bajo settlement in the Tukang Besi Islands. At this time, Bajo from Mantigola embarked on a major migration to Mola.
Kahar Muzakkar Rebellion and Bajo Migration

During the 1950s and 1960s, the Kahar Muzakkar Rebellion was creating havoc in South and Southeast Sulawesi and the Tukang Besi Islands. The Rebellion against the National Government led by Kahar Muzakkar and linked to the Darul Islam (DI) (Islamic State) and Tentara Islam Indonesia (Til) (Indonesian Islamic Army) rebellion in West Java and Aceh kept South and Southeast Sulawesi in state of insurgency from 1950 to 1965. During this period Sulawesi was divided between Kahar Muzakkar and the DI/TII, and the Tentara National Indonesia (National Indonesian Army), and much of Southeast Sulawesi was under the control of local commanders and followers of Kahar Muzakkar and the DI/TII (Harvey 1974:1,437).

The Kahar Muzakkar Rebellion, commonly referred to as the gerombolan by the Bajo, resulted in great upheaval for the Mantigola Bajo and was responsible for large numbers of Mantigola Bajo settling in Mola and other settlements in the Tukang Besi Islands and for further dispersion of Bajo groups around eastern Indonesia.

Older generation Mola and Mantigola Bajo recall the disorder in their lives during the years 1956 and 1957. I was informed about this period in detail by Pallu. During the gerombolan, some members of the Bajo community supported and took part in the associated rebellious activities of the DI/TII and followers of Kahar Muzzakar, which was in opposition to the Kaledupa people and local government. Threatened with violent reprisals and attack by the land people, the Bajo were forced to abandon their settlement at Mantigola and move to Sampela, under orders from the local Kaledupa army who wished to have tighter control on the Bajo. However, support for the rebellion continued, and about a year later, with further threats from the Kaledupa government the Mantigola Bajo fled to Mola, under permission from the Wanci government who supported the rebellion.

At this time, a small Bajo community already existed in the central present day Mola Utara comprising about 30 houses. Most of the Kaledupa Bajo, who fled in their boats and canoes with their possessions to Mola, lived on their boats for a short time and later built small houses, eventually building more permanent ones in what is now Mola Selatan. There are some differences between Mola Utara and Mola Selatan Bajo and this may be related to the historical differences in origin between these groups.

During this period of unrest and upheaval, the majority of Mantigola Bajo moved to Sampela and approximately a year later to Mola, while some Bajo fled Mantigola and Sampela directly
for other areas in eastern Sulawesi. Some Bajo moved to Langara village on Wowonii Island, located close to Kendari. This community was later forced to flee to Kendari but returned. Some people escaped to Matanga in the Banggai islands and Limbo in Central Sulawesi at Kukkusang island. Burningham (1993:209) writes that the settlement of Wuring on the north coast of Flores near Maumere was settled by Bajo from Mantigola during the rebellion. However, Pallu and others from Mola claim the majority of Bajo settled in Wuring were from the island of Kabaena, located to the east of Buton and from Pasar Wajo on the southern coast of Buton. Suffering from similar problems, they fled from the region to safer areas (see also Adkondro 1981).

According to the Bajo, the kampung of La Manggau on Tolandono Island was established after the end of the rebellion. Some Bajo also moved directly from Mantigola and Mola to Sulamu in Kupang Bay and to the Bajo village of Kabir, at Pantar Island. One of these people included the Kepala Kampung of the time, Saddong, descended from Bajo nobility and keeper of a Lontar manuscript containing Bajo history.

At the end of the rebellion, some Bajo returned to Mantigola, Mola and Sampela and still live there today, but the majority remained in Mola. However, these events must have left some dissension between the land groups and the Bajo. For some were content to live in Mola, but for others Mantigola was more suitable because of its proximity to offshore coral reefs. Since the late 1980s, the largest immigration and emigration of Bajo from Mola and Mantigola, not just male members of the community but also women and children, has been to and from the village of Pepela on the island of Roti.

**The Village of Pepela, Roti Island**

The island of Roti is located to the southwest of Timor and is the southern - most inhabited island of Indonesia. Administratively it is part of the Province of Nusa Tenggara Timor (East Nusa Tenggara), and the capital of the province is Kupang located in the southern end of Timor island. The capital of Roti is Ba'a located on the western side of the island. The village of Pepela is located on the northeastern end of Roti island, on the southern side of a large sheltered bay, which faces east into the Timor Sea (see Map 5). The bay is fringed by sandy beaches and mangroves, and coral reefs are located in its centre. At the settlement of Pepela, the sandy beach drops away steeply providing a deep water anchorage close inshore. The bay
of Pepela is also attractive because its physical location provides year round shelter from the strong easterly and westerly monsoonal winds.

Map 5: The island of Roti in the Provience East Nusa Tenggura.

Administratively the dusun (hamlet) of Pepela is part of desa Londalusi, Kecamatan Rote Timur, administered at Eahun located about 9 km inland from Pepela. The total population of Londalusi is 2,765. The population of Pepela was approximately 800 in 1994. The ethnic composition of the population of Pepela is mixed, comprising native Christian Rotinese, immigrants whose ancestors came from other islands and belong predominantly to the Muslim Butonese ethnic group (Fox 1998:127), Bugis, and Bajo from the Tukang Besi Islands. The economy of the inhabitants of Pepela is based on fishing in the Timor Sea and associated trade in marine products. Most of the Muslim inhabitants do not own any land for farming and are therefore mostly dependent on the sea for income.

The settlement of Pepela (Figure 2; Photo 10 and 11) stretches from the coast inland approximately 1 km. A pier dominates the harbour and from here a road leads through the centre of the village up the hill. Houses are built on either side of the road, but most settlement is on the western side. East of the main residential area is an area called Kampung Baru (“new village” comprising a cluster of Bajo houses. Further to the east situated at the base of a ridge is a coconut plantation and cemetery. The main Bajo settlement is located on Tanjung Pasir (meaning sand spit or point and called Tanjung for short) in the east away from the
main part of the village. Next to the pier is the old mosque. In 1994 the government built a new mosque on the hill behind the main part of the village. There are a handful of small shops along the main road and a number of kiosks throughout the village, with most centred around the pier-harbour area. There are one or two wells in the village, but most water is collected in jerry cans from a small lake and well in the west approximately 1 km from the pier, and transported in wooden carts. Houses are mainly brick constructions and a few are of thatched palm leaf panels.

Figure 2: The village of Pepela.
Photo 10: The Bajo settlement at Tanjung Pasir, located to the east of the main settlement in Pepela, Roti Island.

Photo 11: The village of Pepela.
On the other side of the bay is the Christian settlement of Suoi (dusun Suo, desa Dai Ama). In recent years some of the males from Suoi have joined Pepela perahu in fishing activities in the Timor Sea. To the east of Pepela is a small Rotinese settlement dusun Haroe (desa Hundi Hopo), the last point boats pass by before sailing into the Timor Sea.

A passenger ferry operates daily between Kupang and Pantai Baru, a small mangrove fringed bay on the northwestern side of Roti. A motor boat travels twice a week between Pepela and the village of Namosain, in Kupang. The trip takes around 6 hours depending on the weather conditions.

The native population of Roti are Christians, and as well as agricultural activity, engage in local strand collecting and inshore fishing in small boats. They “are not noted for their open sea sailing traditions” (Fox 1998:126). The history of settlement of Muslim maritime people at Pepela has not been documented, but Pepela was traditionally a port for the eastern part of Roti (Fox 1998:127). According to Fox (1998:126), Roti was important in the maritime trading network because the Rotinese produced cloth sails made from the gewang fan leaf palm (Corypha elata) for their own small boats and for sale in the 19th century. Fox refers to a sketch of a Macassan perahu off Raffles Bay, north Australia made by Le Breton in 1839 as an illustration of the kind of sails Roti was noted for (see Macknight 1976, plate 33). Another commodity exported from Roti was (and still is) cakes of crystallised sugar made from the juice of the lontar palm (Borassus sp) (Fox 1977b). Bajo and Pepela residents state that in the past Binongko sailors from the Tukang Besi Islands regularly visited Pepela to purchase lontar palm sugar, which was traded around the archipelago. This trade continues today and also operates in the reverse direction. Vessels from Roti sometimes sail to the Tukang Besi Islands to sell palm sugar directly to the Bajo.

This kind of maritime trading activity would account for some Muslim settlement in Pepela. It would appear this is relatively recent, possibly from the early decades of this century, and most probably after the 1920s. Today the fishing population of Pepela is largely made up of people who themselves or whose ancestors came from other islands. Many have intermarried with the local Rotinese population. The islands most commonly mentioned by Pepela residents are Sulawesi, Buton, Binongko, Alor, Pantar, Flores and Java. One male section of the population is descended from mariners, from the island of Binongko. Two residents, Hassan La Musa and Haji Saman La Duma, now both in their 60s, came from the village of Popalia on Binongko when as young men they were on trading voyages. They married local Rotinese women and
settled in Pepela, bringing with them perahu technology. Both their fathers, they claim, had sailed to Pepela and engaged in trade with the local population previously.

Other residents in Pepela are immigrants from, or descended from the islands of Alor and Pantar, located to the east of Flores. This includes Baranusa a tiny island located in the Bay of Blangmerang off the north coast of Pantar Island, located approximately 35 km to the southwest of the town of Kabir and the nearby village of Bajo. These people appear to have settled in Pepela later. According to Hassan La Musa, they settled in Pepela in the 1960s so they could fish for marine products at off-shore reefs in the Timor Sea.

As well as Buton - Tukang Besi, and Alor-Pantar people who have settled in Pepela, there was also a Bajo man from Mantigola, Suleyman, who was the first Bajo to settle in Pepela and marry around four or five decades ago. A couple of families in Pepela are also descended from Saudi Arabian traders who settled in the area.

These examples provide an indication of the diverse background, ethnic groups and origins of the Pepela population. The history of Muslim settlement in Pepela is largely the result of maritime trade by peoples from Southeast Sulawesi with the Rotinese, and subsequent settlement by other groups appears to be the result of fishing activity undertaken in the Timor Sea.

**Bajo Settlement at Pepela**

Bajo from Mola and Mantigola had in the past sailed from their home villages to Pepela, from where they embarked on fishing voyages into the Timor Sea. While in Pepela, the men lived on their perahu, waiting for suitable weather conditions to set sail, while they re-provisioned their vessels with firewood and water. This pattern of sailing-fishing changed in the late 1980s, when the migration of Bajo men from Mola, Mantigola and LaManggau villages to Pepela began. This migration was the result of changes in shark fishing and the economic, political and cultural context of all of this is a key focus of this thesis.

On 9 September 1994, shortly after my arrival in Pepela, I conducted a basic survey of the Bajo community in Pepela covering the number of Bajo houses, the male family head and wife, the number of children and others living in the house, from which village they originate, and the time they have lived in Pepela.
In early September 1994 there were 42 houses on the Tanjung. Of these, three houses on the Tanjung were unoccupied and one house was being used as a warung (small food stall). At the same time there were 7 Bajo houses in Kampung Baru, and 5 Bajo occupied houses in the main part of Pepela. In total there were 50 Bajo occupied houses in Pepela, with a total of 292 people living in these houses, 134 adults and 158 children. Of all the households surveyed, the majority of Bajo living in Pepela originate from Mola Selatan (28 households), with lesser numbers originating from Mola Utara (8 households), Mantigola (10 households) and La Manggau (2 households) (plus 2 unrecorded).

These data should be taken as an estimate only and accurate for that day because the number of people living in a house changed from day to day and during the following week more Bajo men, women and children arrived from Mola and Mantigola. The 292 people recorded would represent the lowest numbers of Bajo living in houses in Pepela on that day. The population increases and decreases because of the continual arrival and departure of Bajo women and children, and extended family of boat owners, captains and crews. As well, some perahu captains and crew often sleep and eat in the houses of extended family. As well as those actually residing in a house, there are those boat owners, captains and crew who live on their perahu while in Pepela between fishing voyages, and often for months during the fishing season. At least 3 Bajo have married Pepela residents.

Of the Bajo surveyed, most families reported they had been living in Pepela, either in the main part of the village in Kampung Baru or on the Tanjung for the last 1–3 years, with smaller numbers of families living in Pepela for 4 years or more. The first families settled some 5 years before. But some families had come to Pepela for the first time in 1994.

The Bajo settlement on the Tanjung consists of two main rows of houses facing the sea (see Photo 12). These are very basic in construction, most of them raised off the sand and made of panels of thatched palm. Some structures amount to no more than a one room shack and generally reflect the temporary function they serve for the Bajo. Some houses in Kampung Baru are not raised and have dirt floors. The few Bajo houses in the main part of the village are generally better constructed as larger wooden style house on stilts.
At high tide the Tanjung is partly physically separated from the main part of the village by a channel which cuts through the sandy beach and winds around in an arc behind the Bajo settlement. At high tide, the channel floods and smaller watercraft can enter, providing added protection from weather conditions during the west monsoon. A small walkway is in place over this channel to allow access to the Tanjung at high tide, but on big tides even this is underwater and it is necessary to travel a short distance by canoe to reach the main village.

There are no facilities on the Tanjung and water is a problem for the Bajo. The local Camat's office is hesitant to provide any services for the Tanjung because it has no assurance that the Bajo will stay permanently. They could easily leave Pepela if the fishing situation changed. Subsequently, those Bajo who report to the local desa office are given visifor status. A few Bajo have decided to take up permanent residency.

The Bajo women and children have found it difficult living on the Tanjung. The living conditions are poor, there are no toilets and water must be purchased from local water sellers because it is too far for the women to collect it themselves. This also means that usually women have to walk the kilometre or so to the main water source to wash their clothes. Only a few children attend the local primary school. The women reported that fish and marine products are scarcer around Pepela than in the Tukang Besi Islands, and there is a general shortage of food in Pepela in contrast to Mola and Mantigola, particularly during the dry season, the main fishing season and the period when the population is greatest. The nearest market is a 20 minute bus ride away. Vegetables are sold by local Rotinese from house to house and fish caught locally are sold directly on the beach. Often there is competition among women to purchase the catch. During the east monsoon, dried shark fin and dried reef fish brought back from fishing trips in the Timor Sea form a staple part of the Bajo diet.
Conclusion

This chapter has introduced the cultural background of the Bajo, their settlements as well as some of the historical and political conditions contributing to Bajo migration and settlement in the Tukang Besi Islands. I have discussed the historical connections between people from the Tukang Besi Islands with the people of the village of Pepela, Roti island. The Bajo are characterised as an outwardly mobile and maritime - orientated people. The next chapter focuses on Bajo cultural, social and economic inter-relationships with the sea.
Chapter 3

PEOPLE OF THE SEA: THE MARITIME WORLD OF THE BAJO

Introduction

The Bajo live a wholly maritime way of life. In the words of one Bajo “the sea forms the basis of their life” (“laut merupakan dasar hidup”). The marine environment constitutes “living spaces” (Chou 1997:613) for the Bajo. These landless people live in a physical landscape dominated by sea and islands (Sather 1997:92). They spend their entire life in the vicinity of the sea living either in pile houses built over the water or on boats. Their connection to the sea, however, is more than physical. They have a marine cosmology based on belief in, and causal relationship with, spirits who inhabit the sea. These spirits provide a spiritual affiliation with the sea. The Bajo depend almost exclusively on exploitation of the marine environment and maritime associated activities for their subsistence needs and economic livelihood. Bajo commonly recite the following statement to illustrate their economic dependence on the sea: “our garden is the sea” (“kitapunya kebun di laut”). They hold an intimate knowledge of the various maritime zones (the strand or littoral, coastal ecosystems, seabed features, open sea, shoal and coral reefs), marine resources, and the environment - the seasons, winds, currents, tides, lunar cycle, stars and navigation. They have specialised boat building knowledge and skills and a range of types of watercraft which are essential to their very existence through exploitation and interaction with the marine environment. The social and economic domains of the Bajo extend well beyond the Tukang Besi Islands, to other regions of Indonesia and neighbouring countries.

In this chapter, I provide an overview of Bajo perspectives on cosmos, religion, the spirit world, esoteric knowledge and components of ritual andadat. The extent of Bajo social and economic maritime domains are examined through a discussion of networks existing between Tukang Besi Island Bajo and other Bajo communities in eastern Indonesia, followed by a broad overview of economic activities and local and distant shore fishing undertaken by the Mola and Mantigola Bajo. The intention is to provide a background to the activity of nomadic fishing expeditions undertaken by the Tukang Besi Bajo to the Timor and Arafura Seas region of northern Australia.

The final section focuses on Bajo perahu lambo, used to engage in fishing voyages to the Timor and Arafura Seas. The history, design, function and technology of Bajo lambo are
discussed, followed by an examination of aspects of symbolic associations surrounding perahu lambo through a discussion of rituals conducted during their construction.

**Bajo World Views**

**Islam**

Bajo religion is a syncretic system with elements of Islam fused with Bajo indigenous cosmology and ritual practice. Indigenous cosmology and beliefs are very strong and still practised despite Bajo identification with Islam. This syncretism can be observed in various manifestations of Bajo ‘practical religion’ (Pelras 1996:197) in cosmology, rites of the life cycle, rituals to do with boats, fishing, housing, and health. Some Bajo are more “syncretically inclined” (Acciaioli 1990:217) than others.

The Bajo are followers of Sunni Islam and adhere to the faith with varying degrees of observance, both while at sea and in their villages. During Ramadan, the fasting month, some fishing and sailing activities are undertaken, but most Bajo prefer to rest in their home villages and fast. In 1995 there were 10 *Haji* (including 3 women) living in Mola who had made the pilgrimage to Mecca. *Haji* are usually the wealthiest members of the village, and highly respected, owning large numbers of boats, providing financial capital, and buying and trading in marine products.

**Ancestors of the Sea (Mbo Madilao)**

Bajo believe that at the highest level is *Papu* (also called *Tuhan* or *Allah*) who is considered to be almighty God, the supreme being and the creator of the universe. From *Papu* descended the prophets (*nabbi*). The first man created by *Papu* was Adam and he was the first prophet of Allah. Further prophets came and Muhammad was the last. The sea is the home of *Mbo Madilao* translated as “ancestors of the sea”. *Mbo Madilao* are believed to have descended from the prophets at the time the world was created by *Papu*.

The term *Mbo Madilao* refers to a group of seven original ancestors: *Mbo* Janggo, *Mbo* Tambirah, *Mbo* Buburra, *Mbo* Marraki, *Mbo* Malummu, *Mbo* Dugah, and *Mbo* Goyah. The leader and most powerful is *Mbo* Janggo. These ancestors are considered to be like humans and each possesses a different power. According to the Bajo, at some time in the past, the ancestors were all on one boat that somehow became lost at sea and were never found again.
Mbo also means grandparent, and is also a term acquired by senior village members both living and dead. In this latter sense, the notion of ancestor is not a genealogical one (Sather 1997:316). The ancestors are considered to be sacred, and the Bajo are generally reluctant to speak of them outside the appropriate time or place; it is generally forbidden to mention their names in casual conversation.

To reconcile Islam, the Bajo have sought to incorporate their cosmology with aspects of Islamic faith. The position of the ancestors is ranked lower than the prophets and the ancestors are said to work with and for the prophets. In one instance, Mbaga told me the prophets gave the ancestors the control over the sea and the ancestors are described as “assistants to the prophets”. Endicott (1970:177) writing of the political hierarchy in Malay societies, states “Allah, whose domain is the universe, is superior to the prophets … lords of the … natural realms, who in turn rule the more localized spirits within those realms”. Kiramang, a ritual expert, gave me a more detailed version of how the ancestors came to be lost at sea. It is obviously a Koranic version of the Flood Myth, where indigenous cosmology is incorporated with Islamic teachings.

At the time Nabbi Nuhung [Noah] built a boat on the top of the mountain Mbo Janggo, Mbo Tambirah, Mbo Buburra, Mbo Marraki, Mbo Malummu, Mbo Dugah, and Mbo Goyah did not believe that it was possible that the boat could descend to the sea. Afterward, the big water arrived to the top of the mountain, and the boat entered the water. Maybe because they did not believe it could happen, they were cursed and thrown into the sea and became lost. So at that moment the boat wanted to descend from the mountain to the sea all the prophets came together, only these 7 people did not join them, because they did not believe the boat could enter the sea because there wasn't any water. But finally, the water arrived and it was so big it reached the top of the mountain and the boat was able to enter the water.

As Acciaioli (1990:216) describes for the Bugis at Lake Lindu (Central Sulawesi), ritual experts in Mola say that each prophet is associated with a particular domain. I did not obtain a complete list of prophets and their domains. However, I was informed Nabbi Hilir rules over the sea and fish for all Muslim people, but only Mbo Madilao rules over the sea for the Bajo people. In the scale of things, the ancestors have a direct line to God through the prophets and thus act as intermediaries between God and living Bajo (Sather 1997:314).
Further insight into the ancestors was explained to me by Kiramang:

**Mbo Madilao** have control of the universe of the sea and all the creatures in it for Bajo people, for it is their place. **Mbo Madilao** are like the rulers of the sea; **Mbo Madilao** lives freely in the sea, wherever Bajo people go. **Mbo Madilao** accompanies us. Because it is known by Bajo people that **Mbo Madilao** have authority over the sea, the sea is the property/possession [milik] of Bajo people as the place they live and as their place where they search for their livelihood; **Mbo Madilao** lives wherever there is sea, whereever Bajo people search for a living, even if outside the country of Indonesia, they will be accompanied by **Mbo Madilao**.

This description provides a powerful insight into how the Bajo perceive their marine world. It also highlights some differences between indigenous peoples and western cultural perceptions of the nature of the marine environment, whereby “popular western conceptualisations of seascapes tend not recognise these spaces as culturally defined” but as “watery voids” (Pannell 1996:28). For the Bajo, the marine environment is not just the source of economic bounty. The belief that guardian ancestors are not confined to any particular location but live “wherever there is sea” is, it would seem, in line with the wide geographical area in which they fish. The spiritual maritime domain of the Bajo has no boundaries, it is infinite. That means their domain, for the focus of this thesis project, encompasses the Timor and Arafura Seas and the Australian Fishing Zone.

**The Spirit World**

The Bajo cosmic world is also one populated by diverse groups of spirits. Spirits manifest themselves in many forms, for example as humans, land or sea animals. They may be visible or invisible, resident or wandering, may be sea or land dwelling, or inhabit specific localities (jeng/jin) (eg. an island, a reef, rock, or tree). They may talk or appear in dreams, and some can enter people. Most of the spirits are generally evil or malevolent (setang) and can cause illness or misfortune. Usually, relationship with spirits is through propitiation by prayer (baca doa) and offerings (rempo-rempo/kasih turun pinang). Protection from evil and sorcery by spirits and humans can be sought through the wearing of amulets and charms. Each house and perahu lambo has a bottle filled with water (sampa), hanging just inside the entrance, that offers protection from evil spirits and acts of sorcery. Other spirits are those of deceased kin, ghosts, and invisible spirits (duatta, roh alus/roh halus), the latter can come to the aid of
Bajo in times of need, in particular to help find lost kin. Communication with these beings requires the service of a spirit medium (*sandro*).

**Esoteric Knowledge**

Interactions with the spirit world and ritual activity require the use of *ilmu* (*pangatonang*). The word is derived from Arabic which means magical or esoteric knowledge (Southon 1995). A number of different categories of knowledge are found among the Bajo including knowledge to do with sickness, healing, life cycle rituals and spirit mediumship (*pangatonang sandro*); sorcery (*pangatonang bebelau/*ilmu jahat*); construction of houses (*pangatonang ruma'/ilmu rumah*) and boats (*pangatonang lambo/bidu/*ilmu perahu*); for sailing, controlling the marine world and fishing (*pangatonang a'nakoda/pangatongang punggawa/*ilmu juragon*). The name *sandro* is generally used for people with various kinds of knowledge but sometimes *pandre* is also used. Not everyone can acquire knowledge. It can be passed down through generations or acquired through study from a teacher. Esoteric knowledge is considered to be secret, thereby maintaining its power. Those with *ilmu* are afforded certain status and prestige amongst the community.

**Offerings and Ritual**

The basic elements of Bajo ritual are the recitation of prayers to spiritual entities by a ritual officiant or a person with *ilmu*. Prayers are not fixed in form and vary depending on the ritual. They can be in the form of propitiation - (*malaku poppor/minta doa*) - to apologise or ask for forgiveness, or a request to enlist the assistance of the spirits to avoid misfortune or escape danger (Sather 1997:267). Depending on the particular ritual, accompanying items and the composition of offerings may vary. The basic offering (referred to generally as *pinah* or *sirih* after the components) consists of four leaves (*leko/sirih*) from the pepper plant (*Areca catechu*), folded, each containing a piece of betel nut (*pinah/pinang*), with lime or tobacco inside, placed on a plate. This can be accompanied by four hand-rolled cigarettes and sometimes coins. For more complex rituals, particularly boat and healing rituals, more substantial offerings of food (eg. coloured rice, bananas, chicken and cakes) are used. It is believed that the spirits “partake in the spiritual essence of the offered foods” (Acciaioli 1990:215).
Concepts of the Soul: Semangat and Nyawa

In many Southeast Asian societies “the navel is associated with ideas about the soul” (Southon 1995:103). Three main terms, semangat, nyawa, roh and their cognates are widely used in Indonesian and Malay societies to refer to different aspects of the soul (Endicott 1970:48).

Across many island Southeast Asian societies there exists a commonly shared concept of “a vital force which suffuses and animates the universe” (Waterson 1990:115). This concept, as noted by Waterson (1990:155) is referred to in the literature by various labels including “vital principle” (Endicott 1970:47), “cosmic energy” (Errington 1983:545), or “invisible force” (Southon 1995:136) and is associated with notions of “potency”, “soul-stuff” and “spirit” (Errington 1983:545). In Malay and Indonesian languages, the concept is commonly known by the term semangat and its cognates. Throughout the region there are variations in local meaning and usage of semangat. However, underlying these differences, the universal idea “about a pervasive life-force, which may attach itself in differing concentrations not only to living things but also to inanimate objects”, exists (Waterson 1990:115).

Semangat is thought to be attached to the navel of humans. Perahu are given “ritual navels” (bebol) which act as the point of attachment for the semangat. Not only humans and boats, but houses, kinship groups and kingdoms each have a navel which are a source of power that must be guarded and protected from harm (Errington 1983:547). According to Errington (1989:51–52), among the Bugis of Luwu in South Sulawesi sumange’ spreads out from its attachment at the navel, and is “not contained or bounded by the skin or body”. The precarious state of infants as well as people weakened by illness “means that their sumange’ is loosely or unstably attached to their torsos” (Errington 1989:52). Furthermore, “humans are constantly shedding sumange’” by virtue of moving around from place to place (Errington 1989:52–53).

In Endicott's (1970:48) analysis of Malay concepts regarding the soul he draws on work by Wilkinson (1901) to highlight some differences in concepts of the soul. Wilkinson (1901:400) states semangat is referred to as “the spirit of physical life; vitality, in contradistinction to the immortal essence or soul (nyawa); the breath of life”. Further clarification comes from Verheijen's (1986) definition of sumangaq as “spirit” or “zest” and nyawa as “life” or “soul”.

In Mola, at the moment of birth, a child's nyawa is said to travel from the placenta, along the umbilical cord, enter the stomach and live permanently at the navel ("nyawa tetap ada di
tumbuh kita”. A midwife (pangulih) named Muna, after the birth of a child in Mola, said that while the placenta and umbilical cord are still moving, the nyawa is still in the process of entering the child. Once it has ceased moving, the nyawa has entered, and it is then safe to cut the umbilical cord of the newborn. It was not clear to me at what moment sumangaq attaches itself to the navel. Endicott (1970:51) notes that “the semangat of a person makes its appearance at the moment the umbilical cord is severed”.

An important aspect of Bajo spiritual life is the idea of a sibling represented by the placenta of a new born child. After a child is born, the placenta (tamuni) is washed and wrapped inside a woven mat with salt which is tied to a rock and with the recitation of prayer, thrown in the water next to the house by the midwife. The tamuni is said to be received by three prophets. The Bajo believe the tamuni becomes Kaka, their supernatural twin older brother or sister, depending on the sex of the child, who inhabits the sea along with other spirits.

The concept of a sibling symbolically represented by the placenta, which protects a child throughout its life (Warren 1993:38), is widespread among Malay and Indonesian societies. Amongst land dwelling communities, the placenta is most commonly disposed of by burial, or stored in the house. Some groups, such as the Bugis of Luwu in South Sulawesi, occasionally dispose of it by sending it out to sea (Errington 1983:551). The Tukang Besi Bajo dispose of the placenta exclusively in the sea. This seems to be practised to a lesser extent by Sama-Bajau speakers in the Southern Philippines and eastern Borneo, where the placenta is either buried or set adrift at sea (Nimmo 1990b: 184–185; Bottignolo 1995:225; Sather 1997:276). For the Bajo of Mola, the placenta has a central place of importance in their lives. As well as accompanying the Bajo on their travels, Kaka provides for their well being and this is elaborated through healing rituals.

If at any period during the precarious early months or years of a child's life or at any time during adulthood, the person suffers from ill health or sickness - it is believed that the person has lost their sumangaq; it has detached itself from the navel. Sather (1997:294–295) discusses similar ideas about the “life-soul” among Bajau Laut. It is said that this is a result of a person being shocked or startled (kaget). As a result, the person becomes sick - for example hot or cold fevers, headache or maluntu - a condition of weakness, faintness, exhaustion, or lack of enthusiasm. A person who is maluntu is said to be lacking in sumangaq (kurang ada semangat). In this case, it is necessary to call on a healer to perform a healing ritual to restore the person's sumangaq and their health and well-being.
This ritual is directed at Kaka. It is called *kasih makan Kaka* or *pengobatan Kaka*. I had the opportunity to observe this ritual on a number of occasions in Mola. Performed by the sandro, it consists of a series of prayers and offerings beginning in the house, and followed by making an offering with prayers to Kaka in the sea in exchange for sumangaq. Here, a half coconut shell, filled with rice, pinah, nine lit candles and a cup are lowered into the sea (see Photo 13). As the coconut receptacle sinks, and the cup fills with water, the sandro removes the cup. Inside, the cup of salt water is believed to hold sumangaq which is caught using a thread (*di panting semangat dengan benang*). Back in the house, further prayers are made and this thread is later tied around the wrist of the sick person and the sumangaq is restored in exchange for “food” (see Photo 14).
Photo 13: Healer making an offering to Kaka in the sea in exchange for sumangaq.
In Mola, boats exist beyond their physical structure and function as a source of livelihood. A perahu lambo is symbolically conceived of as a living entity and represented as a person. Rituals conducted during phases of a boat's construction liken it to the conception and birth of a child. Perahu are given ritual navels which act as the point of attachment for the life soul and vital spirit. The navel is regarded as a source of good fortune and like humans, must be ritually strengthened in order to underpin success in sailing and fishing activity in the AFZ. This is discussed later.

**Adat**

Bajo voyages and fishing activity in Australian waters, are governed by adat practices. What is actually meant by adat and its scope varies considerably between ethnic groups in Indonesia and there is extensive anthropological literature on the subject (see for example Acciaioli 1985; Warren 1993). In Warren's (1993:3) detailed study of adat and the Balinese she states “Adat has become the generic term for describing local customary practice and institutions throughout the Indonesian archipelago” (Warren 1993:3). Warren (1993:3) goes on to say,

Its conventional translation as ‘customary law’ inadequately conveys the cultural depth and rhetorical essence of this defining feature of Indonesian
life...There is an underlying religious - social vision of the necessary correspondence of cosmic and human relationships towards which it is directed.

This would suggest then that *adat* can encompass “the entire governance of society” (Acciaioli 1985:151). The point I would like to make here is that for the Bajo *adat* encompasses, as Warren points out, more than just “customary law”.

Here I adopt the broad definition adopted from Warren (1993:xxv) as local customary law, institutions, and ritual that are connected with customary practices. Broadly speaking the term *adat* encompasses social norms, rules, appropriate behaviour and sanctions that apply to almost every aspect of life and provides a complete code of living. *Adat* is distinct from *agama* - an officially sanctioned religion - in this case Islam (see also Sather 1997:205). However, as I have mentioned Islam tends to be syncretic with *adat* practices.

Bajo refer more generally to *adat* as “following the custom of our ancestors” that embraces all actions relating to behaviour, conduct and ritual during sailing and fishing. *Adat* is passed down from one generation to another and younger crew members are instructed by their elders on fishing voyages. This study draws attention to particular aspects of *adat* associated with sailing and fishing.

**Bajo Networks**

Mobility underlies Bajo social and economic life. People regularly move. It is not uncommon for Bajo communities in the Tukang Besi Islands to spend short and extended periods of time in another village, or to resettle in another village. This can include places predominantly Bajo, or at settlements with more ethnically mixed populations of Bajo, Bugis or Butonese.

Strong kinship ties exist between all Bajo villages in the Tukang Besi Islands as well as other Bajo communities in eastern Indonesia. The Mola and Mantigola Bajo have regular relations with communities at Langara, Wowonii Island; Kendari; communities living on some islands in the Tiworo Strait and Muna Island, and with communities along the east coast of Buton such as Pasar Wajo, La Goro, Lasalimu, Tira Tira and Kulingusu in Southeast Sulawesi. There are contacts with Bajo communities in South Sulawesi, particularly those communities living on islands such as Pasir Tallu and Karompa in the Flores Sea. In Central Sulawesi, contacts are maintained with a number of communities including the village of Matanga in
the Banggai islands. In the province of East Nusa Tenggara, Tukang Besi Island Bajo have
relations with the village of Sulamu (Timor), Pepela and Oenggai (Roti), Kabir (Pantar Island),
Wuring (Flores), and Wywuring (Adornara). According to the Bajo, kampung Hera in Dili,
East Timor, has had a small population of Mola and Mantigola Bajo since the 1970s who work
in the Tuna fishery. In Southeast Maluku, there are reportedly Bajo from Mola and Mantigola
at Tepa on Babar Island (see Map 6).

Map 6: Tukang Besi Island Bajo network in eastern Indonesia.

As well as social affiliations, these villages act as reference points during sailing. A crew
sailing from Mola to Pepela will often stop at the village of Wywuring in Adornara, or
Sulamu in Kupang for supplies, rest and to visit relatives during its journey. The wider Bajo
community then provides “fixed points of localized reference” (Nadjmabadi 1992:340) for the
Mola Bajo. This network facilitates the itinerant migration and movement of Tukang Besi
Island Bajo around the eastern Indonesian archipelago.

Livelihoods: Fishing and Sailing Activities

Despite there being five Bajo communities in the Tukang Besi Islands, it is predominately
fleets of boats owned by Bajo from the villages of Mola Selatan, Mola Utara and Mantigola
which seasonally engage in nomadic fishing and sailing voyages to the northern Australian
region. However, because of the close kinship ties between all Bajo communities in the
Tukang Besi Islands and with other Bajo communities in eastern Indonesia, perahu crews are often drawn from other Bajo villages. A useful starting point for my investigations into Bajo voyaging was to investigate the economic pursuits of the Tukang Besi Island Bajo, in particular, to find out which communities owned fleets of perahu lambo, since it is these unmotorised craft which are allowed access into an area inside the AFZ.

In Sampela, most of the population are engaged in locally based fishing around Kaledupa and on the outlying coral reefs for subsistence and income. When I visited Sampela in 1994, the majority of watercraft consisted of canoes and a few small motor boats. There was only one perahu lambo. The Sampela Bajo are thus less inclined to voyage to the Timor Sea. However, some males join Mola and Mantigola perahu as crew members. During 1994–1995 there were no perahu owned by Sampela Bajo engaged in shark fishing in the Timor Sea.

Like the Sampela Bajo, the small community at La Hoa and La Manggau predominantly engage in local fishing activities and in 1994–1995, there were no perahu lambo directly operating from La Hoa or La Manggau engaged in long distance voyaging to the Timor Sea. However, a number of families from La Manggau were some of the earliest Bajo from the Tukang Besi Islands to settle in Pepela with their perahu in the 1980s.

**The Monsoon Regime**

Bajo sailing and fishing activity are dictated by the annual cycle of wind seasons dominated by the east and west monsoon wind regimes. The monsoon weather patterns produce periods of strong and light wind conditions and dry and wet seasons.

The east monsoon (salatang or musim timur) begins in April and ends in November. The beginning of the east monsoon is characterised by strong easterly winds (sangai banga' or angin timur kencang) lasting until July, often bringing light rain between the months of May and July. This is followed by a period of light south easterlies and then a period of calm or no winds (sangai teddo or sangai matai) (angin mati or angin teduh) between September and November. The latter part of the east monsoon is the best time to fish in the Timor and Arafura Seas. At the end of the east monsoon is a transitional period (angin pancaroba) of changing wind directions (sangai taputar) leading into the beginning of the west monsoon. The west monsoon (barra' or musim barat) starts in late November or sometimes early December and lasts until March. It is a period of strong westerly winds, heavy rains, high seas, squall and storm activity. At the end of the west monsoon in March is a transitional period.
(angin pancaroba) with winds blowing from southwest, northeast, and northwest directions. This is followed by a period of light variable winds and smooth seas (sangai teddo) (known as the doldrums in English) usually lasting for a week or two, ideal for fishing, but always with the possibility of intermittent squalls or cyclonic activity in northern Australia. Then the strong easterlies return and the cycle continues.

**The Local Fishing Economy**

The rich inshore, coastal and offshore habitats and ecosystems and surrounding deep open waters in the Tukang Besi archipelago are fertile grounds for an exceptionally diverse range of marine flora and fauna that provide a life support system for the Bajo.

Modes of exploitation of these habitats are diverse. Technology ranges from simple hand constructed gear (eg. traps, hook and line, spears), to more costly gear (eg. nets and longlines). Diving with *hookah* (surface supplied breathing apparatus) has become popular in recent years. This enables men to fish at greater depths for reef fish (eg. groupers) and lobster, as well as trepang, and other fish species. Blast fishing, involving the use of bombs on coral reefs was fairly common-place in the past but the authorities have made it illegal, and regular patrols of the marine park apparently have reduced it.

Bajo build and use a range of types of watercraft to carry out their diverse fishing activities as well to transport fish catches, people and cargoes, and to carry out day-to-day activities. This includes a number of types of dugout canoe (eg. *lepa; lepa kaloko*) propelled by paddle, a simple sail or sometimes with an outboard motor (jonson); small (5–10 tons) planked boats (*soppe*); small planked wooden boats with engines (*bodi, motor*); sail powered and motorised perahu (*perahu lambo, perahu layar motor*) and larger motorised boats (*kapal motor*) (see Photos 15–20).
Photo 15: Boat building in Mola.

Photo 16: Men in lepa kaloko returning to Mola after tuna trolling.
Photo 17: A soppe used to fish at offshore reefs.

Photo 18: A small motor boat used in net fishing at offshore reefs.
Photo 19: A perahu *lambo*. 
Bajo classify their fishing activities into four main types: nubba, pali libu, pongka, and lama. The distinctions between these activities depend on the environment fished, technology used and the distances travelled. The first three of these are mentioned briefly here, while lama is discussed in more detail in a later section.

In order to support the family, women and children do nubba. This includes gleaning the beach, littoral zone, sandflats, shallow waters and fringing reefs for a range of products including trepang (bala), sea urchins (tetehe), edible seaweed, shell fish, crustaceans, hard corals and sponges during daylight hours.

Pali libu means to go and seek a living in coastal waters nearby to the village or offshore open waters and coral reefs and return home the same day. These activities include handlining (missi), trolling (tonda) and spearing (sapa) from canoes to catch reef fish, pelagics such as tuna, skipjack, mackerel, squid and octopus, various netting methods (eg. ringgi, tokong, ambai, jalla), diving night and day with spear guns (pana) for lobster and fish. Women also fish from canoes using handlines, often go netting with family members and accompany their husbands at night spear fishing.
Pongka means to go and seek a living in the sea or at the reef for a few days or a week or sometimes several weeks, with a day or two travelling time to reach a destination and return home. In the past soppe or lambo were the main craft used to carry out this activity, but nowadays small motorised vessels are also used. These expeditions can be all male to fish for shark using longlines, net reef fish or to collect turtles around the Tukang Besi Islands. As well, husband, wife, children or extended family, travel to the offshore reefs in the Tukang Besi archipelago and stay either on their boats or in small pile huts built on over the reef. These are used as a sleeping area and as a place to dry and process products such as trepang, clams and reef fish.

Marine products are utilised in three main ways: for food and home use; to supply locals by either being sold for cash or occasionally exchanged in the village or at the local market; sold for cash to traders destined for external domestic and international markets.

Local fishing is conducted year round, weather permitting. At certain times during the west monsoon and rainy season, it is restricted, with the island population as well as the Bajo, sometimes experiencing a shortage of fish for home consumption. The best time for harvesting the offshore reefs is during the latter months of the east monsoon when weather conditions are calm and the sea is like glass.

Although fishing is the basis of the Bajo economy, income is derived from other maritime related activities. Men engage in boat building and associated trade in timber and canoe blanks. Both men and women collect coral rocks from local fringing reefs for sale, and trade in marine products. Women engage in daily economic activities to help with the household income, and in some cases, provide a more regular income than their husbands and sons. Small time trading is the most popular activity with women who buy and resell goods from their own homes or kiosks to make a small profit. As well as food and dried goods, they buy and sell firewood and gold jewellery, make and sell cakes, ice and quilts.

**Distant Shore Fishing Activities**

Tukang Besi Island Bajo also engage in nomadic fishing expeditions further afield. In this sense the term “nomadic” relates to mobility and regular seasonal migration of individuals and households to distant regions (Lenhart 1995b:245).
A large proportion of the male population of Mola and Mantigola spend weeks, months or years living on boats, making voyages around Indonesia and beyond to search for a living (mencari nafkah). Facilitated by the adoption and use of sea-going watercraft, Bajo engage in long distance voyaging to fish for a range of marine products including shark fin, trepang, trochus shell, turtle, and tuna. This kind of long distance economic activity is called lama.

Lama means “to sail” or “sail”. The Bajo employ the term lama to mean sailing voyages or journeys made in boats to destinations both within and outside Indonesia for the purposes of fishing, carrying cargo, or buying and selling goods for periods of months or even years before returning home again. This includes fishing voyages to the Timor and Arafura Seas region of north Australia. Other lama destinations of the Bajo include Irian Jaya, Maluku, Bali, Malaysia and Singapore. Nowadays, the term lama is also applied to voyages made with motorised vessels.

In addition to shark fishing in the Timor and Arafura Seas during 1994–1995, there were two other main fishing activities. Voyages of one to three months were undertaken by men from Mola and Mantigola in motorised boats with minimal sailing power (perahu layar motor (PLM) or kapal layar motor (KLM)) to islands in Maluku including Aru, the coast of Irian Jaya and to some atolls and reefs in the Flores Sea to collect green turtle (bokko) (Chelonia mydas). Turtle are transported back to Mola in the hull of the boat and transferred to holding pens. From Mola, they are loaded onto a large motor boat and transported to Benoa, Bali and sold. The other activity was tuna fishing. This can be regarded as a newer form of larger-scale commercial fishing for the Bajo, but is essentially based on their flexibility and mobility. A number of motor boats (kapal motor) from Mola worked for a Kendari based Japanese fishing company. These vessels travelled to Kupang twice a year, using it as a base to catch tuna using hook and line in the Savu Sea.

During 1994–1995 one or two Mola boats embarked on a trading trip to the Banggai Islands to sell a load of cassava. Some men from Mola also joined vessels belonging to Tukang Besi people on trading voyages to Singapore and Malaysia to buy second-hand goods.

Distant shore fishing activity is undertaken year round and during the squally west monsoon months and beginning of the east monsoon that brings strong wind patterns, travel is undertaken during breaks in the weather. However, there is always a higher risk associated with sailing at these times. For example, during January 1995, two motor boats travelling...
between Karompa (Flores Sea) and Mola, laden with turtles, were caught in a storm. One boat crew survived. With a failed engine and pushed by winds to the southeast, they eventually ended up at Wetar Island (north of East Timor) seven days later. The crew of the other boat were not so lucky: despite efforts by a search party throughout the southern Maluku region they were never found. The months of July through December are when distant shore voyaging is commonly undertaken, although some voyages also occur at the end of the west monsoon. With the advent of larger motor boats such as those used to collect turtle, travelling during non-favourable monsoonal wind conditions has become less restricted.

Most adult males have participated in a fishing or trading voyage to various destinations in Indonesia or beyond at some time in their life, for some, from an early age. Sailing is almost a rite of passage for many young males. However, not all men voyage each season and not necessarily to the same destination. Some men alternate between these various activities. Shifts in voyaging patterns can be the result of available finances, market prices and demand, restrictions on access to particular fishing grounds and political circumstances.

Amongst the Mola and Mantigola Bajo some broad distinctions are evident in modes of livelihood. There is a specific group of Bajo from Mantigola, Mola Selatan and to a lesser extent, Mola Utara who do embark on voyages regularly every year. However, some prefer to remain in Mola and fish the local coastal waters and offshore coral reefs for their main source of income, only occasionally joining a perahu on a fishing expedition outside the region.

An indication of the diverse maritime activities and differences between the types of fishing activities pursued by Bajo from Mola Selatan and Mola Utara is given in Table 3. This shows three main types of boats and their distribution by ownership in Mola Utara and Mola Selatan.

Table 3: Number of boats according to type in Mola Selatan and Mola Utara (31 May–5 June 1994)

<table>
<thead>
<tr>
<th>Perahu type</th>
<th>Mola Selatan</th>
<th>Mola Utara</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>perahu lambo</td>
<td>37*</td>
<td>7**</td>
<td>44</td>
</tr>
<tr>
<td>kapal motor/perahu layar</td>
<td>27</td>
<td>22</td>
<td>49</td>
</tr>
<tr>
<td>motor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>soppe</td>
<td>24</td>
<td>2</td>
<td>26</td>
</tr>
</tbody>
</table>

* (13 in Pepela at time of survey)

** (4 in Pepela at time of survey)
These results show that the nearly all perahu *lambo* and all *soppe* are owned by people living in Mola Selatan. There are also more motorised vessels owned by people living in Mola Selatan, however one *Haji* owns 10 vessels. These results also show that there is some distinction in general terms between the types of fishing activities pursued by Mola Selatan and Mola Utara Bajo. Generally, Mola Selatan Bajo still use *soppe* to fish around the Tukang Besi Islands, whereas Mola Utara Bajo do not. In addition, Bajo in Mola Selatan own the majority of *lambo*. Apparently Mola Utara Bajo owned just as many perahu *lambo* as Mola Selatan in the past, but decided to adopt motorised vessels to pursue other activities such as turtle collecting, carrying cargo and tuna fishing. These general differences between Mola Selatan and Mola Utara generally reflect historical differences, where the majority of the Mola Selatan Bajo came from Mantigola and have voyaged to the north Australian region for most of this century. In contrast, the original Mola Utara Bajo generally do not have a documented history of voyaging. It is said Mola Selatan Bajo have a preference for sailing to Australia.

**History, Design and Technology of Perahu Lambo**

Bajo fishing voyages to the Timor and Arafura Seas are undertaken in unmotorised wooden hulled craft known as perahu *lambo*. The term perahu *lambo* refers to a number of similar types of Indonesian sailing vessels which feature design elements influenced by and derived from, small European fore-and-aft rigged vessels (Horridge 1979a:iv; Burningham 1996:9). One type is the Butonese *lambo* (Horridge 1979a; Burningham 1996). It is this type to which the Bajo *lambo* belong.

The class of vessel that has become known in the literature as the Butonese *lambo* is built and sailed by a number of ethno-linguistic groups from islands in the region of Southeast Sulawesi, and as far west as Bonerate and smaller neighbouring islands in the Flores Sea, South Sulawesi. The Tukang Besi Islands, Buton and Bonerate are regarded as the “centre” of the *lambo* building tradition (Nooteboom 1947:220; Burningham 1989b: 179). Over much of this century the *lambo* has facilitated the spread and migration of people from Southeast Sulawesi, particularly from the Tukang Besi Islands, to other areas of eastern Indonesia. Thus *lambo* are built and sailed in many of those areas where Butonese and Bajo have settled: throughout regions of Maluku and Irian Jaya, and on many of the islands in East Nusa Tenggara, including the village of Pepela on Roti Island (Horridge 1979a:iv, 1985:69; Burningham 1989b: 179).
The defining features of Butonese lambo are a straight stem and stern post, set at an angle to a straight keel, a median rudder, and gunter sail rig (Burningham 1989b: 179). In contrast, in the traditional Indonesian hull form, the stem and stern posts are curved end to end into the keel (Horridge 1985:12). Similarly, traditional Indonesian sail plans for craft larger than canoe types are generally titled rectangular (layar tanja) and lateen sails (layar lete) (Horridge 1979a: 10) (see Figure 3). While the lambo hull exhibits European design elements, the method of building follows the traditional Indonesian method of shell construction, where short planks of timber carved to shape are fitted edge to edge with wooden dowels, and the ribs are fitted afterwards, as opposed to the western method of boat building where planking is added after the rib frame is constructed (Burningham 1989b: 181; Horridge 1985:69). A detailed description of the construction of a perahu lambo is provided in Appendix 1. Perahu lambo have been described as “the most westernised and amongst the most recently evolved trading sailing vessels in Indonesia” (Burningham 1989b: 179).
Figure 3: Types of Indonesian perahu hull forms and rigs: a) Perahu pajala with traditional Indonesian full form with keel in smooth curve with stem and stern posts, and layar tanja rig; b) Perahu lete lete with keel in smooth curve with stem and stern posts, and layar lete lateen rig; c) Perahu lambo with gaff rig; d) Perahu lambo with ketch rig; e) Perahu lambo with counter-stern, straight stem and stern post set at an angle to a straight keel with gunter rig (adapted from Hawkins 1982; Burningham 1996).
Where the term *lambo* is used generally in the literature to describe vessels exhibiting some or all of these features mentioned above, the people who build and sail this class of vessel may not refer to them as *lambo*, but by a range of other names depending on the style of stern or type of rig. Consistent with the literature, I use the term ‘*perahu lambo*’ in this study.

*Perahu* *lambo* are generally between 10 and 40 tons (Horridge 1985:66) and between 10 to 16 m in length. In the past, *perahu lambo* were either gaff or ketch rigged (single or double masted). The gaff and ketch rig (*lama cangking*) has been replaced by the gunter sloop rig (*lama sanade/layer nade*) since around 1960 (Horridge 1985:10) (see Figure 3). According to Hughes (1984:155) who carried out field work in the Tukang Besi Islands in 1982, there were no more two-masted *lambo* left in Wanci or Kaledupa in 1982. Hughes (1984:156,162) also reported that by the early 1970s, all *lambo* in Wanci had been converted from gaff to gunter rig. Since the 1970s many *lambo* have had auxiliary diesel engines installed, and some *lambo* have undergone structural modifications, transforming them into *perahu layar motor* (motorised sail boat).

Three types of stern can be distinguished on *perahu lambo*. The most common form is the distinctive elliptical counter-stern (*pantat bebe*) (see Photo 21). Counter-sterned vessels are steered with a tiller connected to a single rudder hung on a stern post in the European style. The rudder stock passes through the stern of the vessel. Some *perahu lambo* are also built with transom sterns (*pantat puppa*) (see Photo 22). However these are less common. The other style of *perahu lambo* are double-ended with a wooden platform built upon beams laid across the stern. This form of stern is called *pantat kadera*, where *kadera* comes from the Portuguese word for chair and *pantat* means buttocks (Horridge 1985:xvi). On double-ended *perahu*, the rudder is externally hung connected directly to the stem post (see Photo 23). Some *lambo* building communities show a preference for a particular stern style.
Photo 21: Counter-sterned *lambo* with a median hung rudder. The *lambo* in the foreground has a balcony built over the stern, while the boat behind has a toilet box.
Photo 22: A transom-sterned lambo.

Photo 23: A double-ended lambo with an externally hung rudder.
For example, the trading community at Lande in Buton (Southon 1995), appear to build and sail only lambo with counter-sterns where as in Mola perahu with all three types of stern are built and sailed.

A long tri-partite bowsprit (characteristic of European design) extends from the bow of the perahu. The cooking box or hearth is located on either the fore deck or on the aft deck balcony. There are usually hatches on the fore and aft decks. The bilge pump is located on the aft deck. A permanent deck house or cabin is located amidship. On the Mola perahu three different styles of cabins are used: the most common is a cabin with a sloping roof (kamar kabalo balo); some captains prefer cabins with flat roofs (kamar rata or kamar biasa) for the advantage of extra space for drying shark fin and fish; more common on the double-ended perahu are cabins with sides extending to the gunwales (kamar baggo). Inside the cabin, the deck area is covered with fitted (often numbered) wooden planks which can be removed to gain access to the hold. A single mast is located in front of the cabin. Steel wire is used for standing rigging and sail ropes are made from polypropylene and sails from polypropylene sail cloth.

Many of the newer lambo built are designed with obvious advantages for shark fishing. In the case of the Mola lambo, vessels were normally built with a hatch located in the middle of the aft deck. In more recent years, some of the newer built lambo have hatches closer to the end of the stern or to the entrance of the cabin so that the deck is flush and there is greater working space to process newly caught sharks hauled onto the deck (Burningham 1996:141). In hull form, perahu lambo built for Mola Bajo appear to have a less beamier form than other lambo in Southeast Sulawesi, since they are not engaged in cargo carrying activities. Platforms added to the stern of perahu have become popular in recent years, replacing the traditional toilet box. This appears to be related to the adoption of longline fishing gear (Burningham 1996:51). The value of platforms is an additional space for cooking, storing fishing gear, with the toilet box built into one corner (Burningham 1996:51).

The design of the counter-sterned lambo is an Indonesian version of a small western trading sloop or cutter of the nineteenth century (Horridge 1979a:iv). The counter-sterned lambo only developed this century as it did not appear in the west until the second half of the nineteenth century and was not commonly used until the end of the 19th century on small European craft (Burningham 1996:11). However, the European prototype from which the lambo was copied is still the subject of conjecture. The design could have been copied from a number of
European boat types found in Southeast Asia during the end of the last century and beginning of the 20th century (Horridge 1979a:7–8; Horridge in Southon 1995:40–41; Burningham 1996:15,111). The first modern usage of the word lambo found in records so far, according to Burningham (1996:15), is recorded by Kriebel (1920:217) who lists the types of trading perahu including lambo built and used by people of Bonerate. People from Bonerate were noted as expert builders of lambo in the 1930s (Collins 1936:147; Nooteboom 1947:220) and in the late 1940s by Gibson-Hill (1950:133). By the late 1930s, the lambo was already quite widespread throughout eastern Indonesia, and was slowing replacing earlier trading vessels such as the perahupalari (Nooteboom 1947:219, 220).

Much of the discussion in the literature, with the exception of Burningham (1989b, 1993, 1996), has focused on the history and design of the counter-sterned lambo, with very little attention given to the history and design of the double-ended lambo. According to Burningham (1996:11) “some of the double-ended lambo from the Tukang Besi Islands have a hull form that is more closely related to that of an indigenous type called sope or soppe than to any western model”. Furthermore, he claims, double-ended lambo may have been the “original type” of lambo in the Buton region (Burningham 1996:21).

It is possible to determine when the Bajo living at Mantigola in the 1930s and 1940s, first adopted the lambo over other watercraft. Oral history concerning past voyaging to the Timor Sea throughout much of the 20th century provides an indication of boats used in the past. Dating from sometime in the first two decades of this century, Bajo sailed to Ashmore Reef in a double-ended perahu that carried a tilted rectangular sail (lama tanja). By the 1930s and 1940s, sailing voyages to the Timor Sea were undertaken in perahu lambo, some double-ended and some with counter-sterns, with a single rudder and gaff rigged in the European fashion. This seems to indicate the adoption of the lambo by the Bajo as a fishing vessel before the middle of the 20th century.

The majority of perahu lambo in eastern Indonesia are used as cargo carriers or trading vessels. According to Horridge (1979a:iv) the lambo “was brought into use as a trader and was never a fishing boat”. Studies on perahu lambo and on changes in lambo design and effectiveness, focus almost exclusively on their use in trading activities (Horridge 1979a; 1985; Hughes 1984; Evers 1991; Southon 1995; Burningham 1996). For the Bajo of Mola, Mantigola and Pepela, perahu lambo are used almost exclusively for collecting and shark fishing voyages to the Timor and Arafura Seas. Although it is operated essentially as a fishing vessel, rather
than a trading vessel, it can be used otherwise as required. It has the advantage of hull space for storing and transporting fish catches. It is also large enough to transport people who can live on board for extended periods.

The fleet of perahu *lambo* belonging to Mola and Mantigola Bajo and the mixed population at Pepela and Oelaba on Roti are probably the largest fleet of unmotorised *lambo* used almost exclusively for fishing purposes rather than cargo or trading purposes in eastern Indonesia. One of the reasons that has encouraged the continued use of unmotorised perahu *lambo* are the regulations contained in the 1974 Memorandum of Understanding, whereby fishermen must use “traditional vessels”: engines are not permitted. These regulations have contributed to the continuing use of perahu *lambo* by the Bajo and certainly stalled the widespread adoption of engines. With a few exceptions, most other fishing populations use motorised boats to engage in fishing activities in the northern Timor and Arafura Seas.

**Perahu Lambo Ownership**

During June–July 1994, I conducted a survey of Bajo *lambo* from Mola Selatan, Mola Utara and Mantigola, including those boats reported to be in Pepela at the time. The results of this survey on the number of perahu *lambo* owned by Bajo are tabulated in Table 4.

<table>
<thead>
<tr>
<th>Village of residence/origin of owner</th>
<th>No. of <em>lambo</em></th>
<th>No. of <em>lambo</em> in pepela at time of survey</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mola Selatan</td>
<td>24</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Mola Utara</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Mantigola</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>20</td>
<td>54</td>
</tr>
</tbody>
</table>

The results of the survey of perahu *lambo* revealed a total of 54 *lambo* owned by Bajo living in these four villages. Of these, 37 were owned by Bajo from Mola Selatan, 7 owned by Bajo from Mola Utara and 10 by Bajo from Mantigola. In addition, 20 of these were in Pepela at that time. Not all the boats from Mola and Mantigola were used for shark fishing voyages in the Timor and Arafura Seas during 1994 and thus the information presented in Table 4 is not representative of all the Bajo perahu involved in shark fishing during the 1994 season.
This is because by the beginning of the season in August 1994, some perahu were not fully operational and could not be put to sea. Some Bajo had borrowed perahu from other areas, some of the boats had been sold in Pepela, some Bajo had purchased new vessels and some perahu were apprehended over the course of the following months.

Provenance of Perahu Lambo

The provenance of Bajo perahu *lambo* falls into three main categories: those inherited; those purchased second hand from within Mola or from outside (for example Mandati or Wanse, Ambeau (Kaledupa), Bau Bau (Buton), Balu Island (Tiworo), Langara (Wowonii), Kendari, Banggai Islands, Baranusa on Pantar Island), or new perahu locally built in Mola, Mantigola or in other villages such as Langara.

The average cost of having a new perahu *lambo* built by a boat builder in Mola or in Langara, is approximately Rp7,000,000 to Rp 10,000,000 for an average sized counter sterned *lambo*. Smaller *lambo* including double-ended vessels are considerably cheaper to build. In the Tiworo islands a new double-ender can be purchased for approximately Rp4,000,000 or more. The time taken to build a *lambo* can vary from a few months to a few years, depending on the pace of work, finances and availability of timber. Second hand perahu, depending on the condition, can cost between Rp2,000,000 to Rp5,000,000. However, in many cases a second hand boat will require some repairs before it can be sailed, and depending on the condition of the vessel this can cost between Rp 1,000,000 to Rp5,000,000.

The life of a *lambo* may continue for many decades or longer, if well maintained. Most perahu undergo minor and major repairs to the hull to keep them workable during their lifetime, and after 20 or 30 years, very few of the original hull planks of a boat remain. The oldest remaining working perahu from Mola are those built in Mantigola prior to the migration of Mantigola Bajo to Mola during the Kahar Muzakkar rebellion in the 1950s.

Perahu Symbolism and Ritual

Perahu *lambo* have a cultural value and symbolic significance within the community. In Mola the boat symbolically expresses ideas about household processes. It is also symbolically represented as a person. Two rituals are conducted during phases of construction: the joining of the keel sections and the drilling of a hole or navel in the keel. Both rituals liken the construction of the boat to the conception and birth of a child.
Boat Builders and Ritual Experts

Specialist boat builders are called *tukang perahu* or *sandro* and there are a number of them in Mola who are recognised not only for their boat building skills but also for their ritual expertise. These men have acquired the esoteric knowledge required to conduct the various rituals associated with boats. Rituals are conducted during the construction of perahu *lambo* - the joining of the stem and stern posts to the keel, the drilling of the navel in the keel of the perahu and the launching of the boat, and are also conducted prior to a crew embarking on fishing voyage - moving perahu from the confines of the village to the harbour, for departure of boats on fishing voyages, and for regular strengthening of the navel. As Southon (1995:132) points out for people in Lande “knowledge is not uniform” and in Mola variations exist in “different versions of the meaning of a ritual and different understandings of how a ritual should be performed”. All human actions must be synchronised with the cyclic phases that underlie the movement of nature or the cosmos (Southon 1995:134). For every important occasion concerning boats, ritual experts consult lunar and other calendars (*nginda allau*/kotika) to determine auspicious times and days on which to conduct rituals.

One of the most respected *tukang perahu* is Gunda from Mola Utara. He was the head boat builder with a number of men working for him. Gunda learnt the skill of boat building from his father and grandfather. He had recently built two perahu *lambo* currently used in shark fishing, *Tunas Muda* and *Berkat Nelayan*, and performed rituals for a number of boats departing Mola on fishing voyages in 1994. He died in early 1996.

Adam, from Mola Utara was also a well regarded *tukang perahu*, and during 1994–1995 he was engaged in building large motor boats for Mola and Wanci clients. Adam was skilled in boat ritual, but because Gunda was considered to be senior to Adam, it was Gunda who was usually called upon to conduct the rituals for boats built by Adam. This was common in Mola.

Mahating, a *tukang perahu* from Mola Selatan was recognised for his ritual knowledge but was generally thought to have poor craftsmanship and not as skilled at boat building as Gunda. Mahating worked on his own with assistance from his son, building *lambo* for his own use or for later sale, rarely working for a wage or commission. Nurdin, a *tukang perahu* from Mola Selatan had built a number of boats in Mola. During the last few years he had been living in Pepela engaged in shark fishing. In 1996 he returned to Mola and in January 1997 began to build a new boat. He also was knowledgeable in perahu ritual.
In addition to these boat builders, there was a handful of older men in Mola who no longer actually built boats but were still summoned to carry out rituals associated with their departure from the village. Mbaga, from Mola Selatan, was usually called on to conduct the ritual for perahu departing Mola on fishing expeditions. But by 1995 he became too ill to continue and sadly passed away in late 1996. Another man, Gudang, was usually called on to perform the same ritual but he also died in 1996. Younger boat builders such as Adam, Mahating and Nurdin will be called upon to perform rituals more often in the future.

**Joining the Keel Stem and Stern Posts**

The construction of a lambo begins with laying of the keel (lunas). A single plank of timber is selected for the keel by the builder and owner. According to Gunda, if the plank of timber has a knot or eye in it, this brings good luck and good fortune (dalle/rezeki).

The length of the keel is the most important measurement of the perahu. This is determined by the builder or owner. According to one method, starting with the right foot, the builder walks along the length of wood, placing left and right feet end to end, one after the other, until he reaches the end of the keel. But he must finish with the right foot, not the left. Where the last right foot ends, a mark is made by a line corresponding to exactly the middle between the base of the toenail and the first joint of the big toe and the keel is trimmed. Any detour from this is regarded as taboo according to Gunda and the perahu and owner can suffer misfortune. Nurdin, from Mola Selatan, takes a measurement from the owner's body using a length of string and winds it a number of times around the belly. Whatever method of measurement is used, the specific measurement of the keel is determined from a person's body, and so perahu are “individualized” or “customized” (Southon 1995:100).

The keel, resting on supports of logs of wood (kalang), is then joined to the stem (pamaruh munda) and stem posts (pamaruh bulli) fashioned from grown timbers, with tenon and mortice joints (lesoang) (see Figure 4). According to Gunda, the stem post and keel are joined first followed by the stem post. Offerings consisting of a cluster of four leaves from the pepper plant each containing a piece of betel nut, with lime inside and folded, 4 coins and 4 hand rolled cigarettes, are placed on a plate next to each join. Theperahu is said to be created by God (Papu). Prayers are recited at the time of joining the keel to God and to prophets who are said to reside at the join of the stem and stem posts with the keel.
In the words of Nurdin, the keel represents the female and the stem and stem posts are male. The tenon joint in the stem and stem post represent the penis and the mortice represents the vagina. The joining of the keel with stem and stem posts symbolically represents copulation between husband and wife and conception of the perahu.

On another level the keel sections are said to represent the household (*dua laki-laki dan satu perempuan; satu rumah tangga, satu perahu*). This idea of “the household as a metaphor for thinking about theperahu” (Southon 1995:140) is also expressed through the meaning given to a piece of gold inserted into the keel joins. At time of joining, a small piece of gold, sometimes wrapped in white cloth, is placed inside the mortice and a square piece of white cloth 30 cm in diameter is placed over the tenon of the keel at the two joints. When the parts are joined the white cloth protrudes on all sides. The significance of this is explained by Mbaga:

so the perahu has harmony like in the house, the perahu will be cold, the crew will be happy with the owner, no quarrels or disputes between the crew, and the perahu will always be successful.

Gunda also said that gold and white cloth are used “so that theperahu is cold, the same as a house”. During the construction of a house in Mola, a piece of gold is inserted in the mortice of the centre post. The symbolic meaning of this dualism is explained by Teljeur (1990:70) speaking of the oppositions between hot and cold and symbolic meanings given to metals included in house construction among the Giman of Halmahera. He states “cool denotes a condition that promotes health, beauty and prosperity; while hot denotes the opposite condition, resulting in illness, misfortune and a short life” (Teljeur 1990:70).

**The Drilling of the Navel and Ritual Launching of a Lambo**

Once the major structure of a perahu *lambo* is completed, a ceremony is held in which a hole called *bebol* is drilled in the keel. The drilling of the navel (*bebol* or *pusat*) is the most
important moment in the perahu construction. I had an opportunity to observe this ritual in Mola Utara for a perahu motor.

The day selected by the ritual expert for drilling the navel and launching the perahu is a time of great celebration in the village. In this case, the ritual took place at 2.00pm (high tide) on a Sunday. A large number of people assembled around the perahu to watch and take part in the proceedings and to help push the boat into the water after the navel is drilled. Inside the hull, the ritual expert selects the place in the centre of the keel to drill the navel and positions himself behind it. A group of men assemble around him. Three trays of offerings of “tasty and sweet” food are placed along the inside of the hull above the keel and a cluster of pinah are positioned at the navel (see Photo 24). A live chicken is carried into the boat and a small piece of its red comb is taken producing blood that is dropped onto the place of the navel and then the chicken is left to run freely inside the hull. According to Gunda, animals should not be sacrificed while boring the navel because that signifies death when the ritual is aimed at giving life (cf. Southon 1995:104–105). Proceedings commence with prayers. Then the ritual expert begins to drill the hole into the keel using a drill-bit observing certain rules and procedures while holding his breath (napas). Once the hole is drilled, it is plugged with a wooden dowel (pasa'), and a piece of cotton cloth (see Photo 25). This is later replaced with a dowel made of stronger wood. The wood shavings (sampa) are collected on a plate situated beneath the keel, mixed with coconut oil and stored in a bottle. This is hung inside the cabin of the boat while it is at sea. When the boat is docked the bottle is stored in the house. It is said the shavings offer protection from ill fortune and can also be used as medicine for a sick crew member during a voyage.
Photo 24: Men and the ritual expert gather for prayers before drilling the navel of the perahu.

Photo 25: The navel is plugged with a wooden dowel.
A final round of prayers are conducted then the men descend from the boat and prepare to launch it into the water. Men assemble around the hull ready to push and pull the perahu off the foundation and into the water. The ritual expert stands behind the boat with his hand on the stern to protect the perahu as it enters the water. With joint force, men push from behind and pull on a rope connected to the bow and the perahu enters the water (see Photo 26 and 27).

Photo 26: Preparing to launch the boat into the water.
At the moment the bebol is drilled, the perahu is given life by the expert. The life or soul of the perahu is referred to as nyawa and is transmitted from the expert to the perahu (pindah nyawa dari tukang ke perahu). It then lives in or at the navel. Also at this moment the life force or sumangaq attaches itself at the navel. Symbolically, the drilling of the navel and transmission of nyawa from the builder to perahu is likened to birth and in the words of Nurdin “the perahu is the child of the owner” (“perahu di anggap sebagai anak sendiri oleh pemilik”) and thus must be taken care of (“di rawat dengan baik”).

The perahu is symbolically represented as a person and its parts are analogous to the human body. As Nurdin stated, “a perahu is like a person it has hands, a head, a mouth, eyes and feet” (“perahu seperti manusia ‘ada tanganya, ada kepalanya, ada mulut, ada matanya, ada kakC’). Southon (1995:119) provides a more detailed description of the representation of a perahu as the human body for the people of Lande:

The keel represents the backbone, the stern-post is the head, the stern-post represents the feet, the boat's ribs are human ribs, the anchor is the placenta, the anchor rope is the umbilical cord, the drain-hole in the keel is the navel, and the gong is the voice of the perahu. A thin plank running around the deck
(the gunwale) is called...the “lips of the boat”, and the fore and aft doors of
the deckhouse represent the mouth and anus, respectively.

According to Southon (1995:120), symbolic associations with perahu in Lande, “essentially
casts the perahu in the idiom of the nuclear family”. In Mola as in Lande, the perahu
participates in the voyage as a “person”. In Mola, specifically, the perahu participates in the
voyage as “three persons” (perahu termasuk tiga orang) rather than as capital. The owner of
the boat must contribute three times to the operating capital. Under the division of profits from
the voyage the perahu receives three shares equal to that of three crew members.

Good fortune is said to derive from the perahu's navel or bebol. This is explained by Mbaga:

A perahu has a centre just like a person. If a perahu doesn't have nyawa or
a navel [bebol], then there isn't a place where you can ask for good fortune,
the perahu can get into danger at sea, or the perahu will not have enthusiasm
or sumangaq to search for a living. In Sama language [the consequences of]
this is called maluntu.

The navel also has a functional purpose in that removing the plug allows water collected in the
bilge of the perahu to be drained whilst the perahu is on dry dock.

The perahu is regarded by the Bajo as a person, the child of the owner. It has a soul (nyawa)
and inner life force, spirit or zest (sumangaq) for life and must search for a living just
like a person. Returning to the ideas expressed in this chapter regarding concepts of the soul
and people, there is a differentiation between two aspects of the soul of a perahu that co-
exist at the navel: nyawa which is permanent and fixed at the navel and sumangaq which
attaches itself at the navel but can be precarious, fleeting and thus threatening, but is the
source of the zest, enthusiasm or vitality of a boat. As Mbaga told me, a perahu without
sumangaq is maluntu, meaning the perahu has no zest or enthusiasm or vitality to search
for a living. A strengthened navel means a strong vital force which in turn is a source of
good fortune. The navel of the perahu must be regularly ritually restored and strengthened
in order ensure good fortune.

If the perahu is conceived of a living thing, what happens to its vital energy if it is destroyed?
What of a perahu burned by Australian authorities? It is said that the boat builder and/or owner
of a boat can feel if something bad has happened to a perahu. When I asked Gunda what happens when a perahu lambo is apprehended and destroyed by burning he replied:

    When a perahu is apprehended and burnt until destroyed the builder experiences the feeling that the perahu is dead, it can not return home since its nyawa has vanished.

In the words of Endicott (1970:65), “the removal of the nyawa is synonymous with death” and the sumangaq is probably extinguished at this time. The destruction of a boat is effectively the destruction of a child of the owner.
Chapter 4

HISTORY OF BAJO VOYAGES TO THE NORTH AUSTRALIAN REGION: 1900s–1970s

Introduction

This chapter examines the history of Bajo voyaging to the north Australian region, from its commencement in the first decades of the 20th century through the 1970s. This is examined through an analysis of Bajo narratives detailing sailing voyages and fishing activity, as well as Australian historical material.

The main aim of this chapter is to show that present day voyaging by Mola and Mantigola Bajo to the Timor Sea is not a recent phenomenon but represents a continuation of voyaging over nearly a century. In analysing Bajo voyaging, this chapter also illustrates that fishing from the outset has been a commercial venture, and that Bajo have been part of local, regional and international trading economies from the outset.

In the first section, I present and analyse Bajo recollections of early voyages to the northwest region of Australia. In order to contextualise early activity in a historical framework of the history of Indonesian fishing activity in the region, I provide a brief discussion of Macassan voyaging and post Macassan fishing in the Timor Sea. I also provide a comparative European chronology of developments in Australia, focusing on the expansion of European settlers in the northwest region, the pearling industry and an overview of Indonesian labour employed in the industry. I investigate other European fishing activity in the Timor Sea, a subsequent development from the pearling industry in the 1880s. This provides some approximate dates for the beginnings of Mantigola Bajo voyaging to the northern Australian region.

In the second section, I present accounts of an incident known among the Bajo as pesawat jatuh (the plane that crashed), concerning an encounter between a crew of Mantigola Bajo on a perahu fishing at Seringapatam Reef and the crew of a British aircraft forced to land on the same in the 1930s (see Map 7). By augmenting Bajo personal recollections with Australian archive and newspaper reports of the event, it has been possible to identify the “Malays” discussed there as Mantigola Bajo, and provide a specific date for past voyaging.
This incident has not been previously documented in the literature concerning the history of Indonesian fishing activity in the north Australian region. The encounter is also significant as it marks a time in Bajo history from which is measured the beginning of relatively unrestricted activity in the Timor Sea. This continued until the early 1970s when Bajo fishing activity became increasingly restricted under Australian policy responses.

In the third section, other ethnographic texts concerning Bajo voyaging are presented and examined relating to the period prior to World War II. These texts demonstrate that the two previously mentioned incidents are not isolated events. They also demonstrate that Bajo voyaging has always been primarily motivated by commercial purposes and that shark fishing is not only an activity pursued by Bajo in recent years. They have sought shark fin for decades.

The fourth section is concerned with Australian encounters with fishermen identified as “Malays”, and their activity on reefs and islands in the Timor Sea. I present records from a Commonwealth Scientific and Industrial Research Organisation (CSIRO) Fisheries Survey in the Timor Sea in 1949 (CSIRO 1949; Serventy 1952). Drawing on ethnographic observations and discussions with Mola Bajo, I identify the “Malays” described by Serventy (1952) as
Mantigola Bajo. This provides another accurate date of past Bajo fishing activity in the Timor Sea as well as a further detailed description of Bajo fishing activities.

Drawing on the ethnographic present, I briefly document and discuss ngambai net fishing previously used by the Bajo. These are described in Bajo narratives of early voyaging to the Timor Sea. They concur with 1949 CSIRO records and other European sources. Ngambai was the main type of fishing gear used by the Mantigola Bajo during their earliest voyages.

In the final section I present and analyse a selection of Bajo accounts of sailing and fishing activity during the period 1950s to the early 1970s. These provide further evidence of continuing activity in the northern Australian region.

Sources on the History of Indonesian Fishing in the North Australian Region

An investigation of the available fragmentary Australian accounts concerning past fishing activity by maritime peoples from the Indonesian archipelago in the north Australian region from the early 1900s through to the 1960s and 1970s, when records on Indonesian fishing activity in the northwest are more common, has not revealed any source that specifically mentions or identifies Bajo activity in the region (see for example Serventy 1952; Bach 1955; Crawford 1969; Bottrill 1993; Campbell & Wilson 1993). Among the paucity of references, fishermen from Indonesia are generally referred to by generic terms “Malays” and “Indonesians”, rather than by a specific cultural term. This makes it difficult to identify the ethnic origin of the fishermen. Historical sources furthermore mention that vessels are reported to have originated from a number of different islands across the Indonesian archipelago (Crawford 1969:125). By examining Bajo narratives in conjunction with some of these historical sources it is possible to identify some of the “Malay” fishermen as Bajo from Mantigola and Mola. Some of these people are still alive. These histories provide dates for early Bajo fishing activity in the north Australian region. The documentation and critical analysis of the unwritten Bajo past, may well have significance for the future continuation of Bajo fishing inside Australian waters. Anthropology, in the case of the Bajo, has a crucial role to play, in presenting the history of the Other, and in providing a balanced interpretation of events.

When discussing their past, the Bajo classify history into a sequence of time periods. From the early 20th century they refer to: waktu belanda (Dutch times from the first decade of the 20th century), waktu Jepang (Japanese times WW II 1942–1945), waktu NIC A (Netherlands

**Bajo Encounter with Tuan Robin**

Bajo ancestors fished reefs and islands in the Timor Sea. Older men claim that their fathers or grandfathers were the first to sail to Ashmore Reef from Mantigola, which they equate with the time contemporary to an event concerning Bajo involvement with Tuan Robin.

Accounts of this event claim that during the Dutch colonial period, a crew of Mantigola Bajo on a perahu anchored at Kupang, met a schooner captain known by the name Tuan Robm. This man asked the Bajo crew to work for him to collect turtle shell in Australia. The Bajo agreed and accompanied Tuan Robin on his schooner where they spent a number of weeks catching hawksbill turtles (*Eretmochelys imbricata*) and collecting their shells at an island off the coast of northwest Australia. On return to Kupang the Bajo were paid for their efforts. These Mantigola Bajo were only employed by Tuan Robin on this one occasion.

An elderly man named Mbaga living in Mola Selatan, as an adolescent, accompanied his father and grandfather and other men from Mantigola on this perahu, as the tukang masak, or cook. It is difficult to estimate the age of Mbaga, but he was probably over eighty years old when I spoke with him in 1994–1995. When the Bajo crew went with Tuan Robin, Mbaga stayed behind in Kupang and looked after their boat. Hence, his knowledge of some of the events is based on information passed to him by his father and grandfather. The perahu, according to Mbaga was *zpalari*, rigged with a tilted rectangular sail, a type of fore-and-aft rig (called *lama tanja*), a type of sail plan used on perahu prior to the adoption of western style gaff rigs. The owner was *Uwa Kedek* [grandfather Kedek] from Mantigola.

In the old days only Raas people and Madura people went to Ashmore Reef [*Pulau Pasir*] and Scott Reef [*Pulau Datu*]. In the old days Raas people lived at Semau Island [*Pulau Samahung*]. Ashmore Reef was the place to cook trepang. We heard stories about Ashmore Reef from Raas people. We first wanted to go net fishing [ngambai] at Rote. The Raas people told my grandfather about Ashmore Reef. We obtained a sailing clearance in Kupang and followed them to Ashmore Reef. At that time, there weren't any problems, [any regulations about fishing at Ashmore Reef]. Only obtain a clearance in
Kupang if we wanted to go fishing and cook trepang at the Island. This was the first time we went to Ashmore Reef. The second time we met Tuan Robin in Kupang.

We were anchored at Tanoo [Tenau harbour, Kupang] and wanted to go fishing for trepang at Ashmore Reef, when a schooner sailing ship came and anchored near to us. The captain of the schooner was Tuan Robin and he had 5 Alor people with him. We met Tuan Robin and he asked us to work for him. We said to him we wanted to fish for trepang, fish and trochus at Ashmore Reef but he said if you want to, come and work for me in Marege [Australia] and collect turtle shell. My father and grandfather along with 6 other crew were taken on the schooner to Kea island [Pulau Kea], an island off the coast of Marege while I stayed in Tablolong to look after the boat. I was already a youth, already circumcised, at that time. In the old days there were lots of Sama people at Tablolong, at Tanoo and Air Cina [Kupang - South Timor region].

They were taken to Marege for 17 days to collect turtle [kulitang]. They collected 40 bags of turtle shell. My father said that they didn't kill the turtle [to remove the shell]; Tuan Robin instructed them to heat up water in a drum. After that, the turtle were pulled up onto the boat and the hot water was poured over the turtle and the shell peeled off. Then the turtle were thrown back in the water. Aboriginal people [orang Marege] took a few of the turtles to eat.

After 17 days the schooner returned to Tanoo and they got off the boat and called a friend of mine from Tablolong who was at Tanoo at the time to take our perahu to Tanoo. The day after they returned, Tuan Robin paid each crew member two gold coins.

Complementary to Mbaga's recollections are comments by Bilaning, a contemporary of Mbaga, who lived in Mantigola. Bilaning was also probably over eighty years old when I met with him in Mantigola.
My father was one of the first Bajo to go to the Pulau [the islands in Australia]. They were taken to Marege by Tuan Robin and he had a perahu schooner with three layers of jib sail. There they collected turtle. From those times until now lots of Sama people sail to Ashmore Reef, Scott Reef, and Seringapatam Reef [Sapa Taringan]. In the old days it was open [to fish there], then later it was forbidden.

But who was Tuan Robin and when exactly did this incident occur? In order to answer these questions it is necessary to contextualise Bajo activity within a historical framework of the history of Indonesian fishing in the northern Australian region, the northwest pearling industry and European fishing activity in the Timor Sea, a subsequent development from the pearling industry in the late 1880s.

**Macassans and Malays in Northern Australia**

From at least the 1720s (Mitchell 1994:56) until the early 1900s fleets of perahu sailed from Makassar (South Sulawesi) (see Map 8) to the northern Australian coast each year to collect trepang, a range of edible sea slugs or holothurians found in abundance on the sea bed in shallow waters. Once processed, trepang was an important trade commodity in great demand in markets in China where they are considered culinary delicacies with potent medicinal properties (Macknight 1976). In addition to trepang, other marine commodities were also collected for later trade, including turtle shell and shark fin. This industry began well before European colonisation of the Australian continent. Significant contact and trade occurred between Aboriginals and Macassans. The trade operated through the city of Makassar and the majority of people involved in the industry were Makassarese (Macknight 1976). As a result the term “Macassan” is applied to the industry in the literature. However, both Bugis and Bajo made up crews and embarked on fishing expeditions (Macknight 1976:18).
The Macassan fleets fished three areas: the coast along the Northern Territory (from Cape Don to Gulf of Carpentaria) and along parts of the Kimberley coast of Western Australia (from Cape Londonderry to Cape Leveque and perhaps further south towards Port Hedland), as well as offshore reefs and islands in the Timor Sea (Crawford 1969:89; Macknight 1976:2, 27). Evidence of Macassan fishing activity is documented in Dutch archival records, recorded sightings and contact with Europeans along the coast of Australia and in Indonesia from the 18th century onwards, and from the results of archaeological investigations (Crawford 1969; Fox 1977a; Macknight 1976; Bottrill 1993; Campbell & Wilson 1993; Mitchell 1994).

In addition to the activity of the Macassan fleets, historical sources document fishing activity by Bajo perahu travelling independently or accompanying Macassan perahu to Arnhem Land and the Kimberley coast in the 1840s (Macknight 1976:18, Mitchell 1994:32). However, the extent of fishing activity independent of Macassan fleets by other groups along the northwest coast in the 19th century is unknown. In addition to a paucity of references, this is partly because of the use of the term “Malay” applied by most European observers of people they encountered in the region.
Ashmore Reef, located 840 km west of Darwin and just 90 km south of Roti, has been regularly visited and fished by Indonesians since the eighteenth century. The area has its own Indonesian name Pulau Pasir meaning Sand Island. A Rotinese narrative details the accidental discovery of Sand Island in the 1720s (Fox 1998:118–119). In addition, Dutch historical sources also “confirm that Ashmore was known to Indonesian fishermen in the first half of the eighteenth century” (Fox 1998:119). During a visit to Kupang in 1803, Flinders obtained information linking Macassan trepang fishing activity at “a dry shoal lying to the south of Rottee” believed to be Ashmore Reef. There was the accidental discovery by Macassan fleets of an abundance of trepang in northern Australian waters twenty years earlier (Flinders 1814:257). Ashmore Reef has a supply of fresh water, a sheltered lagoon, and has been an important “staging post” for Indonesian perahu on their voyages further south to other islands and reefs (Fox 1998:117).

Macassan voyages to northern Australia began to decline in the latter part of the nineteenth century and the industry ceased in 1907. In 1882, licensing and customs duty were introduced on Macassan trepangers in the Northern Territory and this was partly responsible for the decline in the industry there. By 1906, Australia ceased to issue licenses to the Macassans (Macknight 1976:106,125). The Macassans were never licensed to fish in northwest waters (Campbell & Wilson 1993:31) thus it is unclear why Macassans also ceased to visit the Kimberley region (Crawford 1969:114). According to Crawford (1969:116–117), from the 1870s all foreign fishing in territorial waters was illegal under Western Australian Fishery Acts but these laws were never enforced because “the Kimberley coast remained virtually beyond the limits of government control”. Although the reasons are unclear, Macknight (1976:118) believes those Macassans who ceased to visit Australia resumed other maritime activities originating from Makassar.

When the Macassan fleets ceased operations in the Northern Territory and Kimberley region, fishing activity along the northwest coast of Australia and at offshore islands and reefs continued by fishermen in smaller perahu originating from regions other than Makassar. Very little is known about these voyages and few records remain but the visits are thought to have been widespread (Crawford 1969:115, 124).

Between the early 1900s and 1924, historical sources mention vessels reported to have originated from a number of different islands across the Indonesian archipelago, mainly Timor, Madura, Raas but also from Bonerate (Crawford 1969:125). These visits comprised either
fleets or solitary perahu. From Kupang, vessels sailed to Roti to take on supplies and then sailed south to Ashmore, and from there to other offshore reefs and islands. Vessels also sailed along the Kimberley coast working nearby areas such as Long and Holothuria Reefs and often landed on the mainland to collect supplies of wood and water, and process their catch and return to Kupang to sell it (Crawford 1969:124–125; Campbell & Wilson 1993:18).

**European Pearling and Poaching in Australian**

Parallel to the beginnings of the decline of Macassan voyaging to Arnhem Land and the Kimberleys in the 1870s, was the beginning of the pearl shell industry in the Pilbara and later Kimberley regions in the 1860s (Campbell & Wilson 1993:17–18). In the 1860s, European settlers began appropriating land for cattle leases bringing expansion of the pastoral industry and the pearling industry began at Cossack (Campbell & Wilson 1993:16). Initially, the industry concentrated on the gathering of pearl shells on exposed reefs during low tide. In 1870, the diving capabilities of Aboriginals were discovered and the industry expanded along with European presence in the region (Campbell & Wilson 1993:16). As well as Aboriginal labour, “Malay” men from Indonesia, followed by Singapore and the Philippines, were recruited to work as seamen and divers on pearling luggers and indentured to European captains (McGann 1988:2; Bottrill 1993:i; Campbell & Wilson 1993:16). The first Indonesians to work in the pearling industry were recruited directly from coastal villages on the islands of Alor and Solor in 1870 ( McGann 1988:21–22). In 1874, 316 divers were recruited from Timor and in 1875 it was reported that as many as 1,000 “Malays” obtained from Makassar, Solor, Ende and Singapore would be working during the coming pearling season in the northwest of Australia along with 200–300 Aborigines (Bottrill 1993:15–16). With the expansion of the industry, men were obtained not only from Singapore and Indonesia, but also from the Phillipines, which included Sama speaking Bajau (McGann 1988:42,45).

With the introduction and use of the underwater diving suit replacing the swimming-diving method in 1886, Aboriginals and Malays “were considered unsuited to work with mechanical apparatus” (Campbell & Wilson 1993:17). Coupled with later legislative changes regulating the use of Aboriginal and Asian labour this eventually led to a decline in the number of Malays and Aboriginals engaged in the pearl shell industry. The majority of the labour was replaced by Japanese who later dominated the now Broome based industry from the late 1880s to the early twentieth century until its decline after 1935 (Campbell & Wilson 1993:17). However,
men continued to be drawn from Indonesia, mostly from Kupang and surrounding islands in the region, to work in the pearling industry until the 1960s (Anderson 1978).

In the 1880s, the first European pearlers left Cossack for Kupang. As well as supplying Malay labour for the northwest pearling industry, they went into partnership with Dutch, Arab or Chinese merchants and employed Indonesian crews and fished the northwest for pearl shell in vessels flying the Dutch flag. From Kupang, pearlers could fish waters outside of Australia's 3 nm territorial waters without a license and there was no law preventing them from obtaining shelter and supplies along the Australian coast if needed (Bach 1955:208). These men were joined shortly after by other pearlers from Port Darwin and Broome (Bain 1982:187). The captains had worked in the pearling industry on the north Australian coast where they had gained their experience and knowledge of the Australian coast. The first of these entreprenurial pearling captains to skipper vessels operating out of Kupang in the 1880s were Hart and Geach Drysdale. Their places were subsequently taken by Henry Francis Hilliard in the 1890s who came to dominate the Kupang based fishing activities in the Timor Sea, and later on by Hilliard's son Robin, W. S. Smith and Alex Chamberlain (Crawford 1969:115; Bain 1982:187).

Kupang based Australian and British captains soon diversified into fishing for marine products traditionally taken by Indonesians, such as trepang, trochus shell and turtle shell. According to Bain (1982:184–188), during trips between Kupang and Cossack, these Australians and British had observed perahu from Timor and Madura returning from fishing expeditions laden with marine products they had collected from offshore reefs and islands from Rowley Shoals to Ashmore, and at Holothuria Reefs. It was discovered that a lucrative trade in these products through Dutch ports existed, and a living could be earned less dangerously than pearling.

While Henry Hilliard continued to supply Kupangers to the northwest pearling industry, he employed Europeans and Indonesians to work on a fleet of Dutch registered schooners and cutters and locally built perahu. Hilliard's fleet followed similar sailing and fishing patterns as the Indonesian perahu, fishing offshore reefs and various islands and reefs close to the Australian mainland where supplies could be obtained (Crawford 1969:119–120). Vessels would stop first at Roti to obtain firewood and water and then sail south to fish Ashmore, Cartier, Scott and Seringapatam reefs and sometimes as far south as Rowley Shoals to Minstrel, Clerk and Imperieuse Reefs. When supplies ran low the vessels would sail to the coast to re-stock, work the reefs near the shores such as Long Reef and Holothuria reefs, and return again to the coast. In May, the vessels would congregate at Jones Island to catch
hawksbill turtles and take their shells (Crawford 1969:119–120). Hilliard's most frequented fishing areas appear to have been those also favoured by the Indonesians and a number of references covering a period from 1894 through to the early 1920s make mention of Hilliard's activity in various places in the northwest. These areas included King Sound, Adele Island, Scott Reef, Ashmore Reef and Rowley Shoals (Bach 1955:209; Bottrill 1993:23,28).

Around the same time as Europeans established themselves in Kupang, a number of men set up beach-combing camps along the northwest coast where they collected turtle shell, trepang, trochus, and pearl shell, using Aboriginal labour. These beach-combers had strong connections with the Kupang based captains who called regularly at their camps to trade and buy products later to be sold in Kupang and destined for markets in the Southeast Asian region. Their camps were located near to Adele and Browse Islands, Lacepede Islands and Lynheer Reef, locations where Captain Henry Hilliard and his companions would meet periodically (Bain 1982:188–191).

Sometime in the first decade of the twentieth century, Hilliard was joined by his eldest son, Robin Henry (born in 1888). The exact date of Robin's arrival in Kupang and entry into business is not known. In 1914, it was reported by Stuart, the Pearling Inspector at Broome, that Chamberlain, formerly a Broome pearler for 10 years, had gone into partnership with Robin Hilliard in a Kupang based trading company and together they owned a British registered schooner the *John & Richard* (Bottrill 1993:33). It seems likely then that Robin joined his father sometime in the latter half of the first decade of the twentieth century (probably at the completion of his education), and after spending a number of years working directly with his father had branched out into his own operations by 1914.

Bottrill (1993:54), who visited the village of Pepela on Roti in 1988 and collected oral history of fishing in the northwest region, states that Robin Hilliard was known to the Rotinese as *Tuan Robin*. Bottrill (1993:38) records an entry from *Encyclopaedie van Nederlandsch Indie* (Brill 1917:639) for Roti. In a rough translation it states that several Rotinese joined the Dutch Schooners from Kupang fishing for trepang in Australian waters. In addition, Robin Hilliard later married a Rotinese woman from Oenale (George Hilliard 1998, pers. comm.).

Mr. H.V. Howe, a former Broome pearling captain from before World War I, published an article in *The Sydney Morning Herald* in 1952. The article focuses on Indonesians employed on vessels skippered by Australians and British based in Kupang and operating in the Timor
Sea in 1910. Howe's comments are valuable and provide an insight into what the Hilliard's operations and the Mantigola Bajo experience with Robin Hilliard would have been like.

In 1910, there were 25 vessels, of which six were European-style schooners of 50 to 60 tons, skippered by those aged master manners, whose eventful maritime careers were - and still are - discussed with interest in all Asiatic ports from Karachi to Shanghai. The rest of the Koepang fleet consisted of native prahu of from 10 to 20 tons, skippered by Malay “Kungawas”, who, with lifelong knowledge of the coast and its winds and tides, and with the aid of more or less accurate compasses, navigated to and from various destinations with relatively few mishaps. These smaller vessels fished the coast and adjacent islands, because proximity of the mainland enabled easy replenishment of wood and water supplies. The larger schooners normally worked the six coral atolls which lie in a 500 miles - long chain about 100 miles off the Western Australian coast. From the north-east to southwest these are Ashmore, Senngapatam, Scotts, Minstrel, Mermaid, and Imperieuse Reefs…On each of these islets the fishing schooners set up their boilers and smokehouses for treating the trepang and trochus shell.

The usual “take” of a schooner on a five months’ trip to the reef is worth between £2,000 and £3,000.…About once a fortnight the daily routine is interrupted by a day’s fishing for hawksbill turtle, which yields the tortoise shell of commerce. Nets are stretched across the seaward ends of a number of the channels crossing a reef. At low tide all hands start wading from the lagoon, beating the surface of the channel before them, and driving the turtle into the nets. The catches are taken back to the island, where bags, dipped in boiling water, are laid across their backs for a minute or two. This treatment enables the flakes of tortoiseshell to be lifted from the hard bone to which it is attached. After collection of the tortoise shell the turtle is set free to grow another crop - which it does in about two years. Cruel as the process may seem, it does not appear to hurt the turtle, which show no sign of discomfort under the bag, and when released make their way back to deep water (apparently) unperturbed by the ordeal (Howe 1952:7).
Howe refers to the Malay skippers as “Kungawas”, which is probably meant to be *Punggawa*, a term commonly used not only among the Bajo, but other maritime populations in Indonesia, meaning captain or navigator. Howe also gives a lively description of trepang and trochus fishing methods, the smoking of reef fish, the diet and hardships faced by schooner crews, particularly due to water scarcity.

Notwithstanding the hardships of the life, trips to the reefs are popular with the Timorese, who are always eager to sign on as schooner crews. With his pay of £1 a month and the smoked fish he brings back, each man earns about £20 on a trip. This is good money for in Koepang a fair average quality wife costs only 30/., and the local equivalent of a film star can be bought for £5, which is also the cost of building a good native house…one trip to the reefs secures the fisherman a home, economic security for life, as much domestic felicity as the average man can expect, and still leaves him £5 to spend on furniture and wedding festivities! (Howe 1952:7)

While some of Howe's comments are strikingly ethnocentric, his description of the method of turtle fishing and the extraction of the shell compliments the Bajo description and provides a more detailed description of turtle shell collecting methods. Howe's reference to Timorese reinforces earlier comments about the way Indonesian fishermen were grouped under general headings which does not necessarily reflect their ethnic identity.

It is possible to gain a glimpse of the activities of these expatriates based in Kupang from correspondence between Stuart, the Pearling Inspector at Broome. He wrote to the Secretary of Western Australian Fisheries of the activities of the Kupang fleet. On 10 February 1915 Stuart wrote:

I found out that WA Chamberlain and R Hilliard had had an exceptionally fine year and had fished among other things £1,500 worth of turtle shell, Chamberlain apparently works over a large area and will work Rowley Shoals for beche-de-mer and probably the territorial waters of the north-west north of Admiralty Gulf where I believe turtles are plentiful.

In the same letter Stuart also listed nine vessels reported to be based in Kupang and working the northwest coastal areas and offshore islands and reefs in the Timor Sea. These included two schooners *Petunia* and *Harriet* owned by Tiffer, a Dutch Merchant, the *John & Richard*
owned by Chamberlain and Robin Hilliard, the *Joker* owned by Ah Kit, and five schooners owned by a Chinese called Tokubaru known as “Captain China” and managed by Henry Hilliard (Crawford 1969:119; Bottrill 1993:37, citing letter in Fisheries Department File 57/38, Battye Library, W.A.).

In 1923, another incident concerning the activities of Robin Hilliard was reported to Stuart. In March of that year, F. H. Clark, a pearler in the lugger *Emelyn Castle*, came across Robin Hilliard in charge of the schooner *Petina* at an inlet south of Red Island off Cape Bougainville. He was processing trepang on the coast illegally. On boarding the vessel and examining the log, Clark found that the vessel was owned by Firma Thoeng Thay Company of Kupang and had a crew of 13 Kupangers. Hilliard had been cleared by authorities in Kupang for Scott Reef and had collected trepang there (Crawford 1969:121; Bottrill 1993:45, citing material contained in Fisheries Department File 57/38, Battye Library, W.A.). Photographs of Hilliard's boat and trepang camp, taken by Clark on 29 March, appear in Crawford (1969:122–123).

The activities of the Hilliard family in the northwest region continued for around three decades. With the identity of Tuan Robin established, it is possible to provide an approximate date when the Mantigola Bajo worked for him. It is noted by Bain (1982:198) that Robin Hilliard stopped working the northwest coast around the time of the death of Henry Hilliard in 1924. According to Bain (1982:198), Henry Hilliard died of ptomaine poisoning in Makassar in 1920. This is in contradiction to a date cited in correspondence in Bottrill (1993:45), where Hilliard is reported to have died in early 1924. This was confirmed by George Hilliard, the son of Robin Hilliard currently living in Sydney. Henry Hilliard died of food poisoning in Kupang in 1924 and is buried in the Dutch cemetery there.

The exact reasons for ceasing activities are unclear but may have been a result of increasing pressure and control by Australian authorities on illegal fishing activities. The Dutch refused to issue clearances for Scott Reef, and the beach-combers Hilliard had worked with were either too old or had moved away. All of this can be coupled with declining resources in the area (Bain 1982:198). A date between 1908 and 1924 is therefore proposed for the Bajo involvement with Robin Hilliard. This time period appears to date Mantigola Bajo first embarking on fishing voyages to the north Australian region.
After Robin Hilliard stopped fishing the northwest region he formed a partnership with merchants from Broome and Makassar and operated as the Flores Pearling Company. Bain (1982:198–199) noted that Hilliard:

proposed to H.S. Cross, an indent agent and pearl-buyer in Broome, that they move to the island of Flores, where there was gold-lipped shell in great quantities. At Makassar, an approach was made to Gros Kamp and Drofmeyer, Dutch merchants. The Flores Pearling Company was formed and by 1929 fourteen luggers were working fifty miles off the coast and collecting large hauls of shell which was sold through Osche & Co., of New York.

An advertisement appeared in the local Broome newspaper *The Norwest Echo* on 24 October 1926, announcing that Robin Hilliard was now pearling in the Dutch Indies, but would still be recruiting men for the northwest pearling industry during December–January each year (Bottrill 1993:47). Robin Hilliard continued his activities in Indonesia, based at Labuan Bajo in Flores until World War II, during which time he and Alex Chamberlain were interned by the Japanese and sent to Makassar in 1944. He died shortly after in captivity, and was buried in Makassar (George Hilliard 1998, pers. comm.).

Robin Hilliard's activities in Indonesia following the death of his father were mentioned by Nasseng from Sulamu, Kupang in 1994. His account is informative about further Bajo involvement with Hilliard. Considering the close ties between Tukang Besi Island Bajo and other Bajo communities in eastern Indonesia, it is worthwhile summarising Nasseng's comments.

Bajo people living in Nusa Tenggara Timor, at Sulamu, Oenggai, Wuring, Labuan Bajo and Kabir is attributable to their working for *Tuan* Robin. It seemed that they worked for *Tuan* Robin until the invasion of Japanese troops in Indonesia. *Tuan* Robin began a pearling company in Dobo and Labuan Bajo in cooperation with others from Indonesia and Australia.

It is evident that Robin Hilliard's involvement with Bajo people, not only from Mantigola, but from other settlements in Indonesia, was quite significant and is a topic worthy of further research, particularly in studying migration and settlement of Bajo people in the Nusa Tenggara Region.
A Bajo Encounter with British Airmen at Seringapatam Reef

I first heard mention of the story of the plane crash during the early days of fieldwork in Mola. Badolla told me during one of our lengthy discussions about Bajo history and previous voyaging activities. Many of the men I talked with in the following days about their past voyaging activities also referred to this particular incident. I eventually met and talked with a number of men including Pangasi, an elderly Bajo man, aged around 75, living in Mola Selatan, who were personally involved in the incident.

Pangasi recounted his experience to me:

I was one of the crew on the perahu Si Gambar Bulan. At that time I had just been circumcised. I was still single, still young. My older brother, Si Tuba, was the captain and Si Tedong was the owner of the perahu. There were 10 crew: Pangasi, Tuba, Tedong, Tidong, Jalating, Balating, Kaling, Amang, Nappa and MPeno. Balanting is still alive and lives in Sampela. Tedong lives in desa Bisaya, near Lasalimu in Buton. He moved there during the gerombolan [Kahar Muzakkar Rebellion]. Mpeno lives in Mola Selatan. Jalating was lost [drowned] at Ashmore Reef.

From Mantigola we sailed to Kupang, actually to Air Cina, to the south of Kupang. We spent three days there then sailed to Ashmore Reef, then to Seringapatam Reef [Sapa Taringan]. We ate birds eggs on Ashmore Reef. At that time, Buton people were not yet living in Pepela and Roti people sailed sekoci [a type of canoe] with layar leti leti [lateen rig]. There were Bajo living in Oenggai [Roti Island], but not at Sulamu [Kupang].

We went to Seringapatam Reef to catch fish, not trepang, to salt it, to sell in Makassar. At that time we sold the fish for 4 1/2 ringgit a kilo. The method of fishing is called ngambai, using nets and ropes. The nets were made from tree bark [bagu], with floats on the top and cowrie shells on the bottom, held in place with wooden stakes. Seringapatam Reef is one day and one nights sail from Scott Reef. Taringan is the name of a fish [dayah taringan], found in great quantities at this reef. There is no island or sand there, just reef.

While we were fishing at low tide, we saw a plane run out of petrol and fall out of the sky and land on the reef. Four people from the plane walked over
the reef to where we were fishing and asked for help to take them to Kupang. So we took them to Kupang on our perahu and on the way we met a big ship, a foreign ship, with a motor, coming from the south. The people hailed the ship and boarded it and the ship returned to Australia. It was still Dutch times, maybe 5 years before Japan invaded Indonesia.

When we later returned to Kaledupa, the captain received a letter, telling him to go to Bau Bau to get a reward and letter for all the crew, 40 ringgit for each crew and 90 ringgit for the captain. It was my second time sailing, the first time to Ashmore Reef, the second time the plane crashed. I did not go again after that.

*Si Gambar Bulan* was a perahu with a chaired stern [*pantat kadera*] and a central rudder with gaff rig [*lama cangking*], made from cloth. This was before gunter rig [*lama sande*]. *Si Gambar Bulan* was built by Tedong in Mantigola but he sold it before he moved to Bisaya.

This account by Panghasi details past sailing voyages and fishing activity in the Timor Sea by Mantigola Bajo prior to World War II. It demonstrates these voyages were clearly commercial ventures. This particular voyage, during 1937, is vividly recalled by Pangasi and other Bajo because of the extraordinary event that interrupted their fishing activity; watching a plane run out of petrol and forced to land on Seringapatam Reef.

I was unable to visit two of the four surviving crew from *Si Gambar Bulan* - Balanting who lives in Sampela and Tedong in Bisaya, Buton. However, I visited Mpeno in Mola Selatan the following day. I also found out during my fieldwork, that some of the perahu captains and crews voyaging in 1994 to the Timor Sea, were related to the crew of *Si Gambar Bulan*. For example, Tuba, the captain of *Si Gambar Bulan* was the grandfather of Samsuddin, the captain of *Karea Baru* in 1994 and the captain of a perahu apprehended in 1997. Mpeno was born in Mantigola, and Pangasi and Mpeno are first cousins. Mpeno recounted his experience at Seringapatam Reef and their rescue effort, describing the relations with the plane crew in more detail than Pangasi:

We took the men on our perahu. We had to use sign language, pointing with our fingers, they only knew one word - “Kupang”. The strange thing was, if they wanted to lie down, they didn't go inside [the cabin], they only lay on
the deck. They felt sick because of the smell of the fish, its true the fish smelt rotten. They gave us binoculars. When they spotted the ship, they waved at it with pieces of cloth. The ship approached, and they talked with the people on it, then boarded the ship. We received a reward later from Bau Bau.

In further investigations concerning this incident I spoke with another elderly Bajo man, La Ode Ndoke, who lives in Mola Selatan. He was born in Mantigola and is over 70 years old. When La Ode Ndoke was still a small boy, during Dutch times, his first sailing experience to the “islands in Australia” (pulau di bagian Australia) was as a crew on a perahu called Asia. It had sailed from Mantigola together with Si Gambar Bulan to Seringapatam Reef, via Ashmore Reef, to fish using ngambai gear. The seven crew included Sahung, the owner Senang, Kulla, Sahaling, Ilia, Kiramang and La Ode Ndoke (only the last two mentioned are still alive). Asia was the same type of perahu as Si Gambar Bulan, with a single mast, chaired stern with a single rudder and was gaff rigged. This particular experience is recalled by La Ode Ndoke, not only because it was his first voyage to the Timor Sea but because of the incident involving the plane.

When the plane crashed, we [Asia] were at North Scott Reef [haring Utara] and they [Si Gambar Bulan] were at Seringapatam Reef. We were quite a long way from Seringapatam Reef. The first time we saw the plane it was flying in our direction and we thought it was going to land. But maybe because they still had a lot of fuel, the plane kept going and headed in the direction of Kupang. Not long after that, the plane fell and landed on the west side of Seringapatam Reef, near to Si Gambar Bulan. At the moment the plane fell, we didn't see it because it was too far away, but our friends who were closer saw the plane fall. Then the crew of the plane joined Si Gambar Bulan and halfway through the journey to Kupang the crew were taken onboard a big ship. We went to have a look at the plane afterwards and measured the wing span - it was 8 depa [fathom] long. The frame of the plane is still there to this day. After the time I met with the plane, I went to Ashmore Reef and Scott Reef twice, so I have been three times. After that I had a rest [from sailing] for a long time, then afterwards I worked as a romusa [involuntary labour during Japanese occupation] on the roads in Buton for the Japanese.
This account by La Ode Ndoke demonstrates that the incident was experienced by another perahu crew of Mantigola Bajo. Furthermore, it provides an approximate location of the remaining wreckage of the plane at Seringapatam Reef. I also asked La Ode Ndoke why the Bajo from Mantigola sailed all the way to Ashmore Reef, Scott Reef and Seringapatam Reef in the past to fish. He replied;

At Scott Reef there is a lot of fish - there is more fish at Scott Reef than there is at Kaledupa Reef. There are no enemies or competitors there, it is possible to get between 1.5 and 3.0 tons of fish in one trip.

With regard to the actual crew of the plane, Panghasi, Mpeno, and La Ode Ndoke were unclear of the nationality of the plane crew. Kiramang was one of the crew on Asia. He recited his version of the incident to me and recalls the plane crew were from England.

Both Mpeno and Pangasi could not remember much about the letter and reward. Even though Badolla was not actually involved in the rescue of the plane crew, he vividly recalls the circumstances surrounding the letter and reward that the crew of Si Gambar Bulan received in Mantigola when he was a young boy.

Between Ashmore Reef and Kupang the ship came, they took the men and Si Gambar Bulan did not have to continue to Kupang. Only they said to the Bajo “wait in Kupang”. But they went home to Kaledupa. One month later there was a letter from Bau Bau. The letter was from Australia. They were ordered to go to Bau Bau to receive their reward. In the contents of the letter it was written 3 thousand ringgit. But they only received 3 hundred ringgit because the amount had been reduced because of all the offices the letter passed through, from Java to Makassar and to Bau Bau. Maybe if they had waited in Kupang they would have received more and maybe they would have been given a surat bebas [free/open letter], but instead it went through Bau Bau. It was already a lot less. I saw the letter, but it was written in English. We didn't know what it said, we only understood the numbers.

The amount of the reward received by the crew cited by Badolla is different to that recalled by Pangasi. How the letter managed to find the Mantigola Bajo is not clear, but it seems the Bajo must have reported the incident to someone. No-one was sure what happened to the letter, it was probably retained by the captain who no longer lives in Mola. Badolla also alludes to
the idea, that if the crew of *Si Gambar Bulan* had stopped at Kupang on the way back to Mantigola, they may have received a larger reward and *asurat betas*, a letter stating the Bajo had permission to fish freely at offshore reefs and islands in the Timor Sea and in Australian waters as a greater reward for their rescue efforts.

This concept is described in more detail by Bilaning from Mantigola, who was not a crew member of *Si Gambar Bulan* on this occasion, but who was living in Mantigola at the time.

After the Bajo went with *Tuan* Robin to Marege [Australia], many Bajo used to sail to Ashmore Reef, Scott Reef, Seringapatam Reef; they would catch fish with nets *[ngambai]* and also take all kinds of sea products. At that time we used perahu *soppe* and perahu *lambo*, with sails made from tree bark, in the model of *lama tanja* [fore-and-aft tilted rectangular sail].

In former times the Bajo were free to fish there *[dulu bebas]*, until later times when it became forbidden *[nanti sekarang dilarang]*. When the plane fell from the sky, the crew were taken to Kupang, but before arriving a big ship came and took the crew. The King of England *[raja Inggris]* sent a letter to Kupang but the government of Kupang sent it on to Bau Bau. Then after we met with the plane, fishing at Ashmore Reef, Scott Reef and Seringapatam Reef was not forbidden. It was free to catch fish *[bebas menangkap ikan]*.

Bilaning's recollection is insightful in that it documents Bajo voyaging in the period between *Tuan* Robin and the plane rescue; that a diversity of marine products were fished and collected; and the type of perahu used. The type of sail, *lama tanja* or tilted rectangular sail, described by Bilaning, is the same as that described by Mbaga earlier, and is the traditional sail plan used on perahu before the adoption of the western style gaff rig. Secondly, Bilaning states the letter was from the King of England indicating that the letter may have had an official British or Commonwealth insignia on it. The possible origin of the letter is discussed in more detail below in association with the archival material covering the event. Thirdly, Bilaning's account builds on the ideas expressed by Badolla about freedom to fish. The period following the rescue of the plane crew is perceived as one of relative freedom to fish the reefs in the Timor Sea as expressed by Bilaning (*dulu bebas*). Here Bilaning is explaining to me that the letter sent by the King of England for the rescue of the plane crew, gave the Bajo permission to fish freely at the reefs and islands in the Timor Sea after the incident. Then later fishing become forbidden *(nanti sekarang dilarang)*. The period of restrictions begins during
the early 1970s. These statements are made over and over again by Bajo in conversation about past fishing activities. What this indicates is the connection between the Bajo rescue of the plane crew, the letter and reward received, and being able to fish unhindered afterwards. It suggests that in the perception of some Bajo, this narrative is evoked to legitimise their right to fish in an area they have historically fished which has become under increasing Australian control since the 1970s.

The Missing Monospar Airliner

The 1930s was an era of increasing air travel, and pioneer attempts in aviation to create and break records across the world were common and regularly reported in the newspapers of the day. One such attempt had been made to break the fastest flying record between England and Australia in a plane of the time, a Monospar Croydon airliner (G-AECB) by Lord William Francis Sempill (the 19th Lord and a representative peer of Scotland, born in 1893 and died in 1965) who was a Colonel of the Royal Air Force, a pioneer in aviation and had a long career in aviation and aeronautics (The Argus, 8 October, 1936, p. 11; Burkes Peerage & Baronetage 1980:2405).

In 1936, Lord Sempill had twice attempted a record flight in the Monospar Croydon airliner from London to Australia in July and August, but had failed in Vienna and Karachi, due to engine troubles and damage to the aircraft (The Argus, 8 October, 1936, p. 11). Lord Sempill thus abandoned the attempt to another pilot, Mr. H. Wood and crew, Mr. F. Crocombe (designer), Mr. L. Davies (engineer) and Mr. C. Gilroy (wireless operator) who successfully flew from London to Melbourne in September 1936. From Australia, the crew was attempting to break the flying record of 5 days and 15 hours from Melbourne to London held by Ken Waller and Cathcart-Jones, made in a D.H. Comet aircraft. Amidst much publicity and hype, the plane left Melbourne on the morning of the 6 October 1936 and arrived in Darwin that evening, at a time slightly slower than their predecessors (The Argus, 7 October, 1936, p. 7).

With plans to reach London in 5 days, the Monospar left Darwin at 4.50 am on Wednesday 7 October hoping to reach Kupang in a few hours, for a two hour stop-over and continue the journey to Singapore, and from there to London via Karachi, Iran, and Aleppo (The Argus, October 7, 1936, p. 7). During the early hours of that morning, radio contact was maintained between the Monospar and the Royal Australian Airforce wireless directional finding station at Darwin, whose staff were supplying the Monospar with wireless bearings to compare to their
own navigational bearings until 7.15 am, when the wireless contact faded as the Monospar went out of range (The Argus, 8 October, 1936, p. 11).

The plane was expected to arrive at Kupang by 8.00 am, however by mid morning, no news had been received from Kupang of the plane's arrival. It was assumed then that the crew must have decided to forgo a stop-over at Kupang and continue on to stop and refuel at Rembang (on Java). Petrol supplies restricted the plane travelling any further than Rembang. When no word had been received of the plane at Rembang, and fears that the plane was missing, an international sea and air search was instigated in the Timor Sea. The Administrator of the Northern Territory, Colonel R.H. Weddell, ordered the Commonwealth Government patrol launch, the Larrakeya, to proceed immediately to the position off the coast of Timor where the last wireless message was thought to have come from (The Argus, 8 October, 1936, p. 11). The Minister for Defence, Sir Archdale Parkhill requested the Civil Aviation Board to arrange for a Qantas aircraft to undertake a search in Timor Sea. But with uncertainty regarding aircraft availability, the Prime Minister of Australia, Mr. Lyons, sent a telegram later that evening to the British Consul-General at Batavia requesting the Consul-General on behalf of the Commonwealth Government to ask the Dutch Government at Batavia to begin a search for the missing plane (The Argus, 8 October, 1936, p. 11; AA(ACT): A461/9 (1936); N314/1/7).

Two Dutch flying-boats were dispatched from their base at Surabaya (Java) for Kupang on Thursday morning and began a search for the missing plane in the Timor region on Friday morning. Meanwhile the Marella, the Dutch government patrol boat at Kupang and the Larrakeya, having arrived in the region later that day, began searching off the coast of Timor for the plane. At the same time, an S.O.S. was broadcast to ships in the Timor Sea from Kupang to alert them of the missing Monospar. A Qantas Empire Airways plane, the Melbourne searched for the missing plane for a few hours over the south coast of Timor, during its flight from Darwin to Singapore on Friday (AA(ACT): A461/9 (1936); N314/1/7; The Argus, 8 October, 1936, p. 11; The Argus, 9 October, 1936, p. 9).

By the afternoon of Friday, the 9th of October, the missing men and plane had been found. A wireless message had been received by radio stations in Kupang, Darwin and by the Royal Australian Air Force in Melbourne from the S.S. Nimoda in the Timor Sea. The airmen had been picked up by the vessel and were safe, ending the international search (The Argus, 10 October, 1936, p. 15; AA(ACT): A981 (1936); AVI 20; AA(NT):F1 (1936); 1936/591).
The event made front page news of *The Argus* on Saturday under the headlines “Monospar crew found safe, Marooned on Sandbank, Rescued by Native Craft, Now aboard British steamer” (*The Argus*, 10 October, 1936).

The S.S. *Nimoda*, a British tramp cargo steamer bound for Durban, reported that the men had been picked up by the ship from a fishing boat near Seringapatam Reef:

> the men were rescued by the native boat from a sandbank off Seringapatam Reef... although all the resources of modern aircraft and wireless were employed in the search for the missing machine and its occupants, it was left to natives in a fishing smack and a wandering tramp steamer to effect a rescue (*The Argus*, 10 October, 1936, p. 15).

*The Argus* published the full details of the rescue on the Monday (12 October 1936) based on a wireless message, received from the *Nimoda*, on behalf of Mr. Crocombe, the Monospar's designer:

> Misled by wireless bearings from Darwin. Were assured, despite doubt on our part, that the bearings were correct as late as 6.15 am when bad atmospherics made further communication impossible. Course kept after this, but no sign of land. Forced to assume wireless bearings correct, so proceeded further for 30 minutes. Passed over coral reef at 8.00 am. Using reef as base, we reconnoitred in each direction until petrol almost exhausted. Finally proceeded down line of reefs and located native fishing-boat in lagoon. Successfully landed on rock-strewn reef without damage, but in taxi-ing aircraft out of water to higher portion of reef the tail wheel casting was fractured. Ran out wireless aerial and tried to communicate with Koepang and Sourabaya without success, although heard both stations. Managed attract attention of boat. Carried few personal effects, iron rations, and water over one mile to boat, wading through deep rocky pools infested with giant clams and occasional small sharks. Had extreme difficulty making natives understand our plight. Finally persuaded them to take us on board and to head for Koepang. Spent 55 hours on boat on short rations of food and water, and in strong odour of fish and natives. Conditions were cramped. Picked up at 3.30 pm Friday by s.s. Nimoda in weak condition. Personnel magnificent in sharing hardships. Later established aircraft landed on Seringapatam Reef. Picked up by Nimoda 100 miles north-

The message hardly evokes any gratitude by the airmen for their rescue by the Mantigola Bajo in the perahu *Si Gambar Bulan* who had to stop their fishing activity and sail to Kupang. This sentiment is displayed again in a later interview with the airmen after arriving at Durban on November 1. The men had used a collapsible rubber boat to carry their personal belongings across the reef to the “Malay fishing vessel” and then “it took them five hours to convince the fishermen that they were not making a friendly call but wanted to be taken aboard” (*The Argus*, 3 November, 1936, p. 10).

After the initial reports of the safety of the men were received, there is no further mention or discussion of the “natives” or “Malays”, in the newspapers or archival material. As to the letter and reward received by the Mantigola Bajo: in statements by Badolla and Bilaning the letter was reported to have come from Australia and written in English (Badolla) and the letter was from the King of England (Bilaning). Despite the number of different Australian and British government officials and offices involved in the search and rescue of the plane crew, it seems most likely the letter may have come from the British Consul at Batavia or Resident at Timor. Further archival research may uncover information about the letter. I wrote to surviving relatives of Lord Sempill in England but unfortunately have had no reply.

As to the Monospar-Croydon, it appears there was no attempt to salvage the plane or parts of it, considering the practical difficulties and financial burden of salvage from an isolated reef. It was written-off. According to the Bajo, sections of the frame of the plane still remain at Seringapatam Reef. The plane may not have remained intact for very long under the Timor Sea weather conditions and cyclonic activity and parts of it may have broken up, washed away or washed over the reef edge and be resting on reef slope or sea bottom. A CSIRO Fisheries survey visited the reef in 1949, but made no mention of any plane wreckage.

This event during October 1936 provides another date and a very accurate one, of fishing activity by Mantigola Bajo in the Timor Sea. Some of these men are still alive and while they are too old to sail, their children and grandchildren continue in the tradition of their relatives to fish in the Timor Sea.
Despite the widespread coverage of the incident and one which involved the Prime Minister of Australia, it is curious that the incident does not appear to have given rise to any claims about poaching or illegal fishing activity by Malays in the north Australian region, as had been the case in the 1920s (Bach 1955:210). One reason may be that in 1936, Seringapatam Reef was not under Australian or British sovereignty (unlike Ashmore Reef) but in international waters. Being a tidal reef awash at high tide is was part of the Continental Shelf. Only in 1953 did Australia claim Seringapatam Reef.

**Other Bajo Fishing in the Timor Sea during “Dutch Times”**

As well as the specific Bajo encounters with Robin Hilliard and the plane, personal recollections of Bajo men (aged roughly between 65 and 80 years of age) document fishing activity, fishing grounds, marine products collected, encounters with Europeans and other groups of fishermen from Indonesia in the Timor and Arafura Seas in the period prior to the outbreak of World War II. These recollections relate to the period after Tuan Robin (1908–1924), before and after the plane rescue (1936), until the Japanese occupation of Indonesia in 1942 and after. A selection of narratives are presented below.

**Mbaga** (Mola Selatan)

In Dutch times, black shark fin had a price of around 15 ringgit a kilogram in Dutch money. We used to sell the fin in Kupang. White lontar shark had a higher price, up to 50 ringgit per kilogram.

**Kiramang** (Mola Utara)

During Dutch times when I was still young and before I was married I sailed to Ashmore Reef and Scott Reef. We sailed to Ashmore Reef in a perahu called Saniasa owned by Mbo Kandora from Mantigola. It was a big boat, 80 ton capacity with two masts, gaff sails, one rudder. The perahu had no cabin only an awning made from coconut fronds. We fished using a net [ngambai] and used poison [tuba] to catch the fish. We got lots of fish and sold it in Makassar. One share was 40 ringgit per person. One time we collected trepang and cooked it in sea water, the same as the Raas people. At Ashmore Reef we always met Dutch and Australian people; they didn't bother us - it was permitted [betas] to catch fish, trepang, trochus, turtle shell in those times. We could sail close to the coast of Australia and it was not forbidden, we were
not disturbed or apprehended; they only ordered us to return to Indonesia. At Ashmore Reef there were also lots of fishermen from Raas. One time the Raas people had run into the reef and made a hole in the hull of their perahu. We gave them a plank of wood to repair the damaged one. One time we sailed from Mantigola to Dobo [Aru Islands] to fish for shark using shark rattles and handlines. From Dobo we sailed for one and a half days until we reached our fishing grounds. We sold the shark in Makassar for 5 rupiah per kilo. After the Japanese period I did not go sailing to Ashmore Reef or Scott Reef again.

Subung (Mola Selatan)

During Dutch times we went net fishing at Scott Reef. We could fill 8 canoes with fish in one go. At the edge of the reef we used to fish for shark with shark rattles [goro goro]. We still fished there after Japanese times. At that time people from Pepela used to fish at Ashmore Reef and Cartier Island [Pulau Baru] in sekoci [a type of perahu] for trochus and trepang - they were divers.

Pallu (Mola Selatan)

Even in Dutch times we exchanged balur [salted strips of dried shark meat] with Pepela people for sugar [gula air]. So while net fishing we would also take sharks at the reef but the price of fins was not very high-fish had a much better price. We used longlines [pissi borroh] with 10 hooks, 5 depa long made from tree bark [bagu] on the edge of the reef for shark. Like trochus, shark did not have a price then. We used to take cassava instead of rice and use poison to stun the fish.

Badolla (Mola Selatan)

We used to fish at Ashmore Reef, Scott Reef, Adele Island [Pulau Haria], Rowley Shoals [Pulau bawah angin] for fish, trochus, trepang, from before Japan invaded Indonesia, when it was still Dutch times. The fishing gear used was ngambai, we used to catch lots of fish. In those times the net was made from tree bark before nylon. We made the net ourselves. We bought the tree bark from Buton. We pounded it until it was soft. At that time we made sails
from tree bark. We made fish hooks from iron rods. At Ashmore Reef, if we went to get drinking water we used to step on the bird’s eggs - there were so many. We used to collect the fresh eggs and eat them on the perahu especially if we were constipated. There was water on all three islands, and lots of rats. We used longlines near to Scott Reef. We also used shark rattles and when the shark emerged we caught it with a baited line. After we finished fishing we sold our catch [fish] in Kupang, Kalabahi [Alor], Maumere [Flores]. Some people also sold their catch in Mola, Makassar, Ambon - wherever there was a town that required salted or dried fish.

A number of points can be drawn here. As well as reef fish caught using netting gear and fish poison, the Bajo pursued other marine products during this period including shark, trepang, trochus shell and turtle shell. Of particular interest is shark fin. Shark was caught around Scott Reef using small set longlines, as well as handlines and shark rattles. Some species of shark commanded a higher price than others. According to Kiramang, during Dutch times, some Bajo undertook specific shark fishing voyages to fishing grounds located south of the Am Islands in the Arafura Sea. The catch from these fishing voyages was later sold in a number of towns throughout Indonesia. Dried reef fish was sought as it had a higher price than other products. These narratives also speak of encounters with Dutch and Australians at Ashmore Reef, as well as fishermen from the islands of Raas and Roti. There were trading relations between the Bajo and the people living in the village of Pepela on Roti.

**World War II: 1942–1945**

Bajo and other Indonesian voyaging to the Timor Sea was interrupted during World War II due to the Japanese invasion of Indonesia in 1942 (Crawford 1969:130). During occupation, perahu shipping was strictly controlled and utilised by the Japanese for the war effort. Many perahu were lost or destroyed resulting in a shortage after the war (Dick 1975a:79).

Fighting and naval activity between Japanese and Australian troops in the Timor Sea also deterred any fishing activity (Crawford 1969:130). Also Ashmore Reef may have been used for bombing practise, and survival equipment and food caches were stored on the island (ANPWS 1989:13). Serventy (1952:13) made enquiries among Australian personnel operating in the Timor Sea and reported that no perahu or Indonesian fishing activity was observed during the war.
The Bajo recall waktu Jepang (Japanese times) as a time of hardship and suffering and control on their lives and economic activities. Some of the older men can still recite the Japanese national anthem or a few words of Japanese. Some, like La Ode Ndoke were forced to work in road gangs in Buton for the Japanese. Others, like Nurdin from Mola Selatan recalls how as a young boy he was on a perahu returning from Kupang where he had been going to school, when the perahu was approached and boarded by Japanese. The crew were taken to Bau Bau, accused of being Dutch spies and sentenced to 7 years jail. Nurdin spent 14 months in jail until he was released at the end of the war and returned to Mantigola. He still retains a prisoner stigmata number branded onto one forearm.

After the War, the Bajo resumed fishing in the Timor Sea. This is documented in Bajo narrative and in European sources describing encounters between Australians and Bajo fishermen at reefs and islands in the Timor Sea in the late 1940s.

1949 CSIRO Fisheries Survey in the Timor Sea: Encounters with Mantigola Bajo

During a CSIRO Fisheries Survey of offshore islands and reefs in the Timor Sea in October 1949, the crew of the Fisheries Research Vessel Warreen were surprised to encounter Indonesian boats near Scott Reef, at Seringapatam Reef, Ashmore Reef and Hibernia Reef. Dr. Dominic Serventy, the senior scientist aboard the Warreen, published a short article in 1952, describing some of their encounters with Indonesian vessels during the survey. This article is based on information recorded in the Biological Log of the survey (CSIRO 1949), parts of which were written by Serventy. The log is a key source of information on Indonesian fishing activity in the Timor Sea in this period.

Leaving Broome on the 29 September 1949, the Warreen cruised up the northwest coast of Australia, past Cape Leveque to Yampi, Cockatoo Island, and Adele Island before heading to Scott Reef (Haring Selatan) and later to Sandy Islet (Pulau Datu) during which no sightings of Indonesian boats were made (see Map 7).

On 3 October 1949 whilst the Warreen was underway from Sandy Islet to Seringapatam Reef, “the first official Australian contact with the present-day Indonesian fishing operations” (Serventy 1952:13) was made at North Reef (Having Utara). The vessel was described as “A sailing boat, cutter-rigged…probably a Malay prow. Heavy black hull, square
transome, bluff bow, stumpy bowsprit, gaff mainsail” (CSIRO 1949:42). A few hours later, after coasting around Seringapatam reef from the west side, the Warreen arrived at the northeast corner of the Reef, to find “2 Malay prows…anchored inside the lagoon…near a gap in the reef flat…We saw several dinghies fishing in various parts of the lagoon but these made their way back to their mother-ship shortly after we arrived” (CSIRO 1949:42). On the following morning, Serventy and the Master of the Warreen, Captain Pedersen went by launch through the gap into the lagoon and interviewed the crew of the two Malay prows. They were unable to speak Dutch or English but the Captains showed us their papers which indicated that the prows were the “Sinar-Karang” and the “Si Mappe”, the former's port being Broo Base (CSIRO 1949:42).

The Sinar Karang and Si Mappe had “papers stamped by the Dutch Traukontrole’ at Kupang” (Serventy 1952:13). Serventy recorded a lengthy description of the two engineless vessels in the Biological Log:

The prows were some 40 ft. in length and 6–7 ft. draft. They were of crude construction and appointments, with rattan sails, spars of bamboo, and ropes of coconut palm. The “Si Mappe” had 4 canoes and the other boat 3. Both had homemade fishing nets of about 3” mesh with floaters of wood and tiger cowries as sinkers and the crew were evidently spinning their own twine. Both prows had a conspicuous array of sun-dried fish, split kipper style and stacked on bamboo racks which formed an awning over the deck. The fish included North-west Snapper (Lethrinus), Cods (Epinephalus), large Trevally (Ferdauia), Red Bass (Lutjanus coastesi), marine eels, file fish and Stingray. There was no shark flesh but a few dried fins of large sharks were hung up. There was no tuna. There was a lot of clam meat and some trepang. The shells (whole-back and plates) of 15–20 Hawksbill Turtles were in each boat and there was a considerable quantity of large good quality Trochus shell. It was estimated that each boat would have about 2 1/2 tons of marine products. About 10 persons were present in each boat. It was impossible to ascertain how long they were fishing in the area; the latest date on the papers of the “Si Mappe” was September 1, 1949, and that of the “Sinar Karang” August 13, 1949. It appeared that their course to Seringapatam Reef had been via Ashmore Reef. Their name for Seringapatam Reef was “Saringang” and for
Scott Reef “Poelodatoe”. They were asked about tuna occurrences and they recognised the Northern Bluefin from illustrations. It was abundant, they said, near Koepang but not plentiful in the Sahul Shelf. Each boat had a couple of immature Brown Boobies and one pair of Lesser Frigate-birds, tethered by the leg. Apparently they were kept as pets. Our relations with the Malays were friendly and some of our men gave them presents of clothing, etc. When our launch left the “Warreen” for the first interview the “Si Mappe” ran up a white flag to her masthead” (CSIRO 1949:42–43).

This is the most detailed description of so-called Malay fishing activities found in the literature covering the period between the 1920s and the 1960s. It documents the methods used and the diverse products collected. However, the ethnic identity of the fishermen is not recorded, nor is their home island. Without more ethnographic information, it could be assumed that the boats came from Kupang. The port where the Sinar Karang is recorded to have come from - “Broo Base”, appears to be misrecorded. The only major port in eastern Indonesia with a name similar is Bau Bau on Buton.

During the last month of fieldwork in 1995, I was browsing a summary I had made of Serventy's 1952 article on my Laptop. Earlier that week I had been collecting information about the technique of ngambai reef fishing which was featured in much of the personal recollections and oral history of past Bajo voyaging to the Timor Sea. I had accompanied our neighbours on a day trip to Kapota reef to observe this fishing technique. After reading the notes I had made of Serventy's report it dawned on me that the two perahu encountered at Seringapatam Reef must have been Bajo vessels: The name of one of the perahu recorded as Si Mappeh had to be a Bajo perahu because of the distinct Sama person marker, “Si”, and the description of the fishing net with wooden floats and cowrie shell sinkers was most certainly the same type of fishing gear I had observed the Bajo use a few days earlier.

I sought to find out more about these two boats and asked Akmad if he could remember any Bajo perahu called Sinar Karang or Si Mappeh. I explained to him that in a book I had there was a description of a meeting between the crew on an Australian ship and two perahu called Si Mappeh and Sinar Karang at Seringapatam Reef in 1949. Could he recall any Bajo perahu by these names? Akmad immediately replied that Sinar Karang sounded familiar, but Si Mappeh was the name of a Bajo man, not a perahu, and that he would go and find out some more information for me.
Later that day Akmad confirmed that these were Bajo perahu from Mantigola but said the Australians had recorded one of the perahu names incorrectly because *Si Mappeh* was in fact the name of a Bajo man, cousin to the father of his wife. Si Mappeh died some time ago, but one of his sons is still alive, living in Mola Utara, and owns a motorised perahu used for turtle collecting expeditions.

The *Sinar Karang* was owned by Lenang who was still alive in early 1995 (but died in 1996), living in Mola Utara. The *Sinar Karang* was a counter-sterned vessel and gaff rigged. The captain of *Sinar Karang* at the time of the encounter with the *Warreen* was Saran, who died a few years ago. Saran is the father of Hader, the owner of *NurJaya*, a perahu apprehended for fishing illegally inside the AFZ that was forfeited and destroyed in Darwin in 1994. I spoke to Saran's wife who lives in Mola Selatan about her husband, and she recalled hearing something about the encounter from him. As Akmad later explained to me, the encounter with the *Warreen* was significant because in 1949 around 10 vessels had left Mantigola for the offshore reefs and islands in the Timor Sea, to fish using ngambai gear and collect other marine products for later sale. But on entering the Timor Sea, they encountered strong wind conditions from the east and some of the vessels lost their direction (*jatuh haluan*), and had to return to Pepela. From there they started out again for Ashmore Reef. However, two vessels in the fleet, the *Sinar Karang* and the *Bunga Rosi*, captained by Si Mappeh, had made it to Seringapatam Reef.

I later talked to Kaharra, one of the most respected and knowledgeable Bajo captains in Mola Selatan who still sails each year. Kaharra told me he had been a young crew member on the *Sinar Karang* and remembers the voyage quite well because of the strong easterly winds encountered which caused most of the fleet of perahu from Mantigola to be blown off course, except for the *Sinar Karang* and *Bunga Rosi* which managed to sail on to Seringapatam Reef. He remembers the encounter with crew from the Australian ship and having his photo taken. He also said the fish from that voyage in 1949 were sold in Kaledupa.

It has been possible to positively identify the two vessels as Bajo perahu from Mantigola. These were part of a larger fleet engaged in seasonal fishing voyages from Mantigola to Kupang and via Ashmore Reef, to fishing grounds at Seringapatam Reef. At the reef, the Bajo spent over one month fishing and collecting. The products, including shark fin, were all for later sale.
In the Biological Log, Serventy made a note of taking photographs and movie footage of some of the perahu they encountered later during the Survey at Hibernia Reef (CSIRO 1949:47–48). Ian Crawford examined Serventy's unpublished field notes and photographs. He reproduces one of these, of a perahu under sail, and refers to Serventy's photographs of dugout canoes (Crawford 1969:132). Despite an extensive search by CSIRO archive staff, the remaining original photographs have not been located. Further enquiries with CSIRO staff in Perth regarding the existence of any photographs or films taken by members of the 1949 Warreen cruise led to the discovery in 1996 of four movie films marked “Fishing around W.A.” in the possession of the daughter of Bruce Shipway, one of the technical officers serving on the Warreen in 1949. These films are now held in the Battye Library in Perth, W.A.

One of the films contains a short section of footage of the Warreen's stopover at Cockatoo Island in the Kimberley before making its way to Seringapatam Reef (CSIRO 1949:38). Following directly after this, there is a short section of footage of a double-ended perahu lambo, laden with various kinds of marine products, and a bird tethered to the awning frame which appears very similar to the Bajo perahu described in detail by Serventy at Seringapatam Reef. The footage, lasting only about 45 seconds, pans slowly along the length of the perahu showing some men wearing Muslim black fez hats (songkok) standing on the deck and in canoes tethered to the stern of the perahu, and ends with what appears to be a young boy lowering a white flag from the top of the mast. Thus it seems highly possible this footage could be of one of the Mantigola perahu. However the only way of confirming this is to return to Mola at some time in the future and show the Bajo. Nevertheless, this archival footage is significant, as it is probably one of the few visual references made of Indonesian fishing activity in the 1940s.

After Seringapatam Reef, later that day the Warreen left for Ashmore Reef and on 5 October Serventy records counting “23 prows…some of them 2-masted boats” in the vicinity of Ashmore Reef (CSIRO 1949:44). Shortly before the Warreen anchored north of East Island, Serventy noted seeing “12 prows near East Island” (CSIRO 1949:44). From East Island, the party visited “one of two Malay prows anchored near the shore” (CSIRO 1949:45);

    Embarked on the “Pintoe Doea”, a 2-masted boat, registered at Koepang and recorded in its book as from Waha Tomia. It had no fish on board, only a quantity of Trochus shell. The only fishing gear seen was a trolling line, fitted with a single barbed 8–0 hook, the lure being a piece of sugar cane leaf...
This part of the lure is tied around the end of the hook and trace. Though no one of the 10 persons aboard understood English or Dutch, we were able to ascertain that tuna were not considered to be plentiful in these waters but that they were abundant at Koepang, Roti and Flores. They denied that they ate any birds of the island. From the prow's book. S. Halfweeg [deckhand] ascertained that it had been trading as a carrier (cement and petrol) earlier in the year (CSIRO 1949:45).

This description of the *Pintoe Doea* does not indicate whether the crew may have been Bajo, but the perahu had come from or previously visited the town of Waha on the island of Tomia in the Tukang Besi Islands. Even though it is not possible to identify the ethnic origin of the crew who may have been Butonese from Pepela, it shows that the perahu and crew had alternated between trading and fishing at certain times of the year.

The *Warreen* spent two days at Ashmore Reef. Serventy and the crew made brief observations of perahu in the area, fishing activity, fishing gear and evidence of visitation on East, Middle and West Islands. They recorded fish drying racks and piles of dried fish, the remains of Lesser Frigate birds, and noted the existence of two graves on East Islet (CSIRO 1949:45–47; Serventy 1952:14). These observations are less detailed than those made at Seringpatam Reef and it is not possible to positively identify any of the vessels as Bajo perahu. However, the presence of drying racks could indicate net fishing operations by Bajo or fishermen from Roti.

The *Warreen* left Ashmore Reef and travelled to Hibernia Reef where “4 Malay prows were at anchor, but made sail as we approached” (CSIRO 1949:47). About an hour later, the Warreen coasted up to the vessels under sail at the southwest side of the reef. It was reported “One boat was called the ‘Bintati Moer’. On board one 11 men were counted. Hailed one crew and were informed they were going to Roti. Some dried fish was seen aboard and dried clam” (CSIRO 1949:47–48). In the Log the only time Serventy records taking photos was of perahu under sail at Hibernia Reef (CSIRO 1949:47). After Hibernia, the *Warreen* crew visited Carrier and Browse Island but saw no signs of Indonesian fishing activity nor did they sight any more perahu (CSIRO 1949).

During the survey those aboard the *Warreen* had seen a total of 30 vessels in the area (Serventy 1952:13). At the same time as the *Warreen* was involved in this survey another vessel the F.R.V. *Stanley Fowler* was surveying the central and eastern parts of the Timor
Sea along the Sahul Shelf but had not sighted any Indonesian perahu (Serventy 1952:14–15). Similarly, the Warreen visited Rowley Shoals and had not sighted any perahu there. Serventy incorrectly concluded the Rowley Shoals “are too distant to attract, as yet, the enterprise of the Indonesians…It is felt that the only reason these shoals have not been fished is because the Indonesians have not yet found them” (Serventy 1952:15). However, Indonesian voyaging to Rowley Shoals prior to the CSIRO survey is well documented.

In addition to Bajo activities at Seringapatam reef and probably Ashmore Reef, other perahu probably from Pepela were also fishing in the region in 1949.

Ngambai Fishing

It is evident from oral histories and personal accounts presented in this chapter that Bajo from Mola and Mantigola have been carrying out ngambai reef fishing in the Timor Sea since the early decades of this century. Ngambai probably represents the earliest type of gear used by Mantigola Bajo in the Timor Sea. While fishing methods and target catches have been replaced more recently by longline gear and shark fin, this netting technique is still practised by Bajo from Mola Selatan and Mola Utara on outlying reefs in the Tukang Besi Islands to collect fish for sale locally. In 1995 there were five ngambai fishing groups operating out of Mola. As well, while I was in Pepela in 1994, one perahu had used ngambai gear at Scott Reef after engaging in shark fishing, and returned with a catch of dried reef fish which they sold to local Rotinese at Pepela. Occasionally, a group of Bajo from Tanjung Pasir used this gear on the reef in Pepela Bay, but the catch was relatively poor.

The technique can be described essentially as a fish drive requiring around 8–11 people and comprises a range of equipment: 2 lengths of rope (tali ambai) (300–500 depa in length) with pieces of wood (tangkal) attached along the rope at intervals, nylon nets (ringgiogah) (up to seven pieces joined together), with floats (patau) made from foam and old thongs attached at intervals along the top and tiger cowrie shells (bolleh) spaced at intervals along the bottom, another type of drawstring net (bandong), wooden stakes (ballas), a scoop net (bandre), at least 2 canoes (lepa), spearguns (panah) and goggels (kacamata). According to Akmad, a full set of ngambai nets and ropes costs approximately Rp 1,500,000. Similar forms of this type of fishing gear and methods are reported to be used among the Bajau Laut in Semporna, Sabah (Sather 1985:201, 203) and by Sama people from Sitangkay island, in the southern Sulu archipelago in the Philippines (Nagatsu 1995:7).
In a small motor boat, crew depart Mola usually leaving around 3.00 or 4.00 am in the morning and travel about 2–3 hours to Kapota or Kaledupa reef. Arriving there, a fishing spot is chosen, usually in about 1–2 m of water, the boat is anchored and all the gear in loaded into two canoes. Both canoes, with half the crew in each, row to the place chosen, under the guidance of the leader and set up the gear (see Photo 28). The fish are scared towards the net and eventually trapped, (see Photo 29). All the gear is disassembled and transported back to the boat. The entire procedure takes around 2.5 hours and usually is done twice in a day.

Photo 28: Ngambai netting operation at Kapota reef. The wooden stakes are driven into the uration scared into the net.
Photo 29: The net configuration is made progressively smaller and then closed, trapping the fish.

Some of the main species of fish caught include fish from the Families: Scaridae (Parrot fishes); Labridae (Wrasses), Acanthuridae (Surgeon fishes); Siganidae (Rabbit fishes). On the trip back to Mola, the captain supervises the division of the fish catch on the deck of the perahu. On arriving in Mola women sell the catch either in the village or at the market.

In discussions with Akmad concerning past and present ngambai fishing activities he described some of the methods and gear the Bajo used in past voyaging, this contextualises some of the oral history and accounts provided earlier. According to Akmad, in the past, they used wood (kayu pijarang, sp. unidentified) for floats (see Serventy's 1952 description above) instead of thongs and foam floats on the nets. Before nylon, the nets (ringgi) were made from tree bark (bagu) from the bagu tree, which was beaten and treated and made into twine woven to make the net. Since the bagu tree is not found on the Tukang Besi Islands, the Bajo purchased the material from traders or other Bajo from areas in Southeast and Central Sulawesi. In Verheijen (1986:47), bagu is identified as Agave sisalana from information given by a Bajo man from Wuring, Flores. The bandong used to take the fish from the net-pole encirclement, according to Akmad, only came into use since the 1970s. Before that, the Bajo used tuba, a type of fish stupefying plant material from tree roots. Derris sp. or Milletia sp., are both fish stupefying plants widely known as tuba or some cognate in Indonesia (Hickey 1950:5).
Akmad also described the shares systems used in the past on ngambai fishing trips to the Timor Sea. Essentially, this is the same as currently operates, with one share for each crew member, one share for the owner of each piece of net (ringgi) and one share for each rope (tali ambai), 3 shares for the perahu and 1/2 a share for each canoe. As well Akmad told me, the cost [ongkos] of the voyage was not much in those days, for example 50 ringgit per person…we also took cassava with us to eat, we would soak it and dry it and take it for food, especially if there was no money to buy rice. After we sold the fish, then we could buy rice. In those days, we used to store water in ceramic jars from Singapore and China.

The Bajo have been using ngambai gear since at least the 1920s and it is still used locally in the Tukang Besi region, occasionally in the MOU box area and around Pepela. The techniques and materials used have changed over time, demonstrating cultural dynamism with the introduction of new materials and methods over this 70–80 year period. From the oral history and personal recollections, ngambai fishing for reef fish to dry and later sale, as well as collection and fishing for other marine products, was popular among the Bajo from earliest voyages to the Timor Sea until after World War II.

**Bajo Fishing Activity in the Northwest: 1950s–1970s**

The late 1950s and early 1960s was a period of relative instability for the Tukang Besi Island Bajo during the height of the Kahar Muzzakar Rebellion (1950–1965), particularly between 1956–1957 when the Mantigola Bajo were forced to flee their settlement, and most Bajo reestablished themselves in Mola. According to Pallu, at the time of the Rebellion, some Bajo from Mantigola, and after 1957, from Mola, continued to sail long distances on fishing and trading voyages around the Indonesian archipelago and to the north Australia region, while others fished locally, not far from their settlement. Some Bajo often went in boats to net fish and collect other marine products from the outlying reefs near the Tukang Besi Islands for weeks or up to a month at a time.

Bajo personal accounts of sailing and fishing activities covering the period between the 1950s to the early 1970s are from men aged approximately in their late 40s to mid 60s. They can be described as younger men or younger relatives of an older generation of Bajo whose narratives have been presented earlier.

**Kariman** (Mola Selatan)
The first time I sailed to the region of Australia was to catch fish during the 1950s. I went with the old people to ngambai. At that time we still lived in Mantigola, it was before the rebellion. We earned 1 ton of salt, that's a lot of salted fish! We fished all day long and our bodies ached because there was so much work to salt and dry the fish. We caught so much fish we could fill the entire hold of the perahu with salted fish. After that I sailed all over, transporting goods to different places.

Acing (Mola Selatan)

After we moved to Mola, between 1959 and 1969, I sailed all over, transporting copra to Gresik, Surabaya [Java], Singapore, Tawao [Sabah], Sarawak. At that time we sailed perahu lambo, but we still used gaff sails [lama Cangking]; it was before [the adoption of] gunter sails [lama sande]. The first time I sailed to Ashmore Reef was in 1970. Before this time, from before I was born, Bajo people sailed to Ashmore Reef to fish with nets [ngambai]. I heard many stories from my parents and old people. My father had a perahu he finished building in 1955, and after launching it he sailed to Ashmore Reef. But before my father had a perahu, my father's brothers sailed with my grandfather's perahu and went net fishing at Ashmore. Formerly, at Ashmore Reef there were coconut trees owned by Bajo from Mantigola. But after white people started living there, they chopped down the trees. Actually, in the past, those coconut trees marked the location of Ashmore Reef; from a long distance we could see Ashmore Reef. There are still a few tall coconut trees left.

Kaharra (Mola Selatan)

In the late 1940s and early 1950s, we carried copra to Java, but in 1957 we couldn't go out because of the rebellion. Sometimes we carried copra in 1960s and 1970s. I also carried asphalt once during the rebellion period. But then, in the 1970s lots of motor boats became engaged in the trade in Malaku and we stopped carry copra. Around this time we went fishing for shark, not reef fish with shark rattles and handlines.
Nurdin (Mola Selatan)

In 1962, during the time of the PKI [Indonesian Communist Party], I carried copra. In 1972–1973, I sailed to the Timor Sea and fished for shark and collected trochus shell.

Mudir (Mola Selatan)

My father used to sail a lambo with gaff rig and counter-stern to Ashmore Reef and fish using nets. In between 1969 and 1971, I carried copra from Maluku to Surabaya and in 1972 I went shark fishing in the Timor Sea.

Akmad (Mola Utara)

My father had three perahu and each perahu did different work, we sailed them and other people borrowed them too. After 1957 we sailed perahu lambo to carry copra from Maluku to Java. One time we carried copra to Sarawak. In the past when we sailed to Surabaya we could sail three times during the east monsoon. We also sailed to Singapore. I went to Singapore in 1982 and spent eight months doing labouring work around the harbour but barely earned enough to pay for the trip. In the early 1980s we stopped carrying copra and started fishing again.

Hati (Mola Selatan)

Between 1962 and 1965 I sailed on my uncle's perahu and carried copra from Maluku to Java. In 1967, we changed from gaff rig to gunter rig. In 1967, we carried asphalt between Kendari and Bone [South Sulawesi] and in 1968, I went to live in Central Sulawesi for 9 years and after, returned to Mola.

Ntao (Mola Utara)


Mohammad (Mola Utara)
In the early 1980s I stopped carrying copra. Before that I used to carry copra to Surabaya which we bought in Taliabo Island [Maluku]. I could carry 5 tons of copra.

These accounts document diverse fishing and trading activities of Bajo from Mantigola and Mola in this period. They also document a continuation of Bajo fishing activity in the Timor Sea after 1949 and intermittently until the early 1970s. In the 1950s some Bajo from Mantigola continued to fish in the Timor Sea as their fathers and grandfathers had done in previous decades. The main form of fishing was still net fishing for reef fish, for drying and later sale. Past fishing activity is also recalled in relation to the type of sail or rig used on perahu lambo. The gaff rig provides evidence for voyaging during the 1950s and early 1960s as the Bajo only adopted the gunter rig sail in the late 1960s.

These recollections also document that, prior to the rebellion, but particularly after moving to Mola in 1957, some Bajo became involved in perahu trading activities, especially in the copra trade around Indonesia, collecting cargoes of copra in regions of Maluku and transporting it for sale at Gresik and Surabaya on Java, and as far as Singapore, Sarawak and Sabah. The extent of Bajo involvement in perahu trading prior to the 1950s is unknown but in conversation with Badolla he told me that before World War II, Bajo from Mantigola also engaged in carrying copra in perahu lambo to numerous destinations including Singapore and Sarawak. It appears that during the 1960s perahu trading was an important economic activity for many Mola Bajo.

As the narratives document, many Bajo ceased to engage in perahu trading activities in the early 1970s and turned to shark and trochus fishing in the Timor Sea as their main economic activity. In the early 1950s, net fishing for reef fish was commonly practised at places such as Ashmore Reef but by the early 1970s, shark fin and trochus fishing had largely replaced net fishing. This is probably for a number of reasons. The Kahar Muzzakar rebellion in Southeast Sulawesi and migration of Bajo from Mantigola to Mola in 1957 must have had some effect on patterns of fishing. Other marine products, such as trochus shell and shark fin were probably commanding a higher price than dried reef fish. This shift away from net fishing to other target products may also represent some generational shift in changing activities and preferences.

From the 1940s to the early 1980s recollections demonstrate Bajo from Mantigola and Mola were engaged in diverse economic activities, dictated by individual preferences, weather
conditions and economic factors such as capital availability, market prices for cargoes and marine products. It seems likely that while some Bajo pursued trading, others focused on fishing, as well as alternating between the two pursuits depending on the particular situation. This is still the case now, where some Bajo alternate and pursue various economic activities at different times of the year. In addition, fishing activity is seasonal, dictated by the monsoonal wind conditions.

It is also important to mention Bajo involvement in the local Butonese perahu trading sector and fishing activities in the Timor Sea. For a discussion of the Butonese perahu lambo trading economy see Dick (1975a), Hughes (1984), Evers (1991) and Southon (1995:45–49). These ethnographic texts illustrate that Bajo in the Tukang Besi Islands were also part of the eastern Indonesian inter-island perahu trading sector, which has not been previously documented in the literature.

There is a possible reason why trading may have become increasingly popular. In 1940 the Dutch government had monopolised the copra trade by introducing a “centralized and regulated purchasing system” (Heersink 1994:67) following the impact of the 1930s world economic depression on copra market prices. After the war, the Coprafonds system was continued, and in the case of Selayar Island, as described by Heersink (1994), copra from the island had to be exported to Makassar under this system and sold at Coprafonds prices. Price control resulted in perahu from Selayar and Sulawesi smuggling copra to Surabaya and Singapore, where prices were much higher (Heersink 1994:67). From the recollections presented above, there are hints Bajo from Mola may have been involved in similar copra smuggling activities.

With regard to the Butonese perahu sector, Southon (1995:44) explains that the people of Lande began building and sailing perahu lambo and trading from the 1940s partly in response to the opportunities available in perahu trading during World War II. During the 1950s and 1960s the local perahu trading sector expanded and thrived throughout eastern Indonesia. The Koninklijke Paketvaart Maatschappij (KPM) (The Royal Paketnavigation Company) which had dominated trade in previous decades, was expelled from Indonesia in 1957. The modern shipping sector (Pelayaran Nusantara) was suffering infrastructure effects of political instability and economic decline (Southon 1995:45).

Throughout the 1960s and 1970s perahu trade in copra and cloves had been important in the Tukang Besi perahu economy (Southon 1995:46). After 1967, the local shipping sector
(Pelayaran Lokal), transporting cargoes in wooden and steel hulled motorised vessels over 100 metric tons, increased under Chinese investment and competed directly with local perahu trading (Southon 1995:45). From the late 1960s, there was a decline in the Butonese perahu trading sector and “in 1972 the price of copra fell dramatically and from then on the copra trade was in decline” (Southon 1995:46).

From the personal accounts presented above, this decline in the Butonese perahu trade correlates to the period when some Bajo resumed or engaged in more regular voyages and fishing activities in the Timor Sea. The Bajo entry into the trade in live turtles to Bali also began in the 1970s. Considering the effect the War and Japanese occupation had on local perahu shipping and trading in Indonesia (Dick 1975a:79), and subsequent opportunities in the 1950s and 1960s, the Bajo may have found a niche to engage profitably in diverse carrying and trading activities, something they may not have been involved in to much extent prior to the war.

It seems likely that some fishing in the Timor and Arafura Seas continued during the period, but perhaps in the context of the circumstances in the perahu sector at that time there were more opportunities and money to be made in trading in copra and other goods. The market prices for certain marine products at this time may have influenced voyaging patterns and may have seen the Bajo favour trading in some instances rather than fishing in the Timor Sea. The Bajo continued to pursue trading activities to the early 1970s and to a lesser extent 1980s, until the trade in copra declined. This resulted in an increase in Bajo fishing activity again in the Timor and Arafura Seas. Many perahu owners, captains and crew I spoke with, comment on the early 1970s as a time when they first went to fish in the Timor Sea for shark and trochus shell.

**Conclusion**

An analysis of Bajo narratives and Australian historical sources illustrate that since the early decades of this century, Bajo have undertaken seasonal sailing voyages to fish for a variety of marine products including trepang, shark fin, turtle shell, trochus shell and reef fish, in the plentiful waters off the northwest coast of Australia, for commercial purposes. An analysis of the encounter between Robin Hilliard and Mantigola Bajo provides a broad date of between 1908–1924 for the beginning of this activity. Following this incident Bajo continued to embark on seasonal sailing voyages to the Timor Sea. What is unknown is the extent of Bajo voyaging
to the north Australian region during this period. For an older generation, net fishing at reefs and islands in the Timor Sea appears to have been the most common form of fishing carried out, but other marine products were also collected and shark fishing voyages were also undertaken. Ethnographic texts demonstrate change over time in fishing vessels and fishing gear used by the Bajo, as well as change in targeted species. There appears to have been a decline in the use of ngambai gear and in the 1970s, shark and trochus shell replaced reef fish as the main product sought.

It appears voyages were motivated by the known abundance of marine products in north Australia and available markets for these resources, as well as less competition and activity by other Indonesian fishermen. Furthermore, fishing activity is perceived as being relatively unrestricted until the early 1970s, when increasing Australian government control over Bajo and other Indonesian fishing activity in the Timor Sea began.

Contact encounters and narratives of past activity represent a common Bajo history of past voyaging to the Timor Sea by their ancestors. These reinforce a continuation of current Bajo fishing and sailing activity in the AFZ despite a range of ongoing restrictions and policies enforced by the Australian government.
Chapter 5
AUSTRALIAN MARITIME EXPANSION AND POLICY RESPONSES TO INDONESIAN FISHING ACTIVITY

Introduction

The developments in Australian maritime expansion and related policy and legislation at State, Commonwealth and internationals levels particularly from the 1950s, with regard to Indonesian fishing activity in waters now claimed by Australia are complex. This chapter examines Australian maritime expansion and government responses - by way of legislation, policy and agreements - to Bajo and other Indonesian fishing activity. Many of these developments have been analysed in detail by Campbell and Wilson (1993). Here, I focus on the main developments and responses by Australia as it impacts on Bajo fishing, beginning with an historical perspective.

Claims to Offshore Reefs and Islands in the Timor Sea

The offshore islands and coral reefs located along the continental shelf in the Timor Sea have long been “stepping stones between Asia and Australia” for both European and Indonesian mariners (Fairbridge 1948:193). Indonesians were engaged in regular voyages to these isolated offshore areas from well before official European discoveries in the 19th century. However, some of the reefs and islands were sighted or discovered a century or more earlier by European mariners (Fairbridge 1948).

Carrier Island was discovered by the English Captain Nash in the Cartier in 1800 (Fairbridge 1948:208). Scott Reef was discovered and named by Captain Heywood of the Royal Navy, surveying the northwest of Australia in 1801 in HMS Vulcan (Fairbridge 1948:209). Ashmore Reef was named after Captain Samuel Ashmore who sighted and named the island in 1811. Captain Ashmore had sighted and named the nearby Hibernia Reef after his ship, the Hibernia, during an earlier voyage in 1810 (Fairbridge 1948:209). Browse Island was named in 1838 after being sighted by a schooner captain of that name on a return journey from Roti to the Kimberley (Fairbridge 1948:210). Seringapatam Reef was sighted by crew of the merchant ship Seringapatam in 1842 and named after it (Fairbridge 1948:211).
American whalers discovered the large deposits of guano on islands in the northwest Kimberley region in the 1840s. Guano was exploited periodically up until the 1870s when more regular exploitation was carried out at a number of offshore islands including Ashmore Reef and Browse Island (Woodward 1917:10). The sovereignty of Ashmore Reef came into question as a result of rivalry between American and British interests in guano exploitation. After a period of negotiation between the British Colonial Office and the United States State Department, Britain annexed Ashmore Reef in 1878 and Cartier Island in 1909 (Langdon 1966:55–56). There does not appear to have been any conflict over sovereignty of Browse Island since it was already a possession of Western Australia at this time (Bach 1955:209). In 1904 the export of guano was prohibited (Woodward 1917:9). The crew of the British cruiser *Cambrian* formally took possession of Ashmore Reef in 1906. The captain, five officers and 200 men as a guard of honour landed on the island, hoisted the Union Jack, sung the National Anthem, and saluted the flag by the firing of 21 guns (*Northern Territory Times* 16 February 1906).

The status of these islands began to attract attention in the early 1900s in relation to claims about vessels from Indonesia illegally poaching in the region. In 1909 Henry Hilliard, who was then still a British resident, had complained to the Secretary of State for the Colonies about boats from Indonesia fishing at Long Reef, Adele Island and a reef near Swan Point. They were interfering with his own trepang operations (Bach 1955:208). Hilliard's activities began to arouse interest among Australian authorities who were concerned about foreign based companies poaching in Australian territorial waters, the limit of which extended 3nm from the low water mark from the mainland (Bach 1955:208).

After a series of reports concerning vessels from Indonesia allegedly involved in poaching, the Commonwealth commissioned a gunboat to carry out patrols of the northwest. The only arrests ever made at this time “turned out to be a source of embarrassment to the Australian officials” (Crawford 1969:117). In 1911 the gunboat arrested two schooners, *Harriet* and *Fortuna* fishing at Scott Reef and escorted them to Broome. It was suspected one of the vessels belonged to Hilliard. The captains W.S. Smith and Pebo Doro were charged with smuggling under the WA Customs Act and fined, which they paid by selling their catch of trochus shell, and were released. Apparently the prosecution had tendered as evidence a Proclamation from 1900 which defined the boundaries of the WA State to include all islands adjacent in the Indian Ocean (Bach 1955:218). Bach (1955:218) notes that most of the files
relating to this incident had been destroyed and only a “bare outline of the episode had been preserved”. According to Bain (1982:196) and Crawford (1969:117), the fines were later refunded when it was later admitted that the arrest had been illegal and that Scott Reef was outside Australian waters and Australian laws did not therefore apply. The status of Scott Reef continued to remain ambiguous until 1924 when it was finally clarified that it was part of Western Australian territory (Bottrill 1993:46, citing Battye Library Archives ACC477 AN108/4 8 1923).

The WA government continued to receive reports about vessels from Indonesia illegally fishing along the Kimberley coast and at offshore reefs and islands including Ashmore Reef. The WA government, however, was “largely powerless to act against these incursions” (Campbell & Wilson 1993:22) since the region “remained virtually beyond the limits of government control” (Crawford 1969:116). Between 1919–1923, WA authorities made frequent appeals to the Commonwealth to provide a warship to patrol the coast against vessels from Kupang, which were allegedly violating territorial waters (Bach 1955:209).

In the latter part of 1923, Henry Hilliard petitioned the Australian External Affairs Minister, requesting a fishing concession for Ashmore Reef. He complained again of perahu from Java and Timor denuding the reef of its trepang, trochus and bird populations. He suggested that if he could fish there he could protect the stocks from Indonesian raiders (Bottrill 1993:45, citing Battye Library Archives ACC477 AN108/4 8 1923). In fact, Hilliard himself was a “raider” (Campbell & Wilson 1993:23) and so was his son Robin.

In 1923, the Western Australian Government complained to the Commonwealth following reports of Indonesians illicitly fishing at Ashmore Reef. The Commonwealth had no authority over the islands, which were still under British control. They referred the matter to the British Government. In 1931, the British placed the islands under Commonwealth control and in 1933 the Ashmore and Cartier Islands Acceptance Act was passed. This came into force in 1934 and the islands were transferred to Australian sovereignty. Under the Legislation the Western Australian Government was empowered to make ordinances for the Territory but decided there were few practical benefits to be obtained in administering the islands and requested the Commonwealth take responsibility for the new Territory. In 1938, an amendment to the Ashmore and Cartier Islands Acceptance Act was passed in Federal Parliament vesting control of the islands in the Administrator of the Northern Territory (Langdon 1966:56–58).
Official Perspectives: Indonesian Fishing Activity in the Northwest 1950s–1970s

Until 1952, people from Indonesia were generally free to fish anywhere off the coast of Australia and its islands outside the 3 nm territorial sea (Campbell & Wilson 1993:115). However, in 1952, the *Pearl Fisheries Act* came into force, making the collection of sedentary products to the edge of the Continental Shelf illegal. In 1953, Australia made a unilateral claim to its entire Continental Shelf. This aimed to protect pearl shell resources from Japanese fishing activities (Campbell & Wilson 1993:115). The *Pearl Fisheries Act 1952* received international endorsement in 1960 through the United Nations Convention on the Continental Shelf (UNCLOS II). Although such fishing had been illegal since 1952 according to Australian law, this was only recognised internationally in 1960 (Campbell & Wilson 1993:41). The *Pearl Fisheries Act* was later replaced by the *Continental Shelf (Living Natural Resources) Act* in 1968. Although Australia had the legal powers to prosecute Indonesian fishermen in breach of such legislation during the 1950s and 1960s, the government did not have the capability to apprehend fishermen engaged in illegal offshore activity until decades later (Campbell & Wilson 1993:28).

Campbell and Wilson (1993:35) illustrate that the “official perspective” on Indonesian voyaging during this period was that “there were practically no intentional visits by Indonesian fishermen to the north-west coast”. Those few that did come to the northwest region were believed to be “storm-blown” (Campbell & Wilson 1993:34) arrivals. Campbell and Wilson (1993:35) have labelled this assertion the “myth of emptiness”. Furthermore, the second official claim is that Indonesian fishermen who did fish in the northwest region during this period were subsistence fishermen. Campbell and Wilson (1993:35) call this second official perspective the “myth of subsistence”. This belief that fishermen were subsistence orientated led to Australia in 1968 declaring subsistence Indonesian fishing could continue in designated areas (DFAT 1988:1) which in turn led to the signing of the 1974 MOU with Indonesia. Such perspectives have had a large impact on subsequent policy and understanding. For nearly three decades they have influenced Australian policy and government responses.

Reports of “spasmodic sightings” (Campbell & Wilson 1993:25) of Indonesians were made by Cape Leveque lighthouse keepers in 1957 and 1960. The diary records note Indonesians collecting water from the mainland but the identity of the fishermen is not recorded (Campbell & Wilson 1993:25). In addition, eight perahu had been sighted at Adele Island by members of
the Australian Iron and Steel company in April 1957 and again off Cape Leveque by Sunday Island Aboriginals in August 1957 (ACS 1957).

On 5 October, 1957, an Indonesian perahu the *Si Untung Slamat*, sailed in and berthed at the town wharf at Yampi Sound on Cockatoo Island. The captain and some crew were taken to a local office and interviewed by the Acting Customs Officer, Smith. It was elicited that the crew had left Raas Island and sailed to Kupang and then south to the northwest coast of Australia and fished for trochus shell and trepang for an unknown time. They then got caught in a storm, blowing them off course and subsequently drifted for 5 days to the southeast until they saw signs of habitation at Cockatoo Island. The crew received medical attention and the vessel was provisioned and set sail supposedly for Kupang on the 8 October (ACS 1957).

On 11 October it was reported to the Acting Customs Officer at Yampi Sound, that Aboriginals from the Sunday Island mission had seen a perahu collecting trochus shell at Cleft Island, near the Mission, on 9 October. This was reported to the WA Fisheries Department at Perth and Smith was instructed by the Federal Customs Minister's Department in Canberra to intercept the vessel and interview the crew suspected of illegal fishing. An air search found the vessel anchored off the reef off McIntyre Island, 8 km north of Cockatoo Island (ACS 1957).

On 15 October, Smith and five local residents including Ronald Lind and a woman who could speak Malay left in the Launch *Balga*, armed with a loaded .303 rifle. The vessel was located and the captain and second-in-charge were interviewed about their activities. A search revealed a quantity of trochus shell, trepang and dried fish. The captain could not produce any papers authorising a permit to enter or fish in Australian waters. The crew were arrested and the boat towed back to Yampi and then south to Derby at King Sound. Customs and Immigration formalities were carried out, a rooster found on board destroyed, and the crew and vessel handed over to the Fisheries Department Inspector who had flown in from Broome to investigate the matter. The captain was charged on two counts of using an unlicensed boat and illegally fishing in territorial waters under the WA *Fisheries Act 1905*. He appeared in the Derby Court on 23 October. The captain was convicted on both counts and fined the minimum amount of £15 (A$30). The Indonesian embassy agreed to pay the fine and the boat departed for Indonesia the following day (ACS 1957; Lind 1994:141–146). Photographs of the boat (appearing in Lind 1994:143 and in *The West Australian* 19 October 1957) show the boat to be a Madurese perahu *lete lete*.
The apprehension and conviction of this Indonesian vessel in 1957 is of significance as it appears to be the first apprehension of an Indonesian perahu since 1911, when two boats had been investigated at Scott Reef and taken to Broome to face charges.

During the 1957 incident the issue of illegal Indonesian fishing was raised in the WA Legislative Assembly. On 17 October 1957, the WA Fisheries Minister admitted that Indonesians were fishing along the northwest coast of Australia:

Vague reports have from time to time reached me of Indonesian fishing and shelling activity in the rather inaccessible waters off the North-West coast. As their operations were always well off the beaten track, no opportunity has offered, in the interval between the 1949 incident written up by Dr. Serventy and the present week to board any such vessel to ascertain whether it has, in fact, been engaged in unlawful practices (WA Legislative Assembly Hansard 17 October 1957, quoted in Campbell & Wilson 1993:26).

This reply demonstrates the official perspective of the northwest as a “colonial frontier” (Campbell & Wilson 1993:26) in the late 1950s. The government was uncertain of the legality of Indonesian activity. Furthermore, it demonstrates there was very little concern at the time regarding Indonesian activity and practically no official contact between Indonesian fishermen and the Australian government (Campbell & Wilson 1993:26). In addition, the Minister was also reported to say “without a patrol boat little could be done to police territorial waters off the northwest” (The West Australian 18 October 1957).

The Australian navy ship HMAS Cootamundra visited Ashmore Reef in August 1958 and found Indonesian perahu reportedly from Kupang (ANPWS 1989:10). Two other reports of sightings found in WA archives mention three perahu at Cape Bossut Creek, south of Broome in May 1969, reported to be heading for Mermaid Reef at Rowley Shoals, and four perahu at Cape Leveque in 1970 (Campbell & Wilson 1993:36–37).

European commercial and political influence along the northwest coast and offshore waters began in the early 1960s when multinational companies started mineral exploitation (Campbell & Wilson 1993:26). It was during surveys of Browse Island, Scott Reef and Ashmore Reef that employees of the Burma Oil Company (BOC) found evidence of Indonesian activity in the region. This is documented in Crawford (1969:133–137). His report on the activities of the
Indonesian fishermen is the most detailed since the CSIRO Survey visited the region almost twenty years earlier. In August 1965, the BOC set up its first drilling rig near Ashmore Reef and they were visited by Indonesians. In the following year, in February 1967, another party of Indonesians visited the rig and it was reported they came from the region of Madura. A group of five vessels visited again in October 1967, rig workers saying there was at least one woman on board. Investigations into the origin of these vessels reveals that some may have come from Timor (Crawford 1969:133–137). In February 1968, Crawford went to Ashmore Reef and spent 5 days living aboard a perahu from the island of Raas. He documented Madurese voyages to Ashmore and other reefs and islands further south, as well as fishing and curing activities. He also discussed aspects of the economics of the voyages including the sale of products collected later in Makassar (Crawford 1969:137–156). During his stay, Crawford sighted 11 perahu, all of which originated from Madura or Raas.

It is argued by Campbell and Wilson (1993:37) that these visits to the northwest during this period were not the result of subsistence fishing or storm blown arrivals but were intentional and commercially orientated. Ethnographic material presented in the previous chapter illustrates that Bajo were in fact voyaging intentionally and for commercial purposes at this time. Bottrill (1993) and Campbell and Wilson (1993:27,37) cite oral history to document voyaging by residents of Pepela too.

Between the 1950s and early 1970s fishermen from Indonesia active in the northwest and offshore reefs comprised: Bajo from Mantigola and Mola; fishermen from Timor and Pepela; and Madurese from the islands of Raas and Madura. They were not subsistence fishermen, nor were the majority of their visits unintentional.

It would appear that encounters between fishermen and Australians were rare and mostly unreported. One reason for this was that until the 1970s there were no regular surveillance flights or sea patrols in northern waters (Campbell & Wilson 1993:34). It is argued by Campbell and Wilson (1993:37) that during this 20 year period since “there was practically no surveillance…no system for reporting and recording sightings, and the [Kimberley] area was sparsely populated, that only a small proportion of visits would have been sighted, with even fewer being reported”. With the exception of the 1957 incident, the government gave little attention to their activities. This situation was about to change in the late 1960s, with changes in policy, greater surveillance and control over Indonesian fishing activity.
1968–1975: Background to the 1974 MOU

In 1958 and 1960 the United Nations held conferences (UNCLOS I & UNCLOS II) to establish international standards for fishing limits and territorial seas. In the following decade, many countries unilaterally extended their territorial waters and increased their fishing zones to 12 nm. Indonesia had claimed a 12 nm territorial sea in 1960 (Campbell & Wilson 1993:116).

In 1968 Australia declared a 12 nm fishing zone under the Commonwealth *Fisheries Act 1952*. This was in line with the United Nations Convention on the Law of the Sea (UNCLOS II). It meant that the Zone was reserved “for the exclusive use of fishermen and vessels licensed under Australian Law” (DFAT 1988:1). However, the Australian government decided that traditional Indonesian fishing practices in waters now claimed by Australia could continue, provided that:

> The operations were confined to a subsistence level, and the operations were carried out in the Declared Fishing Zone and territorial sea adjacent to the Ashmore and Cartier Islands, Seringapatam Reef, Scott Reef, Adele Island and Browse Island (DFAT 1988:1).

This policy was the “first time since the turn of the century that Australian policy had been exclusively directed at Indonesian fishermen” (Campbell & Wilson 1993:116–117). Nothing was said as to how it was actually enforced or administered. It is unclear how the Indonesian government and the fishermen themselves were informed of the arrangement. It would appear the official perspective of Indonesians engaged in subsistence fishing had influenced this decision. The ill-informed view that fishermen were engaged in subsistence fishing was to form the basis of misguided and complex policy responses towards Indonesian fishing in the following years.

Operation of the arrangement led to meetings between Australian Prime Minister Gough Whitlam and Indonesian President Suharto in Jakarta in September 1974. This was followed by a meeting between officials of both governments in Jakarta in November to “discuss the specific concerns of the two Governments about the activities of Indonesian fishermen in Australian waters” (DFAT 1988:1). The outcome was the signing on 7 November 1974 of a Memorandum of Understanding between the Government of Australia and the Government of the Republic of Indonesia Regarding the Operations of Indonesian Traditional Fishermen...
in Areas of the Australian Exclusive Fishing Zone and Continental Shelf (1974 MOU) (see Appendix 2).

The Parliament had received reports of extraordinary large numbers of foreign boats operating off the coast of Western Australia during July 1974. The accuracy and credibility of some of these are questionable because there had been no regular surveillance (Campbell & Wilson 1993:38–39). However, throughout the year there were “more credible” reports of Indonesian vessels targeting trochus shell in and around King Sound, and some perahu with dried shark fin and flesh onboard (Campbell & Wilson 1993:38). The government response was, according to Campbell and Wilson (1993:39), to interpret this “as a dramatic rise in incursions”, and against the “myth of emptiness”, Indonesian fishing was seen as an “invasion”. The Australian government increased sea and air surveillance of the northwest coast of Australia.

Prior to January 1974, there had been no regular air or sea surveillance of the northwest Australian coast. Between January 1974 and March 1975 the RAN and RAAF conducted monthly sea and air patrols (Campbell & Wilson 1993:38). Based on figures tabled in Parliament in August 1975 concerning reported sightings of Indonesian vessels, and the level of air and sea surveillance between the years 1972 to 1975, Campbell and Wilson (1993:39) argue for a “strong correlation between the introduction of surveillance and the dramatic increase in reported sightings”. The “myth of emptiness” prior to 1972 was replaced by the “myth of invasion” from 1973 onwards. Furthermore, the figures were used to support claims that prior to 1973, Indonesian visits to the coast were few in number, the result of boats being swept off course and subsistence orientated, but that after 1973, fishermen had begun to visit the coast of Australia in large numbers and intentionally to engage in commercial fishing (Campbell & Wilson 1993:39, 61).


The 1974 MOU came into force on 28 February 1975 and Whitlam tabled the agreement in Parliament on 5 March 1975. The MOU specified “Indonesian traditional fishermen” would be allowed to take and fish certain species of marine products within a 12 nm radius of Ashmore Reef, Cartier Island, Scott Reef, Seringapatam Reefs and Browse Island in the Australian exclusive fishing zone and continental shelf (see Map 9). Oddly, Adele Island, which fishermen had access to under the 1968 decision, and Rowley Shoals, visited by Indonesians since
at least the latter part of last century, were never included in the 1974 MOU agreement (Campbell & Wilson 1993:122).
Map 9: Permitted areas of access for Indonesian fishermen in the Australian Fishing Zone as agreed to in the 1974 Memorandum of Understanding (source: DFAT 1988:4).
Traditional fishermen were defined as “fishermen who have traditionally taken fish and sedentary organisms in Australian waters by methods which have been the tradition over decades of time” (1974 MOU). Under the agreement, fishing was to be confined to offshore reefs and islands. Fishermen would be allowed to take shelter at specified islands and reefs, but all landings would be prohibited with the exception of East Islet and Middle Islet at Ashmore Reef where fishermen would be permitted to land for the purposes of collecting fresh water. The taking of sea turtles was forbidden. Sedentary species (protected under the *Continental Shelf Act* 1968) of trochus, trepang, abalone, green snail, sponges and all molluscs, could be taken only within the 12 nm of specified islands and reefs. The collection of sedentary species at all other places along the continental shelf was forbidden. As long as “traditional” fishermen complied with these arrangements, the government of Australia would refrain from applying its fisheries laws to them.

In February 1975 the Commonwealth *Fisheries Act 1952* was amended to make foreign fishing regardless of the purpose, within the 12 nm fishing zone an offence. However it was stated, “as a gesture of friendship…Australia would refrain from enforcing its fishery laws against Indonesian fishermen who complied with the limitations set out in the 1974 Memorandum of Understanding” (DFAT 1988:2). Those who did not, could, under the new amendments to Sections 13AA and 13AB concerning foreign fishing, be brought before the Australian courts and charged under the amended Act. Prior to the amendments, the *Fisheries Act 1952* only regulated commercial fishing and until 1967 only applied to Australian residents (DFAT 1988:7; Senate Debate on Fisheries Bill 1975; 25 February 1975, pp 403–406).

With the 1974 MOU in effect from 1 February 1975 and legislative powers in place to deal with Indonesian fishermen operating outside the allowed areas, the Australian government mounted a massive air and sea surveillance campaign, officially named “Operation Trochus”. It was undertaken in two consecutive years as Trochus 75 and Trochus 76. From March 1975, the RAN conducted almost continuous patrols of the region. There were fortnightly flights by RAAF aircraft (DFAT 1988:12; House of Representatives Debate 20 August 1975; pp 367–368). The operations formed the “enforcement and education arm” of the 1974 MOU (Campbell & Wilson 1993:65).

Indonesian fishermen found operating along the Kimberley coast were informed of the provisions of the MOU, and forced into the permitted areas to the north (Campbell & Wilson 1993:65). Information was disseminated and warnings given. Leaflets were handed out by
Navy patrols encountering Indonesian perahu. In the DFAT report, it is noted that Indonesian interpreters were used on Navy patrols to assist with information dissemination concerning the MOU. Indonesian officials, particularly the Governor of the Province of East Nusa Tenggara and the Provincial Fisheries department (*Dinas Perikanan*), were also involved in disseminating the provisions of the MOU. A sign was constructed on West Island of Ashmore Reef, with a map and text in Bahasa Indonesia outlining the MOU regulations (DFAT 1988:2). This was rather strange, for under the MOU, fishermen were forbidden to land on West Island.

Apprehension of vessels began. On 13 March 1975 three perahu were apprehended near Troughton Island about 16 km north of Cape Bougainville and inside the 12 nm limit. While under tow, one perahu sank and consequently the skipper did not face charges (*The Kalgoorlie Miner*, 17 & 20 March 1975, p. 15). In an entry in Bottrill (1993:54) unsourced, but most likely taken from WA Fisheries Department archive files held in the Battye Library, Perth, the following report concerning the apprehended perahu that sank was made:

13 March 1975: HMAS ASSAIL encountered the perahu “KENAGAN LAMA”, Capt Mahmoud Malang denied fishing and said his boat had been damaged in a storm and was leaking badly. The “Assail” took the vessel under tow seemingly against the advice of Mahmoud, and headed for Wyndham [near WA and NT border]. During the tow the perahu took water and was cast off after a couple of days. It sank moments later.

The other two skippers were charged under section 13AA(b) of the *Fisheries Act 1952*. This section of the Act reads:

13AA. A person shall not, in the Australian fishing zone-

a. use a foreign boat for taking, catching or capturing fish for private purposes; or

b. use a foreign boat for processing or carrying fish that have been taken, caught or captured for private purposes with the use of that boat or another boat.

Penalty: $5,000.

The captains were found guilty, but the Magistrate refused to order any punishment, saying under the law they had no option to argue their defence. In his words;
the men were unlucky to have been blown off course, unlucky that they had no clear indication that they were in Australian waters and unlucky to be charged under a law worded as it was (The Kalgoorlie Miner 20 March 1975, p. 15).

Under section 13AA, a captain can be charged even if the fish on board the vessel were caught outside the AFZ and the vessel is in transit through the AFZ or forced into the zone by adverse weather (Campbell & Wilson 1993:66). The captains had claimed “they had been travelling for more than a month in their tiny boats and had not intended to enter Australian waters but had been blown off course by westerly winds” (The Kalgoorlie Miner, 20 March 1975, p. 15). In response to the weakness of section 13AA, the Magistrate allowed the fishermen to sail home in the two remaining perahu without a recorded conviction.

It was reported that the fishermen were from Kaledupa Island (The Kalgoorlie Miner 17 and 20 March 1975). When Campbell and Wilson (1993) interviewed Magistrate Ian Martin about the incident he recalled the vessels had shark fin on board. Campbell and Wilson (1993:68–67) argue that these were Bajo “traditional shark fishermen” from the Tukang Besi Islands. However, Officers from WA Fisheries recalled that the perahu were from Roti and were targeting trochus shell (Campbell & Wilson 1993:174). The vessels were Bajo boats from Tukang Besi Islands and it seems most likely that they would have sailed to Pepela and began their voyage from there. Whether or not they were trochus or shark boats as described by Campbell and Wilson is debatable. It is conceivable that the fishermen may have been targeting both trochus and shark. They appear to be the first Bajo boats brought before the Australian courts.

In early 1975, an Inter-Departmental Committee had planned to apprehend some perahu to run a test case. It was hoped that “the courts would order forfeiture of vessels owned by Indonesians offending against our Fisheries Laws” (Campbell & Wilson 1993:67). In a statement, written in March 1976, contained in AFZ Files held at WA Fisheries, the following explanation was given as to why the case failed:

Simply the problem is this then. Fisheries legislation can be effectively applied to keep and remove Indonesian fishermen from the Australian mainland areas, but if the same legislation is used in an attempt to persuade the courts that the fisheries offences are of such seriousness as to require forfeiture of the
vessels involved, such a course may not be successful (quoted in Campbell & Wilson 1993:67).

Operation Trochus was stopped in June 1976. The decision was partly due to the destruction of a number of aircraft by fire at their base in Nowra, NSW, and partly a reduction in the availability of Darwin based Naval patrol boats because of commitments associated with the arrival of Vietnamese refugees. However, because of ongoing infringements by Indonesian vessels collecting trochus within 12 nm of the Australian mainland, regular and more permanent air and sea patrols were introduced (Campbell & Wilson 1993:68).

With the release of two perahu in 1975, WA Fisheries carried out forms of what Campbell and Wilson (1993:68) have termed “local justice”. Under the Fisheries Act 1905 (WA) fisheries officers could legally board perahu operating outside the MOU allowed areas, particularly those operating along the Kimberley coast collecting trochus in the King Sound region, and confiscate fishing gear and catch. In some cases gear and catch were thrown overboard. Crews were left with supplies, given warnings and told to return to the allowed areas to the north. This program was cost effective and relatively successful with the loss of equipment and catch providing sufficient punishment for the fishermen (Campbell & Wilson 1993:68).

One of the things that came out of increased contact between Australian officials and diverse groups of Indonesian fishermen operating in the northwest region during the 1970s was a change in Australian perceptions and a more “realistic assessment” (Campbell & Wilson 1993:70) of the activities of Indonesian fishermen. Prior to the 1974 MOU, fishermen were believed to be subsistence orientated and unintentionally arriving on the coast of Australia. As outlined in WA Fisheries reports in 1977, this picture was replaced with one where fishermen were now acknowledged to be fishing commercially and intentionally arriving at fishing grounds. This new “true representation” was used to legitimate the policy of “local justice” (Campbell & Wilson 1993:70–71).

In 1980, it was decided on recommendations by fisheries and navy officers that stronger policy and penalties should be introduced to combat repeated illegal fishing activity along the northwest coast and hence the “local justice” approach ceased. The first of these new measures occurred in July 1980, when two perahu were apprehended. The Sama Biasa was apprehended at Gregory Island, and Jangan Tanya Lagi was apprehended at Bedford Island, Bucaneer Archipelago, King Sound. The crews had been collecting trochus shell, and had attempted to
hide from authorities in the mangroves along the Kimberley coast. The captains were charged and found guilty under section 29A(2)(b) of the *Fisheries Act 1905* (WA). The boats and all equipment were forfeited and the captains and 31 crew repatriated to Indonesia. Both boats were owned by Pepelans and the crew had planned to sell their catch to a trader. The loss of the perahu, equipment and enforced economic hardships on the crew and their families had “an immediate and lasting effect” on the fishing patterns of the Pepela fleet, who as a result were now forced to concentrate their fishing effort on the allowed areas as set out in the MOU (Campbell & Wilson 1993:72–73). The *Jangan Tanya Lagi* was destroyed, but the *Sama Biasa* with all equipment and gear, was donated to the WA Maritime Museum in Fremantle. It was another eight years before perahu from Pepela were again apprehended and confiscated.

**Australia Maritime Expansion and Negotiations with Indonesia**

The Third United Nations Convention on the Law of the Sea (UNCLOS III) was adopted in 1982. Sixty States had to either ratify or accede to the Convention before it entered into force as a binding treaty. The convention finally received the requested 60 ratifications or accessions and it entered into force on 16 November 1994. UNCLOS III sets out the comprehensive body of principles and rules on the rights and obligations of States with respect to control over and use of marine areas and resources.

In 1971 and 1972, Australia and Indonesia had concluded agreements that established seabed boundaries extending from Papua New Guinea in the east to waters between Ashmore Reef and Roti Island in the west, leaving a gap in the boundary south of the then Portuguese colony of East Timor known as the Timor Gap. These came into force on 8 November 1973 (Kaye 1995:45) (see Map 10). The western extension of the seabed boundary between the two countries from a point north of Ashmore Reef remained undecided until final negotiations and the signing of the Australia - Indonesia Maritime Delimitation Treaty in Perth in 1997. In 1989, the Timor Gap Treaty was finally concluded between Australia and Indonesia establishing a Zone of Cooperation (ZOC) in the Timor Gap area providing for the sharing of oil revenues in the seabed area south of East Timor. This entered into force on 9 February 1991 (Kaye 1995:53) (see Map 10).
Map 10: Maritime arrangements between Australia and Indonesia.

In November 1979, along with many other countries, Australia increased its 12nm fishing zone unilaterally to become the 200 nm AFZ (endorsed by UNCLOS III in 1982). The outer boundary extended to a median line between Australia and Indonesia. In March 1980, Indonesia also proclaimed an Exclusive Economic Zone extending 200 nm from the coast.

Due to the overlapping claims, on 29 October 1981, Australia and Indonesia signed a Memorandum of Understanding agreeing on a Provisional Fisheries Surveillance and Enforcement Arrangement, that came into effect on 1 February 1982. The agreements covered jurisdiction over fisheries enforcement matters in the water column between Australia and Indonesia. Under the arrangement, each country would refrain from surveillance and enforcement action against fishing boats licensed by the other beyond a Provisional Fisheries Surveillance and Enforcement Line (PFSEL) (see Map 10). It was agreed that a permanent settlement on the fisheries boundary would be negotiated at a later date (this finally occurred with the signing of the Australia - Indonesia Maritime Delimitation Treaty in March 1997).
It was also agreed that the arrangement would have no effect on the position of Indonesian traditional fishermen operating in accordance of the 1974 MOU. The provisional line would apply only to swimming fish and jurisdiction over sedentary species in the region was based primarily on the seabed boundary lines agreed between Australia and Indonesia in 1971 and 1972 (DFAT 1988:20–25). The Australian Fisheries Service (AFS) became responsible for the surveillance and enforcement of the Australian 200 nm AFZ. The AFS was replaced with the Australian Fisheries Management Authority (AFMA) in 1992.

In reality, the implications of the 200 nm expansion for Indonesian fishermen meant that waters that had previously been high seas and open to Indonesian fishermen became off limits. These areas included Bajo shark fishing grounds stretching along the Sahul Shelf from the north of Broome in the west Timor Sea across to the Arafura Sea and to the north of northeast Arnhem Land. Moreover, it meant the fishermen could no longer legally fish while in transit from one allowed area to another. That is in the waters between Ashmore Reef and Cartier Island to the north, Scott and Seringapatam Reefs, and Browse Island to the south (Campbell 1991:116).

With a greatly expanded AFZ, increased and more regular surveillance patrols of the area to control and confine the fishing activities of Indonesians continued. Perahu were routinely boarded in both the permitted areas and in other areas of the AFZ and reports completed. Information recorded included: the date and location of boarding; the name and origin or last port of call of the vessel; owner, captain and crew; type of vessel; the catch; type of fishing gear; movements of vessel; whether an information sheet on the 1974 MOU regulations had been given to the fishermen or if the crew received a warning regarding their fishing activities.

Although shark fishing activities became illegal in 1979, the Australian authorities tolerated such activity in the 200 nm AFZ until 1990 when the first boats apprehended for illegal shark fishing in the AFZ were confiscated. The apprehension of perahu from 1990 onwards was, according to Campbell (1991:61), partly due to the introduction of more technologically sophisticated aircraft capable of spotting perahu in the outer regions of the AFZ.

**Indonesian Activity at Ashmore Reef National Nature Reserve**

Bajo and other Indonesian fishing at Ashmore Reef was affected by a range of Commonwealth policy and legislation as well as Australian responsibility to international treaties concerning the flora and fauna found on the islands.
In 1978, the Territory of Ashmore and Cartier Islands was made a separate Commonwealth Territory with responsibility vested in the Minister for Arts, Sport, the Environment, Tourism and Territories. The *Ashmore and Cartier Island Acceptance Amendment Act 1978* was passed shortly before the Northern Territory was granted self-government. Until 1978, the laws of the Northern Territory applied to Ashmore and Cartier Islands. The resumption of Commonwealth control of the islands probably lay in the significance of the islands for Australian maritime jurisdiction (Burmester 1985) and the significant hydrocarbon resources in the area (Bergin 1989:13).

In August 1983, the Ashmore Reef National Nature Reserve (ARNNR) was declared under the Commonwealth *National Parks and Wildlife Conservation Act 1975* to be managed by the Australian National Parks and Wildlife Service (ANPWS). An interdepartmental committee (comprising members of the Departments of Territories and Local Government, Home Affairs and Environment, Foreign Affairs, Prime Minister and Cabinet, Resources and Energy, Primary Industry, Transport, Defence and Health) had recommended the reserve be declared earlier in 1983, in order to provide a legislative basis for the protection of wildlife at Ashmore Reef and to control heavy exploitation of certain marine products including clam shell, fish, seabirds and turtle (ANPWS 1989:13). The committee was acting on recent reports of severe depletion of wildlife populations by Indonesians in contravention of the 1974 MOU. The activities of the Indonesians also contravened Australia’s international obligations under agreements on the protection of migratory sea birds with Japan and China (*Migratory Birds Ordinance of the Territory of Ashmore and Cartier Islands 1980*) and as a signatory to the *Convention on International Trade in Endangered Species* (CITES) (1976) on the protection of endangered wildlife including turtles.

The declaration of the reserve was the second step (the first being the 1974 MOU) in increasing control by Australia over Indonesian visits to and utilisation of Ashmore Reef. It was to have a significant effect on Bajo and other fishing in the region (Campbell & Wilson 1993:119).

The reserve covers 583 square kilometres encompassing three islands, reef shelf and surrounding waters to the 50 m bathometric contour, with some extensions beyond that contour to regularise the boundaries (ANPWS 1989:1) (see Map 11). The reserve is recognised to have high nature conservation significance with a rich and diverse marine life and because of its isolation a high degree of endemism. It is an important breeding ground for seabirds.
and as a staging point for migratory bird populations and breeding and feeding habitat for endangered marine turtles (ANPWS 1989:3).


With the declaration of the reserve, an increase in surveillance was instituted as part of the Australian Customs Service (ACS) Civil Coastal Surveillance Program. Regular patrols were undertaken by RAN ships, and sometimes chartered vessels with accompanying ANPWS and fisheries officers performed inspections of Indonesian fishing vessels. Air patrols by Coastwatch, a branch of ACS, were carried out on a random basis. Under the program, officers were briefed to board any Indonesian vessels in the reserve and fill out a report recording the vessel name; vessel type; presence of a motor; the location; the master's name and number of crew; the home port, and last port of call; details of any catch on board; and the number of days fishing in the reserve. Vessels were searched for evidence of protected species, crews were given warnings and provided with notices advising of the area's reserve status (ANPWS 1985a: 15–17).

In the ANPWS Annual Reports for the years 1983–1984 and 1984–1985 concerns were expressed about offences including damage to vegetation, un-authorised landings, the taking of seabirds and eggs, poaching and disturbance, and the capture and killing of turtles. (ANPWS
It was also reported that the well on Middle Islet was found to be contaminated with cholera (DFAT 1988:34, Senate Debate 21 August 1984 regarding Ashmore Reef National Nature Reserve). However this could not necessarily be attributed to Indonesian fishermen (Bergin 1989:15).

In August 1985, after a review of surveillance and law enforcement procedures at Ashmore Reef, it was announced by the Minister for Territories that in order for the external Territory to be effectively administered, a significant budget increase would be granted to establish a seasonal surveillance program to monitor and control the activities of Indonesian fishermen and to assert sovereignty. In 1985 a pilot program was undertaken with caretakers based in a camp on West Island during the latter part of the fishing season to monitor Indonesian activity, warn Indonesians of their responsibilities under the MOU, prevent infringement of landing rights and destruction of protected wildlife. For the 1986 fishing season a chartered vessel was stationed at Ashmore Reef as a base for caretaking operations (ANPWS 1986:23). All vessels visiting the reserve were boarded by contractors, and a boarding report completed.

In addition, ANPWS wardens regularly conducted surface patrols of the reserve with the assistance of RAN patrol boats. These were supported by additional aerial surveillance of the reserve and MOU areas by Coastwatch, RAAF and RAN aircraft. It was at this time that quantitative information on Indonesian voyaging and fishing activity in Ashmore Reef and other areas in the AFZ began to be collected.

During the years 1985–1986, 85 violations of the 1974 MOU were reported. Wardens searched 63 Indonesian vessels in order to ascertain the level of harvesting of marine products in the Reserve. From estimated catches of trochus shell, reef fish, shark, trepang and clam meat, it was reported that although the “crews rely on the reserve for subsistence (apart from water and rice)”, the increase in the harvest of trepang recorded during the year “may be in response to the re-opening of the markets in China rather than subsistence demand in Indonesia” (ANPWS 1986:23–24). This statement illustrates the confused use of the term “subsistence” and the lack of knowledge regarding the marketing and demand of certain marine products in Indonesia.

The ANPWS Annual Report for 1986–1987 repeated reports of violations by Indonesians and concerns over the impact on bird populations. It was also stated that based on information from various patrols and surveillance of the reserve carried out that year, the size and
number of marine sedentary species was declining and that Indonesians were attempting to use “hookah” gear (underwater breathing apparatus) to dive in the deeper waters of the reserve.

During 1986, because of continued violations of the MOU by Indonesians and concern over impacts of fishing activities on resources, the Australian government submitted a draft revision of the MOU to the Indonesian government to constrain the activities of the Indonesians (ANPWS 1987:18). Around the same time as the revisions to the MOU were being drafted, NT Museum was commissioned to undertake a research consultancy to investigate the impact of Indonesian fishing activities at Ashmore Reef (Russell & Vail 1988). ANPWS hoped this could be used to provide support for urgent action on a revised MOU with Indonesia (ANPWS 1987:18).

Their report covers an analysis of perahu visits for 1986, 1987 and 1988, results of interviews with crew of 13 perahu, and population data on the main marine species exploited by Indonesians based on fieldwork undertaken at Ashmore Reef in April and September 1987. As well as providing a useful compendium of information and analysis of voyaging activities, the consultants recommended two options for management of the marine environment at Ashmore Reef: (1) a complete ban on all fishing activities, (2) to permit a managed traditional fishery to continue (Russell & Vail 1988:139–143).

The consultants favoured the second option saying that Ashmore Reef had been a traditional fishing ground for Indonesian fishermen for a long time, in particular for fishermen from the villages of Oelaba and Pepela on Roti. Note the exclusion of mention of Bajo utilisation of Ashmore Reef. The report also stated a total ban on fishing would create economic hardships for the fishermen and their families, and in addition would be difficult and expensive to enforce. It outlined management practises which should be imposed to allow a traditional fishery to continue to operate using traditional gear and methods. It also recommended introduction of a licensing system and further research.

In 1989, the ANPWS prepared a Plan of Management for ARNNR (ANPWS 1989). It came into force in December 1990 and had effect for 10 years. The Plan made no mention of any future possibilities of allowing a traditional Indonesian fishery to operate. It states “The prime objective of the Reserve is the protection of marine and terrestrial habitats and wildlife. To achieve this it is necessary to maintain so far as possible natural processes undisturbed by people” (ANPWS 1989:43).
In order to offer “protection of the natural values of the Reserve” (ANPWS 1989:iii) and manage the Reserve, contractors are stationed at Ashmore Reef between March and December each year, living aboard a vessel. One crew member is appointed as a warden under the National Parks and Wildlife Conservation Act 1975 to enforce the legislation within the reserve and to inform fishermen of regulations. The first Indonesian vessel apprehended for wildlife violations occurred in 1988.

1988 and 1989 Amendments to the 1974 MOU

In August 1986 Australia submitted a draft proposal for a revised MOU for consideration by the Indonesian government. This outlined the necessity for changes. In November 1987 the revised draft was rejected by the Indonesian government. They preferred a more effective implementation of the existing 1974 MOU. The Indonesian government was then notified of the Australian government's further intentions in February 1988 in the form of a Third Person Advisory Note (Text of note setting out the Australian governments' understanding on implementation of the 1974 MOU from 1 March 1988, and Notes Supplementary to the Third Person Note on Indonesian Traditional Fishermen visiting the Australian Fishing Zone, DFAT 1988:54–65). The Australian government outlined developments since 1974 which made new arrangements necessary. These were: since 1978 the Territory of Ashmore and Cartier Islands had been administered as a separate Territory of the Commonwealth of Australia; in 1979 Australia had established a 200 nm AFZ; there had been an increase in the number of Indonesian fishermen visiting the AFZ and as a consequence a depletion of fisheries stocks around Ashmore and Cartier Islands; Australia was a signatory to international obligations to protect wildlife including wildlife in the Territory of Ashmore and Cartier Islands; the establishment of the Ashmore Reef National Nature Reserve in 1983; the contamination and drying up of wells on Middle and East islets of Ashmore Reef; the destruction of flora and fauna on the islands by Indonesian fishermen and other breaches of the 1974 MOU including unauthorised landings; and the use by Indonesian fishermen of non-traditional methods of fishing, including the use of motorised vessels and fishing gear powered by motors or engines (DFAT 1988:54–65).

The Indonesian government was also informed that from 1 March 1988, the 1974 MOU would be enforced by Australian authorities in accordance with Australian law, including laws related to conservation, customs and quarantine. For the Australian government, traditional fishing did not include fishing from vessels with motors or fishing gear employing motors or engines.
Only fishermen using paddle-powered or wind-powered boats and using lines or nets would be permitted in the MOU areas. Australia would apply its laws in regard to interference by Indonesian fishermen with flora and fauna in the Ashmore reserve and to fishermen fishing or taking sedentary species in the reserve. Landing rights were withdrawn from East and Middle islets, because the wells had either dried up or were contaminated, and instead fishermen could land on West Island for the purpose of obtaining water. Fishing activity would continue to be limited to 12 nm radius around specified islands, except at Ashmore Reef where fishing would not be permitted inside the reserve, but fishermen would be allowed safe anchorage in the channel to West Island (see Map 12). Any person convicted under the *Fisheries Act 1952* for taking fish outside the allowed areas could attract a maximum fine of $5,000 or may face forfeiture of boat, equipment, and contents. Likewise, convictions and imprisonment could apply to persons taking sedentary organisms from the Australian continental shelf outside the allowed areas. Giant clams and turtles, protected under CITES could no longer be taken in the allowed areas (DFAT 1988:54–65).


During the period 27 June to 1 July 1988 the Australian Ambassador to Indonesia visited Sulawesi and East Nusa Tenggara to inform Indonesian officials and fishermen of the new interpretation of the MOU and the ban on all fishing at Ashmore Reef (Campbell & Wilson 1993:133). In April 1989 officials from Indonesia and Australia met in Jakarta to discuss the
activities of Indonesian fishermen and review the operation of the 1974 MOU. They also discussed the activities of Indonesian fishing vessels operating in other areas of the AFZ including “non-traditional” vessels operating along the northwest coast and in the Arafura Sea (see Appendix 3: Agreed Minutes of Meeting Between Officials of Australia and Indonesia on Fisheries). Following discussions, both sides agreed to the requirements previously outlined by Australia in 1988. In addition, it was agreed that Indonesian traditional fishermen would be able to conduct fishing activity in a wider box area in the AFZ and Continental shelf (see Map 13). In order to improve implementation of the 1974 MOU, the Indonesian and Australian Governments adopted ‘Practical Guidelines for Implementing the 1974 MOU’ (see Appendix 3). Access to the expanded MOU area would continue to be limited to “Indonesian traditional fishermen using traditional methods and traditional vessels consistent with the tradition over decades of time, which does not include fishing methods or vessels utilising motors or engines” (Practical Guidelines for Implementing the 1974 MOU, 1989).
Map 13: Permitted area of access for Indonesian traditional fishermen in the Australian Fishing Zone as agreed to in Agreed Minutes of Meeting between Officials of Australia and Indonesia on Fisheries, 1989 (source: ANPWS 1989:62).
Developments in Australian Responses to Illegal Fishing Activity

The establishment of a 200 nm AFZ in 1979, new arrangements for traditional Indonesian fishermen agreed to in 1989, as well as a dramatic increase in illegal fishing activity by several other discrete groups of Indonesian fishermen and Australian responses to this activity, had a significant impact on policy towards illegal Bajo fishing. I trace these developments in Australian policy responses to illegal Bajo and other Indonesian fishing between 1985 and 1993, which resulted in the policy of apprehension, forfeiture and destruction of perahu as a solution to deter further illegal activity. Other government initiatives and policy responses to the problem of illegal Indonesian activity since 1993 are also considered. As a result of these developments, specific arrangements have developed in Darwin and Broome in order to process Indonesian fishermen. I begin with a discussion of these arrangements along with the process of apprehension of fishermen suspected of illegal fishing activity, procedures and conditions of fishermen whilst detained in Australia.

Administrative Arrangements, Processes and Conditions in the Apprehension and Detention of Indonesian fishermen

The Australian Customs Service (ACS) is tasked by the Government to provide a civil coastal and offshore surveillance and response service to a number of government agencies in order for them to carry out their portfolio responsibilities. These include AFMA, Australian Quarantine and Inspection Service (AQIS), Department of Immigration and Multicultural Affairs (DIMA), Department of the Environment, Sport and Territories (DEST), and the Australian National Parks and Wildlife Service (ANPWS). DEST was replaced by the Department of the Environment and Heritage in October 1997. ANPWS became the Australian Nature Conservation Agency (ANCA) in 1994 which then became Parks Australia, an agency under the Biodiversity Group of the Department of the Environment and Heritage. This service is provided by Coastwatch, a branch of ACS. Coastwatch manages and co-ordinates Australia's surveillance program using a combination of contracted aircraft, Defence patrol boats and aircraft, and sea-going vessels of the Customs marine fleet. Some of the components of the surveillance and response effort in the AFZ include that by 13 civilian contracted aircraft flying approximately 12,000 hours per annum, 250 hours of dedicated RAAF P3C Orion offshore patrol of the AFZ, and 1800 days provided by RAN patrol boats (Naylor 1995:1–4). Coastwatch co-ordinates the responses to detected breaches of Australian fisheries laws and other offences centrally from Canberra.
Perahu found operating in Australian waters are officially classified according to “the degree to which Western technology has influenced design” (Campbell & Wilson 1993:4). There are three main categories: Type 1 perahu are those with a traditional lateen rig such as *lete lete* sailed by the Madurese; Type 2 perahu are those with a western sailing rig most commonly *lambo*. Type 3 perahu are motorised, either with a sail and auxiliary motor (*perahu motor layar*), or with a motor only (*perahu motor*) (see Figure 5). This includes boats or ships larger to those Type 3 shown at Figure 5.
Figure 5: AFMA Classification of Indonesian perahu types found operating in Australian waters (after Cowan, Mellon & Anderson 1990:20).
When a suspected illegal foreign fishing boat is sighted and reported, AFMA (Compliance and Monitoring - Foreign Compliance Programs Section) in Canberra is contacted along with regional fisheries officers in Darwin or Broome. The information in the sighting report is assessed to determine whether a response action is warranted. This includes considering the likelihood of the existence of evidence necessary for a prosecution or whether further investigation is warranted (Anonymous 1990:18). If a response action is required usually a Naval patrol boat with a fisheries officer on board is directed to the area, locates the boat and a boarding party including a fisheries officer and naval crew are dispatched. The captain is questioned about his activities often through the use of Indonesian language cards. A Fisheries Vessel Reporting System report (Fishreps) is compiled and a boarding report is completed by fisheries officers. This information is wired to Canberra for assessment by AFMA and a decision is made whether sufficient evidence of illegal fishing activity is available and therefore the boat and crew apprehended. If AFMA in Canberra has approved apprehension the captain is informed and the vessel is towed to either Darwin or Broome for further investigation and prosecution. Under the Fisheries Management Act 1991 fisheries officers and members of the Defence Force are authorised to question and detain fishermen suspected of committing an offence under the Act.

On arrival in either Broome or Darwin, a significant number of Australian government agencies are involved in the detention, prosecution and repatriation of fishermen. These agencies include the Australian Quarantine Inspection Service, Department of Immigration and Multicultural Affairs (DIMA), the Australian Customs Service, the Department of Health and Community Services, the NT and WA Correctional Services Departments, the Legal Aid Commissions of WA and the NT, the Commonwealth Director of Public Prosecution, the Magistrate Courts of Darwin and Broome, Department of Foreign Affairs and Trade and the Department of Primary Industries & Energy.

A significant level of Commonwealth funding is involved. The government provides AFMA with funds to meet the cost associated with action arising from apprehension of illegal fishing vessels. The funds meet costs of interviewing offenders, maintaining seized vessels, housing and maintaining crew and court costs.

In Broome and Darwin, AFMA's functions are carried out by officers of the NT and WA Fisheries Departments who are agents of AFMA and authorised to act under the Fisheries Management Act 1991. The fishermen are held in immigration detention and AMFA is
responsible for them. After arrival, formal processes of immigration, health and quarantine checks are completed. Custody of the boat is formally transferred to the Fisheries Authorities and they commence investigations into the alleged offences. The captain/and or crew are charged by summons and a court date sought.

In Broome boats and fishermen are held at Willie Creek, an isolated coastal property 20 km north of the town. Boats are anchored in the bay at the mouth of the creek and fishermen are free to move between their boats and the property (see Photo 30). Facilities are basic and include a partly finished recreation building and a limited accommodation block (see Photo 31). Generally fishermen sleep on their boats. The property is owned and operated by a private contractor responsible for the care and security of the fishermen and their boats. At Willie Creek fishermen are questioned and given access to the Indonesian consulate in Perth by phone. In the past the Legal Aid Commission initially provided representation for the captains. However, Legal Aid ceased providing representation for fishermen, in most cases due to a lack of resources (Campbell & Wilson 1993:128). AFMA supplies an interpreter used for questioning and during appearances in the Broome Magistrates Court.

Photo 30: A Bajo perahu lambo at Willie Creek detention area, with recreation building and craetaker's home located in background.
In Darwin, fishermen are held on their boats, anchored some 300 – 400 m off Stokes Hill Wharf in a designated Quarantine mooring area in Darwin Harbour (see Photo 32 and Photo 33). Men are confined to their boats. A NT marine charter company, Barefoot Marine, under contract to AFMA, is responsible for caretaking services including maintaining the boats, security and enforcing the quarantine zone, supplying food, water and transporting the fishermen to and from the land to attend meetings, the court and receive medical attention if necessary. In Darwin, access to interpreters, Legal Aid representation and the Indonesian Consulate in Darwin, are generally better than services available in Broome.
Photo 32: Indonesia fishing boats anchored in the Quarantine mooring area, Darwin harbour.

Photo 33: A Bajo perahu *lanbo* crew confined to their boat during the wet season in Darwin harbour. Stokes Hill Wharf and Darwin city in the background.
The period of time fishermen are detained in either Darwin or Broome depends on the judicial process. On average this period extends for around 3–4 weeks but in some cases fishermen have been held for much longer periods - up to 5 months - pending availability of Legal Aid, and court dates. In cases where fishermen have been given jail terms for repeat offences they are held at Broome Regional Prison or Berrimah Prison in Darwin. Fishermen are repatriated by plane usually to Kupang or Bali and from there they are sometimes met by the Indonesian Social Department who may provide some food, and money for costs for additional transportation to reach their home villages. But this is erratic. Forfeited boats and equipment are destroyed by burning at Willie Creek and along a coastal strip in Darwin. In some cases boats, equipment and engines are sold or auctioned by AFMA.

**Perahu Apprehensions in Darwin and Broome 1985–1993**

Although fishing outside the allowed areas in the expanded AFZ became illegal in 1979 it was six years before any vessels were apprehended. In 1985 five Bajo boats were apprehended for illegal shark fishing inside the AFZ and towed to Darwin. These were the first Indonesian perahu to be brought to Darwin to face charges of illegally fishing in the expanded AFZ.

The apprehension of the first four perahu was part of a surveillance program of northern waters called ‘Operation Roundup’. On 27 February 1985, a RAAF Orion aircraft on a surveillance flight sighted 12 Type 2 Indonesian fishing vessels between 30 and 60 miles northwest of Cape Van Diemen, Melville Island (NT). On 28 February the HMAS *Ipswich* was directed to relocate the vessels. Later that day the *Ipswich* arrived in the area and located and boarded two Indonesian fishing vessels the *Cari Damai* and *Usaha Selamat* to the north of Melville Island at position 10°33 South and 130°09.5 East. At the time of boarding it was discovered that both vessels, each with a crew of 9, were from Wangi Wangi and had quantities of fresh and dried shark fin on board. At the time of boarding the captain of *Usaha Selamat* stated there were up to twenty vessels from Wangi Wangi fishing in the area to the west and north. Both vessels were subsequently taken in tow for Darwin (NTAPP 9005).

On 1 March a RAAF plane relocated several Indonesian fishing vessels northwest of Melville Island. The police boat *Pobassoo* was despatched from Darwin to rendezvous with HMAS *Ipswich* to continue the tow of the two vessels. HMAS *Cessnock* also departed Darwin and was directed to the area to relocate the vessels. The AFS in Darwin chartered the MV *Pacific Adventurer* to go to the search area and assist the *Cessnock*. HMAS *Cessnock* made visual
contact with 7 Indonesian vessels, one of which was boarded. But it left to pursue other vessels further north. On 2 March HMAS Cessnock apprehended two more boats, Tenaga Atom and Tunas Muda, and took them in tow to rendezvous with Pacific Adventurer (NTAPP 9005).

In a Record of Interview on 6 March 1985, conducted by a Fisheries Officer and an Interpreter, the captain of Usaha Selamat, Usman Basirang, was asked:

Q31. Do you have any knowledge of such a thing called the Australian Fishing Zone?

A31. No I don't know.

Questioning continued, and he replied:

A39 I've been sailing from Masela Island for one night and one day. That we used to sail that length of time will still keep us in Indonesian waters therefore I don't think I have been in Australian waters.

Q40 At what speed would you think that your ship would do at the time you are talking about.

A40 I don't know the speed.

Q41 Was there a strong breeze at the time you are talking about?

A41 Yes. That's why we take some sail down.

Q42 Do you have anything else you wish to say?

A42 Therefore I don't feel guilty.

Usman also stated that he was from Mola and the vessel belonged to his parents. He and his crew had departed Mola on 31 January and in the last seven days had caught shark, most of which they were intending to sell back in Mola for Rp3,500 a kilogram. The remainder was to eat (NTAPP 9005).
The captains of *Usaha Selamat* and *Cari Damai* were charged with using a fishing boat for taking fish in the AFZ without a license under section 13B of the *Fisheries Act 1952*. They appeared in Darwin Magistrates Court on 8 and 11 March 1985. The captains, represented by a solicitor from the Legal Aid Commission of the NT, pleaded guilty to the charges, even though Usman had said he did not feel guilty. The defence gave evidence that the vessels were wooden sailing boats, had no charts or navigational gear, and only poor quality compasses. The Australian Government Solicitor sought an order for forfeiture of the catch and the fishing gear on board the vessel. This was opposed by the Legal Aid Solicitor. Magistrate Sally Thomas ordered the men be convicted but not fined stating they had no means to pay, and that she could not order forfeiture of vessels. Instead she ordered the fish and equipment be forfeited with the exception of the canoes, and that the defendants be allowed to keep enough fish and fishing equipment to provide sustenance for the crew on the journey back to Indonesia (NTAPP 9005).

The captains of the other two vessels, *Tenaga Atom* and *Tunas Muda* were not charged. A telex from Coastwatch in Canberra to NT Fisheries in Darwin dated 12 March 1985 explains why:

> On information provided by Foreign Affairs, it appears that in 1981 an agreement was made with the Indonesian government that none of their boats be apprehended in a “hot pursuit” situation. As a result of this there will be no prosecution of the second two boats *Tenaga Atom* and *Tunas Muda* that arrived in Darwin harbour on Sunday 3 March 1985 (NTAPP 9005).

On 12 March, all four vessels departed Darwin under tow of *Pacific Adventurer* to the outer limit of AFZ. The cost of chartering the *Pacific Adventurer* was $1,200 a day (NTAPP 9005).

The fifth vessel, *Bunga Mawar*, was also apprehended in March and towed to Darwin. The Fisheries File however, does not contain any information regarding the prosecution of the crew. The only reference to this vessel is in a telex from AFS in Canberra to NT Fisheries dated 19 March 1985, where a request is made for NT Fisheries to arrange a charter vessel to escort the convicted vessel *Bunga Mawar* to the edge of AFZ (NTAPP 9005).

A change occurred in the late 1980s that was to have a significant effect on the operations of Bajo and other Type 2 vessels operating outside the allowed areas. At this time, several
waves of distinctly different groups of Indonesian vessels had begun operating illegally in the AFZ, signalling a dramatic increase in apprehensions.

Late 1987 and early 1988 saw the beginning of a wave of illegal activity by Type 3 motorised vessels (perahu layar motor) seeking access to trochus beds along the Kimberley region especially at King Sound and further south at Rowley Shoals. The majority of boats and crews originated from a number of islands in Southeast Sulawesi (eg. Maginti, Masaloka, Kadatua, Buton) and a few from Pepela. They comprised men from Bajo, Butonese and Rotinese ethnic groups. Trochus voyaging was due to a rise in the price of trochus shell in the late 1980s, the over-exploitation of the shell in Indonesian waters and other socio-cultural reasons impinging on the lifestyle of these groups (Reid 1992:4). With the exception of men from Pepela, this group of Indonesian fishermen do not appear to have a long history of voyaging in the north Australian region. Unlike the Bajo and Madurese in that regard, they constitute a “separate and discrete form of Indonesian fishing in the AFZ” (Campbell & Wilson 1993:161).

Between 1987 and 1990, 67 trochus boats were apprehended in Australian waters and taken to Broome. The first was apprehended in November 1987. In 1988, 20 vessels were apprehended, a further 16 in 1989, and 31 during 1990. In almost all cases, vessels, catch and equipment were confiscated and destroyed. In the mid to late 1970s, when Pepela and Bajo boats were illegally targeting trochus shell along the northwest coast, the majority of boats were warned but not apprehended, with the exception of two vessels in 1980. However, due to this unprecedented influx of motorised vessels on the northwest coast, a policy of boat apprehensions and forfeiture was adopted as a “solution” to deter further incursions (JSCFADT 1993:123). In addition, large numbers of captains and crew unable to pay fines for convictions under various legislation were jailed in Broome Regional Prison. This was also the time when periodic boat burnings were introduced as a further deterrent (Reid 1992:7; Campbell & Wilson 1993:136). The sentiment at this time is expressed in a reply to a question without notice made by the Minster for Defence, Senator Robert Ray in a Parliamentary debate on costs to the Australian Defence Force of surveillance and interdiction operations against illegal foreign fishing vessels:

> The boats themselves are deliberately of a very low quality so that when they are seized they cannot be sold. About the only fate for them is an annual burning and the sending of photos back to Indonesian fishing villages as a warning (Senate Weekly Hansard, 23 May 1990 Senate, p. 882).
In 1991 only four trochus boats were apprehended. In 1992 none were apprehended and in 1993 there were four. It has been argued by Fisheries that the decline in trochus incursions was due to improvements in surveillance and enforcement measures against illegal activity such as apprehensions, perahu confiscations and imprisonment of crew (JSCFADT 1993:120). However, Campbell and Wilson (1993:190) argued that such policy directives were largely ineffective, and possibly encouraged trochus incursions, in particular, repeat offenders, and that such policy measures may not be the most effective way of deterring incursions. They also argue that a decline in the price of trochus shell and other socioeconomic factors may also have contributed to a decrease in incursions (Campbell & Wilson 1993:60).

In late 1988, another kind of illegal activity began in the northern Arafura Sea. Between October and November 1988, 25 large scale well equipped Type 3 boats were apprehended from an area to the south of the Aru Islands inside the AFZ. All but one originated from Dobo and all were targeting shark using large gill nets. Some of the captains and crews were wage labourers. In Darwin all captains were charged and found guilty under Section 13AB(la) and 13B(5) of the *Fisheries Act 1952*. Vessels, gear and catch were confiscated, two skippers were fined and all captains were placed on good behaviour bonds (Campbell & Wilson 1993:162–163). This group of vessels were the first of several waves of illegal activity by motorised perahu targeting shark fin and reef fish in the Arafura Sea (Campbell & Wilson 1993:163).

More of these large-scale shark boats were apprehended in 1989 (20 boats) and 1990 (11 boats). By June 1990, there was a decline in incursions and in 1991 only two industrial boats were apprehended. However, they rose again in the first half of 1992 to seven (all targeting shark with the exception of one boat targeting tuna) (Campbell & Wilson 1993:163–165). During the second half of 1992, there were nine illegal incursions of “ice boats” targeting reef fish (AFMA Apprehension list 1992). These are similar in technology to the industrial shark boats. They fish in an area in the northern AFZ known as the Timor Box, a rich reef fishing ground straddling the Australia-Indonesia border.

In November 1990, two motorised Type 3 perahu (*perahu motor lay or*) similar in technology to the trochus boats were apprehended for shark fishing a few miles inside the AFZ. Then in March 1991, 29 of these perahu were apprehended. All captains were convicted for illegally fishing for shark in the AFZ under the *Fisheries Act* and perahu, catch and equipment confiscated. The fishermen were Butonese or Bajo and had come from a number of settlements and islands in South Sulawesi (Bonerate, Karompa and Kalatoa Islands), Southeast Sulawesi
(Binongko Island), East Nusa Tenggara (Wuring village, Flores, Pomana Besar Island and Alor) and from Dobo in the Aru Islands (Fox 1992; Stacey 1992; Campbell & Wilson 1993:165–174). All had sailed to Dobo and then south into the AFZ where they fished for shark using longline gear. No more of these shark boats were apprehended in 1992. In the short term it appeared that the policy of forfeiture deterred further incursions (Campbell & Wilson 1993:188). However boats were apprehended again in 1993, a situation that continues to the present day.

Around the same time as large numbers of trochus boats were being intercepted on the northwest coast, three Type 2 perahu were apprehended in the MOU allowed areas in relation to new interpretations of the 1974 MOU.

On 19 May 1988, seven crew originating from the village of Suoi, opposite Pepela on Roti, in Karya Sama, an unmotorised perahu lambo, were apprehended at Ashmore Reef National Nature Reserve. They had been collecting eggs and killing seabirds at East Island protected under the National Parks and Wildlife Conservation Act. As a result the vessel and crew were escorted to Darwin, charged under the Act and convicted. In order to deter further infringements it was strongly recommended by ANPWS that the harshest penalty would be confiscation of boat, rather than confiscation of catch or jail sentences. The captain and crew were placed on a good behaviour bond of $50.00 for two years. The crew were repatriated and the vessel forfeited and later donated by the ANPWS to the NT Museum (Karya Sama File ANPWS 1988; Stacey 1997). The Karya Sama is held in the ethnographic watercraft collection of the Museum and is on display in the Boat Shed Gallery.

In early July 1988 two perahu, Cahaya Indah and Alam Niaga, from Pepela, were apprehended fishing for trepang and trochus shell and escorted to Broome. Both Type 2 vessels had auxiliary engines installed and had been fishing for trepang around Scott Reef. The apprehension was in response to a policy change by Australia after the revised MOU was rejected by Indonesia. From 1 March 1988, the Australian authorities adopted the new definition of “traditional” that excluded all boats using motors in the allowed areas. Both captains were convicted and their vessels, catch and equipment were confiscated (WAFF 16/88 Cahaya Indah & WAFF 17/88 Alam Niaga; see also Campbell & Wilson 1993:132–133). Since then most Pepela and Bajo fishermen have largely complied with the no motor rule in the MOU areas.
In 1990 two Bajo perahu were apprehended for fishing illegally (WAFF 40/90 & WAFF 41/90). On the 29 March, *Kenangan Indah* was boarded some 20 nm north of Maret Island in the Bonaparte Archipelago off the Kimberley coast. An inspection of the vessel by a WA Fisheries Officer revealed the crew had been shark fishing with handlines and shark rattles. Both fresh and dried quantities of shark fin and flesh were found onboard, along with reef fish for bait. Two whole shark, recently caught, were lying on the deck. The captain, Samading, and 7 crew had left Kaledupa on 15 March and sailed to Roti, departing on 26 March to Ashmore and to their current position. *Rahmat Ilahi* 2 was boarded approximately 30 nm north of Maret Island. An inspection of the vessel revealed handlines, shark rattles, fresh and dried shark fin, meat and carcass. The captain and owner of the perahu, Lalbu, and 7 crew had left Wangi on 20 February, sailed via 6 islands to Roti, departing on 26 March to Ashmore and to their current position. The WA Fisheries Officer recommended a severe reprimand and warning for the crews but AFS in Canberra advised the Fisheries Officer to apprehend the vessels and take them to Broome.

Both captains pleaded guilty to charges under sections 13AB(1) and 13B(1A) of the Commonwealth *Fisheries Act 1952* and were placed on two year good behaviour bonds of $2,000. The vessels, catch and equipment were forfeited and the fishermen repatriated to Indonesia. These were the first Bajo vessels to be confiscated for illegal fishing activity in the AFZ even though perahu had been operating outside the allowed areas for years.

The forfeiture of these two perahu in 1990 represented a change in the treatment of Type 2 vessels found operating outside the permitted areas. By then, the policy of apprehension and confiscation of illegal motorised fishing boats was well established in both Broome and Darwin. The decision of the court in Broome to confiscate the vessels was influenced by the large number of apprehensions and confiscation of trochus boats there over the previous three years.

Based on conversations with WA Fisheries officers, Campbell and Wilson (1993:179) stated perahu which had been engaged in shark fishing for many years in the Timor Sea did “not constitute a serious problem” when Australia increased its AFZ to 200 nm since the vessels remained well out to sea. WA Fisheries officers generally tolerated shark boats operating between the coast and the MOU areas, and in most cases boats were only warned if found operating too far from the allowed areas. This is also supported by Fisheries boarding reports of Bajo perahu dating from 1979 documenting shark fishing activities, fishing grounds and
fishing gear. From 1981 onwards, the label “shark fishermen” or “shark boat” begins to be used on boarding reports generally referring to Bajo perahu from Mola and Mantigola. AFS boarding report records show a pattern of repeated visits by many of the same Bajo perahu in successive years between 1979 – 1989. Over this period Bajo perahu have been boarded on a number of occasions both inside the allowed areas and in the areas where fishing is not permitted. Locations in the AFZ where Bajo boats were boarded include Adele Island, Troughton Island, Cassini Island, in the Kimberley region, and in an area stretching along the Sahul Banks from Adele Island in the west across the Sahul Shelf to east of Cartier Island, along the Sahul Banks in the north. Perahu have also been boarded in the allowed areas - Ashmore Reef, Cartier Island, Scott Reef, and Browse Island as well as to the east of allowed areas (AFS Indonesian Database, WA). Regular contact with Australian authorities generally did not end in apprehension. Even if vessels were apprehended they were not confiscated. However, this unofficial tolerance ended in 1990 with the AFS taking a stricter approach to illegal fishing by Type 2 vessels, brought about by high levels of illegal activity by trochus boats. Heightened surveillance of the WA coast at this time also resulted in an increase in the apprehension rate of trochus boats and other perahu operating illegally in the AFZ (Campbell & Wilson 1993:160)

In October 1990, two more perahu from Mola, the Wisma Jaya (NTAPP 9004) and Usaha Selamat (NTAPP 9005), were apprehended and taken to Darwin. The Wisma Jaya on 5 October 1990 was approximately 20 nm northwest of Troughton Island, off the Kimberley coast. At the time of apprehension, the crew were engaged in shark fishing using handlines and shark rattles (see Photo 34 and 35). The captain, Kaboda, pleaded guilty to charges under sections 13B(5) and 13AB(1A) of the Fisheries Act 1952. He was convicted on both counts and placed on a 12 month good behaviour bond of $500 for one year. The vessel, catch and gear were forfeited. The report concerning disposal, deemed the vessel to be in a poor condition, valued at $800, and recommended it be destroyed along with the fishing gear, and the shark fin sold by public tender (NTAPP 9004).
Photo 34: *Wisma Jaya* apprehended for illegal shark fishing in the Australian Fishing Zone in 1990 (Photograph courtesy of WA Fisheries Department).
The *Usaha Selamat* was apprehended on 13 October at 1.30 am approximately 15 nm west of Bathurst Island. The captain, Usman Basirang, was previously apprehended in the same perahu in 1985. At the time of boarding, the fisheries officer found freshly caught shark, handlines and shark rattles, and 200–300 kilograms of shark fin and flesh on board. Usman pleaded guilty, was convicted and placed on a three year good behaviour bond of $200. The vessel, catch and equipment were forfeited. The *Usaha Selamat* was deemed to be in a fair condition valued at approximately $1,200. In the report concerning the disposal, it was recommended that the *Usaha Selamat* be transferred to the Navy in Darwin to be used in familiarisation boarding training exercises for naval crew, and the shark fin was sold by public tender (NTAPP 9005).

In October 1991 five vessels *Sinar Jaya* (NTAPP 9131), *Kota Alam* (NTAPP 9132), *Asean* (NTAPP 9133), *Toyota* (NTAPP 9134), and *Suka Damai* (NTAPP 9135) were apprehended and taken to Darwin. All vessels originated from Mola and were targeting shark using handlines and shark rattles in an area to the north of Joseph Bonaparte Gulf, and to the west of Bathurst Island in the Northern Territory.
They were apprehended at positions between approximately 38 nm and 97 nm inside the AFZ. All the captains pleaded guilty and were convicted under Sections 13B(5) and 13AB(1A) of the *Fisheries Act 1952*. Each captain received a 12 month good behaviour bond of $200. In all cases the vessels, catch and equipment were forfeited and with the exception of *Toyota*, which was sold to a Darwin restauranter, all vessels were destroyed by burning.

In April 1992 a further three Bajo perahu from Mola, *Jaya Harapan* (NTAPP 9205), *Usaha Baru* (Green) (NTAPP 9206), and *Usaha Bam* (Blue) (NTAPP 9207) were convicted of fisheries offences in Darwin Magistrates Court. On 20 March, three perahu had been located approximately 2 nm inside the AFZ by a RAAF P3 Orion aircraft on a surveillance flight as part of an Australian Military Defence exercise “Kangaroo 92”. On 23 March, during a surveillance sweep as part of the exercise, HMAS *Cessnock* sighted three perahu within a 2 nm radius approximately 22 nm inside the AFZ. HMAS *Derwent* and HMAS *Cessnock* investigated the boats, and one perahu was boarded and the crew warned. The perahu were observed to have set lines in the water. Subsequently all three perahu recovered their lines, hoisted sail and proceeded to the north. Later that day the naval ships were ordered to relocate the vessels, and carry out an investigation of the boats with a view to apprehension. The vessels were boarded at a position approximately 15 nm inside the AFZ, to the north of Bathurst and Melville Islands. It was suspected the crew had been fishing with handlines, shark rattles and one boat *Usaha Baru* (green) had a small longline with 37 hooks on board. At the time of boarding it was observed that the *Usaha Baru* (green) had 10 kg of dried fish, 10 kg of shark fin and 5 kg of fresh whole shark. The *Usaha Baru* (blue) had 25 kg shark flesh, 15 kg of fresh shark fin and a fresh whole shark and three lines set. The *Jaya Harapan* had 2 kg of fresh fish on board and two lines set. The vessels were apprehended and towed to Darwin (NTAPP 9205; NTAPP 9206; NTAPP 9207).

Each of the captains were charged under sections 100(2) and 101(2) of the *Fisheries Management Act 1991*, that had just come into force replacing the 1952 *Fisheries Act*. Unlike previous trials in 1990 and 1991, their case was strongly defended by a Legal Aid lawyer, who was supplied with information from a number of local Darwin sailors and perahu owners who had previously visited Mola, and the fishermen pleaded not guilty to the charges. It was argued by the defence that the boats had been becalmed and carried south into the AFZ by a strong current; that the longlines extending from the perahu at the time of boarding were drag-anchors intended to stop the boats drifting further inside the AFZ; and that the shark had been caught
while in Indonesian waters and the fishermen were only fishing for food to stay alive. The defence also argued, based on precedent from 1985, that the amount of catch was insignificant to warrant forfeiture of the vessels and such a decision would result in severe economic hardships for the crews as well as their families. The prosecution called for forfeiture of the boats, following precedents set in previous cases, that would continue to act as a deterrent (NTAPP 9205; NTAPP 9206; NTAPP 9207; Fox 1998:133). The captains were convicted and placed on two year good behaviour bonds of $1,000. However, in contrast to previous cases, the Magistrate decided the offences were not serious enough to warrant forfeiture of vessels. Instead he ordered forfeiture of the longlines, hooks, floats, shark rattles and one canoe each, but ordered the fishermen keep their handlines to enable them to fish for subsistence on the journey back to their village (NTAPP 9205; NTAPP 9206; NTAPP 9207; Fox 1998:133).

The same treatment was not afforded nine Type 2 perahu apprehended and taken to Darwin between September and November 1993. In September 1993 six perahu from Pepela Titian Muhibah (NTAPP 9302), Bintang Selamat (NTAPP 9303), Tegal Baru (NTAPP 9304), Usaha Remaja (NTAPP 9305), Sari Idaman I (NT APP 9306) and Sari Idaman II (NTAPP 9307) were apprehended and taken to Darwin. All had been fishing for shark fin using longline gear and most had been warned previously. All these cases were heard together with the exception of Sari Idaman I. All captains pleaded guilty to charges under sections 100(2) and 101(2) of the Fisheries Management Act 1991. During the court hearing the catch of shark fin for each perahu was valued at between US$2,000 to $4,000 by the Prosecution. This was the first time such a value had been put on a shark fin catch. The value seems to be too high and the prosecution did not state how much one kilogram of fin was worth. In the case of Sari Idaman I whose case was heard later that month, the same prosecutor stated shark fin currently fetched US$50 a kilogram. The perahu Tegal Baru had a forfeited catch of 19 kg of semi dried shark fin. According to prices quoted, this would be worth US$950, a significant amount less than the value quoted in court - US$3,000. The presiding Magistrate saw their intrusion as severe, stating that Australia had to “protect its fishing grounds from foreign exploitation since the fishing industry yields large profits” and that “forfeiture is the only solution…if forfeiture was not imposed, others will follow”. All equipment, catch and vessels were confiscated and four captains received five year good behaviour bonds of $5,000, one received 12 months and $2,000 and another a bond of $200. The vessels were inspected, deemed to have a value of between nil to $500, and destroyed by burning (see Photos 36–39).
Photo 36: Confiscated perahu *lambo* towed to the coast, and driven into the embankment in Darwin, 1993.

Photo 37: Boats are dragged out of the water on to the land.
Photo 38: Six boats are pushed closer together by a front-end loader.

Photo 39: The boats are destroyed by burning.
The fate of three other perahu apprehended during September and November of 1993 followed the same treatment with convictions and forfeiture of vessels, catch and gear. *Kembang Sari* (NTAPP 9309) and *Dasar Usaha* (NTAPP 9310) were both apprehended on 30 September, towed to Darwin and went to court on 11 October. Crews and perahu originated from Lasilimu in south Buton and Ereke in north Buton, with mixed Bajo and Butonese crews. The *Alam Baru* (NTAPP 9308) was the first boat from Oelaba, Roti to be apprehended and convicted for illegally fishing in the AFZ. Boats from Oelaba fished for sedentary products in the past, but some crew had turned to shark fishing. During the case the presiding Magistrate Mr. Harmon stated: “give them an inch and they take a mile - that's what they're doing”.

From 1987, an increase in illegal activity in the AFZ by a number of different groups of Indonesian fishermen and the perceived threat this exploitation may have on Australia's natural resources, led to a policy of apprehensions, forfeiture and the destruction of perahu. This approach was adopted by the Australian government as a “solution” to deter further illegal Indonesian fishing (JSCFADT 1993:123).

From 1990 there were major changes in policy and legal treatment of Type 2 boat fishermen found operating outside the allowed areas. The Australian government adopted a “harder line” (Campbell & Wilson 1993:179) towards illegal fishing activity in unmotorised perahu, resulting in confiscation of vessels and gear, and in most cases, the destruction of perahu.

At no time during the court proceedings of the cases of Bajo and Pepela perahu discussed above was reference made to the fact that some of these fishermen were operating under the terms and conditions of the 1974 MOU and considered to be “Indonesian traditional fishermen”. Although their vessels had no engines and the shark fin catch was relatively small, they have been treated in the same fashion as the crew of a large industrial motorised fishing vessel using high-tech navigation equipment with an ability to harvest significant yields. In the brief of evidence for the case of *Usaha Selamat* in 1990 the only reference made to the MOU was in regard to the position of the perahu at the time of its apprehension. Similarly, as noted by Fox (1998:134) concerning the case of the three Bajo perahu apprehended and allowed to sail home in 1992:

> At no time in the legal proceeding was any attention given to the Bajau as a specific population with the longest historically documented evidence of fishing in the Australian Fishing Zone. Nor were the Bajau distinguished from any
other Indonesian fishermen. And even if this were to have been noted, it would have had no bearing on the case in terms of the Fisheries Act. A historical perception of the problem was irrelevant (Fox 1998:134).

In the short term, it appeared that the policy had been effective in deterring further incursions by Type 3 vessels since by 1993 there was an overall decline in the number of apprehensions. However, since 1993, there has been a steady increase in the number of Type 2 and Type 3 vessels apprehended in the AFZ each year. Apart from a small number of exceptions, nearly all apprehensions have resulted in confiscation of vessels, catch and gear.

**Further Responses to the Problem of Illegal Indonesian Incursions in the AFZ**

In 1993 the results of a Joint Standing Committee on Foreign Affairs, Defence and Trade (JSCFADT) investigation into Australia's Relations with Indonesia was published. In the foreword of the report, it was noted “the inquiry had its origins in concerns about illegal fishing off the north and north west coast of Australia” (JSCFADT 1993:xxvii). One section of this report deals with Fisheries Issues (JSCFADT 1993:113–128): it focuses on the issue of illegal Indonesian fishing in Australian waters. Submissions to the inquiry were made by Campbell and Wilson, Fox, as well as the DPIE and WA Fisheries Department. As a result some of the inconsistencies and problems in Australia's policy and treatment towards traditional Indonesian fishing were highlighted and possible solutions canvassed.

In respect of Indonesian fishing in Australian Waters, the Committee concluded that illegal Indonesian fishing (for shark or trochus) in Australian waters is driven by two main factors: firstly the “monetary gain from a successful voyage which could amount to two or three months income for poor fishermen”; and secondly, because of “resource depletion in Indonesian waters” (JSCFADT 1993:128). The Committee also added that in addition, “the general lack of development and a poor range of alternative occupations in Eastern Indonesia” also contribute to illegal fishing (JSCFADT 1993:128).

The Committee outlined some unresolved issues and made a number of recommendations, which included: standardising the treatment of illegal Indonesian fishermen under the different State, Territory and Commonwealth Legislation; consideration of aquaculture (trochus) projects; and joint management of marine resources with Indonesia (JSCFADT 1993:130). In addition, they were of the opinion that “illegal fishermen are Indonesian nationals and there are limits to the actions the Australian government can take. It is the Indonesian
Government's responsibility to attempt to prevent nationals from fishing illegally in Australian waters” (JSCFADT 1993:129).

The Committee also concluded that there were “problems” with the current 1989 MOU, with regard to the definition of “traditional”, and the shark fishing grounds of Southeast Sulawesi fishermen “were not catered for” in the 1989 MOU (JSCFADT 1993:129). They went on to say “if there are deficiencies in some aspects of Australia's handling of the problem of illegal fishing they were probably caused in part by a lack of knowledge about complex social and economic situations in eastern Indonesia” (JSCFADT 1993:129). In the Committee's view the 1974 MOU “does not adequately deal with all categories of Indonesian fishermen” operating off the coast of WA, and considers it “appropriate to reconsider all aspects of illegal fishing with the involvement of Indonesian authorities” (JSCFADT 1993:131). Furthermore, the Committee recommended, based on Campbell and Wilson's submissions, an examination of the MOU using the Torres Strait Treaty as a model with regard to “the definition of ‘traditional’ fishermen to provide broader categories which take account of a wider range of nautical, cultural and historical factors” and an “examination of the feasibility of a re-negotiation of the MOU to ensure the allowed areas coincide as far as practicable with historical fishing patterns” (JSCFADT 1993:131).

Since the publication of these results in November 1993, none of the recommendations appear to have been implemented. Instead policy continues to focus on a high level of surveillance of the northern AFZ, apprehensions and prosecutions. In addition three other main initiatives have been instigated: commissioning of a review of Indonesian fishing activity in the AFZ by the Commonwealth Department of Primary Industries and Energy (DPIE) in 1994, the formation of an Interdepartmental Committee in Canberra in 1995 to look at issues of illegal Indonesian fishing in the AFZ and solutions to the problems; and in 1995, the first of a number of educational campaign visits to eastern Indonesia.

In November 1994, the Fisheries Resources Branch of the Bureau of Resource Sciences, (DPIE) was commissioned by the Fisheries Policy Branch of DPIE to undertake a review of Indonesian fishing in the AFZ. The project was proposed in response to concerns by the Fisheries Policy Branch, the Australian Fisheries Management Authority (AFMA) and the domestic fishing industry in northern Australia, that Indonesian fishing catches may account for a substantial proportion of the recommended allowable catch for some target species (Wallner & McLoughlin 1995a). The findings of this review are contained in an unpublished report
by Wallner & McLoughlin (1995a). However, a summary of this report has been published (Wallner & McLoughlin 1995b). The report assesses the nature and extent of Indonesian fishing activity in the AFZ and determines the impact of fishing on the marine resources in the AFZ through an analysis of information from various government departments and offices including AFMA, ANCA, Coastwatch, and WA Fisheries. They examined five different fisheries operating in the AFZ and found that “there are different ethnic groups, fishing in different areas, using a number of methods and a range of technologies” (Wallner & McLoughlin 1995a: 13). They classify the different fisheries based on target species and fishing methods. These are: Shark line and longline fishery; Shark gillnet fishery; Sedentary species (trochus/trepan) fishery; Demersal finfish, fishery and Tuna longline fishery. They provide some recommendations for future management of the fisheries resources and ways of improving the information base, as well as alternative strategies to deal with traditional Indonesian fishermen operating in the MOU area. Without reference to any particular group of Indonesian fishermen, Wallner & McLoughlin (1995a:32) concluded that current illegal Indonesian fishing activity has a minor impact on marine resources and environment. They also concluded that “it would appear surveillance, enforcement and prosecution efforts have been effective in minimising illegal fishing activity” in the AFZ (Wallner & McLoughlin 1995a:32; 1995b: 121). However, they stated that the management of resources in the MOU still needs to be determined by granting “priority access rights” in the form of limited licensing arrangements to “fishers who can demonstrate an historic interest in these waters” (Wallner & McLoughlin 1995a:33). Access rights should be based on a limited license entry fishery and conditions should not be limited by technology considerations (Wallner & McLoughlin 1995a:34–35).

An Inter-Departmental Committee was set up in Canberra in 1995 to look at issues of illegal Indonesian fishing in the AFZ, and advise solutions. Membership of the Committee was restricted to various government departments and agencies (DFAT, AFMA, DPIE, AusAID, DEST, Coastwatch, Defence, ANCA). With the exception of a paper outlining a licensing proposal by Fox submitted in 1996 (see Fox 1998) to the Committee for consideration, there appears to have been no other consideration of current research by social scientists into the issues. This is despite calls by academics for ethnographic research into the social, economic and cultural organisation of fishing groups operating inside Australian waters (Campbell & Wilson 1993:191). Such myopia is not confined to the subject of Indonesian fishing. At the World Fisheries Congress staged in Brisbane in 1996 it has been pointed out by Johannes...
(1996:20), “not a single fisheries social scientist spoke”. He asked the question “Are senior Australian fisheries researchers and managers in some sort of 60s time warp?” (Johannes 1996:20). He continued his criticism stating “Social science is clearly still considered beyond the pale by many senior Australian fisheries researchers and managers despite the burgeoning literature on the subject and growing demonstration of its practical value” (Johannes 1996:20).

In response to high levels of illegal intrusions in the AFZ during 1994 compared with previous years, a joint Australian-Indonesian delegation organised an information and education visit to a number of eastern Indonesian provinces in January 1995. The purpose of the visit was to explain to fishing communities, central and local government authorities and officials, Non Government Organisations, traders and the media, the conditions under which traditional fishing may take place in the AFZ and to increase the awareness of the consequences of illegal fishing (Australian Fisheries Management Authority 1995:63–64). The delegation comprised senior government officials from the Australian Embassy in Jakarta, Australian Agency for International Development (AusAID) (Jakarta), AFMA (NT), and from the Indonesian Directorate General of Fisheries. During the visit several thousand information handouts and maps were distributed showing the maritime jurisdictions in the Timor and Arafura Seas (see Appendix 4). One aspect of the visit was also to seek opportunities for initiating AusAID small-scale development assistance programs in fishing communities. The provinces of South Sulawesi, Southeast Sulawesi and East Nusa Tenggara were visited. In Southeast Sulawesi meetings were held in Kendari and Bau Bau and two representatives from Mola attended. On Roti a meeting was held at Ba’a and some representatives from Pepela attended. Since the initial visit a number of follow up trips have been, made and new colour plastic coated longer lasting revised maps distributed (see Appendix 4). This educational approach has been complementary to the enforcement and prosecution approach. This is the extent of Australian policy responses to deal directly with the issues of legal and illegal fishing in the AFZ.

Conclusion

By the early 1950s, Australia had successfully obtained sovereignty to all offshore islands and reef areas in the Timor Sea where Indonesians had historically fished. In 1968 Australia increased its fishing zone from 3 to 12 nm. By 1973 Australia had successfully negotiated arrangements with Indonesia laying claim to the non-living seabed resources between the two countries. In 1979 Australia expanded its fishing zone from 12 to 200 nm which meant
that Indonesians lost access to fishing grounds covering a large area across the Timor and Arafura Seas.

Despite these claims, the remoteness of the northwest region and offshore islands and a lack of regular patrols and surveillance, meant that Indonesians were largely free to fish undisturbed in the region until the early 1970s. At this time increasing restrictions on Indonesian activity commenced with the signing of the 1974 MOU between the Australian and Indonesian governments in recognition of the long history of Indonesian activity in the region. The MOU gave access rights to “traditional Indonesian fishermen” to operate within a 12 nm radius of specified offshore reefs and islands in the Timor Sea and banned all fishing within 12 nm of the coast. As a result, Australian presence in the region increased with the introduction of regular surveillance patrols and vessel boardings aimed to inform Indonesians of the arrangements and warn vessels engaged in illegal activity. These resulted in a change in official perceptions of the activities of Indonesians. Previously Indonesians were considered to be arriving on the coast unintentionally, were few in number and fishing for subsistence purposes. This was replaced with perceptions of an invasion of large numbers of boats purposely seeking access to areas to harvest products for commercial purposes. In actual fact, fleets of perahu intentionally sailed to the northwest coast to harvest commercially valuable products on demand in domestic Asian markets.

In 1975, a change in policy occurred with the apprehension of three vessels illegally operating outside the allowed areas with the aim to obtain forfeiture of vessels. However, this test case was a failure and although the men were convicted they were allowed to return to Indonesia with their vessels. For the next five years a policy of local justice ensued with regular patrols and continuing boardings of perahu to inform Indonesians. In 1980, after continuing breaches by Indonesians, a change in policy occurred with the apprehensions of perahu resulting in the first successful cases of boat confiscation found operating illegally in the AFZ.

The declaration of Ashmore Reef as a National Nature Reserve in 1983 driven by environmental concerns resulted in further surveillance policy initiatives designed to protect and promote the natural values of the area but monitor and restrict the activities of Indonesian fishermen. In 1988, fishing was banned in the reserve.

In 1989 in response to maritime boundary developments, legislative changes and Australian obligations to international conservation treaties, concerns over exploitation of resources, and
continuing breaches of MOU arrangements, new guidelines for implementing the 1974 MOU were adopted by Australia and Indonesia. An expanded box area was agreed on in which traditional Indonesian fishing activity could continue provided fishermen complied with the new definition of traditional fishing which banned the use of motors and motorised fishing gear in the MOU box area.

From the late 1980s, there was a sudden increase in illegal fishing in the AFZ by a number of diverse groups of Indonesian fishermen who had not previously operated in the north Australian region. This began with large numbers of motorised boats (Type 3) collecting trochus shell along the northwest Kimberly coast, followed by large numbers of motorised boats apprehended for illegal shark fishing in the northern Arafura Sea. This was the beginning of a series of waves of illegal activity that continued into the early 1990s, and continues to the present day. From 1988, as a result of these incursions and perceived threats to marine resources and loss of economic earnings to Australia from foreign exploitation, a policy of forfeiture of catch, equipment and boats, and their destruction by burning, was introduced as a form of deterrent.

These incursions resulted in an increase in surveillance measures and significant policy changes by the Australian government towards the treatment of Bajo and Pepela fishermen. In the past Bajo and Pepela perahu found inside the AFZ had been boarded and warned but not apprehended. This approach changed in 1990 resulting in apprehensions, and with the exception of three boats in 1992, confiscation of vessels, catch and equipment. These penalties were imposed, even though these fishermen had been operating in waters now claimed by Australia for decades and they were “traditional fishermen” operating under the 1974 MOU arrangements. They were punished in the same fashion as other fishermen who did not have a long history of fishing in the north Australian region. Research and recommendations into the problems associated with incursions by traditional Indonesian fishermen have largely been ignored. The number of apprehensions has increased and the policy of enforcement continues. The next chapter examines Bajo responses to Australian maritime expansion.
Chapter 6
BAJO RESPONSES & PATTERNS OF VOYAGING

Introduction

Between 1968 and 1989 a complex set of developments took place with regard to Australian responses to Indonesian fishing activity in the Timor and Arafura Seas. Since the 1970s there have been major changes to the conditions under which Bajo and other Indonesian fishermen have operated in the northern Australian region. This began with the expansion of the AFZ from 3 nm to 12 nm in 1968 and the banning of fishing within 12nm of the coast of Australia. Under the 1974 MOU fishermen were permitted to operate only in a 12nm radius of specified offshore islands and reefs claimed by Australia as part of its continental shelf and landings were prohibited at all but two islands at Ashmore Reef. In 1979, with the expansion of the AFZ from 12 to 200 nm fishermen lost access to fishing grounds along the shallow waters of the Sahul Shelf. These developments resulted in increased and more regular surveillance patrols in the AFZ to control and confine the fishing activities of Indonesians. In 1988 fishing at Ashmore Reef National Nature Reserve was banned, and under a new interpretation of traditional fishing, the use of motors and motorised fishing equipment was banned in the MOU allowed areas. Under the 1989 amendments, fishing activity was confined to a box incorporating the original 1974 MOU areas plus an expanded zone. Little of this territory matched with their original shark fishing grounds.

What did the Bajo make of the complex arrangements and regulations restricting their fishing activity? How have they interpreted and responded to the many changes and restrictions on their fishing activity? This chapter examines Bajo voyaging to the northwest coast of Australia and to the Timor and Arafura Seas during the period between the late 1960s and the early 1990s.

Patterns of Voyaging: 1960s-1980s

In examining Bajo fishing activity in the Timor and Arafura Seas during the late 1960s, 1970s and 1980s, I draw on recollections and personal experiences of men from Mola, Mantigola and Pepela who were part of the Bajo fleet engaged in shark fishing in the Timor and Arafura Seas during 1994. This group of 31 men aged between 30 and 60 years, born in either Mantigola or Mola, were perahu owners and/or captains or senior crew members when
I carried out fieldwork during 1994. My material was gathered from these men in Mola and Pepela. We talked generally about when they first went sailing to the north Australian region, and particularly of their shark fishing activities during the 1970s. Many told me they first sailed to the Australian region in the late 1960s and early 1970s. A few of the older men had sailed to offshore reefs and islands in the Timor Sea to fish for reef fish in the 1950s and 1960s. For some of them, Australia has been the main destination for distant shore seasonal voyaging since they were old enough to sail.

According to the Bajo, shark fin became the main product sought after in the late 1960s and early 1970s. Twenty-eight men recall undertaking shark fishing voyages in the Timor and Arafirra Seas between the years 1969 and 1979, mostly on shark fishing voyages in 1969 and between the years 1970 and 1974. For some, the first time they went sailing to Australia was to catch shark fin. Such men include Dudda, who first fished for shark in 1969 with handlines and shark rattles near Adele Island (*Pulau Haria*). Two personal accounts presented below indicate patterns and motivations for shark fishing at the time.

**Kaharra (Mola Selatan)**

In 1970 we started fishing for shark because there was a price for it in Ujung Pandang. Between 1970 and 1975 we sold the fin to a trader in Ujung Pandang named Johnny Goh who had a shop near the harbour. Then in 1977, the boss started to buy the fin directly from Mola through Haji Djunaedy and some other Haji in Mola. In those times we only needed a capital [*perongkosan*] of Rp 100,000 – Rp200,000 and the interest rate was only 2.5%. In 1975, when the borders were still open, some Pepela people started to fish for shark and joined the Mola men. Before that Pepela people fished for trochus and trepang. We sold the fin in Mola until 1988 – 1989 then we started to sell the fin in Pepela. It is better to sell the fin in Pepela because we can go out more times. If we have to sail to Ujung Pandang we can only go out once a season.

**Nasir (Mola Selatan)**

I first sailed to Australia in 1969. In the early 1970s we sold shark fin to traders in Ujung Pandang. This meant we could only sail once in a season. The price was Rpl,500/kilogram for *potong biasa* [crude cut with some meat
still attached]. When we arrived in Ujung Pandang, we dropped anchor and the traders would come to our perahu, ask what we had to sell, and give us coffee, sugar, and cigarettes. Later the boss would come out and buy the fin and pay us straight away. We still used shark rattles and handlines then. There were no borders and we caught a lot of shark, sometimes 400 – 600 kilograms, sometimes as much as 1 ton. Usually, after selling the fin we obtained Rp2,000,000 – 3,000,000 to share. The cost of the voyage was not much then, only about Rp200,000 – Rp300,000 and each crew member only had to put in Rp25,000 towards the cost of the voyage. In about 1974, Haji Djunaedy started providing the capital to cover the cost of the voyage, so we sold the shark to him in Mola, not in Ujung Pandang any more. This continued until the late 1980s and early 1990s. Then we started to sell the shark in Pepela. But during this time, some Bajo still sold the shark in Ujung Pandang or Bau Bau because the price of shark fin was always higher in Ujung Pandang.

Bajo shark fishing activity followed two patterns largely determined by the east (April to November) and west (December to March) monsoons. During the east monsoon Bajo departed from Mola and Mantigola in their perahu lambo and sailed to Pepela where they would take on extra supplies and wait for suitable wind conditions to sail south. Interaction occurred between the Pepelans and the Bajo through trade, intermarriage and a small number of Bajo who had previously settled there in the past. While in Pepela, boat crews generally slept on their perahu anchored in the harbour. The main months of fishing were August -November. However some fishing was undertaken around Ashmore and Scott Reefs during the strong southeast winds between April and July. June is usually a period of very strong wind conditions and vessels rarely venture out.

From Pepela vessels sailed south to fish around the reefs and islands in the Timor Sea and along the shallow waters of the continental shelf off the north-western Australian coast. These shallow waters are known as “air putih” or “white waters” and are considered to be very productive shark grounds. Shark fishing grounds stretched from northwest of Cape Leveque and around Adele Island across to Holothuria Banks, and to the northeast and east of Ashmore Reef along the Sahul Banks (see Map 14). In order to reach fishing grounds along the Kimberley coast, perahu would sail via offshore islands and reefs in the Timor Sea, and use navigational light towers on some islands and on the mainland along the Kimberley coast. At
the end of a fishing expedition they sometimes travelled via Pepela to replenish supplies or exchange dried strips of shark meat (balur) for lontar palm sugar (gula air) before sailing to Mola or Mantigola or to other towns or cities in eastern Indonesia to sell the catch.

Map 14: East and west monsoon Bajo shark fishing grounds in the northern Australian region.

During the west monsoon, shark fishing expeditions focused on the eastern part of the Timor Sea and western part of the Arafura Sea during periods of light wind conditions, usually between the months of February and March. However, voyages at this time of year were never as regular or frequent as during the east monsoon. The end of the west monsoon is a period of light variable winds and smooth seas, ideal for fishing (known as the doldrums in English literature), but often interrupted by short intermittent squalls and possible cyclonic activity, in which case perahu would make for sheltered islands.

Vessels departed from Mola and sailed to the group of islands located to the east of the eastern tip of Timor (eg. Leti, Moa, Lakor, Sermata, Babar, and Masela Islands) or to Selaru Island in
the southern Tanimbar group. From here they would sail south drifting and fishing along the Sahul Banks and shallow waters of the Continental shelf lying to the north of Bathurst Island. Some also went from the Tukang Besi Islands to Dobo in the Aru Islands and from there sailing south to fish (see Map 14). On return, the vessels travelled back through the Banda Sea with the first of the southeast monsoon winds, usually in April. Bajo perahu apprehended and taken to Darwin in 1985 and 1992, were caught undertaking shark fishing voyages in the Arafura Sea at the end of the west monsoon.

Occasionally during the west monsoon, some vessels also sailed to Pepela and from there undertook short voyages, depending on the wind conditions, to fish around the reefs and islands in the Timor Sea. Three Bajo perahu apprehended off the Kimberley coast in 1975 and two apprehended and taken to Broome in March 1990, were pursuing this fishing activity at this time of the year. The distance between fishing grounds and trade centres, and the dependence on prevailing wind conditions meant that until the late 1980s perahu would normally sail and fish just once during the east or west monsoon seasons. The duration of time spent fishing was variable depending on supplies and weather conditions. It could be between 3–8 weeks, with longer periods spent fishing during the calmer months of the east monsoon than the west monsoon.

In the shallow waters along the Sahul Shelf, with the perahu under main sail and drifting slowly, shark were caught with baited handlines set from the deck. Handlines (koelangan tansi) consist of a length of nylon line, a wire trace, a lead weight and hook, connected to a wooden reel with a flat wooden base. This inexpensive equipment, costing only a few thousand rupiah to make, was assembled by the fishermen themselves.

Sharks are attracted with shark rattles called gogoro or goro goro. These are made from a length of bamboo (bolo tallah) split at one end, and six half coconut shells (timpuroh) threaded onto a piece of bamboo fitted horizontally into the split end of the stem. Shaken in the water continuously the noise of the clacking coconut shells attracts shark to the surface. They are then caught using a baited line and hauled onto the deck. The fins are removed and laid out to dry in the sun and in some cases the carcass flesh is retained, cut into strips, salted and dried.

Voyages were financed by credit arrangements. Financial capital including the cost of provisioning vessels with firewood, water, rice and money for the families during the men's
absence, was usually obtained in Mola or Mantigola. The capital came from the fishermen themselves, their extended family, money lenders or often from village traders in marine products. The cost of a typical shark fishing expedition was around Rp 100,000 – Rp300,000 (SA55.00 – 167.00), depending on the number of crew. Upon return, the shark fin was sold to traders either in Mola, Ujung Pandang or Bau Bau or sometimes to traders in Kupang, Ambon or Dobo depending on the time of year. With the money obtained from the sale of the fin, the cost of the voyage and provisions was taken out. The remainder was divided between the perahu owner and crew, with the owner of the perahu receiving three shares and each crew member one share.

It is difficult to ascertain specific prices for shark fin since they depended on the quality and type of fin and where it was sold. In the passage above, Nasir stated that in the early 1970s the price of shark fin was Rpl,500/kg in Ujung Pandang. Goseng, a Bajo man living permanently in Pepela since the late 1980s, stated that in 1971 he received Rp600/kg. By 1974 the price rose to Rpl,200/kg. In 1987 he received Rp15,000/kg. Sabaruddin stated that in 1979 he and his crew received Rp25,000/kg in Mola. Acing, who went shark fishing for the first time in 1970, said that after a shark fishing trip in 1979 where he and his crew caught 400 kg of shark fin, they sold the catch in Ambon at Rp6,500/kg. The captain of Usaha Selamat, Usman, who was apprehended in 1985 and charged in Darwin, stated in the Record of Interview that he expected to receive Rp3,500/kg for shark fin in Mola. These diverse responses, although dependent on a range of variables, demonstrate a gradual rise in the price of shark fin over time.

During this period fishermen from Pepela also fished in the Timor Sea and on the northwest coast, but generally kept to the islands and reefs where they concentrated on collecting sedentary marine products and reef fish. Interaction between Bajo and Pepela fishermen meant that some Pepela fishermen adopted Bajo shark fishing gear and also engaged in shark fishing around the reefs and islands in the allowed areas. Russell and Vail (1988) document Pepela fishermen using handlines and shark rattles to catch shark around Ashmore Reef.

During the early 1970s, as well as shark fishing, some Bajo from Mola and Mantigola embarked on voyages to the Kimberley region along the northwest coast to harvest trochus shell and turtle shell. In the late 1960s, the price of trochus began to rise, due to a depletion of stocks in Indonesia and other parts of the world and increasing demand again from button
and paint manufacturers (Campbell & Wilson 1993:43). The Bajo also reacted to this market demand as did Pepela fishermen.

During the years 1971 – 1975 a number of perahu from Mola embarked on voyages to collect trochus shell at Yampi Sound, King Sound, Adele Island and Cape Leveque. Kaharra collected trochus in 1972 at Cape Leveque. Similarly, Nasir visited Yampi Sound and Adele Island to collect trochus in 1971. Others, including Badolla, Usman, Kati, Hasim, Goseng and Nurdin also speak of trochus collecting between the years 1972–1976. They recall encounters with Australian naval patrol ships, having their perahu boarded and searched, being questioned, told to return to Indonesia, and even having their catch of trochus dumped overboard. For the Bajo, this period marked the beginning of increasing contact with Australian authorities.

**Badolla (Mola Selatan)**

I met a patrol ship at Yampi, but they did not apprehend us, only ordered us to return home. There, I was looking for trochus. At that time, during the 1970s there were hundreds of perahu, many of them went too close to the coast. They were spotted by aircraft. In 1975, there were lots of patrol boats. I remember one Bajo being hit on the shoulder by one of the officers.

Most of these men recall collecting trochus only once or twice while they continued to shark fish as well. The product sought after could change from year to year. In some instances more than one target product was obtained. For example, a perahu could undertake a voyage to King Sound to collect trochus shell, and on return north, could fish for shark fin for a few days before returning to Indonesia.

Ntole from Mola Selatan and his crew were fishing for shark fin in the Timor Sea in 1974. During strong winds the unmotorised perahu was blown off course and ended up at a reef further east near the coast, only to discover a large quantity of hawksbill turtle. Taking the opportunity over a few days, the crew captured a large number of turtles. The shell was sold in Mola and the crew made a large profit. The word of Ntole's success spread throughout the village and after obtaining directions on the location of the reef, a number of boats left Mola in August. One was a perahu *lambo* owned by Usman from Mola Utara, and another was a motorised perahu owned by Haji Djunaedy from Mola Selatan. After calling in at Pepela, both perahu encountered strong winds while sailing south and Haji Djunaedy turned back. Usman,
unperturbed, kept going but ended up at King Sound from where they slowly sailed east and finally located the reef. Over one week they collected one ton of turtle shell. They sailed to Ujung Pandang and sold it, making a small fortune which later enabled Usman to buy a motorised perahu and a few years later make the Haj to Mecca. Haji Djunaedy, after waiting for the wind to die down, set off again from Pepela, located the reef and also collected a substantial amount of turtle shell. The reef known to the Bajo as sapa Ntole is Holothuria Reef, located off the Kimberley coast.

On a visit to Broome Historical Museum in November 1995 I noticed two photographs, one in a file entitled “Indonesian Illegal Fishing” and the other framed in the front room of the Museum. The first photograph is captioned “Malcolm Douglas with Indonesian fishermen from four boats off our shores in 1974”. Malcolm Douglas is a local Broome resident and runs the crocodile farm at Cable Beach. The photograph shows Douglas in the foreground leaning on a dugout canoe with at least 6 other canoes in the background containing 14 fishermen. One of the fishermen is wearing a hat typically made and worn by Bajo people called a capio. The other photograph (Photo 40), is a close up of a man sitting in a canoe with a sarong wrapped around his head. The caption reads “Indonesian fishermen located by Malcolm Douglas 1974”. Upon seeing this photo, I immediately recognised the distinct face of this man as La Toke from Mola Selatan who was a crew on the perahu Sumber Bahagia in 1994. When I returned to Mola in 1997, I took a copy of this photo back with me and gave it to La Toke who was quite surprised. He told me he had been a crew member on the perahu owned by Haji Djunaedy and while they were collecting turtle shell at the reef they met a group of Australian fishermen. He pointed out the turtle shell lying in the back of the canoe.
Another area where turtles were collected was a large reef in Yampi Sound. According to Kariman, the reef was first “discovered” by Darisa from Mola Selatan who named the reef karang bebek, (lit. “duck reef”) because the shape resembles the shape a duck.

**Kariman** (Mola Selatan)

When I visited karang bebek in the 1970s we caught a lot of turtle and filled the entire perahu with shell. We also met orang Marege [Aboriginals] at the reef and we gave them some turtle meat. They were also catching turtles but not using the same method as us.
With an increase in surveillance and enforcement measures by Australia involving air and sea patrols of the Kimberley coast from 1974 onwards, the 1974 MOU which banned fishing within 12nm of the coast and Operation Trochus in 1975 and 1976, trochus and turtle shell harvesting by Bajo along the Kimberley coast appears to have largely ceased. Shark fishing in the allowed areas and along the Sahul Shelf became more important.

**Bajo Perceptions on Restrictions to Fishing Activity**

When Bajo speak of the period between 1920s and the 1970s it is remembered as a time of relative freedom (*dulu betas*) to fish the islands and reefs in the Timor Sea. When they speak about fishing off the northwest coast and at offshore reefs and islands, such as Ashmore Reef in the Timor Sea in the post 1970s, most commonly they state, “*nanti sekarang dilarang*”: “now it is forbidden (to fish)”.  

In the 1920s there was quite a lot of attention on Ashmore Reef after complaints made by the WA Government to the Commonwealth about poaching activities by Indonesians. This eventually led to Australia accepting sovereignty of Ashmore and Cartier Island in 1933. Afterwards, there appears to have been relatively little Australian activity or attention given to the offshore reefs and islands in the Timor Sea area until the 1960s. Surveillance and enforcement was at best sporadic. The Bajo were largely able to fish unhindered along the Kimberley coast and at offshore reefs and islands until the late 1960s and early 1970s when the 1974 MOU came into force. This time of freedom is expressed by Kariman:

**Kariman** *(Mola Selatan)*

In the past, it was open [*betas*], we were not disturbed, in fact when we met with Australian navy or oil rig workers they gave us food and water but this is not the case now.

I asked some Mola Bajo why they are not allowed to fish along the northwest coast and at islands such as Adele Island, and why they are no longer permitted to land at the offshore reefs and islands in the MOU areas, and why, according to them, fishing was banned at Ashmore Reef. The common reply to why they are no longer allowed to fish along the coast of north west Australia at places such as King Sound and Adele Island is because other people, namely the Madurese and Pepelans, had in the past, broken into and vandalised and damaged...
buildings and storerooms on the islands. Because of similar acts at islets in Ashmore Reef, it also was closed to fishing.

**Badolla** (Mola Selatan)

After the time of the plane [1936], it was still all right for the Bajo to fish, even if we met with patrol boats we were still permitted to fish *[masih tebas]* at Ashmore Reef, Scott Reef, Adele Island and Rowley Shoals. But now the area is guarded and we were not allowed to fish there any more because of thieves. The Madurese people in perahu *lete lete* broke into the buildings, destroyed the inside and stole things ending in a serious result. If they hadn't of done this we would have been allowed to continue fishing. At that time I encountered the patrol ship number 0090. On the ship was an interpreter, a Malaysian. He told me the reason we were not allowed to fish there any more. He said Indonesians are thieves. He said the buildings contained supplies, like water and food for people that are in trouble and had a shortage. He said don't break into the buildings and don't take anything. Just imagine if they hadn't wrecked the buildings we would still be allowed to search for fish, trochus and shark.

**Idrus** (Mola Utara)

The Pepela people broke into the buildings, took things, and Australia was angry.

**Hasmin** (Pepela)

The Raas people destroyed storerooms on the islands, that's why we can't fish there any more.

Between the 1960s and the 1970s there are a number of reported incidents of vandalism by Indonesian fishermen to Australian property, weather stations and storerooms at islands including West Islet at Ashmore Reef, Scott Reef, Browse Island, Adele Island and Rowley Shoals. The following example is made in the Ashmore Reef Plan of Management:
An automatic weather station was erected on West Island in 1962. By 1970 all equipment had been stolen and the inner walls removed. The station was refurbished in 1971 but pilfering and vandalism again resulted in the destruction of the station. It was abandoned in 1973 (ANPWS 1989:13).

On 17 August 1977, in reply to a question in the House of Representatives debate concerning the text of the sign erected at Ashmore Reef in 1975, Mr. Sinclair, the then Minister of Primary Industry, read out the English version of the sign. Included in the text at point 5 and point 6 reads:

You must not interfere with the automatic weather stations on Ashmore Island, Scott Reef, Browse Island, Rowley Shoals, Adele Island. Indonesian fishermen found anywhere in possession of material suspected of having been taken from those automatic weather stations are liable to be prosecuted in Australian courts. There is no food or water in any of the automatic weather stations. If you try to enter them they will send a radio message to Australia and the Royal Australian Navy will come to investigate.

Unless you are shipwrecked, you must not take food from the food dumps left by Australia on the islands. If you are not shipwrecked and take the food, you could cause people who have truly been shipwrecked to die of starvation (DFAT 1988:15).

In a House of Representatives debate on 19 November 1981, Minister for Health Mr. MacKellar, replied to a question on illegal landings by Indonesian fishermen since July 1978. He stated there had been twenty-five landings on Australian soil reported by surveillance air and sea patrols. One of these dated 25 September 1979 reads:

An Army Nomad aircraft sighted an Indonesian fishing vessel in the vicinity of Adele Island. The Transport vessel M.V. Cape Pillar responded and found that the food and water cache at Adele Island lighthouse had been stolen and there was Indonesian writing on the lighthouse walls. The fishing vessel was not relocated (DFAT 1988:26).

It is easy for the Bajo to blame other groups of competing fishermen for vandalism and destruction. As a measure of comparison, I asked La Muru, a long time Pepela resident who
has fished for decades at the offshore reefs and islands, the same questions I had asked the Bajo. He replied:

**La Muru** (Pepela)

The Bajo wrecked the buildings and storerooms on the islands which is why it became forbidden to fish near the coast.

As to which particular group were responsible for the vandalism of buildings and the like is of little importance. What is interesting is that even among two competing groups of fishermen, the Bajo and the Pepelans, the same perception exists as to why their fishing activity became restricted. The narratives demonstrate that in the perception of the Bajo and the Pepelans, fishing restrictions enforced on them along the northwest coast and at offshore reefs and islands were not the result of Australian immigration or quarantine concerns, Australian maritime expansion over areas of sea under international maritime treaties and law, international agreements and obligations, overfishing of certain marine resources, nature protection and the conservation values of specific areas such as Ashmore. It was because of destructive activities to buildings and weather stations on Australian islands by fishing groups from Indonesia.

**Changes in Bajo Voyaging and Shark Fishing**

Shark fins are one of the most expensive food commodities in the world. Shark fins consist largely of soft collagen and elastin fibres commonly referred to as fin needles. They are highly prized and sought after by the Chinese as a luxury culinary delicacy. When processed, they form the basis of a number of favourite Chinese dishes, most notably shark fin soup (Lai Ka-Keong 1983:35). Shark fin is associated with prestige and is used to honour or impress special guests on important occasions (Lai Ka-Keong 1983:35; Rose 1996:49). The value of shark fins varies according to species (black or white), size, and types of cut of the fins (Rose 1996:49).

Shark fin became established in formal banquets during the Ming Dynasty (1368–1644). By the Qing Dynasty (1644–1911) the Chinese had listed shark fin second among the “eight culinary treasures” from the sea. By the end of the Qing Dynasty, shark fin banquet dishes were well established in both Cantonese cuisine and in Hong Kong among the wealthy (Rose 1996:49). After the second world war, the consumption of shark fin was discouraged in China by the government. However, in the mid 1980s, the relaxation of state market controls,
increased disposable income, and growing official acceptance of shark fin consumption led to a dramatic increase in domestic demand for it and a corresponding impact on world fin prices and trade. An overall increase in Asian demand and the opening of China as a seemingly unlimited market for fin, were accompanied by significant increases in world prices during the late 1980s and early 1990s (Rose 1996:49–50).

A number of new developments occurred in the shark fin trade in Indonesia as a consequence. In conversations with one of the largest wholesalers in marine products in Ujung Pandang, I was informed that new entrepreneurs entered the trade, increasing competition in Indonesia. This stimulated a more directed shark fishery in places like Pepela. Similar developments took place in other parts of the world. For example, Chinese fin traders from Hong Kong established direct trade in West Africa supplying outboard motors and gear to local fishermen in return for harvested shark fin (Rose 1996:92).

Before 1989 there were no permanent traders living in Pepela. Visiting traders from Ba’a on Roti or Kupang came to Pepela during the fishing season to purchase various marine products. In addition, like the Bajo, the Pepela fishermen usually sold their catch directly to traders in Ba’a, Kupang, Ujung Pandang or Bau Bau. In 1989 the first of a number of wholesalers of marine products established a permanent direct trade in marine products in Pepela. The first of these was a Hong Kong wholesaler who began a partnership with a member of one of the wealthier Pepela families. This was followed by the entry of a trader from Ujung Pandang. Operating via Kupang, he placed his buyers in Pepela. These traders provided capital to their buyers in Pepela, who in turn started to provide provisions and fishing materials for shark fishing trips, as well as cash to the fishermen on credit. In return for credit, the fishermen are obliged to sell their shark fin catch to that buyer at the price offered, and pay off the cost of provisioning. One of these traders also began to acquire his own fleet of perahu lambo which he loaned to fishermen in order to undertake shark fishing voyages. By 1994 there were at least 4 traders based permanently in Pepela reflecting the rising demand for shark and its availability in the Timor Sea. Around the same time as the establishment of direct trade in Pepela, the migration of Bajo to Pepela commenced.

The first wave of migration was characterised by some Bajo men arriving in Pepela without their own vessels. Borrowing Pepela owned boats they embarked on a number of fishing trips over a season. While some slept on their boats, others found temporary accommodation in the village. In the following year, more Bajo arrived either with or without perahu but with their
families. From 1990 – 1992 many of these lived within the main part of the village, either renting houses or building small houses and shelters close to the losmen or next to the coconut plantations in the east, an area which came to be known as “Kampung Baru” (“new village”). During this period many Bajo families did not return to Mola or Mantigola at the end of the east monsoon shark fishing season but stayed on.

In late 1992 with increasing numbers of Bajo families arriving, the local district government agreed to set aside the sandy beach area to the east of the main settlement specifically for the Bajo to establish their own kampung. This area is called Tanjung Pasir. It seems that overcrowding in the main part of Pepela had caused some problems and friction between the Bajo, the local community and local government. Apparently the settlement of Bajo was welcomed by some of the local shop owners and traders because of the economic benefits to be gained. Some Bajo who had previously built houses in the main part of the village, and in Kampung Baru, continued to live there and upgrade their dwellings, while others moved to the Tanjung along with further new arrivals from Mola and Mantigola in 1993.

The first dwelling was built on the Tanjung in November 1992 (Photo 41) and by June 1993 some 36 houses were established on the beach. There are no reliable figures available on the actual number of people who migrated at this time, however it has been reported by Fox (1998:128) that by June 1993 some 113 Bajo families from Mola and a number from Oenggai had migrated to Pepela. By early September 1994 there were 42 houses on the Tanjung with approximately 50 Bajo houses in all of Pepela, inhabited by a minimum of 65 families or approximately 300 people (Photo 42).
Photo 41: The first Bajo house built on Tanjung Pasir, Pepela, November 1992.

The migration and settlement of some Tukang Besi Island Bajo to Pepela correlated with a rise in the price of shark fin and changes within the trade of shark fin in Indonesia. This in turn resulted in the establishment of permanent traders in Pepela and subsequent credit relations between fishermen and traders for the financial provisioning of vessels engaging in shark fishing expeditions, as well as financial support for families in the fishermen's absence. These conditions - access to credit and a market for shark fin - attracted more and more Bajo to settle in Pepela. It also meant larger numbers of Bajo and Pepela perahu targeting shark fin in the Timor Sea.

The presence of buyers in Pepela facilitated quicker financial returns for the fishermen. In addition, since many Bajo are now located closer to their fishing grounds, they can fish up to 2–4 times during an east monsoon season and more frequently during the west monsoon. Although large numbers of Bajo perahu, crew and their families relocated to Pepela, some Mola and Mantigola owned vessels and crew have continued their usual pattern of voyaging from the Tukang Besi Islands to Pepela and to the Timor Sea and returning to their villages again at the end of the east monsoon. However, with the establishment of traders in Pepela these Tukang Besi based Bajo were also able to obtain materials, goods and cash on credit and sell their fin in Pepela. So they too were able to embark on more fishing trips during a season.

With this system of trade in shark fin there resulted an increase in the number of boats operating out of Pepela. In the past much of the perahu ownership in Pepela was in the hands of individual families. In a few cases some of the wealthier and prosperous residents of Pepela owned more than one perahu. However, with good profit returns for existing boat owners from a number of successful fishing trips over a short period of time, local residents including some of the traders purchased more perahu lambo in an attempt to further increase returns. These lambo came from various places around eastern Indonesia, particularly Southeast Sulawesi. Some Bajo from Mola and Mantigola saw this as an opportunity to sell their perahu in Pepela. In addition, there was no shortage of available crew, particularly with large numbers of Bajo living in Pepela eager to borrow a boat. This resulted in an increase in perahu available for Bajo shark fishing voyages as part of an overall increase in the number of perahu operating out of Pepela. In 1988, 38 vessels were reported to be based in Pepela (Darling 1994) excluding Bajo perahu. This compared with approximately 82 Pepela owned vessels in 1993 excluding Bajo perahu (Harbour Master's office: Daftar Nama Perahu yang BerOperasi di Pelabuan Pepela 1993). An examination of AFZ boarding reports concerning Bajo perahu between 1979
and 1991 shows that all were owned by Bajo. However, by early 1992 some of the perahu boarded were owned by Pepelans but crewed by Bajo.

These changes also affected the fishing patterns of other groups of Indonesian fishermen operating in the Timor Sea. The fishermen of Pepela and Oelaba had previously targeted sedentary reef products and sometimes shark in the permitted reef areas. With higher prices offered for shark fin, more and more Pepela fishermen turned to shark fishing, as did fishermen from the village of Oelaba. Recall the first perahu from Pepela and Oelaba were apprehended for illegal shark fishing in 1993. In addition to high shark fin prices, the banning of fishing at Ashmore Reef created an increase in pressure on existing sedentary stocks at other reefs, resulting in over exploitation and a decline in marine resources (Campbell & Wilson 1993:180), which also contributed to these fishermen taking up shark fishing. In addition, the increase in the price of shark fin in Indonesia in the late 1980s and early 1990s, motivated large numbers of motorised Type 3 vessels to target shark illegally in the northern Arafura Sea inside the AFZ.

**Increases in the Price of Shark Fin**

The dramatic rise in the value of shark fin during the late 1980s and early 1990s is shown in prices fishermen have received for fin in 1987 and 1994. In a survey undertaken at Ashmore Reef in 1987, Russell & Vail (1988:89) reported that fishermen from Pepela expected to receive between Rp3,000 to Rp20,000 ($A2.17–14.50) per kilogram for black fin species and between Rp6,000 to Rp50,000 (SA3.75 – 31.25) per kilogram for white (lontar) fin species. In addition, most of the 13 crews of fishermen they interviewed stated that the price of shark fin had doubled over the last few years. In 1994 in Pepela, fishermen were receiving on average between Rp 10,000 – Rp 150,000 (SA6.25 – 93.75) per kilogram for black fin species and between Rp60,000 – Rp175,000 (SA37.50 – 109.40) per kilogram for white fin species.

The increase in the price of fin obtained by fishermen operating out of Pepela was not only a result of a general increase in the price of shark fin worldwide, but because of changes in the type of cut of black shark fin made by fishermen. This occurred as a result of direct and closer relationship between fishermen and Pepela based traders.

According to the Bajo and traders, prior to 1993–1994 they sold shark fin as a crude or straight cut (potong biasa). This type of cut actually retains quite a lot of meat, is heavier in weight, requires more processing and commands a lower price than the other two cleaner cuts.
of fin - half moon cut (potong semi) or full half moon cut (potong full) which retain less meat, weigh less - an important consideration for transportation costs, require less processing later on and command a substantially higher price (see Figure 6 and Table 5).

![Types of cuts of black shark fin](image)

Figure 6: Types of cuts of black shark fin.

Table 5: Example of 1994 prices for types of cuts of black shark fin in Pepela.

<table>
<thead>
<tr>
<th>Black fin cut</th>
<th>potong biasa</th>
<th>potong semi</th>
<th>potong full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price per kilogram</td>
<td>Rp40,000</td>
<td>Rp50,000</td>
<td>Rp50,000</td>
</tr>
</tbody>
</table>

In 1993, most of the Bajo continued to cut black fin as a crude cut as they had done for decades. However later that year and during the 1994 season, the Pepela traders instructed them on how to measure fin and cut it as a half moon, thereby retaining less meat. By the height of the season in 1994 nearly all Bajo had changed to cutting fin as either half moon cut or full moon cut. This meant that overall, fishermen were receiving substantially higher prices for fin per kilogram than in the past.

Around the same time as changes in the trade in shark fin and Bajo voyaging patterns were being played out in Pepela, the 1989 amendments to the 1974 MOU came into force. This meant that much of the Bajo shark fishing grounds along the Sahul Shelf were now inside the 200 nm AFZ, outside the allowed box area, and therefore off-limits. These policy responses impinged significantly on Bajo fishing technology.

**Changes in Shark Fishing Gear**

Around 1991, after the system of selling shark fin directly to buyers based in Pepela was established, the Bajo, followed by the Pepela fishermen, replaced handlines and shark rattles
with a particular type of longline gear as the main gear used to catch shark. They claimed that in 1991 a Bajo captain and his crew from the village of Langara, Wowonii Island in the Kendari region, sailed into Pepela to sell shark fin after a successful fishing trip in the Timor Sea using longlines. The story of the success of these men’s catch led to the adoption of this gear. The Pepela fishermen, faced with declining sedimentary resources due to over-exploitation in the MOU areas, and high prices of shark fin, were keen to learn this new fishing technique. A period followed whereby Pepela fishermen joined Bajo perahu to learn how to make and use the new form of longline gear. This adoption of new gear and the interaction between Bajo and Pepela fishermen contributed to the acceptance of Bajo living in Pepela. A gradual period of adoption of longline gear took place between late 1991 and 1993.

It should be noted that longline technology was not entirely new to the Bajo. Small set longlines had been used for decades. Russell and Vail (1988:84) noted the use of small set lines. This type of gear, 100 m long with 5–7 large hooks was usually set both inside and outside the reef. The difference between the small set longlines and the new form of longline is that the smaller longlines were not deployed in the open ocean. The new form of longline is designed to target shark found in deeper open waters.

AFS boarding reports also confirm the gradual adoption of longline gear and a gradual increase in the size of longline gear. Reports from the 1980s reveal all perahu were using handlines and shark rattles to fish. In 1990, a total of three Bajo perahu were boarded and none of the vessels are reported to have longline gear on board (AFS Indonesian database, WA). In 1991, four Bajo perahu were boarded and one (Hasil Nelayan) from Mola Selatan was reported to have two sets of longlines on board, 100 m long with 8–10 hooks on each. In 1992, seven perahu were boarded and all had longline gear on board (ranging between 350 m – 1000 m long and 50 – 60 hooks on each). One of these was Tunas Mudah II. It was reported to have a set line 350 m long with 50 hooks as well as handlines and shark rattles.

Evidence for the adoption of longline gear is found in Fisheries files of perahu apprehended between 1990 and 1993. The two Bajo perahu Kenangan Indah and Rahmat Ihahi 2 apprehended in March 1990 both used handlines and shark rattles to catch shark (WAFF 40/90 & WAFF 41/90). None of the Bajo perahu apprehended in October 1991 had longlines on board (NTAPP 9131; NTAPP 9132; NTAPP 9133; NTAPP 9134; NTAPP 9135). Of the three Bajo perahu apprehended in March 1992, all used handlines and shark rattles as the main shark fishing gear, although one perahu had a small set of longline gear with 37 hooks (NTAPP
The six Pepela perahu apprehended for illegal fishing in September 1993 all used longlines as the main gear (NTAPP 9302; NTAPP 9303; NTAPP 9304; NTAPP 9305; NTAPP 9306; NTAPP 9307).

In 1994 a standard design of longline (Figure 7) was in use by Sail Bajo shark fishermen. The dimensions of longlines differ between perahu and are dependent on personal preference, as well as the financial situation of the fishermen. Appendix 5 lists dimensions of longline gear of 18 perahu crews. This provides an indication of the variation and similarities in dimensions of longline gear used by the Bajo in 1994 and the gradual increase in size over time.

The gear (pissi borroh) consists of a horizontal main line (tali taha or tali basar), carrying a number of snoods (comprised of a length of nylon rope (korambu), with a wire trace (koa) and hook (pissi)), spaced at intervals along the line. The term “snood” is commonly used in English when discussing fishing gear with the characteristics described. The term “branch line” is also used sometimes. The length of snood rope is usually a set length, but a few longlines have snoods of varying lengths (eg. 3, 5 and 7 depa long). A depa (originally a Malay word) also known as depa in Indonesian meaning “fathom” in English, is measured as the length between fingertips to fingertips of outstretched arms. Depa is the traditional
measurement however metric measures are also used. A **depa** is not an exact measurement since the length will vary from person to person. For example one **depa** can be equal to 1.5–1.8 m. The Bajo use the following formulae to roughly convert **depa** to meters; 3 **depa** = 5 m and 6 **depa** = 9 m. Here I use 1 **depa** = 1.6 m. The wire trace is approximately 0.5 cm – 1 m long, often weighted with a piece of lead (**timbua**). A set of longlines can contain between 70 and 150 snoods and hooks. The distance between each snood can range from 9.5 to 21.5 **depa** (c. 15.2 – 34.4 m). The length of snood rope can range from 1 to 9 **depa** (c. 1.6 – 14.4 m). Two longlines did not have a snood rope, the wire trace was connected directly to the main line. The total length of longlines ranges from approximately 803 **depa** to 2,468 **depa** (1,285 – 3,949 m). Each longline has 2–5 shot lines connected to the main line, spaced at intervals and weighted with large stones.

A buoy (**tangkal**) marks the location on the surface. When set, the longline is attached to the **perahu** at anchor. Figure 7 illustrates the general form of a typical bottom set longline.

Depending on its size, a new set of longlines can cost around 1 to 1.5 million Rupiah (SA625.00 – 937.50) to make. If we compare this to the cost of shark rattles and handlines (a few Australian dollars), longline gear is significantly more expensive. The use of shark rattles and handlines is viewed as a successful and quick method for catching sharks in shallow “white water” along the northern Australian continental shelf. One Bajo captain stated the following:

**Kaharra** (Mola Selatan)

In white water there are many shark, after two or three days fishing with shark rattles, we can catch enough and return home. If the water is too deep, the shark cannot hear the rattles.

So if the use of shark rattles and handlines was so productive why did the Bajo adopt longline gear as the main form of shark fishing gear?

**Goseng** (Pepela)

we do not use it [shark rattle] much now, since the place where the fish are is forbidden to us so we can't use it. In the past, the place of the fish was
not forbidden and we still used shark rattles. In the past we could sail to the shallow waters, but now we cannot - the water [where we are permitted to fish] is deeper, and if we use shark rattles the shark do not hear.

**Idrus** *(Mola Utara)*

In former times, before it was prohibited by the Australian government, we fished here [shallow waters along the Sahul shelf]. We used shark rattles. Myself, before it was forbidden, fished here. Within one day we caught enough. But now it is prohibited. I am also afraid of them taking my perahu, I would cry. So we do not use shark rattles anymore, because in the deep water we already tried with shark rattles, but no sharks emerged, no sharks ate the bait so that is why we changed equipment.

The adoption of longlines was partly in response to the 1989 amendments to the 1974 MOU. Under these arrangements fishermen lost access to much of the shark fishing grounds along the shallow “white waters” of the Sahul Shelf that lie outside the box area and inside Australian waters. Having lost access to shallow waters, they were forced into deeper waters inside the MOU box and to the north. Handlines and shark rattles used in shallow waters became largely ineffective. The Bajo managed to adapt by adopting new methods that have enabled them to continue fishing in the Timor Sea. Fishermen claim that longlines are used in waters at a depth of 60 – 100 m or more. Within the box area, much of the water is too deep to use shark rattles and handlines and the new type of longline gear is employed. Only a few areas which they consider to be good shark grounds around Ashmore, Cartier and Browse Islands, remain available.

The adoption of longline gear over handlines and shark rattles was facilitated by the availability of credit to fund the increased cost of longline gear. This has created a financial strain on the fishermen, contributing to the migration of Bajo to Pepela and further economic reliance on the Pepela traders.

**Conclusion**

During the period of developments in Australian responses to Indonesian fishing activity between the 1970s and late 1980s, Bajo continued to operate both in and outside the permitted zones. It appears that surveillance patrols and repeated boardings of Indonesian perahu by
Australian officials had little effect in deterring continued shark fishing operations in the prohibited offshore areas along the continental shelf. Fishing continued to be carried out in a wide region across the northern Australian region. While shark was the main product sought after by the majority of Bajo perahu, at certain times they pursued other products including reef fish, trochus shell and turtle shell. However the collection of sedentary products (trochus and turtle shell) largely ceased with an increase in Australian surveillance and enforcement and eviction of fishermen from the northwest coast in the 1970s.

In the 1970s some Bajo had begun to use motorised perahu in line with normal cultural dynamism and developments in Indonesia in modernisation and motorisation of the perahu sector (Hughes 1984:33). With the banning of motors and motorised fishing gear inside the allowed areas in 1988 under the new interpretation of the access for traditional fishermen in MOU, the Bajo were forced to step back in time technologically.

Bajo and Pepelan perceptions of reasons for policy developments that resulted in loss of access to certain fishing grounds during the 1970s illustrate they have little comprehension and understanding of the complex reasons that gave rise to limiting the conditions under which they had previously operated. This highlights an issue with regard to Australian government understanding of Indonesian fishermen. There is an Australian belief that Indonesians have some level of acceptance and understanding of Western principles of the need for border regimes, scientific notions of the need for resource management, as well as international maritime law. It is not necessarily that fishermen have a deliberate disregard for the “law”, but from their perspective the laws and regulations are meaningless in seeking access to resources upon which livelihood depends.

Major changes occurred in patterns of Bajo sailing and fishing activity to the north Australian region from the late 1980s. These were the migration and settlement of Bajo to Pepela, the establishment of a direct market for shark fin in Pepela, availability of credit to fund fishing voyages and thus changes in the financial arrangements of voyaging, an increase in the number of perahu operating in the AFZ and with Bajo perahu operating directly out of Pepela, an increase in the number of voyages undertaken per season, and the adoption of new shark fishing gear. In addition, changes also occurred in the fishing strategies of Pepela and Oelaba fishermen. In the past, these fishermen had generally orientated themselves to different target products and fishing grounds than the Bajo. However, more of these fishermen turned to shark fishing. This resulted in an increase in the number of Indonesian perahu targeting shark in both
the MOU areas and inside the AFZ. Having showed the Pepelans how to catch shark, the Bajo have found themselves in competition with Pepela and other fishermen over the same resource.

These changes were in reaction to a convergence or coalescence of interconnected social, economic and political events and forces. High demand and rising prices for shark fin and changes in the trade in shark fin internationally, impacted on the trade in Indonesia and in Pepela. These in turn stimulated the settlement of Bajo to Pepela. This situation provided support for the adoption of new expensive fishing technology, in response to the 1989 amendments to the 1974 MOU, the creation of the box area and restrictions on Indonesian fishing activity in the AFZ.
Chapter 7

SAILING & SHARK FISHING: THE 1994 SEASON

Introduction

A central issue of this thesis is the question of why the Bajo continue to fish in the Timor and Arafura Seas in the face of Australia's maritime expansion, loss of access to their fishing grounds, technological restrictions, boat apprehensions and confiscations? The historical dimension of this was considered in chapter 4. Are there other motivations? What place do social - cultural and economic issues have? In order to address both these dimensions for continued Bajo fishing activity in the AFZ, I focus on sailing and shark fishing practice and activity during the 1994 season in this chapter and chapter 8.

Here, I present a discussion of the various phases of preparation undertaken in Mola and Pepela prior to departure. This includes practical preparations concerning boats as well as the social institutions surrounding voyaging, together with aspects of the organisation of social relations and roles of boat owners, captains and crew. The present chapter also examines the extent of the Bajo perahu fleet operating out of Pepela, perahu ownership, and patterns of voyaging during the 1994 season. A description of methods of navigation, fishing grounds and the technique of shark fishing is also provided.

In chapter 3 Bajo world views and spiritual conceptualisations of the sea were introduced and symbolic notions surrounding perahu lambo were discussed in general terms. In sections of this chapter I explore how these beliefs manifest and are articulated in actual sailing and fishing activities in the AFZ during the 1994 season. Rituals and beliefs associated with boats, sailing and fishing, cultural notions regarding ownership of the sea, rights of access to, and exploitation of marine products in the AFZ are investigated. By presenting the way sailing and fishing in the AFZ are conceptualized, the socio-cultural implications for continued Bajo fishing activity are examined.

By providing an account of Bajo voyaging practices and activity, and the social and cultural conditions underpinning shark fishing activity during 1994, this chapter provides the setting for an examination of the economics of shark fishing in 1994, which is dealt with in an expanded form in chapter 8.
Preparations for Departure

The onset of the east monsoon signals the beginning of preparations in Mola and Mantigola for the forthcoming shark fishing season. My arrival in Mola in late May 1994 and initial stay of two months through late July, coincided with these preparations.

Many of the perahu lambo in Mola had not been used during the previous west monsoon and had remained in dock close to the owners' houses for a number of months. During the weeks or months prior to departure, the owners began preparing vessels. All vessels require some repairs and maintenance. Some had undergone substantial structural operations during the west monsoon with sections of the hull, deck, or cabin needing to be replaced. Other perahu required only minimal work replacing a few planks here and there.

Before a boat can go to sea the hull is scraped, recaulked and covered in lime putty which is painted over with anti-fouling paint. The entire boat is then repainted, often in a bright colour scheme. It is common for related perahu owners to paint their vessels in the same colour and style. The perahu is fitted out with equipment and the standing rigging is repaired, ropes and wires replaced where necessary. Sails are repaired and new sets made if required. Most of this work is usually carried out by the owner, assisted by their extended family. If nearer to the time of departure, the crew may also assist in preparing the perahu for sea. The owner is responsible for any expenses. If funds are limited at this time, some of the maintenance work, in particular making new sails or repairing older ones, is carried out once the boat arrives in Pepela where materials can be obtained on credit from a trader.

Perahu Owners, Captains and Crew: Relationships and Responsibilities

In Mola the majority of perahu owners (pemilik perahu) join their boats, usually as the captain (a'nakoda), but sometimes as a crew member (sawi). If the owner does not accompany his boat, usually his brother or son, or a close relative, becomes captain (juragang). In a few instances there is no familial connection between the perahu owner and captain. This is almost always the case when Bajo borrow Pepela owned perahu. The owner of a boat can lend his perahu to another person and join another boat as a crew member. Alternatively, he may borrow another boat, for example a Pepela owned boat, and act as captain to increase his returns.
One of the captain's tasks is to organise all the administrative letters and sailing passes for himself and the crew to leave the village. The captain must obtain a *Sural Keterangan Izin Berpergian* (Identification Papers for Travel Permit) from the office of the *kepala desa* that must be approved by the local government offices of the *Camat* (sub-district head), Police and Military. Each *perahu* has a Pass Book (*Buku Pas*) that must be stamped by the *kepala desa* office prior to departure and again on arrival. It contains details pertaining to the crew, cargo and destination. To comply with registration requirements, *perahu* are given names in Indonesian, not in the Sama language. The owner may change the name of a *perahu* from year to year or retain the same name each year. Generally, among the Bajo, a *perahu* is not referred to by its name but after the name of the owner of the boat (for example, as “*perahu Hamid*”, meaning “the boat of Hamid”.

In addition to the captain, many of the Mola *perahu* have a sea captain called *punggawa dilao’* (*punggawa laut*), especially if the captain is not particularly experienced at shark fishing. The *punggawa* is usually an older man with considerable sailing experience, skill and knowledge. The duties of the sea captain are concerned with aspects of navigation and fishing activity, including organising the catching of bait (*atur cari umpang*) for the fishing lines and the setting of fishing gear (*atur pasang pancing*). He is also a person with knowledge about fishing grounds (*lana* or *tempat mencari*). Depending on the composition of the crew, one person may be both land captain and sea captain.

Amongst the Bajo fleet, the existence of a designated land captain and sea captain is less common among younger captains and crews. Particularly is this so for Bajo living in Pepela using their own *perahu* and Pepela owned boats. It seems to be something new in the last few years since availability of *perahu* in Pepela. However, some younger captains have considerable sailing skill as well as knowledge of sea and weather conditions.

All captains (and *punggawa*) are expected to have some esoteric knowledge (*pangatonang a’nakoda* or *pangatonang punggawa/ilmu*) to determine auspicious days to travel, to perform prayers and ritual activity associated with sailing and fishing, to reverse the consequences of not observing taboo, such as calming or dangerous weather conditions like strong winds, to repel evil spirits, to repair parts of a boat damaged at sea and for curing sickness among his crew. A few Mola captains said they didn't know any *ilmu* and in this sense were no more than “paper captains…literate, and skilled in dealing with port authorities but lacking
supernatural powers” (Southon 1995:130). In such a situation, another crew member, usually the **punggawa** is the person who has *ilmu*.

During the weeks or months prior to departure the captain must find a crew. This depends of the size of the perahu and ranges between 4 and 10 people. The crew are usually related to the captain and/or owner of the perahu. In addition, some crew may come from villages other than Mola or Mantigola within the Bajo network. There are particular rules governing the composition of a crew (eg. it is considered taboo to have three brothers together on one perahu). Examples of Mola crew composition for the 1994 season are shown below.

Table 6: Examples of Mola perahu crew composition.

<table>
<thead>
<tr>
<th>Perahu</th>
<th>Sumber Jaya</th>
<th>Cahaya Mola</th>
<th>Tunas Baru</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>father of captain</td>
<td>captain</td>
<td>crew member</td>
</tr>
<tr>
<td>Captain</td>
<td>eldest son of owner; sea captain</td>
<td>owner</td>
<td>brother-in-law of owner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>crew relationship to captain</th>
<th>crew relationship to captain</th>
<th>crew relationship to owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crew 1</td>
<td>younger brother</td>
<td>younger brother</td>
<td>owner and sea captain</td>
</tr>
<tr>
<td>Crew 2</td>
<td>first cousin</td>
<td>nephew</td>
<td>son</td>
</tr>
<tr>
<td>Crew 3</td>
<td>first cousin</td>
<td>nephew</td>
<td>uncle</td>
</tr>
<tr>
<td>Crew 4</td>
<td>second cousin</td>
<td>nephew</td>
<td>uncle</td>
</tr>
<tr>
<td>Crew 5</td>
<td>second cousin</td>
<td>uncle</td>
<td>first cousin</td>
</tr>
<tr>
<td>Crew 6</td>
<td>brother-in-law</td>
<td>second cousin (sea captain)</td>
<td>second cousin</td>
</tr>
<tr>
<td>Crew 7</td>
<td>brother-in-law</td>
<td>second cousin</td>
<td>second cousin</td>
</tr>
<tr>
<td>Crew 8</td>
<td>distant relative</td>
<td>son of Crew 6</td>
<td>father-in-law</td>
</tr>
<tr>
<td>Crew 9</td>
<td>no relation; married to Mola woman</td>
<td>brother-in-law</td>
<td></td>
</tr>
</tbody>
</table>

The success of a voyage is said to be dependent on the harmonious relations between the captain and his crew. A captain who has a reputation for treating his crew harshly (*kejam*), expressing anger, or is deceptive or dishonest, has difficulty finding crew. A captain who has a reputation for being successful each year will never have difficulty finding a crew. Because a crewman's earnings depend on the success of the boat, there is a tendency for crew to seek out the most successful captains. If a perahu is not successful after a fishing trip, midway through a fishing season, some crew may decide to shift to another perahu, making it difficult for the initial captain to embark on another voyage. In other cases, crew
undergo minimal changes during the season with the departure of one crew member and replacement with another. Some crew only join a boat for one trip and then return to Mola. In some cases the crew may not change much from year to year. One reason for this can be ongoing indebtedness from previous voyages between crew, captain and the perahu owner to a money lender or trader. Boats departing and returning to Mola at the end of the season had the most stable crews. In comparison, the Mantigola owned perahu seemed to undergo more changes with captains and crew.

Once a crew is complete, pre-departure meetings take place between the boat owner, captain and crew. Most decision making is based on mutual consensus between them. The purpose of the meetings are to make any agreements on the terms of borrowing the perahu and negotiating the value of the indemnity against loss at sea; to organise the financial arrangements of the voyage, including the source of capital and distribution of cash to families to support themselves during the absence of the men; the system of division of shares to be used; the amount of provisions and equipment to be purchased; and the setting of dates for various phases during the preparations towards departure. It is the captain's responsibility to keep records of all financial accounts. Decisions must also be made concerning the fishing gear, whether a new set of longlines will be made, or an older set from the previous year's voyage repaired, and who will have ownership of the gear.

**Pre-departure and Boat Rituals**

The next phase in preparations for departure takes place once the perahu is ready to go to sea, outfitted, the crew has been finalised, and financial arrangements organised. At this time, a ritual expert is consulted and a date is set for departure. As the day of departure draws close, the perahu is moved from its dock inside the village (pangangsalaang), through a canal and placed at anchor.

**Ritual for Moving a Perahu to the Open Sea**

The moving of a perahu from the confines of the village to the open sea is marked by a ritual prayer called *doa pamaloka'an perahu*. This is usually performed by a ritual expert. A few captains have the required knowledge to perform the ritual themselves.

It is 21 July, 1994, 6.00 am and high tide. A ritual expert named Gudang boards *Cahaya Baru I* while it is still docked; the first of three boats to be moved. Holding a jug filled with water
he recites a prayer into the jug. He then enters the cabin and into the hull of the perahu. At
the navel in the keel, he places an offering of betel nut, leaves and tobacco and recites prayers
for 5 minutes. At completion of the prayer, he pours water over the navel and emerges from
the cabin and moves to the right along the deck and continues pouring water over parts of
the perahu from the front to the back (see Photo 43). At the tiller he recites another short
prayer. Prayers are made to God (Papu) and to the three prophets of the perahu, to inform
them of the route the boat is about to make in order that they may offer physical protection
to the front, stern and sides of the perahu, protection from misfortune and also to protect the
boat's good fortune (jaga kamipunya rezeki).

Photo 43: Expert performing a ritual prayer for moving a perahu lambo from the village to the open sea.

After this is completed the perahu is moved using long bamboo poles propelling it through
the canal into the harbour, with Gudang accompanying the perahu until it is anchored, then
returning to the village by canoe (see Photo 44).
The significance of water, not only during the moving of the perahu from the village confines to the harbour, but at other rituals is articulated by Bajo as being synonymous of human like practices. Because a perahu is like a human, and a human always washes, then so must a perahu. In the words of Gudang so “the perahu will be healthy, and not maluntu”.

**Ritual Strengthening of the Navel**

Like a person, a perahu has a vital force which requires regular strengthening. If it is lacking in this “potency and effectiveness” (Errington 1989:61), it will not be successful and thus affect the sailing and fishing success of the crew and owner of the perahu. The ritual navel of the perahu represents the source of the perahu's good fortune and “protects] their human occupants and ensure[s] prosperity” (Southon 1995:136).

Once the perahu is anchored, ritual strengthening (*kasih makan di perahu*) can take place. The navel must be ritually strengthened to ensure good fortune, since vitality of the boat is believed to be attached at the navel. It is at the discretion of the owner whether the perahu needs to be “fed”. This ritual act can be undertaken before the crew depart, during a fishing season if the perahu has lacked success on any previous trips, every year or every few years. But it should be conducted at least once every three years.
According to Gunda it is discernable when a perahu is “hungry” (in this sense “maluntu” because it hasn't been successful for maybe one, two or three years. It is also possible that the perahu has been subject to sorcery (guna-guna) by a jealous enemy of the owner, someone seeking revenge on the owner, or even maybe a previous crew member who broke a taboo.

Ritual strengthening involves prayers carried out by a ritual expert on the perahu and is followed by a meal taken together with the owner, captain, and crew. The owner pays for the cost of the meal. His wife and other female kin prepare the food in the village and transport it to the perahu in the late afternoon. In the ceremony, the owner of the perahu, crew and the ritual expert gather around the navel inside the hull. On a tray, laid next to the navel are offerings of tasty food - rice, vegetables, cakes, cigarettes, betel nut, tobacco and a plate of bananas. Three lit candles are placed at the middle, front and back of the hull. The ritual expert burns incense and begins a series of prayers. They wait for the candles to burn and go out and as each candle extinguishes, more incense is burned. When all three candles have burned out, water is poured over the navel and everyone prays. The ritual expert then rises into the cabin of the perahu and prays again. He ends by shaking hands with the owner. The owner and crew then sit inside the cabin and partake of the meal laid out on the deck. The women and children sit out the back eating the portions they have saved for themselves.

Gunda (Mola Utara)

We give food to the perahu so we will have good fortune. Because a perahu searches for a share [of the catch] and because a perahu is like a human, the perahu must eat also. We can see if a perahu is hungry when it sails, one, two or three times and is not successful, then we must feed it. If the perahu is maluntu, it is lazy, and has no enthusiasm [sumangaq] for work and sleeps all the time. It's the same as not taking it sailing, because even if it sails, it won't be successful.

A meal may also be organised by the owner of the perahu for the captain and crew to eat together in the house of the owner. The lavishness of this meal depends on the financial situation of the owner since he is required to pay for it. The ritual expert is usually invited and sometimes the local Iman is called upon to deliver prayers for the safe passage of the crew. These meals also serve to reinforce the notion of joint venture of the voyages.
The final preparations and provisioning for sailing are then completed. Departure now may only be a few days away. At this time the crew may conduct a test sail in the vicinity of Mola to ensure the perahu is in working order. Any necessary adjustments to rigging and sails are made. The perahu is stocked with rice, coffee, tea, sugar, cooking oil, lamp oil, cigarettes and sometimes additional foods such as fresh coconuts, a sack of flour, chilli or tamarind. Wood for the stove is purchased. Water is collected in jerry cans and transferred to large plastic drums stored in the hull. Wives, mothers and other female relatives of the captain or crew undertake tasks of purchasing and transporting provisions to the boat. Sometimes they sort through the sacks of hulled rice (beras) picking out the bad kernels. For some perahu, only enough provisions to make the trip to Pepela are obtained. On arrival in Pepela further food provisions and fishing materials are acquired on credit from a trader. These can also include cash to send back to Mola.

**The Day of Departure from Mola**

Departure is an important event, since the crew will be away for many months. Shortly before the time of departure, the crew, carrying their belongings, are delivered to the boat by canoe by kin. Usually the family members tie up their canoe to the stern of the perahu and wait for the perahu to hoist sails and depart. As well as the crew, other male or female relatives of the captain or crew may accompany a boat to Pepela. A ritual expert is summoned to perform the ritual prayer called doa palamakang (doa perahu berlayar).

I had an opportunity to participate in the departure of *Tunas Muda* and crew. This was the first perahu to depart Mola for Pepela during the 1994 season. The captain had built a house on the Tanjung in Pepela in April 1993 and had lived there with his wife and five children. He returned to Mola in late April and was anxious to return; hence the early departure. The following is an extract from my field notes recording the departure of *Tunas Muda* and the ritual prayer carried out by Gunda.

28 June 1994: At 2.30 pm I paddled out to *Tunas Muda* which was anchored off Mola Selatan to watch the departure. Many people, family of the captain, owner and crew came out by canoe to deliver the crew members to the perahu. The owner of the boat also came out. The captain was the first on board. One by one the crew arrived and stowed their few belongings - one bag and a plate and glass. Some brought a few coconuts, a spear gun or handlines.
A few carried bottles of water which they hung inside the cabin. I saw only one sleeping mat and pillow. Maybe they were on the other side of the cabin out of my sight. The fishing gear was already stowed below. They also had a cargo of ready-made thatched palm leaf sections for the walls of a house on the Tanjung. By the time all the crew and family were on board the boat was full of people (around 40).

The last person to arrive was the orang tua - Gunda from Mola Utara a ritual expert and boat builder to perform the prayers. Gunda built Tunas Baru, the owner's other perahu and has carried out repairs on Tunas Muda in the past. He boarded the perahu from the side and first placed the tiller into the rudder stock. He then sat down facing the tiller with his back to the cabin and prayed. Next he poured water from a glass which someone gave him onto the rudder stock and put his right hand over the wetted area - and his left hand over his lower stomach. He prayed again for about 3 minutes. After this he went to the front of the boat and prayed to the main sail rope and then began to hoist the main sail. The crew then took over and continued to hoist the sail. At this point, I left Tunas Muda and paddled over to Penasehat Baru anchored nearby and sat on the deck, watching and taking photos. Gunda then prayed again to the anchor rope and then all the crew helped to pull up the anchor. Gunda left the perahu by the side and got into a canoe tied to the rear of the perahu. Some family also left Tunas Muda at this point and paddled back to the village, while some remained in their canoes being towed along behind the perahu. Some family were still on the perahu as it slowly started under sail. They hoisted the jib sail and sailed towards Otouwe Island and then tacked in front of Mola Selatan for a short distance and south towards Kaledupa reef. One by the one the people in the canoes behind the perahu let go and returned to the village. As the perahu disappeared from sight, I paddled back (see Photo 45 and 46).
Photo 45: Ritual expert praying at the rudder stock and tiller of *Tunas Muda* prior to departure for Pepela.

Photo 46: Departure of *Tunas Muda* from Mola. The ritual expert is seated in a canoe behind the boat, along with other family members of the crew.
According to Gunda, it is at this moment, once the perahu is ready to depart that the Bajo are now in the domain of the ancestors (Mbo Madilao) and thus prayer must be directed at them as well as the older twin sibling (Kaka) of the Bajo:

**Gunda**

I pray to Mbo Madilao, who asks Kaka, Kaka answers to Mbo Madilao who answers to me; I receive a reply usually later when I am sleeping or dreaming. We must do this so we don't get into danger at sea. We ask Kaka to accompany us, so Kaka must know our destination. If we don't let Mbo Madilao and Kaka know, then Kaka will become our enemy and we will get into danger at sea or get sick.

Two other ritual experts suggested prayers are directed to God and the prophets at this time. Mbaga told me that for this prayer,

I ask to prophets and to God for the crew to be spared from danger at sea; to avoid big waves, strong wind, and so as not to collide into a reef. We must mention the name of God to protect us from danger at sea.

Success in fishing is conceived of as being the result of good fortune deriving from the navel of the perahu. All rituals surrounding the boat prior to departure “are aimed at increasing good fortune” (Southon 1995:7).

**The Voyage to Pepela**

During 1994, the majority of perahu from Mola departed for Pepela during July and August. Typically, the journey takes around one week depending on the wind conditions and number of stops along the way. From Mola, perahu sail south through the Flores Sea, often stopping at the southern end of the Tukang Besi coral reef complex to the west of Tomia to fish for a day or two for food for the trip, or to sell later on. The route takes the boats through the Maco Strait passing the islands of Adonara and Lomblem. Some vessels stop briefly at the Bajo village of Wywuring on the southern end of Adonara, to sell fish previously caught at the reef, before continuing on through the Savu Sea towards Kupang, perhaps stopping at Sulamu or Tablolong village south of Kupang, and then on to Pepela in eastern Roti.
After arriving in Pepela, another phase of preparations takes place prior to departure for a fishing trip. This includes restocking the perahu with food, water and cut timber, or obtaining extra supplies or equipment. Once preparations are complete it is a matter of obtaining a sailing clearance from the harbour master (syahbandar) and waiting for suitable conditions to depart.

The Bajo Fleet in Pepela

When I arrived in Pepela in late August, the village was bustling with activity. The harbour was a picturesque sight of dozens of brightly painted sailing boats at anchor, a scene that would rarely be seen at any other port in eastern Indonesia. All of the Mola perahu and most of the Mantigola perahu had arrived. Bajo perahu anchored off Tanjung Pasir and to the east side of the pier, while the Pepela owned perahu generally anchor to the north and west of the pier. I estimate that the total Bajo and Pepela sailing fleet operating out of Pepela during 1994 was somewhere in the vicinity of 140 to 150 perahu.

Pepela harbour acts as a stopping off point and base for perahu from other villages like Oelaba (Roti), Madurese perahu lete lete, as well as motorised perahu from other regions of eastern Indonesia which are fishing in Indonesian and Australian waters. In 1994, a number of motor boats from Sinjai in South Sulawesi used Pepela as a base to process trepang and restock supplies between each fishing trip.

From August through December 1994, I kept records of the activities of all Bajo perahu lambo operating out of Pepela harbour. There were 74 Bajo perahu. I recorded data according to 6 categories of ownership, source or point of departure of individual boats, and details such as whether craft had been borrowed. This information is summarised in Table 7 and given in full in Appendix 6. The fleet included:

1. Perahu that departed from Mola operating out of Pepela. This includes two perahu Rahmat Bahan and Rahmat Bahari, owned by ex-Mola Bajo living in Lasilimu, Buton and one perahu, Karea Bant, owned by a Kaledupa land person borrowed by a Mola crew.
2. Perahu owned by Mola Bajo living in Pepela. This includes one perahu, Cinta Lalesa, owned by a Bajo from LaManggau village, Tomea.
3. Perahu that departed from Mantigola operating out of Pepela.
4. Perahu owned by Mantigola Bajo living in Pepela.
5. Perahu owned by Pepelan residents borrowed by Bajo from Mola and Mantigola. Most of the captains who borrowed these perahu were living in Pepela with their families.

6. Bajo perahu from other villages with relationship to Mola operating out of Pepela.

Table 7: Number of Bajo perahu operating for each category of the Bajo fleet during August-December 1994.

<table>
<thead>
<tr>
<th>Mola living in Pepela</th>
<th>Mola Bajo living in Pepela</th>
<th>Mantigola Bajo living in Pepela</th>
<th>Bajo crew from Pepela</th>
<th>Bajo from other areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of perahu</td>
<td>26</td>
<td>22</td>
<td>6</td>
<td>3</td>
<td>13</td>
</tr>
</tbody>
</table>

Appendix 6 lists the name of the perahu, whether the owner joined the perahu, the captain's relationship, if any, to the owner, the number of crew and their home villages. It also lists voyaging details, including departure from home villages and arrival in Pepela, the voyages undertaken during the season, number of days at sea, return to home villages, and any additional information about the perahu. It also notes if the boat was apprehended or sold during the season or if it remained in Pepela at the end of the season.

A small number of Bajo men crewed on Pepela owned and Pepela crewed boats. Men from a number of ethnic groups can come together to form a crew and borrow a perahu from a Pepela boss. As well as perahu *lambo* there were approximately 10 motor boats of various sizes owned by Bajo from Mola and Mantigola living in Pepela. These were used to fish for shark using longlines in the northern Timor and Arafura Seas.

Most perahu are owned by Bajo (61) with only a small number (13) of boats owned by Pepelan bosses. Perahu owned by Mola Bajo comprise the majority of the fleet. For Mola perahu (category 1) only two people owned two boats each. Half of the category 1 owners joined their perahu as either captain or crew. For category 2, two Bajo living in Pepela, owned four and five boats each. Ownership of 9 boats by two Bajo living in Pepela reflects the financial success these men have had with regard to shark fishing in previous years. In the case of Mola Bajo living in Pepela (category 2) approximately three-quarters of owners joined their perahu.

During August to December, the total number of boat trips undertaken by Bajo was 194. The number of trips undertaken per boat is shown in Table 8. This includes trips ending in
apprehension. The usual number of trips undertaken by each perahu is 2 to 3 trips per season. Most common number of trips during the season was 3, while 26 perahu made two trips.

Table 8: Number of boat trips made by 74 Bajo perahu between August – December 1994

<table>
<thead>
<tr>
<th>No. of trips</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of perahu</td>
<td>6 *</td>
<td>26</td>
<td>32</td>
<td>10</td>
<td>194</td>
</tr>
</tbody>
</table>

*For this section, three perahu (Madelina I, Rote Indah II and Rote Indah III) are recorded as making a minimum number of one voyage each because it is not known exactly how many voyages each of these perahu made for the season.

For some, this represents the total number of trips undertaken for the whole year, particularly for the majority of perahu and crew based in Mola and Mantigola departing their home villages for Pepela and returning to their home villages at the end of the season. However, for many of those Bajo living in Pepela for the entire year, the number of shark fishing expeditions undertaken would be higher. For example, the captain of Hidup Merdeka stated that between the months of January and mid September 1994 he had undertaken seven short shark fishing trips.

The usual duration of voyages is between 20 and 30 days. The length of a fishing voyage can depend on the prevailing wind conditions and the amount of supplies. This does not equal the number of fishing days. For example, perahu fishing in the eastern region of the Timor Sea can take over 5 days sailing and tacking against the wind, to return to Pepela.

The majority of voyages were undertaken during the months of September, October and November. The majority of perahu departed Pepela for the first fishing trip between 5 and 8 September and returned to Pepela in the first two weeks of October. The majority of Mola perahu departed for their second trip during the third week of October, returning during the second and third week of November.

At any one time, the harbour can be full of boats, numbering a 100 or more. In contrast, within a matter of days it can be almost deserted and quiet for a few weeks. On 8 September I counted only 20 perahu lambo in the harbour. On 4 October, the harbour was bursting with activity after dozens of boats had returned from fishing (see Photo 47).
Photo 47: Dozens of Bajo perahu *lambo* anchored off Tanjung Pasir, Pepela in early October.

Such mass exodus within a period of a few days is due to wind conditions in relation to the lunar cycle. According to the Bajo, the end of a lunar cycle, when there is no moon (*bulan mati*) is usually a period of strong winds and not considered a safe time to depart. With the beginning of the lunar cycle and a new moon, the wind is not as strong, so boats usually wait until day 4 or so before departing Pepela. This also ensures crews can take advantage of sailing and fishing during a full moon. Many of the Mola boats waited for a new moon to depart on their first trip for the season (see Photo 48).
There is no set period for the amount of time a boat remains in Pepela in between voyages. Generally, crew spend approximately one to two weeks in Pepela, time enough to sell the catch, carry out maintenance, clean the perahu, repair fishing gear, re-stock with supplies and wait for suitable wind conditions to depart again.

After returning from the second trip, some perahu left Pepela in late November and returned to Mola. For other perahu a decision is made depending on the financial success of the season, and the current weather conditions, whether or not to go out again a third time. At this time of year, prior to the onset of the west monsoon, the weather becomes increasingly unpredictable. Some perahu departed a third time only to face strong wind conditions and were forced to return to Pepela later the same day. However, other perahu continued to voyage while the weather conditions enabled them to do so.

Fishing trips may be hampered by strong winds, but during the months of August-November, usually the problem is a lack of wind and the perahu may be becalmed. In such conditions, the crew may be required to row the perahu using a set of long oars to prevent them from drifting into forbidden areas. At the end of the season, the size of the Bajo fleet had decreased
due to perahu being sold in Pepela, Wanci or Kaledupa or apprehended for illegal fishing activity. This is shown at Table 9.

Table 9: Number of perahu either sold or apprehended and number remaining at the end of the season (December 1994).

<table>
<thead>
<tr>
<th></th>
<th>Mola</th>
<th>Mola Bajo living in Pepela</th>
<th>Mantigola Bajo living in Pepela</th>
<th>Mantigola Bajo from other areas</th>
<th>Bajo crew</th>
<th>Bajo from other areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. sold</td>
<td>4</td>
<td>–</td>
<td>2</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>7</td>
</tr>
<tr>
<td>No. apprehended</td>
<td>2*</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>7</td>
</tr>
<tr>
<td>No. remaining</td>
<td>21</td>
<td>19</td>
<td>4</td>
<td>2</td>
<td>11</td>
<td>4</td>
<td>61</td>
</tr>
</tbody>
</table>

* The perahu *Tunas Baru* was apprehended in November 1996. The crew were able to pay a security bond and retain the perahu and return to Indonesia, thus this perahu is not included in total numbers lost.

At the end of the 1994 season, approximately 20% of the Bajo fleet had been sold or apprehended reducing the fleet from the original 74 to 61. About 5% had been apprehended for illegal fishing activity during the season.

**Returning to Mola**

At the end of the fishing season approximately two-thirds of the Bajo perahu fleet returned to Mola, Mantigola or other villages (see Appendix 6). The return voyage to Mola from Pepela follows the same route. Usually perahu returning to Mola or Mantigola take on extra passengers, including women and children, or crew from boats that have been sold or apprehended (see Photo 49 and 50). On *Sumber Jaya*, on which I was a passenger, we had a total of 17 people on board for the return journey of 7 days duration. As well as the original crew, this included one other female, the sister of the captain; some crew from *Nurjaya*, apprehended and confiscated in November; and the captain of *Sinar Jaya II*, who had returned early to Mola in October, then come back to Pepela by motor boat to collect his two sons to return to Mola again.
Photo 49: Bajo sailing to Mola in early December. Onboard are wives and children of crew members.

Photo 50: Squally west monsoon conditions experienced on return voyage to Mola in early December.
During the 1994–1995 west monsoon (December – March), most Bajo families returned to Mola and Mantigola. Many of the Bajo women living on the Tanjung during the 1994 fishing season had stayed on during the 1993–1994 west monsoon and found it difficult, many having to evacuate their houses during strong winds and wet conditions. Families returned home to visit relatives, attend religious feasts and celebrations, and check on houses. It provided opportunity for men to work in the live fish trade operating in Southeast Sulawesi and the Tukang Besi Islands during early 1995.

**Fishing Grounds**

On sailing from Pepela south into the Timor Sea, the captain decides the destination for fishing depending on the prevailing wind conditions. Fishing activity takes place in a number of different areas along the continental shelf both within and outside the MOU box area. The areas fished by the Bajo include the area known as “bagian perusahan” (oil rig region). This is located outside the MOU box to the east Carrier Island (see Map 15) and south of the PFSEL to Longitude 125°.00, between Skua rig (called perusahan merah) and Jabiru and Challis rigs (called perusahan putih dua buah di atas). In the MOU box area, fishermen operate in the vicinity of Ashmore Reef and Cartier Island, to the east and north east; around Scott Reef; in waters between Cartier Island and Browse Island, and around Browse Island along the edge of the continental shelf. Outside the MOU box, fishing is conducted along the Sahul Shelf in waters to the east of the eastern boundary of the MOU box and waters to the south of the southern boundary of MOU box. Bajo boats also operate along the area called “bagian timur” (the eastern region) referring to the north eastern part of the Timor Sea, to the north east of the oil rigs, stretching along the Sahul Shelf, to south of the Tanimbar Islands - the area between the PFSEL and deep waters located south of Timor (Map 15). Since the best fishing grounds are located outside of the allowed areas, some fishermen often seek access to these areas, facing the possibility of apprehension. In other cases, fishermen are not knowingly aware they are outside allowed areas. This is particularly the case when they may only be a few nautical miles outside the MOU box or south of the PFSEL.
Pepela fishermen generally do not sail as far east as the Bajo and confine their fishing activities to inside the MOU box area and outside the southern and eastern boundaries of the box and around the oil rigs.

**Navigation**

Bajo navigate by a system of dead reckoning with reference to familiar land marks, navigation lights, oil rigs, sea features such as reefs, shoals and channels, directions of currents, waves and swells, tide patterns, prevailing wind directions, and stars. They also use a magnetic compass (*pedoman*). Wind directions are named after a system of compass directions called *mata sangai* meaning “points of origin of the winds” (Ammarell 1995:202). An example of a Bajo directional system is shown at Figure 8. The naming of wind directions corresponds to the main points on a magnetic compass.
It is not known how long the Bajo have carried magnetic compasses aboard their boats, but according to Ammarell (1995:202), the Bugis have been familiar with the magnetic compass since European contact.

The Bajo have an extensive knowledge of required navigational directions to reach destinations all over eastern Indonesia, as well as specific islands, reefs and fishing grounds in the northern Australian region. While sailing and fishing, position is obtained and monitored by reference to landforms. It is not usual to be out of sight of an island for many days. For example, if fishing along the northern Sahul Shelf, a short sail in a northeasterly direction will bring a boat within sight of Timor. Specific features along its southern coast assist in determining a perahu’s position. To assist, a crew member will be summoned to climb up the mast for a better vantage point. The time taken to travel between a set of reference points is recounted as days and nights.

As well as dead reckoning, the Bajo employ extensive sounding of the seabed to determine position in relation to allowed areas and to determine a depth of water suitable to fish. Fishermen have an extensive knowledge of the sea bed in the MOU area and Timor Sea. Depth is regularly monitored using a lead line (nduga), a prism shaped lead weight about 1–2 kg attached to a length of nylon fishing line. They determine whether they are in permitted...
or forbidden waters by water colour and depth. Men frequently stated that if they found they were in “white waters” it meant they were outside the allowed areas. Sometimes aparahu may temporarily get lost (*jatuh haluari*). Some carry charts or maps on board and occasionally refer to them for a general indication of location. But these are almost impossible to use with any reliability without modern navigational instruments. The use of the magnetic compass and proper compass bearing is becoming more common on frequently sailed routes.

**Methods of Shark Fishing**

Before shark fishing commences, the crew must locate a suitable place, usually a reef, to catch bait. The location of fishing (for bait or shark) is called *lana* or *tempat mencari*. Collecting bait (*umpang*) can take a few hours if fishing at a reef, or most of the day or sometimes longer. Bait is caught using troll lines with lures from theperahu while under sail or from a canoe in the open sea either under paddle or sail. In this case, canoes are launched from the perahu and crew may travel a few hundred meters or more away from the perahu trolling for fish. Bait can also be caught using handlines from the deck of the perahu, particularly if it is too rough to sail canoes. The amount of bait required depends on the number of longline hooks and the size of fish caught and can be in the vicinity of 70 to 200 fish. Bait can be kept longer by salting it, but not allowing it to dry out. As well as fishing for bait, this type of gear and methods are used to catch fish for eating. The staple diet at sea is rice and fish, so Bajo are nearly always handlining. When good eating fish are absent, crew may eat left over bait or shark meat. Excess fish can be cooked or dried and eaten when there is a lack of fresh fish.

Once sufficient fish are caught to bait longlines, the perahu will sail to locate a place suitable to set the longlines by sounding the sea bottom. All hooks and snoods are lined up along a plank or along the top of a hatch and baited. Usually the lines and snoods with baited hooks are fed out while the perahu is under sail. If there is no wind, it is necessary to row the perahu. The setting of longlines takes about half an hour to an hour. This is usually done in the afternoon and left overnight, attached to the perahu which is also anchored, with the longlines' location marked by buoys. Once the lines are set, the evening meal is prepared and crew entertain themselves, sleep, and take turns on watch.

Just before dawn the crew begin the arduous process of hauling in the longlines. This can take hours since no mechanical devices are used. Strong winds and currents can make it more difficult to pull in the lines. Depending on the wind conditions a perahu can sail under a half
set jib sail while pulling in the longlines. It is not uncommon to lose a section of the longlines or occasionally the entire set during a fishing expedition and most perahu carry some extra fishing equipment with them. The cause is usually due to the main line being eaten through at a certain point by fish. It then drifts away on the current. It is often difficult to recover the gear, particularly if it has happened some hours before the crew become aware of it, or if there is little or no wind to sail and recover the lines.

Sharks caught using longlines are usually already dead by the time the lines are hauled in. The shark are landed onto the deck of the perahu with assistance of gaffs or harpoons (iddi). The fins are cut off. These are trimmed of excess meat and laid or hung out to dry in sun. It takes about three days for the fins to dry and longer for the tails. The shark body is either cut up, the flesh cut into strips, salted and hung up to dry, or the carcass is dumped overboard. This process is repeated either at the same location or in another place. Some of the perahu crews I spoke with had set longlines around 10 times during approximately one month at sea but had only made a total catch of six or seven sharks.

Many perahu still carry a few handlines and shark rattles. If the crew find themselves in shallow waters at any time during the expedition, or when there is little or no wind, handlines and shark rattles may be deployed for a few hours or a day or two and sometimes at night. When fishing with hand lines, usually the main sail is hoisted and theperahu drifts slowly while crew shake the rattles over the side of the perahu. This method of fishing is more dangerous than longlines since the shark are alive when caught and must be stunned or killed either by using a harpoon with a detachable iron head, or clubbed before attempts are made to remove the fins.

The established use of longlines as the main gear has resulted in changes to the types of perahu used: there is now preference for smaller perahu. According to the Bajo, with a large perahu it is more difficult to fish when pulling in longlines. Because longlines are anchored to the bottom of the sea with stones, it means that they must pull theperahu towards the lines to pull them up. A bigger perahu is heavier and therefore more difficult to pull. A smaller perahu is lighter and faster. The use of motorised vessels is also advantageous since it is possible to motor slowly towards the lines while hauling them in.

Some Bajo also comment that when fishing with handlines while the perahu is slowly sailing, they can immediately sail away if a surveillance aircraft flies overhead. However with
longlines, since they are anchored, it can take hours to pull in the lines. This could be the time between reported sighting of illegal fishing activity by Coastwatch and arrival of a patrol vessel to investigate the activity.

**Fishing Ritual: Prohibitions and Placation of the Ancestors at Sea**

Once at sea, sailing and fishing are sacred activities because the Bajo have crossed into the domain of their ancestors and appropriate behaviour towards these beings at sea and during fishing will determine their fortunes. Taboo (pamali) observance and prayers, usually accompanied by offerings, complement shark fishing. Amongst villagers of Pepela, Bajo are renowned for their strong adherence to *adat* prohibitions and rules while sailing and fishing. It is taboo to: throw anything such as food or ashes from the fire box directly into the water - the material must be thrown over the deck of the perahu and later washed off with water; spit, or clean your teeth directly into the water - this must be done on the deck of the perahu and later washed off with water; urinate or defecate anywhere from the perahu but via the toilet box; comb hair while at sea; or use soap to wash the body or clothes while at sea.

If these are not observed, strong winds or storms may arise, with big waves, strong currents or no wind at all, sickness, or no fishing success. A Bajo man treating a crew member who just returned from a fishing voyage with a sickness from which he later died, told me the problem was because he had not observed a taboo at sea.

The practice of propitiating the spirits prior to fishing activity was always conducted during shark fishing when rattles and handlines were used. This has also been taken up since the introduction and use of longlines. Before the crew begin shark fishing operations, the captain or *punggawa* recites a prayer and lowers a simple offering, consisting of betel nut and leaves, lime and tobacco, to the *Mbo Madilao*. During a shark fishing expedition, it is only necessary for this to be carried out once, at the first place of fishing. This prayer is intended to praise the ancestors, and “to show respect” to those who live in the sea. In the words of Mudir, it is “to ask permission from *Mbo Madilao* if we can take fish and to give us good fortune” and “to be kept away from danger, like big waves, or strong wind”.

Mudir elaborates on the relationship with the ancestors:

> In the past our ancestors gave offerings to the sea. This is the custom [*adat*].
> We also do this. We still do this now. We lower offerings first and ask the
ancestors for this and that, to give us fish and good fortune. Then we can start fishing. We must. Whatever region we go to we have to inform the ancestors because they are not fixed at any one place. Because it is not us who have possession of the sea. It's the same if we want to ask for water or rice or wood we have to ask the person who owns it before we can take it. It's the same with our ancestors that live in the sea.

Kariman explains what might happen if permission is not sought first from the ancestors:

If we do not ask for permission from the guardian in the sea to take products usually they will hide the sea products, sometimes under a rock, or under the sand, under seaweed or sometimes the sea will become hazy or clouded or strong winds and big waves will come. But if we politely ask the sea guardian, we can have everything and also we will not have difficulties harvesting products from the sea because we have already asked permission.

Non-observance of such practices, such as not asking permission before fishing, can result in misfortune or sickness. In such instances, in the words of Kariman:

If Bajo have an accident at sea or misfortune or sickness [sore stomach or vomiting] they must ask forgiveness to the people who live in the sea who have taboo. If you want to ask for forgiveness we must say “we ask for forgiveness because we already took your riches [marine products] and especially because we did not have permission to do so first because we are only stupid people and don't know anything”.

Dudda, another perahu captain from Mola Selatan stated:

If we get the consequences of taboo, we must apologise to Mbo Madilao in order that we are safe from danger, from the consequences of taboo. When we have given them food, Mbo Madilao will go away, and the condition of the sea will be safe and the consequences of the taboo gone.

Fishing success is said to be also dependent on the correct construction and use of fishing gear. Mudir explains the specific rules for using shark rattles:
Before we begin fishing with a shark rattle we must say a prayer first to the ancestors, and ask to be given good fortune so we can aim to return home quickly. Then we dip the end of the shark rattle in the water three times. Once this is done then we can begin fishing.

Each person operating a shark rattle must also wear a hat. If there are no hats available they must tie a sarong or shirt around their head. In the words of Mudir “it is taboo to not wear a hat, if we don't wear a hat, the fish will not appear, or if they appear, the fish will not eat the bait”.

Shark fishing is a “social interaction” (Zerner 1994a:27) between people and spirits, and the way in which interactions are conducted is believed to determine fishing outcomes. Spirits govern the appropriation of marine resources. Fishing rights or permission to take fish is obtained from ancestors through ritual offerings.

**Conclusion**

Preparations in Mola for the 1994 east monsoon shark fishing season began many months prior to the departure of boats and crew from their home villages to Pepela. These include carrying out maintenance work on the boat to ready it for sea; organising crew; meetings between boat owners, captain and crew to arrange the terms of borrowing the perahu, the financial arrangements and fishing equipment ownership.

Shark voyaging is a family enterprise. The majority of Mola owners join their boats either as the captain or a crew member and crew are usually related to the owner or captain. Despite the availability of perahu in Pepela, the majority of the Bajo fleet operating in 1994 were owned by Mola Bajo, the majority from Mola Selatan, with only approximately 20% of boats owned by Pepela bosses. Boats undertake 2–3 fishing trips between the months of September and November with each trip lasting around 20–30 days. Relying on extensive local knowledge and navigation skills, the Bajo operate in an area covering hundreds of kilometers across the northern Timor and Arafura Seas. By the end of the 1994 season, the fleet had been reduced by 20% through either the sale or apprehension of boats. In 1994, approximately 5% of the Bajo fleet were apprehended for illegal fishing activity in the AFZ. At the end of the season, the majority of the Bajo fleet and families living in Pepela returned to the Tukang Besi Islands for a variety of social and economic reasons.
An investigation of the social-cultural conditions underlying shark fishing voyages during 1994 has shown that certain beliefs, rules, behaviours and rituals govern the activity of sailing and fishing. The purpose of pre-departure boat rituals are to offer physical protection to the perahu, its good fortune and the crew during voyages. Good fortune in sailing and fishing are also dependent on appropriate behaviour towards spirits who inhabit the sea, and control the exploitation of marine products. Permission to exploit shark is obtained through ritual offerings and prayers made to the ancestors prior to fishing activity. At this cosmological level, Australian ownership of marine resources in the AFZ is not recognised. Continued Bajo activity in waters now claimed by Australia is partly driven because the Bajo believe they have a legitimate right to fish in the AFZ, in waters controlled by their ancestors.
Chapter 8
THE ECONOMICS OF SHARK FISHING

Introduction
This chapter focuses again on the Bajo fleet operating out of Pepela during 1994 to investigate the economics of shark fishing voyages. It considers the trade and marketing of shark fin, financial arrangements, systems of distribution of earnings, earnings from shark fishing and variables affecting returns, as well as causes and effects of indebtedness. It examines economic reasons why Bajo continue to fish in the AFZ in the face of loss of access to traditional fishing grounds, technological restrictions and a policy of deterrence through boat apprehensions and confiscations. It also considers what effect boat apprehension and confiscation have on continued activity and whether this policy actually deters further illegal activity.

The Bosses of Pepela and Trade in Shark Fin
The Pepela traders are essentially commercially - based entrepreneurs, traders, or middlemen who are interested in the fishermen as suppliers of marine commodities in exchange for credit to fund the search for shark fin. The relationship between fishermen and traders is characterised by credit arrangements and indebtedness. This type of economic relationship is what Acciaioli (1987:10) describes as “transitional ties of dependence” - commercially oriented forms of indebtedness rather than “traditional ties of patronage”. These types of relationships founded on an economic base have in many cases replaced traditional patron-client relations across maritime societies in eastern Indonesia (Pelras 1996:332).

In Pepela in 1994 there were four main traders, each with his own network. These men are often called buyers (pembeli) by the fishermen, but the most common term used is bos, after the English term boss. Some of these traders operate in conjunction with other members of the local community, also called bos, who supply fishermen with boats, capital and provisions. In the following discussion, I have replaced personal names of bosses with letters in order to protect their identity.

The largest and wealthiest trader (bos ‘A’), was born in Pepela and has a part Arab heritage. He works for a husband and wife team from Hong Kong who provide him with capital to purchase sun-dried fin for export to Hong Kong. Bos A provides interest free financial capital...
to fishermen, or buys fin from fishermen who are financially independent. He also works in conjunction with his uncle (bos ‘B’), who operates from his own premises and provides capital and provisions to fishermen on credit, with the arrangement that the fin is sold to bos A. Bos A owns 18 perahu. He lends these to Bajo and Pepela fishermen. It is difficult to know for certain but bos A probably controls about 40–50% of the trade in shark fin in Pepela.

Bos C is of Chinese descent and lives in Ba'a, Roti, and of all the traders, has the longest established relationship with fishermen in Pepela. He was the first local trader to buy marine products from Pepela but has never lived in the village or directly supplied goods on credit. Bos A worked for bos C for a time before working with the Hong Kong partners. Bos C operates with another person (bos ‘D’), a relative of bos A and bos B. Bos D owns 6 perahu lambo which he lends to Bajo fishermen. He also provides supplies and money if needed. But bos D does not buy shark fin. The fishermen sell their fin to bos C. He in turn sends the fin to his partner in Ujung Pandang.

A Kupang based Bugis trader (bos ‘E’), who began direct operations in Pepela in 1992, has a number of Bugis collectors working for him in Pepela. Bos E works with another trader from Surabaya who provides the finances for his operation. His three collectors buy provisions in Kupang, transport them to Pepela and supply the goods to fishermen on credit. They purchase catch in return.

As a result of the good profits from shark fishing in the early 1990s some of the wealthier residents and boat owners purchased more perahu lambo and eventually branched out to become entrepreneurs themselves by providing capital, materials and supplies to Bajo and Pepela fishermen. One of these newer entrepreneurs is bos F. He sells fin to bos E in Kupang, or sometimes to other traders. He also owns a fleet of 11 perahu lambo which he lends. In 1994 he told me he provided provisions to 40 perahu in Pepela, both Bajo and Pepela boats. After a financially successful year in 1994, he and his wife made the Haj to Mecca in early 1995.

As well as these four main traders and their subsidiaries, other wealthy Pepela residents and boat owners purchase fin from the crew of vessels they own. They sell it to traders in Pepela or Kupang. The local shop owners also supply provisions to fishermen, making a profit on the higher price charged for goods obtained on credit. They sometimes buy fin and sell it to local or to Kupang based traders.
In Kupang, as well as bos E, there is another trader (bos G). He provided capital for at least one Mola perahu in 1994. Some Bajo who are financially independent of Pepela traders may sell their fin directly to bos G.

**Shark Fins: Grading and Marketing**

The market demand for shark fin is year-round, since shark fin soup is favoured at banquets. Maximum demand however is during the months of October to February, the favoured months for weddings and other feasts, especially in February with the Chinese New Year (Lai Ka-Keong 1983:37).

The quality and quantity of fin needles differ between species of sharks and thus their prices and grades also vary. Shark fins are divided into two groups: white and black. Black fins fetch a lower price than white fins, since white fins have a higher yield of fin needles. Shark with the highest commercial value are white finned sharks - shark-like rays especially the white-spotted guitarfish (*Rhynchobatus djiddensis*) (*kzreo nunang* or *lontar*). The second most valuable are black fin sharks, reef and offshore associated whaler sharks (*Carcharhinus* spp: *kareo simburoh; kareo tarang tikkolo; kareo lapis gigi; kareo pote'; kareo angntngan*); tiger sharks (*Galeocerdo cuvier: kareo mangali*) and Hammerhead sharks (*Eusphyra blochii* and *Sphyrna* spp: *kareo bingkoh*).

Two different grading systems are used. In the traditional grading system, fins are classified either according to species or grouped according to the colour of the skin of the shark, and sold as a set consisting of two pectoral fins, the first dorsal and one caudal fin. Further grading is determined by the size, dryness, and method of cutting - crude or straight cut (*potong biasa*), half moon cut (*potong semi*) and full half moon cut (*potong full*). The upper lobe of the tail has no commercial value. In Pepela some fishermen retained this portion of the tail which sold for Rpl,000/kg and was according to one trader, used to make pig feed. The second dorsal, ventral and anal fins and the fins from small sharks are not sold as a set but as mixed dried fins (Lai Ka-Keong 1983:38) (see Figure 9).
Because of different grading practices of the exporting countries and the difficulties in identifying which species of shark the fin belongs to, nowadays fins are graded principally by their size, colour and method of cutting (Lai Ka-Keong 1983:38). In Pepela, this is the system used preferably for black species. Black fins are cut in either of three methods. In 1994 most fin was sold as half moon cut, with only a few fishermen attempting the full moon cut. In some instances large black species fins may be sold as a set of four fins (see Photo 51). White species are sold as a set (3 fins only) and are always crude cut (see Photo 52).
Photo 51: A set of black fins.

Photo 52: A set of white fins.
Tables 10 and 11 show examples of the grading and pricing systems used by traders in Pepela in 1994, based on the colour of fin, the size and the type of cut.

Table 10: An example of grading and prices of black fin shark species, September 1994, Pepela (prices shown are in rupiah per kilogram).

<table>
<thead>
<tr>
<th>Black Fin</th>
<th>potong biasa</th>
<th>potong semi</th>
<th>potong full</th>
</tr>
</thead>
<tbody>
<tr>
<td>hitam besar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 cm and above</td>
<td>40,000 – 45,000</td>
<td>105,000</td>
<td>150,000</td>
</tr>
<tr>
<td>hitam tengah</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25–29 cm</td>
<td>22,000 – 22,500</td>
<td>55,000</td>
<td>75,000</td>
</tr>
<tr>
<td>hitam kecil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15–24 cm</td>
<td>10,000–12,500</td>
<td>27,500</td>
<td>40,000</td>
</tr>
<tr>
<td>kepel</td>
<td>5,000</td>
<td>17,500</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: hitam besar = black large; hitam tengah = black middle; hitam kecil = black small; kepel = ventral fins, anal fins, second dorsal fin.

Table 11: Two examples of grading and pricing for white fin shark species from two traders in Pepela 1994 (prices shown are in rupiah per kilogram).

<table>
<thead>
<tr>
<th>White Fin</th>
<th>Trader 1</th>
<th>White Fin</th>
<th>Trader 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>putih X super</td>
<td>potong biasa</td>
<td>putih X super</td>
<td>potong biasa</td>
</tr>
<tr>
<td>38 cm and above</td>
<td>175,000</td>
<td>38 cm and above</td>
<td>170,000–175,000</td>
</tr>
<tr>
<td>putih besar</td>
<td>potong biasa</td>
<td>putih besar</td>
<td>potong biasa</td>
</tr>
<tr>
<td>30–37 cm</td>
<td>150,000</td>
<td>34–37 cm</td>
<td>140,000</td>
</tr>
<tr>
<td>putih tengah besar</td>
<td>potong biasa</td>
<td>putih tengah besar</td>
<td>potong biasa</td>
</tr>
<tr>
<td>29–36 cm</td>
<td>125,000</td>
<td>25–33 cm</td>
<td>120,000</td>
</tr>
<tr>
<td>putih kecil</td>
<td>potong biasa</td>
<td>putih kecil</td>
<td>potong biasa</td>
</tr>
<tr>
<td>28–35 cm</td>
<td>100,000</td>
<td>22–30 cm</td>
<td>100,000</td>
</tr>
<tr>
<td>putih kecil</td>
<td>–</td>
<td>–</td>
<td>60,000</td>
</tr>
</tbody>
</table>

Note: putih besar = white large; putih tengah = white middle; putih kecil = white small.
The prices offered depend on the quality of the fin, with small variations between traders. The average price of a particular species and size or cut of fin remains relatively stable. But competition may see one trader offering a slightly higher price than another. For example, one Bajo captain received Rpl 16,000 per kilo for hitam besar, Rp60,000 per kilo for hitam tengah and Rp30,000 for hitam kecil and Rp20,000 for kepel fins (potong semi). Fishermen may be offered lower prices or may lose a percentage of the total price of shark fin if it is not completely dry.

Traders make a profit on the resale value of the fin at each level. For example for the largest sized black fins (hitam besar), traders purchase the fin from the fishermen at Rpl05,000/kg (half moon cut). This fin will then be sold to another trader, in Surabaya say, for Rpl 10,000/kg if the cut remains the same. However, the collector may re-cut the fin to full half moon after and then sell it to the next trader for a much higher price – Rpl50,000/kg, making a large profit. The profit margin must be high enough for traders to cover local tax and transportation costs. A local fisheries officer from the Camat's office in Eahun visits Pepela daily to collect tax (Rp500/kg shark fin) from each trader. However there is a large degree of tax evasion, with traders falsely declaring the amount of fin purchased.

From Pepela the shark fin is transported to Kupang where it is shipped by plane to Surabaya or Ujung Pandang (Rp2,500/kg for freight costs). From there it is either sold for use in the local domestic Chinese market or exported to Hong Kong, mainland China, Singapore, Taiwan or Korea. It is impossible to know precisely how much shark fin passes through Pepela. However, according to the local fisheries officer, 29 tons of shark fin was exported from Pepela in 1993. To provide an idea of the cost of shark fin soup in Indonesia, in April 1995 I spoke with the manager of the Surya Super Crab restaurant in Ujung Pandang. He informed me that he purchased five kilograms of partly processed shark fin from a local trader for Rp210,000 per kilo (Rp1,050,000). From 5 kg of fin he gets approximately 50 portions (Rp21,000) and a bowl of prepared shark fin soup sells for Rp35,000 (AS22.00) in his restaurant.
One of the reasons why shark fin is so expensive is because fins undergo complex processing in order to extract the fin needles. This requires the removal of the skin, cutting away any meat attached to the fin and base of the cartilaginous platelets, soaking, washing and bleaching the fins to remove any blood in the cartilaginous base, and then drying the processed fin. Before the fins can be cooked they are soaked to make them soft, bleached again, boiled and the base kneaded by hand to separate the fin needles from the membrane. It is sold as either wet or dry fin needles. At this stage the fin needle can be cooked and sold as one fin still in its shape as soup, or processed and made into a fin net. Lower grade fins or small fins are further processed to make fin net lots which facilitate easy cooking and also increase the value of the material. The fins may be marketed at various stages of the processing (Lai Ka-Keong 1983:35–37) (see Photo 53).

![Photo 53: Forms of processed shark fin.](image)

Hong Kong is currently the entrepot for the global trade in shark fin (Rose 1996:57). According to Rose (1996:50), retail prices for shark fin in Hong Kong range from approximately US$40.00 per kg to US$564.00 per kg, while shark fin soup ranges in price from US$4.50 to US$90.00 per bowl. As well as local consumption a percentage is exported to other Chinese markets from Hong Kong. Over 80% of shark fins sold in Hong Kong are
consumed in restaurants and thus strong ties are established between processors and restaurants to ensure a steady supply of prepared fin. Shark fins can also be purchased at retail outlets as ready prepared, processed and packaged dried shark fin and canned shark fin soup.

**Financing a Voyage: Credit Arrangements**

Bajo departing either from Mola or Pepela finance shark fishing voyages through credit arrangements. Dependence on credit in fishing societies is universal and is “closely bound up with the nature of fishing” (Sather 1997:132) where with regard to income “the peaks are sharper and the valleys deeper” (Alexander 1982:58). The highly variable and fluctuating returns from fishing mean that at certain times of the year, income is not sufficient to support daily household expenses or to meet larger expenditures such as education, life cycle rituals and marriages, religious feasts, fishing equipment and boat maintenance. So people rely on credit to get by. In addition, conventional methods of obtaining credit, such as obtaining a loan from the bank, are not accessible to them as they have few or suitable assets to guarantee their loan.

Many of the boat owners and crew have little or no savings of their own. Most fishing activities whether locally based or long distance, are financed by credit. For example, Polio from Mola Selatan has access to a small motor boat and regularly spends days or a few weeks fishing for trepang at offshore reefs. He sells his catch to a local Bajo trader who in turn sells it in Bau Bau. This trader advances cash to Polio so he can buy provisions needed for his fishing expedition. He also gets money for his wife and children to sustain themselves while he is absent. In another example, Bajo men working in the live fishing industry at local and distant reefs obtain cash from the bos to provide for their families during their absence.

Generally anyone with a degree of economic independence can invest in and seek a return on investments by providing capital. In Mola capital is obtained either from extended kin, wealthy local residents often *Haji*, or a more official money lender based in Wanci. Unlike other areas of eastern Indonesia, where Indonesian Chinese provide capital to fishing peoples, there are no Chinese living in Wanci or Kaledupa. There are three main forms of money lending: money lent from the local Wanci people at fixed interest of 10–15% per month (which usually requires gold jewellery as security); money lent at fixed interest (for example, a person borrows Rp 1 million for an unlimited time but rather than pay interest per month makes
an agreement with the lender to pay back the original Rp 1 million plus Rp500,000 as fixed interest) usually requiring security; or a shares system called saduh.

Under the saduh system, a crew member borrows, for example, Rp300,000 from a relative or other person. Sometimes this may be the owner of the perahu or a crew member himself who will invest in a share or part share (eg. Rp150,000). An agreement is made whereby the original Rp300,000 must be returned to the lender, plus one share of the profit from the sale of the fin, equivalent to the share of a crew member. This arrangement is sometimes called “bagi dua” (two parts). The agreement is usually made for a fixed number of fishing trips within a season - usually two. There is no security for the money lender. If the crew are not successful, the money lender will lose his or her money. However, as demonstrated in the example below, there is the potential for the money lender to earn a substantial profit on the original money lent.

Many Mola and Mantigola Bajo have been attracted to Pepela partly because of the advantages in obtaining capital and interest free credit from bosses. There are also complementary difficulties faced in their own villages raising enough capital for a voyage. The capital required varies depending on the number of crew, and whether a set of longlines must be newly constructed or an existing set repaired, but it is usually in the vicinity of Rp 2–4 million (A $1250.00–52500.00). The cost of provisioning a vessel based in Pepela for a shark fishing voyage is significantly less than for a vessel from Mola or Mantigola. This can vary but generally is around Rp400,000 – Rp700,000.

In 1994, a Mola owned perahu with a Mola based crew usually obtained most of the operating capital needed to cover the cost of provisioning the vessel with food, equipment and supplies for the voyage from Mola to Pepela, and for at least the first fishing trip, in Mola. This also included money to leave for their families in Mola while the men are absent, for 3–4 months or longer. The amount varied between Rp50,000 to Rp250,000 per family.

On arrival in Pepela, most perahu financed from Mola or Mantigola obtain extra supplies or equipment and sometimes cash from a bos on credit. Some Mola boats finance themselves with just enough provisions to sail to Pepela and on arrival they join with a bos to obtain the rest of their supplies and fishing materials on credit and obtain cash to send back to their families in Mola. Although there are benefits in obtaining equipment and supplies on credit from the boss, reducing the amount of cash to be obtained from other sources, the traders
actually charge a higher price for goods than the normal shop or market prices. However, interest free credit has the benefit of being clear from what could amount to higher debts in the long term if a perahu is unsuccessful, especially on money borrowed at 10% interest per month. Such financial arrangements make it much more attractive to the Bajo fishermen and their families to live in Pepela and provision their vessels on credit. In 1994 a few Bajo vessels had financed themselves and were independent of bosses in Pepela and were able to sell their shark fin to the trader offering the highest price in Pepela or in Kupang.

**Dividing the Earnings: Share Systems**

The system of distribution of the earnings or profit from shark fishing is based on a system of shares, rather than fixed wages. Shares are allocated to returns on capital, the boat, labour and fishing equipment. There are three parties to the division of income: the owners of the capital, the boat owner and the crew. This system and joint credit arrangements helps spread the risk of fishing among the crew in what at times can be a variable and uncertain activity (Acheson 1981:278). According to Acheson (1981:278), the share systems “effectively increases the motivation of the crew by making them partners in the enterprise, and reduces the risk for boat owners by ensuring that they will not have to pay fixed wages if catches are poor”.

Two systems of dividing the profits from a voyage are used by the Bajo depending on how the capital was obtained: the Mola and Mantigola system (*bagi* Mola) and the Pepela system (*bagi* Pepela). Both systems have been in use for a long time and represent contemporary versions of shares systems used historically by maritime societies throughout Indonesia on fishing and trading voyages including Macassan voyages to northern Australia in the 18th and 19th centimes (see Macknight 1976:19–23; Hughes 1984:128, 175; Southon 1995:67–69).

The following examples illustrate the differences between the Mola and Pepela systems of dividing the profits after the sale of shark fin to a trader in Pepela. I consider a Mola perahu financed under the *saduh* system and under money borrowed at a fixed interest rate, and a Pepela based Bajo perahu financed by a local trader. For these examples, longlines have not been newly made but required repairs so the cost of materials would be included in the total expenses. In the case of longlines, the owner of a set, usually the perahu captain or owner, will value the longlines at say Rp500,000. Then each crew member including the captain buys a share of longlines at Rp50,000 each. This cost is added to the total cost of the voyage. In these examples the gear is jointly owned by the crew. Similarly, canoes can be owned by the captain,
a crew member or the boat owner. In these examples the captain is the owner of the canoes. I have chosen a crew of nine for Mola based perahu and seven for Pepela based Bajo perahu since overall, Mola perahu have larger crews, and the numbers fit with my field observations.

**Mola Perahu Financed Using the Saduh System**

The 9 crew and owner of a perahu obtained a total capital of Rp3,600,000 from Mola under the *saduh* system (Rp300,000 = 1 share, so Rp3,600,000 = 9 shares for crew @ Rp2,700,000 and 3 shares for the owner @ Rp900,000 since the perahu participates in the voyage as 3 persons and the owner thus must contribute three shares). The capital is used to cover the cost of the voyage from Mola to Pepela, together with the first shark fishing trip, including fishing gear and supplies, food, and money left for families in Mola (Rp50,000 for each crew member and for the owner of the perahu). On arrival in Pepela, the crew obtained extra supplies on credit from a trader in Pepela to the value of Rp100,000. The fishing trip was 4 weeks duration and the crew obtained Rp6,000,000 from the sale of shark fin to a Pepela trader.

The Bajo system of dividing the profits from the sale of the shark fin (Rp6,000,000) ($A3,750) are as follows: after the cost of the fishing trip has been subtracted (Rp 3,700,000) ($A2,312) the remainder (Rp2,300,000) ($A 1,440) is divided into shares. The owner of the perahu takes 3 shares; the captain and crew one share each; the owner of the longline gear, in this case the crew, takes one share. The owner of the canoes, in this case the captain, receives a quarter share for each canoe. For each amount of money borrowed under *saduh*, the lender receives one share.

<table>
<thead>
<tr>
<th>Rp6,000,000</th>
<th>sale of shark fin</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Rp3,700,000</td>
<td>capital from Mola and extra supplies in Pepela</td>
</tr>
<tr>
<td>= Rp2,300,000</td>
<td>balance - to be divided into 25.5 shares =</td>
</tr>
<tr>
<td></td>
<td>Rp90,200 per share</td>
</tr>
</tbody>
</table>

25.5 shares =

9 shares for crew (including captain) =

Rp811,800 = Rp90,200 per person

1 share for longlines = Rp90,200 (owned by all crew so divided by 9 = Rp10,020 each)
0.5 share for 2 canoes with 1/4 share each = Rp45,100 (both owned by captain)

12 shares for capital (Rp3,600,000) borrowed from Mola = Rp1,083,000 = Rp90,200 per Rp300,000

From this example, with a perahu crew receiving Rp6,000,000 from the sale of shark fin, each crew member receives **Rp100,200** ($A62.60), one share each plus a share from the longlines, for 8 weeks (since leaving Mola, arriving in Pepela and 4 weeks at sea).

Since the arrangement under the saduh system was for two fishing trips, the money loaned will still attract an equal share of the profits from the second trip but the original money borrowed has been covered outright. The provisioning expenses for the second voyage will not be as much (Rp400,000 – Rp700,000) as the first. Under this system, it is only on the third trip, if one is undertaken, that the crew will be clear to split the profits between themselves.

**Mola Perahu Financed from a Money Lender**

This time the capital is obtained from a money lender in Wanci. A total of Rp3,600,000 was borrowed. Under the arrangement a total of Rp5,400,000 ($A3,375) must be returned (Rp1 million attracts a fixed interest of Rp500,000). On arriving in Pepela the crew obtained extra provisions worth Rp100,000 from a bos.

<table>
<thead>
<tr>
<th>Rp6,000,000</th>
<th>sale of shark fin</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Rp5,500,000</td>
<td>capital from Mola with interest and extra supplies in Pepela</td>
</tr>
<tr>
<td>= Rp 500,000</td>
<td>balance to be divided into <strong>13.5 shares</strong> = Rp37,040 per share</td>
</tr>
</tbody>
</table>

**13.5 shares =**

9 shares for crew (including captain) =

Rp333,360 = Rp37,040 per person

1 share for longlines = Rp37,040 (owned by all crew so divided by9 = Rp4,100 each)
0.5 share for 2 canoes with a 1/4 share each = Rp8,520 (both owned by the captain)

Here each crew member receives **Rp41,140** (A$25.70), one share each plus a share from the longlines, for 8 weeks (since leaving Mola, arriving in Pepela and 4 weeks at sea). Although this share is very small, the advantages of this system against the saduh system are that the original capital has been covered outright and for the second trip, the costs will be considerably less (Rp400,000 – Rp700,000). Depending on the success of the trip, the profits for each member will be higher.

**Pepela or Bajo Owned Perahu Financed by Pepela Boss**

For a perahu based in Pepela, all supplies and materials including money left for families while at sea are obtained on credit from a boss at Rp700,000 (A$438). The longlines belong to the boat owner and he is responsible for any expenses associated with them. The canoes are usually rented from the owner for a fixed price. The fishing trip was 4 weeks duration and on return the crew obtained Rp6,000,000 from the sale of shark fin.

Under the Pepela system of dividing the profits, the proceeds from the sale of shark fin of Rp6,000,000 are divided by three. One third is taken by the owner of the boat and from the remainder the cost of the voyage (Rp700,000) is taken out along with the rental cost of canoes at Rp50,000 (2 @ Rp25,000 each). From this sum, the remainder is divided among the crew and captain. The owner of the longlines receives one share.

\[
\begin{align*}
\text{Rp 6,000,000} & \div 3 = \text{Rp2,000,000 for perahu owner} \\
\text{Rp 4,000,000} & \quad \text{remainder} \\
- \text{Rp 750,000} & \quad \text{supplies in Pepela and canoe rental} \\
\text{ Rp 3,250,000} & \quad \text{balance - to be divided into 8 shares} = \\
\text{ Rp406,250 per share} & \\
8 \text{ shares} & \quad 7 \text{ shares for crew (including captain)} = \\
\text{ Rp2,843,750} & \quad \text{Rp406,250 per person} \\
\text{1 share for longlines} & \quad \text{Rp406,250 (owned by perahu owner)}
\end{align*}
\]

From Rp6,000,000 from the sale of shark fin, each crew member receives **Rp406,250** ($A254) having left from Pepela for a 4 week period at sea. In these examples the captain receives an...
equal share to that of a crew member. According to one Bajo, in some cases an arrangement is made between the perahu owner and captain, whereby the perahu owner gives the captain an additional 10% – 20% of his share for the safe return of the perahu.

The share for a Pepela based Bajo (Rp406,250) is greater than that for a Mola based Bajo (Rp100,200 or Rp41,140) for a voyage lasting the same period and of equal profit from the sale of fin to a trader in Pepela. This is because the amount of capital required is significantly higher for perahu departing from Mola or Mantigola than Pepela and because the capital borrowed attracts high interest rates or a share equal to that of a crew member.

Under the Pepela system of dividing the profits, the owner of the boat obtains a significantly greater share than under the Mola system (Rp2,000,000 compared with Rp270,600 or Rp111,120). Under the Pepela system, the boat owner's share is taken out from the total earnings and then the cost of the voyage is taken from the crew's share. This means that the boat owner always receives a share even if the voyage makes a net loss. Under the Mola system, the cost of the voyage is taken out from the total amount before the remainder is divided between the boat owner and crew. This would suggest that under the Mola system, the cost of the voyage is a more equally shared financial arrangement between perahu owner and crew than under the Pepela system.

A feature of the Mola arrangements is that the return to the boat owner on the capital investment of the boat is relatively low compared to the investment on other forms of capital such as under the saduh system. Southon (1995:69) found the same feature in his analysis of returns to boat owners from trading voyages in Lande on Buton. Here, I follow the example used by Southon (1995:69). For example every Rp300,000 of capital attracts one share. Applying the same rate to the return of the boat and assuming the boat is worth Rp4,500,000 then the boat owner would receive 15 shares, instead of 3 shares. The return to the boat owner is also relatively low when compared to the share of a crew member or the share allocated for longlines. Another example of disproportionate returns to capital against labour in these financial arrangements is where the owner of the boat receives the same number of shares irrespective of the boat's quality or the amount of investment it represents. Alambo worth Rp 4 million receives the same number of shares as a lambo worth Rp 9 million. The same applies to longline gear; the share of a longline worth Rp750,000 is the same as one valued at Rp 1.5 million. This feature is common among fishing societies. According to Acheson (1981:278), the effect of the share system is that,
it inhibits capital investment, because boat owners...do not receive full returns on the investment they make. That is the owner pays all the costs of investment, but the crew receives part of the increases in catch that result.

Even though the perahu represents a significant financial investment for the Bajo, under the Mola share system, it would appear that since the perahu as an investment is rewarded at a relatively low rate compared with other forms of capital, labour or equipment, the perahu is not operated as a capital investment. This is because the perahu participates in the voyage as three persons rather than as capital (see also Southon 1995:120). Thus the practical advantages of boat ownership lie mainly with good profit returns, since under the Mola system there is no security on returns for the owner if the voyage is unsuccessful. A Mola or Mantigola boat owner can increase his returns participating as a crew member. In 1994 approximately half of Mola perahu owners participated in the voyage as either captain or crew. Providing crew have a relatively successful fishing season, the owner can draw a regular income from his investment. Whether this balances out against the outright capital investment of the boat and yearly expenses for maintenance and repairs over time is unknown and requires further research.

For Mola based perahu, if fishermen catch enough shark to clear their debts on capital originally borrowed, cover the costs of the voyage and return a profit, they are able to obtain provisions from a Pepela bos on credit, and divide the profits from following trips under the Mola or Pepela system. Because the Bajo are closer to their fishing grounds, the cost of subsequent trips is much less, and if successful, they can obtain a better share of the profits than on the first or second voyage. If the expedition has returned a profit, after the first trip, the crew may decide to use their profits to finance the next trip themselves and purchase supplies and equipment from the local shops or market. This means that the costs are less by bypassing the bos and they are free to sell their fin to the trader offering the best price.

The Bajo consider the saduh system to be too heavily weighted in favour of the investor (“terlalu bent”) and their earnings can be quite low compared to other forms of obtaining capital. However, if they do not have any security to guarantee a loan from a money lender, the saduh system remains the only way of financing a voyage. Since no security is required to obtain credit in Pepela it is unclear why more men and their families have not migrated to Pepela to take advantage of the credit arrangements there. Some Bajo told me they preferred their families to remain in Mola so their children's schooling was not interrupted. There
were less opportunities in Pepela for women and children to obtain food for subsistence through fishing and collecting, and there were also difficulties associated with housing and living conditions.

**Financial Independence and Indebtedness**

The earnings from shark fishing are variable since there is a “large element of unpredictability” (Sather 1997:131). One trip may provide good returns while the next may see the crew suffer a loss. Similarly, one boat crew may be successful throughout the entire season while another may not have been able to clear their debts. The success of a shark fishing expedition and the crew's earnings over a season are dependent on a number of variables. These include weather conditions - strong currents or light or calm wind conditions might make it difficult to reach fishing grounds, misfortune, illness or accident at sea, the number of trips undertaken, catch yield and profit returns, and apprehension. A boat may return to Pepela after a few days because of an ill crew member. Fishing gear may have been lost or fouled on the sea bed at some point during the voyage, requiring the boat to return to Pepela perhaps before the crew has even caught enough sharks to cover costs. This in turn means further investment to repair and replace equipment. There may have been problems with the perahu itself, damage due to bad weather, tearing a sail, or unseaworthiness forcing the crew to return to port. Such occurrences were relatively common during the 1994 season among even the most skilled Bajo.

Earnings during the 1994 season varied considerably among the fleet. Table 12 provides examples of amounts 11 perahu crew received for the sale of a catch of shark fin over 2 or 3 trips for the season. These examples show considerable variation. For example, returns from one trip range between Rp400,000 to Rp15,000,000. The crew of *Sejati 02* obtained just over Rp 3 million from the sale of their catch from the first voyage. On the second trip the catch was much larger and they received over Rp15.5 million (Table 12). With such a good return on the second trip the captain decided to return to Mola.

Table 12: Amount received for sale of shark fin for 11 Bajo perahu over August-December 1994 (prices shown are in rupiah).

<table>
<thead>
<tr>
<th>Perahu</th>
<th>Trip No. 1</th>
<th>Trip No. 2</th>
<th>Trip No. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Perahu departing from Mola operating out of Pepela</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Harapan Jaya</em></td>
<td>6,000,000</td>
<td>4,500,000</td>
<td>–</td>
</tr>
</tbody>
</table>
During the 1994 season, only a small number of Bajo perahu were highly successful. Six made catches worth over Rp 10,000,000 on one trip. The highest return from one trip was reported to be Rp20,000,000. For the boat owners these were very profitable, particularly those based in Pepela and for those Mola perahu on their second trip after most of their initial costs had been covered with profits from their first trip. Some Mola perahu owners sunk their profits into repairs on their vessels during the west monsoon. The owner of Suka Bakti made the Haj to Mecca in 1995 with his profits. Another owner on his return to Mola, made a special trip to purchase a cow from Buton, for an extravagant feast for a rite of passage for his infant daughter.

Because of the variables involved in shark fishing and the large number of boats operating, I was not able to collect details on average earnings for the entire season from all boats. However, based on available data, it appears that many of the Mola based perahu crews came out in front at the end of the season with the total profit for each crew member ranging between Rp 100,000 – Rp500,000 for four to five months fishing.

In one example, the crew of Sumber Jaya who financed their voyage under the saduh system, sold their catch for Rp7,000,000 on the first trip and received a share of Rp100,000 each. On the second trip they received Rp6,083,000 for the shark fin, and after expenses received a share of Rp85,000 each. On the third trip the perahu was forced back to Pepela because of strong winds and decided to return to Mola rather than risk fishing in early December. However, since the perahu had been provisioned with goods on credit from a trader to the
sum of Rp250,000, the crew still owed this amount. Since the overall returns for each crew member for the entire season were not high (Rp285,000), the captain was required to leave his longline gear with the trader as security until the amount could be paid off at a later date. This shows that despite relatively good returns for shark catch, Bajo do not always receive high profits through credit arrangements.

For some Pepela based Bajo, moderate returns for the season enabled them to invest in a new vessel. The captain of Mekar Indah who had lived in Pepela for a few years, was successful enough during 1994 to return to Mola at the end of the season with his family and finance the construction of his own boat. The owner of Bintang Nusantara purchased a second hand perahu at the end of the season. The owner of Usaha Marni purchased a newly built boat in late November. In contrast, none of the owners, captains or crew from Mola or Mantigola purchased new perahu or began construction of a new boat at the end of the season.

Some crews made poor catches throughout the season. The result of an unsuccessful trip means that fishermen are placed further in debt, and have to borrow more goods on credit to provision the perahu for the next trip. They are under further pressure to obtain a good catch on the following voyage in order to repay debts. At the end of the season a few perahu had not been successful enough to break even and clear themselves completely of all debts. The crew of Purnama after three trips for the season made a total of just under Rp 3 million (Table 12). Since this did not cover the costs of the voyages, neither the perahu owner nor the crew received any shares and at the end of the season still owed Rp70,000 each for the costs of the voyage. At the end of a season, a crew that has been continually unsuccessful will be forced to resume a relationship with the same boss in the following season.

If the crew want to return to Mola, depending on the size of the debt, a boss may demand that the owner, captain and crew leave some form of indemnity behind, such as longlines or, in the worst case, the perahu. To pay off debts the owner may be forced to sell the perahu to the Pepela trader if he refuses to extend credit over to the following season. This was the case with the Mola perahu Penasehat Baru and the Mantigola perahu Suka Bakti II. The crew will then be indebted to the owner. Such cases have contributed to the increase in ownership of perahu among the bosses in Pepela in recent years. After an unsuccessful season, a perahu may also be sold at the end of a season to repay debts to a money lender in Wanci. This was the case with Karya Satu.
Families and fishermen deciding to remain in Pepela during the west monsoon, may survive for a few months on any profits they made during the season. However, when this runs out, they can obtain cash and basic supplies on credit from a boss. If the men have not had any returns on fishing at the end of the west monsoon or during the earlier months of the east monsoon, by the time the main fishing season begins, the Bajo may have a considerable debt again to the boss, in addition to costs required to provision a perahu for its next voyage.

Although no detailed investigation was made into the contribution of returns from shark fishing to the annual household economy, for most Bajo, returns from shark fishing and other forms of long distance voyaging provide cash to meet expenses that day to day income cannot. These include expenses for household goods, maintenance and purchase of fishing equipment, canoes and small boats, housing, religious feasts and ceremonies, schooling, clothes, money to pay off prior debts, income to sustain the family during the west monsoon and periods of bad weather that make fishing difficult and unreliable, and the purchase of gold that acts as a form of saving. The day to day local fishing and collecting of sea produce by men, women and children, as well as other small-scale economic activities of women, provide the subsistence and basic requirements for the household. However, even if the earnings from sailing are negligible and make little contribution to the household economy, the very act of men being absent from the village for months at a time on fishing voyages means that at least their day-to-day subsistence needs have been covered.

As well as poor returns from shark fishing, debt and indebtedness arise from the apprehension and forfeiture of a perahu, catch and equipment. This can be considerable. For example, in the case of a Mola financed perahu apprehended on its first voyage. In addition, if an indemnity is placed on the boat by the owner, the debt acquired by the crew can run into millions of rupiah or thousands of dollars. In 1994, in contrast to Mola, Pepela perahu did not have an indemnity, a further attraction for Bajo to borrow Pepela owned perahu.

Between August and December 1994, seven Bajo crewed perahu were apprehended for suspected illegal fishing in Australian waters. Two of these were Mola based perahu (Nurjaya and Tunas Baru); three were owned by Bajo living in Pepela (Harapan Bersama, Teluk Pepela and Usaha Bersama) and two owned by Pepela bosses (Putra Bahari II and Usaha Nelayan). All crew were convicted and with the exception of Tunas Baru, all boats, equipment and catch were forfeited. In this case, the crew were able to pay a security bond of Rp3,000,080 in lieu of the value of the perahu and return to Indonesia with their boat. This was only possible
because on their first voyage the catch sold for Rp 11,865,000 and thus they had enough cash on board in Darwin to pay the bond. However this was unusual.

The seven crew of Nurjaya were apprehended on their second trip after just clearing most of their debts from Mola with Rp3,000,000 obtained on the first trip, but still had debts from provisioning the vessel on credit with a Pepela boss to the sum of Rp450,000. At this time it was not clear whether the crew would be required to pay back the indemnity to the owner since the crew had no means in the foreseeable future to do so. In the case of Putra Bahari II, there was no indemnity for the perahu and the cost of the voyage amounted to Rp800,000 which the nine crew had paid off using the returns from the first voyage where they had obtained Rp3,000,000 in total. The crew of Harapan Bersama were in a similar situation but their debt for the cost of provisioning the vessel to a Pepela boss was much less at only Rp250,000.

Apprehension always results in some level of debt for the crew and the effects of apprehension affect the entire family. As well as the cost of the voyage to be repaid, there is the loss of equipment, since in nearly all cases to date, fishing equipment has been confiscated. The biggest loss is faced by the owner of the perahu: a substantial capital investment that has provided a means of income for a number of families. In addition, during the period the fishermen have been detained they suffer a loss of earnings. Sometimes crews held in detention at Willie Creek in Broome or on their boats in Darwin wait months for their case to be heard in the courts. In addition, jail sentences for repeat offenders in breach of good behaviour bonds can result in an additional period of time away. While the men are absent, families may have to borrow money or obtain basic supplies on credit.

How can fishermen attempt to pay off their debts? If the crew has obtained credit and provisions from a Pepela boss they have little choice but to return to sea in an attempt to secure a profitable return to clear their debts. In this case, a Pepela boss may lend them a perahu.

A perahu captain or owner may be fearful of being apprehended a second time, to be burdened with more debt, and likely prospect of a jail sentence, and thus stay well clear of profitable fishing grounds inside the AFZ and outside the MOU box area, decreasing his and his crew's chances of obtaining a good catch. One Mola perahu owner and captain apprehended in 1992 has a reputation for never being successful and continually in debt since he is
reportedly frightened of fishing too close to the AFZ and MOU borders with the possibility of apprehension a second time. At the end of 1994 this particular captain had large debts and was forced to sell his boat to his boss. The captain of *Sinar Jaya II*, who was apprehended in 1991, said he was not scared to go fishing in the Timor Sea after being apprehended because if he did not, he would not earn enough money to support his family (*kalau takut, kita tidak makan*; if we are scared we will not eat).

**Does Apprehension Work?**

For a small minority of Bajo captains, the deterrence strategy appears to be effective. A few are discouraged from entering the AFZ and fishing illegally. However, even for this minority who are deterred – people who are poor to begin with – they are faced with the prospect of bad fishing and poor returns. This is turn creates a situation where people are unable to extract themselves from further debt and poverty. The majority of captains and crew however, are not deterred and continue to embark on voyages. The economic pressure is far too great to have any trepidation about return forays in the AFZ.

There is little ethnographic evidence that apprehension and forfeiture of vessels has in fact deterred continued illegal fishing activity over recent years. The situation is infinitely more complex. The philosophy of “removing the boat removes the threat” does not actually work since there is no shortage of *perahu lambo* in Pepela or in eastern Indonesia. Most of the captains and crew from Mola and Mantigola apprehended in the years 1990, 1991 and 1992 were still embarking on shark fishing voyages during the 1994 season. This does not suggest a deterrent result. In fact, it appears that apprehension and forfeiture of vessels may have the opposite effect. Debt and indebtedness incurred due to apprehension requires the fishermen to go shark fishing again in an attempt to clear their debts. And since the best fishing grounds which have the most likely prospect of a financially successful trip are located outside the permitted areas under the 1974 MOU, illegal fishing may be well worth the risk as opposed to further debt and poverty.

In regard to trochus voyaging between the years 1987–1992, Campbell and Wilson (1993:156) also concluded that despite high interception rates of illegal incursions “crew members continue to participate in voyaging out of desperate attempts to service their debts, encouraged also by genuine reports of successful voyages”. For the bosses of Pepela who own large fleets
of lambo, the apprehension of a few of their fleet each year does not act as a deterrent since the possible gains from remaining boats are more than enough to still provide adequate returns.

**Conclusion**

Shark fishing voyages are financed by a system of credit arrangements between fishermen and traders or money lenders. These credit relations strengthen and maintain trading networks and the trade in shark fin in eastern Indonesia. The system of obtaining credit to fund fishing voyages is not something new among Bajo, but a contemporary version of an old practice. Credit relations link the Bajo to external markets and the wider global economy. This ultimately extends forms of control on Bajo shark fishing by dictating market prices and demand. The high demand and price offered for shark fins continue to attract fishermen. If the price of shark fin dropped dramatically back to mid 1980s prices then the entire fishery would undergo considerable change.

An examination of credit arrangements and two systems of division of shares shows there is an economic attraction for Bajo to base themselves in Pepela. The boat owner is better off under the Pepela share system which has partly contributed to wealth accumulation and an increase in boat ownership in Pepela and boats available for voyaging. Returns from shark fishing are highly variable and despite relatively good catches of shark, crew do not always receive high returns because of credit arrangements.

There are clear economic reasons why Bajo continue to fish in the AFZ. Firstly, while shark fishing does not guarantee any returns, the attraction of making a profit from high prices offered for shark fin continues to attract fishermen. These earnings are significant since they are in many cases the main contribution to the household economy. Furthermore, compared with other long distance voyaging activities shark fishing has the potential to provide higher returns for the average crew member. For the owner of an unmotorised perahu lambo, there are few economic activities which can provide such high returns.

Secondly, because of debts to bosses, traders or money lenders, that result from a poor fishing trip or season, as well as debts due to apprehension and confiscation of boats, equipment and shark fin catch, fishermen are forced to return to Pepela and embark on further shark fishing ventures in the Timor and Arafura Seas. They are caught in a cycle of debt that their further voyages are designed to pay off. The policy of apprehension and confiscation of Indonesian fishing boats as a means of deterring further fishing incursions does not appear to be effective
since resulting indebtedness actually encourages continued fishing activity. In the next chapter, I consider other reasons which contribute to boat apprehensions and why Australian policies have in the main, been ineffective in halting illegal activity.
Chapter 9
AUSTRALIAN POLICY RESPONSES TO INDONESIAN FISHING ACTIVITY: PROBLEMS & SOLUTIONS

Introduction

There are a number of reasons why Australian policy is not working. These will be explored in this chapter. A key concept underlying Australian policy has been the concept of “traditional” fishing encapsulated in the 1974 Memorandum of Understanding (MOU) which regulates access for Indonesian fishermen in the AFZ. It is based on continuing use of “traditional” or unchanging technology over time. Drawing upon anthropological perspectives on the notion of tradition, I consider what it is that informs this particular view of “traditional” as static, timeless, and non-commercial. What are the implications of invoking this particular notion of “traditional” in light of Bajo dynamism? This latter question is examined by focusing on a specific case of apprehended Bajo fishermen. Drawing on legal precedents in Australia, I show that although there has been some acknowledgement of the fluidity of tradition, following recent anthropological approaches to the concept, “traditional” is still largely presented as an inversion of “commercial”. In this respect, I argue that the treatment of Indonesian fishermen is largely in accordance with the treatment of indigenous Australians. In addition, I examine how such views of “traditional” have in turn resulted in misunderstandings and inconsistencies in Australia's treatment of Indonesian fishermen. Most importantly, this has all hindered attempts to produce solutions to the problems concerning Indonesian fishing activity in the AFZ.

I then examine to what extent the MOU has been effective in providing recognition of fishing rights, marine resource management and curbing illegal fishing activity? Other policies adopted to deter illegal activity are also considered. In doing so, I argue that there are serious inconsistencies in these policies, and they have, for the most part, been ineffective.

The final section discusses alternative approaches to managing a traditional Indonesian fishery in the AFZ. Why is there a reluctance on the part of the Australian authorities to address previous suggestions and recommendations? Some of the complex reasons for this are raised. What emerges is a need to devise new culturally appropriate fisheries management policy responses, with the involvement of fishermen themselves.
“Traditional”: The 1974 MOU

In Chapter 5 I discussed official perspectives of Indonesian fishing activity in the north Australian region during the 1950s and 1970s. One perspective was that prior to the 1970s Indonesians were engaged in subsistence fishing. This idea influenced the 1968 decision to permit traditional Indonesian fishing to continue within the 12 nm territorial sea adjacent to Ashmore and Carrier Islands, Seringapatam Reef, Scott Reef, Browse Island, and Adele Island, provided operations “were confined to a subsistence level” (DFAT 1988:1). This arrangement led to the 1974 MOU which allowed some Indonesian fishing activity to continue in designated areas under certain regulations. In the 1974 MOU, no direct reference was made to the mode of production. Instead, “Indonesian traditional fishermen” were defined as “fishermen who have traditionally taken fish and sedentary organisms in Australian waters by methods which have been the tradition over decades of time” (1974 MOU).

Then, under the 1989 amendments to the 1974 MOU, the original definition allowing access for fishermen in Australian waters is qualified with further reference to boat and fishing technology used. Under the 1989 amendments, access to the MOU box area is limited to:

- Indonesian traditional fishermen using traditional methods and traditional vessels consistent with the tradition over decades of time, which does not include fishing methods or vessels utilising motors or engines (Practical Guidelines for Implementing the 1974 MOU, 1989).

Traditional fishing is defined by the methods and vessels which have been used “traditionally” - that is “over decades of time”, the minimum period being two decades, qualified by the exclusion of “modern” methods and vessels. The direct reference to fishermen with a history of Indonesian activity in the AFZ is dropped, but it is actually implied by inference that fishermen have been fishing “over decades”. It is not clear whether “decades of time” is meant to apply to the two decades preceding 1974 when the original MOU was signed or two decades preceding the signing of the 1989 amendments. Implicit in the MOU, is the notion of traditional societies operating in a static and unchanging fashion over a long period of time. Following on from this, traditional rights of access are determined by continuing use of “traditional” - that is, unchanging technology.

The notion of “traditional” in the 1974 MOU reflects and contains essential elements of a popular, prevailing, everyday view of indigenous tradition in Australia and elsewhere as
ancient and unchanging (Handler & Linnekin 1984; Merlan 1991; Hovelsrud-Broda 1997; Ewins 1998; Ritchie 1999). An everyday definition of tradition is “those beliefs and practices that have been handed down from generation to generation” (Ewins 1998:3). This view presumes that “an unchanging core of ideas and customs is always handed down from the past” (Handler & Linnekin 1984:273); in the case of the MOU “over decades of time”. A connected prevailing view of this notion of “traditionalism” (Merlan 1998) is that changes in tradition, such as the adoption of new methods as a result of adaptation to changing circumstances, are considered to be “inauthentic”, “modern” and therefore not “traditional”. Until recently challenged, these everyday views of tradition in the anthropological and historical literature, were widespread. They remain dominant in popular discourse and in the media.

These interpretations of “traditional” are formed and informed by now discredited Western assumptions and dichotomies stemming from 19th and 20th century social theories of cultural evolution, which “assisted in the creation of a creature on the periphery of civilisation, ‘the primitive’, unchanging, immutable, thoroughly unmodern” (Miller 1994:59). Nineteenth century evolutionary schemes saw a series of stages of social and cultural progress along which all societies advanced from “primitive” to “civilised”, or from “traditional” to “modern”; Terms such as “primitive” or “savage” refer to less technologically developed societies, characterised by subsistence economies and simple technology considered to be “out of time” (Fabian 1983) or non-contemporary, with western civilisation. More technologically advanced, capitalist or “modern” societies are characterised by commercially based economies. A direct effect of such notions is a corresponding practice of dichotomising “traditional” against other terms. Since “modern” often means “commercial”, “traditional” is equated with “subsistence” (Campbell & Wilson 1993:75). Thus traditional (subsistence) is presented as an inversion of commercial (modern). Furthermore, because “traditional” implies “primitivism” it also “underpins the belief that ‘traditional’ is, and should continue to be associated with primitive technology” (Campbell & Wilson 1993:76).

While such notions and dichotomies are now rejected in social theory, and have been reconsidered in anthropological and historical literature, they still remain powerful and continue to inform Australian authorities’ understanding of traditional Indonesian fishing activity in the AFZ. Campbell & Wilson (1993:75) argue that these cycles of associations led to the “myths of subsistence and commercialisation, the belief that Indonesian fishermen were subsistence
fishermen who, in the 1970s, were transformed into commercial fishermen”. These notions continue to inform policy in the 1990s.

Australia's treatment of traditional Indonesian fishermen in the face of our own cultural dynamism fits the kind of Orientalist discourse articulated by Said (1979). The Australian discourse rests on an enforced and fictionalised cultural inertia ascribed to Indonesian fishermen. Ironically, Australia allows itself dynamism. Firstly, with the expansion of Australian territorial waters (200 nm AFZ) and appropriation of Indonesian fishing grounds. Secondly, with the continual upgrading and modernisation of the Australian Naval fleet and maritime technology to patrol the waters Indonesians are prohibited from fishing in. While Indonesian fishermen are forced to use simple fishing gear and non-motorised vessels in order to remain traditional, primitive, stagnant, underdeveloped and technologically unsophisticated, Australia can change, develop, upgrade, and modernise.

The regulations in the 1974 MOU agreement effectively lock Indonesians and their material culture of fishing into a time bound past. They are forced to operate outside of their own time (Fabian 1983:2), resulting in a technological freeze (Campbell & Wilson 1993:185). They are denied cultural dynamism and the broader processes of influence in which they exist (Marcus & Fischer 1986:78). The consequences of an adherence to this concept of traditional fishing, underpinned by notions of traditional societies as being in a state of “reified timelessness” (Carrier 1992b: 11) and the “oppressive uses of Time” (Fabian 1983:2), has meant that because of changes in the Bajo fishery, they are no longer considered by authorities to be operating “traditionally”. They are deemed by Australian authorities as commercial operators, lessened by their perceived remove from a simpler, “primitive”, subsistence existence. To examine these notions of the shifting status of Indonesian fishermen between the “traditional” and “commercial” dichotomy, and their direct implications with regard to Bajo fishing, I turn to a discussion of a particular court case involving the crew of a Mola perahu.

The Case of the *Karya Abadi*: “Traditional” vs “Commercial”

On 18 May 1997, a Mola Bajo captain, Nasir, and four crew of the *Karya Abadi* were apprehended for illegal activity outside the MOU box area (10.7 nm south of southern MOU boundary, south of Browse Island) and taken to Broome. The crew and captain were charged under the *Fisheries Management Act 1991* with using a foreign fishing vessel in the AFZ
without a license to do so (section 100). The captain was charged with being in charge of a foreign fishing vessel equipped for fishing (section 101). He and the crew pleaded not guilty to the charges. Legal Aid assistance was not provided, but a lawyer from Perth, WA, decided to take on the case and donate his legal services. The crew were held at Willie Creek, until their case was finally heard 6 months later in the Broome Court of Petty Sessions on 16 and 17 October (Mitchell v Nasir, Sahaba, Dona, Dualin and Laduma 1997).

The case, the first of its kind, received an unprecedented level of print and television media coverage prior to and during the trial. This was because the defence was claimed to be making a Mabo style sea claim to a native title right to fish in areas of the AFZ outside the MOU box area. The defence case centred around evidence that at the time of the alleged activity, the defendants were all traditional fishermen exercising traditional fishing rights recognised at law. Thus sections 100 and 101 of the Fisheries Management Act 1991 were inoperative against them (Vincent 1997).

Legal precedents set in previous cases in Australia have outlined the evidence required to prove native title rights for land or sea and these formed the basis of the defence case. A well known case, the first traditional fishing rights case in Australia, Mason v Tritton (1994) 34NSWLR 572 (“Mason”, was heard in the New South Wales (NSW) Supreme Court in March 1993. It dealt with a man arrested on the south coast of NSW for having more than the allowed limit of abalone in his possession. Mason's defence was that he was “exercising his native title right to fish and therefore outside the scope of the fisheries regulations” (Peterson & Rigsby 1998:11). Mason lost his case. However, the court “recognised the existence of a traditional right to fish but questioned whether the defendant was actually practising that right at the time of his arrest” (Cane 1998:66).

Justice Kirby's judgement in the appeal of the Mason case found that the right to fish based upon traditional laws and customs is a recognisable form of native title in Australia identified by the High Court in Mabo v The State of Queensland (1992) 175 CLR 1 (“Mabo No 2” where the claim by Murray Islanders in the Torres Strait to native title was recognised at Common Law (Mason at 579). Justice Kirby also set out the type of evidence required to establish a successful common law claim for native title. The criteria adopted by Nasir's defence to demonstrate the Bajo traditional right to fish followed closely those of Justice Kirby (Mason at 584). These were: 1) that traditional laws and customs extending to the right to fish were exercised by the communities from which the defendants originated immediately
before Australia exercised its sovereignty over the waters in question; 2) the defendants are indigenous people and descendants “or within the permitted group” of the relevant communities; 3) that the defendants have continued uninterrupted, to observe the relevant traditional laws and customs; and 4) that the defendants’ activities in fishing for shark fin were an exercise of those traditional laws and customs.

A range of people became involved in the case, providing funding and evidence to support it. The International Commission of Jurists, philanthropists, anthropologists, historians, and members of the Broome based Kimberley-Indonesia Friendship Society all took part. Because of my research into the activities of the Mola Bajo in the AFZ, I was asked to submit a report on evidence in defence of Nasir and the crew addressing the four criteria outlined above. I also appeared as an expert witness during the trial.

In submissions to the Magistrate, the defence highlighted that the two likely contentious points on the question of “traditional” were whether fishing for shark fin for sale or barter can be regarded as a traditional activity and whether the use of longline gear can be so regarded. Based on evidence presented, the defence argued that sale of shark fin is in keeping with the traditional practices of the Bajo. In addition, it was argued that there is in law, no requirement for customary practices to be immutable, fixed in time. This was based on recognition of this by Justice Brennan in *Mabo No 2* in relation to native title, and by Justice Kirby in the Mason case (*Mason* at 583–4). Laws and customs could change over time (Vincent 1997).

The Magistrate handed down his decision on 11 November, 1997. Regarding traditional fishing rights versus extinguishment under the *Fisheries Management Act 1991*, the Magistrate ruled that the Act was plainly and clearly intended to extinguish foreign traditional fishing rights in Australian waters. Furthermore the MOU set aside areas within the AFZ where traditional fishermen could operate. This, he said, indicated a legislative intention to abrogate any such rights that may have existed in the AFZ (Roberts 1997:15). The Magistrate also found that the defendants could establish points (1) and (2) above but could not establish (3) and (4), whether the defendants could be properly regarded as “traditionally fishing” (Roberts 1997:19). He outlined a number of reasons in support of his findings. One reason was that in the view of WA Fisheries authorities, longlines are not considered a traditional fishing method by virtue of their recent adoption and size. Based on the evidence of the Fisheries officer, the Magistrate went on to state:
Previously shark boats used only handlines and the fishermen kept all of the shark. Now they only keep the fins or a small proportion of the body…Further, the price of shark fin has increased dramatically whereby Indonesian fishermen may receive up to $80A per kilo for No 1 grade product (Roberts 1997:21).

In addition, he stated:

Even allowing for cultural dynamics, the recent development of relatively sophisticated longlining appears to be as a direct result of the high price paid to Indonesian fishermen for shark fin and the desire to maximise profits. In my view this method of fishing cannot be said to be a traditional fishing practise [sic] - even making allowances for changing fishing equipment technology (Roberts 1997:21).

In his decision, the Magistrate noted the Torres Strait Fisheries Act 1984 “excludes traditional fishing from the definition of commercial fishing”, and mentioned that no such exclusion exists in the Fisheries Management Act 1991. He therefore concluded the defendants were engaged in commercial fishing (Roberts 1997:6). He stated:

I have reservations in accepting the proposition that a defence based upon a traditional fishing right extends to fishing for commercial purposes…the formal written contract entered into by Nasir with the money lender, the sale and/or exchange of shark fin for goods or money and the use of the longline demonstrate that his venture was of a commercial rather than traditional nature (Roberts 1997: 21–22).

The Magistrate convicted the fishermen on all charges and placed them on good behaviour bonds of $3000 for five years. He ordered forfeiture of fishing gear but not the vessel. His reasons for this decision were firstly, seven months in detention awaiting the trial and decision was fair punishment for the crew and secondly, because the vessel was only 10.7 nm outside the MOU box. However, he added by using what he called “imprecise” and “primitive” navigational equipment (compass and depth lead line) the captain was reckless to be fishing so close to the MOU box boundary. A few days later, the vessel was stocked with food and towed over 3 days to the outer edge of the AFZ, from where captain and crew returned to Indonesia.
The Broome decision is particularly contradictory. Fishermen using longline gear operating inside the MOU box area are considered to be “traditional” since they are not apprehended for being non-traditional and therefore engaged in illegal activity. The Karya Abadi had been boarded by a senior WA Fisheries officer inside the MOU box area northeast of Ashmore Reef 10 days prior to their apprehension. According to the evidence presented in court, the officer stated he informed the captain where he could and could not fish, and inspected his fishing gear. In doing so, he acknowledged the men were “traditional fishermen” since they were carrying out “traditional fishing” within the 1974 MOU regulations. Not a single Indonesian perahu has ever been apprehended and convicted for charges of being “non-traditional” in the MOU box. However, if the same vessel is found operating outside the MOU box area using the same longline gear it is, based on the judgement of this Magistrate, considered “non-traditional” and the activities of the crew, “commercial”, criminal and “illegal”.

The three main issues arising from this decision are: 1) in determining whether the Bajo were engaged in traditional fishing was based on the technology used; 2) in establishing a traditional right to fish, traditional laws and customs cannot change; and 3) traditional fishing does not include fishing for commercial purposes - that is, selling the catch.

For a number of decades anthropology has criticised and rejected static models of culture, and in doing so has debunked constricting dichotomies of idealised representations of indigenous people. There is now widespread academic awareness of the paradoxical fluidity of tradition (Ewins 1998:12). Culture is shaped by changes in social, economic and historical circumstances. As Miller (1994:59) has noted “it has taken some time for anthropology to come to terms with a humanity that is equal, that is universally dynamic and changing, possibly in different ways within different cultural projects, but which could not simply be sundered into the progressive and the traditional”.

Legal precedents from Australia, in some instances informed by anthropological opinion, regarding the concept of “traditional” have come some way to acknowledge cultural dynamism, and reject a definition of “traditional” activities based on technology used, in stark contrast to the approach written into the 1974 MOU.

The Australian Law Reform Commission's (1986) findings on determining whether Aboriginal hunting and fishing activity is “traditional” stated it should not be based on technology (Campbell & Wilson 1993:78). According to the Australian Law Reform Commission:
In determining whether an activity is “traditional” attention should focus on the purpose of the activity rather than the method (Law Reform Commission 1986:181).

The Commission also acknowledged the changing nature of Aboriginal traditions and states:

Aboriginals have had to adapt to change and outside influence…in many cases hunting and fishing practices have incorporated new materials. Nylon fishing nets may have replaced those made of bush fibre…guns may very often have replaced spears, aluminium dinghies are used instead of dugouts (Law Reform Commission 1986:121).

Therefore, according to the Law Reform Commission, technological change should not determine whether or not an activity is still considered “traditional”. The Commission's recommendations are directed at Aboriginal hunting and fishing for subsistence purposes, broadly including “consumption within local family or clan groups…even though elements of barter or exchange may be present” (Law Reform Commission 1986:181). The findings of the Commission do not directly apply to Indonesian fishermen since they are not fishing for subsistence and are not Australian nationals. However, as Campbell and Wilson (1993:78–79) have previously argued, a determination of “traditional” based on the purpose rather than the method has already been applied to foreign fishermen in the Torres Strait Treaty 1978 between Australia and Papua New Guinea (PNG). The Treaty regulates fishing access to foreign nationals from PNG in a Protected Zone in waters under Australian jurisdiction (Campbell & Wilson 1993:79–83).

The principal aim of the Treaty is “to acknowledge and protect the traditional way of life and livelihood of the traditional inhabitants including their traditional fishing and free movement” (Torres Strait Treaty 1978, Article 10(3)). The Treaty defines “traditional fishing” as “the taking, by traditional inhabitants for their own or their dependants’ consumption, or for use in the course of other traditional activities, of the living resources of the sea, seabed, estuaries and coastal tidal areas, including dugong and turtle” (Torres Strait Treaty 1978, Article 1(1)). The Treaty defines “traditional activities” as:

activities performed by the traditional inhabitants in accordance with local tradition, and includes, when so performed -
i. activities on land, including gardening, collection of food and hunting;

ii. activities on water, including traditional fishing;

iii. religious and secular ceremonies or gatherings for social purposes, for example, marriage celebrations and settlements of disputes; and

iv. barter and market trade.

In the application of this definition, except in relation to activities of a commercial nature, “traditional” shall be interpreted liberally and in light of prevailing custom. (Torres Strait Treaty 1978, Article l(k)).

Although the definition of traditional activities is broad, there is no reference to the methods of traditional fishing only to the purpose. In addition, there is acknowledgement that customs can change. This has been recognised more recently in Australia by the courts in the Australian High Court's 1992 Mabo No 2 decision regarding native title claims and the changing nature of traditional life. In this case, the court recognised that over time the “laws and customs of any people will change” however this does not mean the defendants are no longer exercising traditional rights (Justice Brennan in Mabo No 2 1992–175 CLR 1 at 61). The Broome decision contradicts these important findings.

In Australia contention continues to exist whether a traditional fishing activity or right extends to commercial purposes. The Torres Strait Treaty falls down in this respect by not recognising that traditional fishing can be commercially orientated, where “traditional” is defined in terms of “subsistence” and excludes traditional activities that are commercial. On the Torres Strait Treaty, Schug has noted that,

after a century of commercial fishing by the Strait's indigenous inhabitants it was uncertain what fishing activities could be legitimately regarded as ‘traditional’. By adopting a narrow definition of traditional which excludes commercial activities, the Treaty failed to acknowledge the fluidity of tradition as well as the dynamic quality of economic decision making in the face of changing social conditions (Schug 1996:219).

In Nasir's case the Magistrate relied on the Torres Strait Fisheries Act 1984 which implements the Torres Strait Treaty, to come to his judgement that the men were engaged in commercial fishing. The Torres Strait Fisheries Act 1984 defines “commercial fishing” as meaning “fishing
for commercial purposes, but does not include traditional fishing” (*Torres Strait Fisheries Act 1984*, section 3).

In Australian courts, there have been no clear legal determinations on whether Aboriginal native title rights include commercial activities (Sutherland 1996:28; Peterson & Rigsby 1998:12). There are, however, indications that the right to native title and traditional practice extends to commercial use (Kilduff & Lofgren 1996) but this has yet to be successfully tested. It would appear that in Australia, official perceptions of Indonesian fishermen are consistent with representations of indigenous Australians. “Traditional” is still largely represented as an inversion of “commercial”.

In the case of Indonesian fishermen, the purpose of fishing in the north Australian region has, since the beginning, been primarily for commercial rather than subsistence purposes (Campbell & Wilson 1993). Ethnographic fieldwork among the Bajo also shows the purpose of their activity has been for commercial purposes from the outset. Drawing a distinction between traditional and commercial fishing activity is untenable in the case of the Bajo fishery.

There is, as the Broome case illustrates, a generally held belief by Australian authorities that fishermen have changed their status from “traditional” to “commercial” fishing because of increases in the price of fin in recent years and by catching more sharks with the adoption of a more “modern” type of fishing gear (Wallner & McLoughlin 1995b: 120). In regard to this, Campbell and Wilson (1993:75) make the point that “shark fishermen take shark fin ‘traditionally’ provided the profit is small; once they begin to make significant commercial returns their activities cease to be traditional”. This was reflected in the Broome case. It also parallels a point made by Tonkinson (1997:18) about attacks on Aboriginal traditions being no longer “traditional” after undergoing change, and in particular, when these changes threaten government or private sector interests and potentially high financial returns. The Australian government focuses on the high returns Indonesians are making on successful shark fishing trips, for example the $A80 per kilogram quoted by the Fisheries officer in the Broome case, and the government and industry's perceived losses in financial revenue from such activity. As one Darwin Magistrate stated in his decision to convict the Mola Bajo captain of *Bintang Nusantara* for illegal fishing in the AFZ in March 1999: “Clearly fish in the AFZ is an asset which the court jealously guards, and an asset if not properly controlled will be plundered by a people with no legal right”.

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This sort of thinking provides justification for continuing the policy of apprehension and prosecution. There appears to be a willingness on the part of the Australian authorities to apprehend Bajo and other groups of fishermen operating in sail powered boats outside the MOU box area using longline gear to fish for shark fin, which commands high prices on international markets, on the basis they have betrayed their earlier authentic “traditional” status and thus forfeited any “traditional” rights they may have previously had.

**Effectiveness of the 1974 MOU and Other Policy Responses**

The Australian government has endeavoured to recognise the long and continuous presence of traditional Indonesian fishing activity in waters off its northern shores. The 1974 MOU attempts to deal with its legal obligations resulting from maritime expansion and environmental obligations. It recognises some form of fishing rights and attempts to regulate access for traditional Indonesian fishermen in an area now under Australian control. However, in the words of Fox (1998:114) “numerous problems have arisen as a result of this seemingly well-intended endeavour” and led to a succession of “unintended consequences”.

The MOU does not specifically identify who is allowed access into the MOU area. Rather, access is open to any Indonesian “traditional” fishermen as long as they comply with the regulations, that is by using “traditional” methods and vessels. Access is determined not by historically recognised use rights for specific groups who operated in the region prior to Australian maritime expansion, but by the technology used: anyone using a sail powered boat is allowed to fish in the region. In not identifying the specific groups who historically accessed the AFZ, the effectiveness and original intention of the MOU has been undermined, and its outcomes severely attenuated.

The original intention behind excluding the use of motorised vessels and methods in the face of increasing motorisation in the small-scale perahu sector in Indonesia was designed to limit the number of boats entering the area. This in turn would control the level of resource exploitation and act as a form of resource management. The technology was unsophisticated or “primitive” enough to offer some protection for marine resources. But this technological freeze failed to achieve the desired outcome. By not restricting the numbers of vessels or the amount of product taken, it has opened the area up to an unlimited number of fishermen in sail powered vessels, of which there is no shortage in Indonesia, and resulted in over-exploitation of resources in the MOU box area, particularly sedentary species at reefs and islands.
By not permitting the use of motorised vessels, which can assist fishermen in times of bad weather and cyclones, the government has been accused of enforcing a policy that subjects the fishermen to unnecessary risks (Campbell & Wilson 1993; Fox 1998:121). Over the last decade, a number of sailing boats and crew have been lost during cyclones in the MOU area. For example, in April 1994, four Pepela owned boats and their mostly Bajo crew drowned during a cyclone in the Timor Sea. In addition, since fishermen are not permitted to use engines, they must rely on sail power for propulsion. In periods of little or no wind or strong currents, when it is impossible to make any headway, it is possible to unintentionally drift outside the allowed areas.

Another consequence is that legal fishing in the MOU box area is a gateway to illegal fishing (Fox 1998). The 1989 amendments to the 1974 MOU and the creation of the box area did not incorporate most of the productive Bajo shark fishing grounds. Apart from a few areas around reefs and islands and along the edges of the MOU borders, the box is a relatively poor shark fishing ground (Wallner & McLoughlin 1995a:34). In addition, there have been no motorised Type 3 perahu apprehended for illegal shark fishing activity in the MOU box area. Butonese and Bajo fishermen from across eastern Indonesia who use motorised boats to target shark prefer to concentrate their activities in the more productive waters to the north and east of MOU box (Wallner & McLoughlin 1995a:34). The best shark fishing grounds are, according to the Bajo, located outside the MOU box area. Bajo fishermen often seek access to these profitable grounds via the MOU box. However, in doing so they run the risk of apprehension. Fishermen are forced to fish illegally outside the MOU box area in an attempt to secure adequate returns. Therefore, illegal fishing and thus boat apprehensions occur in direct response to the ineffectiveness of the MOU.

The borders of the MOU box area are not marked or sign posted. They only exist as lines on maps, unconnected to any geographical features. Bajo navigation is based on reference to familiar landmarks and sea features. Their sailing and fishing activities have, until recently, never been confined to areas bounded by lines on maps. Even for the most experienced navigators it is difficult to determine exactly where the boundaries of the MOU box are. The MOU restricts access to fishermen using “traditional methods”, but expects high-tech accuracy. They are required to know border latitude and longitude coordinates to determine the location of the MOU boundaries that can only be accurately located using marine charts and sophisticated navigational equipment such as a Global Positioning System (GPS). Prior to
the early 1990s, fishermen found within an unspecified reasonable distance outside the allowed areas were generally warned but not apprehended. The tougher approach adopted by AFMA in recent years has seen Bajo and other fishermen apprehended as little as 5 – 8 nm outside the MOU box inside the AFZ (AFMA 1996–1997 apprehension lists). Fishermen are required to know where modern borders lie but are denied the use of motors and sophisticated equipment under the MOU. However, once they cross the border, modern legislation applies; they are treated in the same fashion as any other illegal foreign fishing vessel and charged under the same sections of the Australian *Fisheries Management Act 1991*. They are processed in the same way as an industrial foreign fishing vessel worth millions of dollars caught illegally fishing in the AFZ.

In regard to Ashmore Reef, the 1974 MOU and the Plan of Management for Ashmore Reef National Nature Reserve (ANPWS 1989) make no mention of the area as a cultural resource. For example, at least 8 Indonesian graves have been identified on West Island and others on East and Middle Island (ANPWS nd; Paul Clark, 1999, pers.comm.). At least one of these graves is that of a Bajo man from Mola Selatan. Under the Plan and the 1974 MOU, fishermen are officially prohibited to land on the islands and visit grave sites. However, formal requests by fishermen are made to the caretaker to obtain permission to visit graves, for purposes of maintenance, performing ceremonies and presenting offerings. The caretaker often accompanies the fishermen on these visits (Paul Clark, 1999, pers.comm.).

Indonesian fishermen have played no role in shaping the MOU agreement. The agreement makes some attempt at recognising their rights but they have not been invited or allowed to participate in its formulation or implementation. They are not alone, for the interests of maritime peoples are often “ignored, dismissed or marginalised” (Schug 1996:210) in the formulation of international maritime boundaries and agreements designed to protect their livelihood. The case of the indigenous people of the Torres Strait is one example. Like the 1974 MOU, the boundaries between Papua New Guinea and Australia via the *Torres Strait Treaty* were developed “without sufficient consultation with the people who would be affected most directly by the political division” (Schug 1996:222). As a result this has “created an unstable situation which threatens to undermine the Treaty's efforts to provide for the protection of the Strait's marine environment” (Schug 1996:222). With the MOU, dialogue operates on a government to government level but other stakeholders such as Indonesian
fishermen are unable to participate in the decision-making processes and policies directly concerning and affecting their livelihood.

There is also the issue of aid. Contained in the Agreed Minutes of Meeting Between Officials of Australia and Indonesia on Fisheries signed in April 1989 in Jakarta, the following agreement was made in respect of the 1974 MOU:

Indonesian and Australian officials agreed to make arrangements for cooperation in developing alternative income projects in Eastern Indonesia for traditional fishermen traditionally engaged in fishing under the MOU. The Indonesian side indicated they might include mariculture and nucleus fishing enterprise scheme (Perikanan Inti Rakyat or P.I.R.). Both sides mutually decided to discuss the possibility of channelling Australian aid funds to such projects with appropriate authorities in their respective countries.

The Nucleus Estate System is a transmigration program in fisheries, used as a means to shift the rural and/or fishing population from densely populated areas to those islands where population density is low. Since this agreement was made, no significant aid assistance has been directed at any of these fishermen.

During the educational and information tours of eastern Indonesia in 1995, officials from the Australian Agency for International Development (AusAID) were exploring opportunities to deliver aid to poor isolated fishing communities. AusAID has implemented some Small Aid Activities. However this aid has not been directed to fishermen referred to in the MOU agreement, but instead to other opportunistic fishermen. AusAID targeted people from Sinjai in South Sulawesi who were apprehended in large numbers in 1994–1995 following a wave of illegal trepang fishing activity in the northern AFZ. Some small-scale funding assistance (from the Direct Assistance Program of the Australian Ambassador to Indonesia) has been given to fishing communities which include Pepela. In one instance this money was used to purchase a perahu lambo with the proceeds from fishing supposedly to be distributed among the community. The project was a failure and the perahu (Bintang Pagi) has since been apprehended, confiscated and destroyed in Darwin.

There is a serious inconsistency here. There is a policy commitment by Australia to delivery of aid to fishermen of eastern Indonesia operating under the MOU. Yet Australia retains a policy
of confiscating and destroying the sources of livelihood of these very same people. ABC radio in February 1995 interviewed a representative from the Australian Embassy in Jakarta and a senior WA Fisheries officer, who had just returned from the first educational tour of eastern Indonesia. The DFAT representative explained that the Australian Government was exploring opportunities for the deliverance of aid assistance for “isolated poor fishing communities in eastern Indonesia…who need, for their livelihood, to gain income to support their families and are ready and willing…to often engage in some risky fishing activities south of the border” (ABC Radio National Libby Price Show 1995:2). In the same interview, discussing the effectiveness of the deterrence policy, the WA Fisheries officer stated:

From our experience…we've found the only real deterrent is to continue prosecuting them and to take their boats off them and just fly them home… I think this is the only real way we can deter them is to continually confiscate and burn their boats, so they lose all their boats and all their fishing equipment, and fly them home back to Indonesia. And just continually do that (ABC Radio National Libby Price Show 1995:5).

This is stunning. As Fox (1998:131) noted, it is an “outright contradiction” for the Australian government, as part of the Australian Overseas Aid Program, to continue to fund aid projects to alleviate poverty in eastern Indonesia, while burning vessels belonging to some of the poorest inhabitants of the region.

The educational and information tours undertaken by Australian officials to eastern Indonesia since 1995 were in response to high levels of incursions in the AFZ in 1994. They distributed maps. These explain the complex maritime jurisdictions existing between Australia and Indonesia in the Timor and Arapiira Seas and the MOU area and contain a mix of Bahasa Indonesia and English (see Appendix 4). There is a belief among fisheries authorities that the handing out of maps as part of the educational policy response are a solution to the illegal fishing problem. They seem to think that these are readily understood by the fishermen, helping them determine where they can and cannot fish. Fishermen with maps have no excuse if found outside of the allowed areas. During fieldwork in 1997 I talked to some Bajo captains about these maps. They found them highly confusing and difficult, if not impossible, to comprehend. Particularly this was so for those who are illiterate. The maps were dismissed as basically useless in addressing their concerns about being able to fish in areas that are prohibited to them.
Perhaps most importantly, at no time has one of the official Australian delegations visited the villages of Mola, Mantigola or Pepela. The idea of direct engagement with fishermen and an understanding of the issues from their point of view appears to be completely alien to Australian authorities.

The educational and information campaigns also appear to have introduced the AFZ to coastal peoples who may not have been aware of the existence of the MOU agreement and permitted areas for fishing in the AFZ in the past. In addition, looking at the number of perahu apprehensions since 1995 (Table 13), it appears these campaigns may have actually contributed to large numbers of boats from eastern Indonesia engaging in illegal activity.

Although there was some drop in apprehensions in 1995, in 1996 ninety-seven boats were apprehended and in 1997, 122 boats, the largest number of apprehensions ever.

Table 13: Total number boat apprehensions, total number Type 2 and Bajo Type 2 boat apprehensions per year

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Source: AFMA Apprehension lists, NT and WA.
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<tr>
<td>1997</td>
<td>122</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>611</td>
<td>134</td>
<td>62</td>
</tr>
</tbody>
</table>

**Source:** AFMA Apprehension lists, NT and WA.

The present enforcement and prosecution approach costs the Australian taxpayer millions of dollars each year. Expenses include the costs of towing the vessels to Darwin or Broome, carrying out immigration, quarantine and customs checks, maintaining crews and vessels until the completion of court hearings, repatriation of fishermen and destroying forfeited boats. The costs incurred for each apprehended boat crew depend on the time the fishermen are detained, which depends on the prosecution process. The average stay for fishermen has been reported to be 27 days (Commonwealth Ombudsman 1998:30). However, some fishermen spend months awaiting court hearings.

It is difficult to obtain official government figures on expenses incurred in the apprehension and prosecution of Indonesian fishing boats. Not only is there a reluctance to put such information into the public domain but many different government departments and agencies are involved in the apprehension, detention, prosecution and repatriation process and each pays for specific expenses. A significant level of Commonwealth and State funding is involved (Commonwealth Ombudsman 1998:2).

In its submission to the Joint Standing Committee on Foreign Affairs, Defence and Trade (JSCFDAT) in 1991, AFMA reported the costs associated with the apprehension of Indonesian vessels in 1989–1990 was $750,499 (Fox 1998:132). Since then the number of Indonesian vessels apprehended each year has increased (Figure 10).
I was informed by a senior AFMA official, that for the financial year 1997–1998, AFMA spent around $A3,500,000 dollars on 124 foreign fishing apprehensions, of which 113 were Indonesian. This amount includes the salaries of 15 – 20 fisheries officers on AFZ patrolling duties and other fisheries support functions which comprise the bulk of expenses. It also includes the costs of caretaking and security operations while fishermen are in detention, including food and medical bills and the cost of interpreters.

In Darwin, the contracting caretakers receive a daily rate from AFMA to cover administration and running costs while fishermen are detained on their boats. This includes wages for four staff a day, for 24 hour security, running a mothership, dinghies and fuel costs, maintaining the boats and crew, security and enforcement of quarantine zones, supplying food and water, transporting the fishermen to and from the shore to attend meetings with Legal Aid and the Indonesian Consulate, and attend court hearings. I have estimated this rate to be approximately $A1,000 a day. The cost for Legal Aid representation, based on conversations with Legal Aid lawyers is also around $A1,000 a day. Repatriation costs are considerable. From Darwin, fishermen are normally repatriated to Kupang on a Merpati flight. A single passage costs between $A244 – 319 depending on the time of the year. From Broome repatriation to Indonesia is more costly. For those few crew who pay security bonds in lieu of the price of the vessel and are allowed to return to Indonesia in their boats, there are costs associated with towing the vessels to the Australian -Indonesian border. This itself can cost thousands of dollars. No precise figure can be obtained on the cost associated with the apprehension
and prosecution of one Indonesian perahu and crew but it is estimated to be over $A 10,000. This means that, for instance, in 1996 alone, the costs of apprehension, detention, prosecution and repatriation of 49 Type 2 vessels and their crew was somewhere in the vicinity of half a million dollars.

For over a decade, the policy of apprehension and confiscation of boats, catch and equipment as a form of deterrent to further illegal activity has been in place. Between the years 1988 and 1993, there was an overall decline in the number of boat apprehensions, giving the impression that the policy was working. However, since 1994, there has been a dramatic increase in the number of apprehensions, peaking in 1997 (Figure 10). Of the total number of Indonesian boats apprehended between the years 1975 and 1997, approximately 22% or 134 boats are Type 2 vessels. Of these 62, almost half are Bajo Type 2 vessels. From the early 1990s, since the adoption of longline gear, there has been an overall increase in the number of Type 2 boats apprehended (Figure 10). The highest number of vessels apprehended was in 1996, when 49 Type 2 perahu were apprehended. Of these 18 were Bajo perahu. In 1997, 31 were apprehended, with 15 being Bajo perahu (Figure 10).

The effectiveness of the policy of apprehension in deterring illegal activity was questioned by the JSCFDAT in 1993. The Committee concluded that with regard to high levels of intrusions by Type 3 trochus boats, it was a drop in the price of trochus shell, not surveillance and enforcement that caused a decline in illegal trochus activity in the northwest in the early 1990s. In addition, the Committee noted that with regard to illegal shark voyaging in motorised vessels around the same time, that while the price of shark fin was high, similar enforcement and prosecution approaches “are unlikely to be effective” (JSCFDAT 1993:129). Furthermore, as I argued in chapter 8, the policy of deterrence actually contributes to further Bajo illegal activity due to indebtedness arising from the apprehension and confiscation of perahu, catch, and equipment.

The policy of deterrence, costing taxpayers millions of dollars, has failed. It does not deter illegal fishing. Current Australian policies toward Indonesian fishermen are clearly inappropriate and ineffective. Apprehension and confiscation of Bajo perahu should cease. New approaches and new agreements to regulate activity need to be developed to better deal with Indonesian fishing in the AFZ.
New Approaches to Managing a Traditional Indonesian Fishery in the AFZ

The MOU is a simple document designed to deal with a unique situation. Despite its failings, it does recognise some form of fishing rights. However, an open access fishery system, which determines entry by technology rather than specific user rights, and confines fishermen to inappropriate fishing grounds, is unable to achieve sustainable resource management of the area, fair and equitable allocation of resources, or prevent illegal activity.


Australia should move to: 1) abandon the current definition of traditional fishing that defines access based on the technology used and assumes traditions cannot change; 2) identify specific groups of fishermen who have historically fished in the AFZ and provide rights of access for them; 3) introduce some form of management intervention in order to limit the number of vessels fishing to regulate access and to avoid over-exploitation of stocks in the form of a licensing system; and 4) provide access to an area that better fits with previous fishing grounds and resource availability.

Licensing

Some suggestions have already been put forward on how a licensing system could operate and the benefits it would deliver to Indonesia and Australia once groups with a historical interest in the AFZ have been identified (eg. Reid 1992, Campbell & Wilson 1993, Wallner & McLoughlin 1995a, Fox 1998). Fox (1998:129–130,138) has outlined a proposal for the licensing of traditional fishermen operating in the MOU area. He notes however, the details of the proposed system need to be worked out with Indonesian authorities. Some aspects suggested include a licensing arrangement operated through the Pepela harbour master (syahbandar) who currently keeps records of arrivals and departures and issues sailing clearances. The captains of perahu would be required to apply to the harbour master for a seasonal non-transferable license. He would be responsible for issuing licenses in line with conditions set down by the Australian government. Any violations would result in the suspension of the license for three years. The decision on who obtained the licenses would
be made by local community members and the system monitored. The Australian authorities would be informed at the beginning of each season of the details of all licensed perahu.

The licensing of boats to fish for shark only inside the existing MOU box area (Fox 1998) would not actually deter illegal fishing outside the box since there are not sufficient stocks available to exploit in the box area. Bajo fishermen tell me they are prepared to pay relatively large amounts of money for licenses as long as they are assured of accessing fishing grounds that have guaranteed fish stocks. This would enable them to recoup their capital outlay. The advantage to Australia in providing rights of access for certain fishermen to areas within the AFZ with guaranteed stocks would mean fishermen would not have to engage in illegal fishing activities. This in turn would save Australia millions of dollars in apprehension and prosecution costs.

There are other benefits that new policies and regulations would deliver to both Australia and Indonesia. Fishermen with specific access rights “would be reluctant to commit offences which risked their privileged access; they would have an interest in helping Australian authorities protect ‘their’ resources from illegal voyaging” (Campbell & Wilson 1993:194). Moreover, fishing rights “would deliver aid to certain communities in the form of guaranteed access to resources” (Campbell & Wilson 1993:194). Through direct engagement with fishermen in implementing new policies and procedures, education and awareness in marine resource sustainability and the need for appropriate forms of conservation and management could occur (Campbell & Wilson 1993:195).

**Ongoing Inaction on New Approaches**

Despite recommendations outlined earlier, further investigation and action have been hampered for a range of reasons. There is a lack of political will on the part of the Australian and Indonesian governments to instigate research identifying groups qualifying for specific user rights. Only when this information is known, can consideration be given to developing appropriate conditions under which a traditional fishery could operate in the AFZ. The results of my research have identified the Bajo as one group of Indonesian fishermen who historically fished in the AFZ prior to Australian maritime expansion. They continue to do so. But we need to know much more. A detailed analysis of the other groups operating in the MOU still needs to be undertaken. For, like the Bajo, the various groups of fishermen from the villages
of Pepela and Oelaba, as well as Madurese, who have continued to operate in the AFZ for decades, also have legitimate claims for access to the AFZ.

There is also uncertainty over finalisation of seabed and water column boundaries between Indonesia and Australia. This would impact on any changes to the MOU and area of future access. After eight rounds of consultations between Australia and Indonesia, the Foreign Ministers of both countries signed the Australia - Indonesia Maritime Delimitation Treaty in Perth on 14 March 1997. The treaty covers three outstanding maritime boundaries between Australia and Indonesia: a) the western extension of the seabed boundary between the Australian mainland and Indonesia west of a point just north of the Territory of Ashmore and Carrier Islands reached in the 1972 treaty (Article 1); b) the complete water column (EEZ) boundary between the Australian mainland and Indonesia (Article 2); and c) the exclusive economic zone (EEZ) and seabed boundary between the Indonesian island of Java and the Australian Territory of Christmas Island (Article 3) (see Map 16).

Map 16: Depiction of all Australian - Indonesian maritime boundaries after the Australia-Indonesia Maritime Delimitation Treaty, Map 5.)
In order for the treaty to come into force it will need to be preceded by completion of procedures in both countries. Both parties then need to ratify the treaty in their respective Parliaments. To date this has not happened. During a Joint Standing Committee on Treaties (JSCT) inquiry into the Treaty a number of issues were raised. Under the provisions of the Treaty, Ashmore Reef will generate a 24 nm exclusive economic zone while the existing MOU only incorporates a 12 nm zone. This would mean that Indonesian fishermen would lose access to exploit resources in this 12 nm area which they currently have access to. In addition it would raise significant enforcement problems. The idea that the northern boundary of the MOU be extended to coincide with the proposed 24 nm boundary was raised and Parks Australia called for a renegotiation of the MOU (JSCT 1997:30–32). This was supported by submissions from the Fisheries Department of Western Australia (JSCT 1997:34).

In respect of Indonesian traditional fishermen the Committee recommended that:

> the Australian Government in consultation with the relevant State and Territory governments, review the 1974 traditional fisher Memorandum of Understanding with Indonesia in light of the changes to the Exclusive Economic Zone boundary in the vicinity of Ashmore Islands, and…review the issue of ongoing Indonesian traditional fisher access to Australian waters and its impact on the sustained management of Australian fish resources (JSCT 1997:ix).

While significant in recognising some anomalies, the recommendations do not go far enough. Political developments in East Timor in 1999 and the move to independence will signal a re-assessment of this Treaty and other previously determined maritime boundaries between Australia and Indonesia to the south of Timor, including the Timor Gap Treaty. The implications for Bajo fishing activity in the Timor Sea could be significant.

In addition, there has been a lack of reliable data on the actual status of marine resources in the northern AFZ and MOU box area that can be used to assist in designing permitted future levels of access for Indonesian fishermen. The most recent government initiative of the Interdepartmental Committee on Indonesian fishing (perhaps as a result of recommendations made by Wallner & McLoughlin 1995a) was to contract the CSIRO to undertake a survey of the reef resources in the MOU box area in late 1998. The report has yet to be released. A survey of shark resources still needs to be undertaken. According to AFMA, these findings will serve as an empirical baseline from which any future decisions will be considered regarding
an alternative management approach towards licensing and a consideration of a renegotiation of the MOU (Stuart Fitch, 1998, pers. comm.).

There appears to be a perception by the Australian government that the education, enforcement and prosecution approach is actually working as a solution to deterring illegal fishing activity. The approach may work for certain groups operating in the AFZ at certain times. But it has been ineffective against other groups by virtue of ongoing access afforded under the MOU. According to Fox (1998:134), that such policy continues “without serious reconsideration is difficult to comprehend. One can only speculate on why Australia persists with a policy that is so evidently inappropriate to the problem that it is intended to solve”.

Part of this persistence is due to beliefs generated in Australian government circles that the government of Indonesia is responsible for controlling the activities of its fishermen and that the Indonesian government has the capacity to control thousands of these boats (Fox 1998:134–135; see also JSCFDAT 1993:129; JSCT 1997:36). In addition, there is the belief that the situation can be contained by intervention into the activities of certain entrepreneurs in Indonesia who control the trade in marine products and who are also thought to control the activities of fishermen (Fox 1998:134). Fox argues that,

Other, perhaps deeper, attitudes are involved in maintaining present policy - a determination on the part of some Australians to uphold, at whatever cost, the integrity of territorial boundaries and an equal determination to preserve a strict interpretation of the law. Perhaps more pertinent is a perceived difficulty in dealing with what has been defined as “traditional”, as if tradition was something frozen in time and not amenable to processes of reasonable discussion and negotiation (Fox 1998:135).

Van der Spek suggests that Australian government inaction on the notion of tradition and forced cultural inertia:

is nothing else but a rhetorical device serving the legitimation and execution of its policies. There is obviously no political will to adopt any other definition, as the present one serves the stated objectives of territorial, commercial, and environmental protection quite adequately. It is, therefore, in Australian policy makers’ interests to continue to view Indonesian fishing in the AFZ
as a largely homogenous phenomenon, with virtually no differentiation made between fisheries and fishermen…without considerations of time-depth, or a clear understanding of the social complexity which underwrites small-scale commercial fishing (Van der Spek 1995:21–22).

To this lack of inaction can be added the belief by Australian authorities that fishermen have changed their “traditional” operations to “commercial” ventures. Because of changes in Bajo fishing activity, such as the adoption of “modern” longline gear, this new technology is considered inauthentic. Therefore, fishermen are considered to be no longer operating “traditionally” but “commercially”. As a consequence, they have lost any traditional rights they may once previously have had. This provides the necessary justification to continue the policy of apprehensions, potentially cancel the MOU with Indonesia and close access to the AFZ for Indonesian traditional fishermen.

There is also an antiquated but powerful conservation thinking that has informed Australian policies which considers indigenous peoples as “enemies” and “threats” to natural resources, rather than as the “key” to their sustainability (Stevens 1997:4). The 1974 MOU and in particular the Ashmore Reef National Nature Reserve with its exclusionary management regime, represent examples of this kind of prevailing consciousness.

Technically, under UNCLOS III Australia has some legal obligation to recognise prior activity in the AFZ by people from Indonesia. Under UNCLOS III nationals of foreign states are technically entitled to the surplus of the allowable total catch in the Exclusive Economic Zone of the coastal state (UNCLOS Article 62(2)). In allocating surplus to foreigners, the coastal state is required to take into account a number of factors including the significance of the living resources of the area to the economy of the coastal state concerned and must take into account the need to minimise economic dislocation in States whose nationals have habitually (ie. traditionally) fished in the zone (UNCLOS Article 62(3)). Under UNCLOS, Foreign States and their nationals do not have any rights to the resources on the continental shelf (UNCLOS Article 77(2)). This means that Australia is under no obligation to give Indonesian fishermen access to exploit sedentary products on offshore reefs and islands in the MOU area.

However, UNCLOS III does not specifically protect the rights and interests of indigenous peoples and it is unlikely that such a legal claim would ever be made, let alone be successful. UNCLOS III is more heavily weighted in favour of nation states than indigenous minority
The way forward for Australia and Indonesia will depend less on legal obligations, but rather on foreign policy relations and political and moral realities and commitments between the two countries (Campbell & Wilson 1993:194; Tsamenyi 1995:10).

On the other hand, however, Australia has other international considerations in regard to indigenous peoples’ rights of access to resources. The protection of indigenous human rights and the interests of indigenous peoples is a current and emerging issue. In the last decade multilateral environmental and human rights treaties to which Australia is a signatory, have recognised that indigenous local people retain traditional ecological knowledge and methods of natural and cultural resource management which can contribute to sustainable development. International human rights standards require that governments recognise indigenous peoples rights to “customary use of resources; even in protected areas; rights to participate in decision-making and be included in management regimes which recognise customary resource use, and rights to benefit equitably in the returns generated by resource use” (Sutherland 1996:5). Some of these instruments and recent developments ratified by Australia include multilateral and bilateral conventions such as the Convention on Biological Diversity (1993) and the International Covenant on Civil and Political Rights (1991). Non-binding declarations and other instruments include Agenda 21 (UN Conference on Environment and Development 1992). Agenda 21 is a program for achieving sustainable development and it also attempts to recognise and strengthen the role of indigenous peoples. Other emerging international law includes the Draft Declaration on the Rights of Indigenous Peoples (1995) (Sutherland 1996:75–94).

Working Towards a Sea Change

The MOU requires renegotiation consistent with a 1990s approach based on contemporary circumstances and fishery management principles and practices, not those of 25 years ago. Future strategies need to excise out-dated assumptions and come into line with national and international standards. Contemporary approaches to fisheries management around the world are moving away from biological management, scientific modelling and centralised government responses. They are moving to partnerships between people, decentralisation, co-management between government and local communities, including local peoples' involvement in decision making. It is now clear that fisheries management will not succeed without involvement of the fishermen themselves (Pomeroy 1994:2; White et al 1994; Hviding & Baines 1996:80; Mace 1997:2). More specifically, fishermen must have a recognised “stake” in resource management
in the form of rights in order to provide incentives for resource protection (Bailey & Zerner 1992:11; White et al 1994:14).

Management also needs to take into account the social, cultural, and economic dimensions of resource use and exploitation (White et al 1994:9). These issues were reiterated most recently in a number of presentations at the 1997 2nd World Fisheries Congress held in Brisbane (Hancock et al 1997). In addition, guidelines developed by the FAO on adopting precautionary measures to fisheries management also outline the necessity for cooperation between stakeholders in the development of management plans (Mace 1997:13). One of the guiding principles of AFMA's management philosophy is to ensure active participation of user groups in the “development and implementation of fisheries management measures” (McColl & Stevens 1997). It is surely time AFMA applied their stated philosophy to Indonesian fishing activity in the AFZ.

**Conclusion**

The concept of “traditional” contained in the 1974 MOU reflects a simplistic but popular evolutionist view of tradition. This holds that for something to be authentically “traditional” is to oppose modernity or change. Ethnocentric evolutionary theories on societies’ progression from the “primitive” to the “civilised” have contributed to placing terms such as “traditional” and “modern”, “subsistence” and “commercial” as part of a dichotomy. Contemporary anthropological and legal approaches which have followed, depict tradition and culture as dynamic in the face of changing circumstances. As demonstrated by Bajo dynamism, fishermen are not operating according to some static adherence to the past. Adherence to a notion of “traditional” as something culturally inert, as well as defining access to the MOU area based on unchanging technology, is antiquated and at odds with other accepted approaches. However, such notions remain fixed and legitimate with regard to Australian policy on Indonesian fishing activity. These discourses continue to inform government responses, perceptions and treatment of Indonesian fishermen.

In light of recent Bajo dynamism, and an ongoing adherence to such views, Australian authorities no longer consider the Bajo to be operating “traditionally” but “commercially”. The implications of such perceptions means that Bajo have lost any “traditional” access rights to areas of the AFZ they may previously have had. This in turn provides the government with a justification for continuing the policy of apprehension, confiscation and forfeiture of
perahu on the basis that fishermen no longer operate in an authentic “traditional” fashion. Moreover, it appears that such views have contributed to a lack of will on the part of the Australian government to embrace alternative approaches to managing a traditional Indonesian fishery in the AFZ.

The 1974 MOU arrangement has failed to adequately and fairly address the issues of marine resource management, recognition of fishing rights, and to deter illegal fishing activity in the AFZ. The 1974 MOU is on the one hand, an open access system and, on the other hand, unreasonably restrictive. Under the MOU, no specific rights exist for groups who operated in the region prior to Australian maritime expansion. Indonesian fishermen are denied normal cultural dynamism in pursuing their livelihood. There are double standards being applied to Bajo fishermen: Australians can change, but Bajo cannot; Bajo must operate “traditionally” under the 1974 MOU by not embracing change, but there is recognition of cultural dynamism; and the adoption of new technology equates with a loss of rights for Bajo fishermen, yet not for Australians.

By not restricting levels of access to the MOU box area, overexploitation of resources has occurred. The MOU box is generally regarded as a poor shark fishing ground. Thus fishermen are forced to fish illegally in order to access more abundant shark populations to secure adequate profits. Technological restrictions, along with Bajo navigational methods, means that it is often difficult to determine the location of borders. This too contributes to illegal activity outside the permitted areas. Educational campaigns and the policy of deterrence have been largely ineffective, since large numbers of boats continue to be apprehended for illegal incursions in the AFZ. The burning of fishing boats that provide a livelihood for some of the poorest peoples of eastern Indonesia while Australia continues to fund aid projects to alleviate poverty in the region, represents a serious inconsistency in foreign policy.

Despite continued adherence to policies that are mostly ineffective and costly, a range of complex competing political, territorial, commercial, environmental, and legal reasons as well as ongoing misplaced perceptions, continue to influence government inaction in the engagement of new policies for Indonesian traditional fishermen. A more inclusive culturally informed approach should be taken to devise new agreements for specific groups with a historic interest in the area prior to Australian maritime expansion.
The challenge for future Australian and Indonesian policy makers remains in accommodating a flexible arrangement that incorporates the cultural dynamics of a traditional Indonesian fishery while at the same time maintaining legal, territorial, commercial and environmental principles and objectives of the nation state.
Chapter 10

CONCLUSIONS

This thesis has examined Bajo sailing and fishing activity in the Australian Fishing Zone. I have presented an analysis of the history of Bajo voyaging in the north Australian region, the social, cultural and economic organisation of voyaging and change and continuity in the patterns of voyaging and material culture of fishing. I have also examined issues concerning Australian maritime expansion and Australian government policies, treatment and understanding of Indonesian fishing activity in the AFZ with regard to the Bajo, as well as the complex issues and implications surrounding legal and illegal Bajo fishing activity in the AFZ.

Bajo from the villages of Mola and Mantigola have since the early decades of this century, engaged in seasonal voyages to the northwest coast of Australia and offshore islands and reefs in the Timor Sea to fish for a variety of marine products including turtle shell, trepang, trochus shell, reef fish and shark fin. This fishing activity has been dependent on market trends and demand for certain marine products both locally, regionally and internationally. An approximate date of between 1908 and 1924 can be assigned to the beginning of this activity. From that time, Bajo have continued to voyage periodically to fishing grounds in the north Australian region.

The expansion of the AFZ from 3 to 12 nm in 1968 meant that fishermen lost access to fishing grounds within 12 nm of the Australian coast. Under the 1974 Memorandum of Understanding, fishing was permitted only within 12 nm of specified offshore islands and reefs claimed by Australia in the Timor Sea. In 1979 with the expansion of the AFZ to 200 nm, fishermen lost access to fishing grounds stretching in a wide arc along the shallow waters of the continental shelf. The banning of fishing at Ashmore Reef in 1988 and the 1989 amendments to the 1974 Memorandum of Understanding which confined traditional Indonesian fishing activity to a box area, resulted in further loss of access to fishing grounds. As a result of Australian maritime expansion and MOU policy responses to Indonesian fishing activity, as well as a convergence of other interrelated social and economic events and forces, Bajo fishing methods and voyaging patterns and economics altered significantly from the late 1980s.

Rising demand and prices for shark fin internationally, impacted on the trade in Indonesia, resulting in the establishment of shark fin traders in Pepela and the availability of interest-free credit and boats for shark fishing voyaging. These conditions attracted some Bajo men and
their families from the Tukang Besi Islands to migrate and settle in Pepela. This resulted in a shift in patterns of voyaging from Mola and Mantigola to Pepela, changes in the financial arrangements of voyaging, an increase in the number of fishing trips undertaken by boats during a season, an increase in the number of boats operating directly out of Pepela and an overall increase in the number of Indonesian fishing boats operating in the AFZ. These interconnected events provided support for the adoption of costly new fishing gear. The MOU box area agreed to in 1989 did not accommodate most of the traditional Bajo shark fishing grounds. In general, the most profitable shark fishing grounds are found outside the MOU box. Here, shark had previously been targeted using handlines and shark rattles in wide arc across the shallow waters of the continental shelf along the north Australian region. However with the creation of the box, and the confining of fishing activity to this area of deeper water, this technology became largely ineffective. New fishing methods to catch shark were adopted in direct response to the new arrangement implemented, as a result of Australian maritime expansion.

An analysis of the notion of “traditional” fishing contained in the 1974 MOU which regulates traditional Indonesian activity in the AFZ has shown it to be problematic, with serious implications for Bajo fishing activity. The concept of “traditional” fishing regulating Indonesian access to the MOU box area enforces a now defunct cultural evolutionary concept of so called traditional societies operating in an eternal, enduring, constant condition that has not changed through time. It implies and encapsulates a view of traditional fishing activities as “primitive”, subsistence orientated, and therefore non-commercial, based on use of inalterable technology over time. The MOU is unreasonably restrictive and denies Indonesian fishing cultures normal dynamism, by enforcing a technological standstill of Indonesian material culture. It ignores the placement and interaction of fishing cultures within a wider social and economic environment.

This anthropological analysis has shown that the MOU does not reflect the reality of traditional Bajo fishing. Contemporary anthropological approaches hold that traditions and culture are not static but dynamic and adaptive. This study has shown that despite this notion of timelessness contained in the MOU, Bajo fishing is not an isolated activity, but dynamic and complex, reacting and interacting to a range of local and global forces: the Indonesian nation state; Australian regulation of their activity; local regional and international economies. Bajo voyaging traditions are constantly reinventing themselves within the broader processes of social, economic and political influences while retaining meaningful linkages to the past. By
defining access rights to the MOU area based on unchanging methods and not by the purpose of the activity, and enforcing a policy which ignores and denies culture change, the 1974 MOU is inconsistent and at odds with other accepted approaches to defining and regulating indigenous traditional fishing activities in Australia.

The consequences of Bajo dynamism against an adherence to a view of traditional fishing as inert and non-commercial is that Bajo are no longer considered to be operating as a traditional fishery but as a modern, commercial enterprise. The implications of such views that Bajo have surrendered their integrity and authenticity in adapting to changing circumstances, is that their traditional access rights are forfeited.

New representations of Indonesian fishermen shifting from subsistence to commercial activities in the 1970s legitimated the policy of local justice by fisheries authorities. New representations of fishermen operating commercially rather than authentically traditional, because of changes in the fishery, also justify and legitimate the policy of boat apprehensions and confiscations in the 1990s. Furthermore, such views appear to have contributed to a lack of response by the Australian government in adopting new approaches to regulate traditional Indonesian fishing activity in the AFZ.

There is serious irregularity and double standard in Australian policy to deny Indonesian fishermen change, yet not so for Australia. The view that “newness” implies “falseness” (Haley & Wilcoxon 1997:776), and results in a shift from a “traditional” to a modern and therefore “commercial” condition is misplaced. Yet it continues to inform Australian policy responses. To quote Fabian (1983:155):

> Tradition and modernity are not ‘opposed’ (except semiotically), nor are they in ‘conflict’ … what are opposed, in conflict, in fact, locked in antagonistic struggle, are not the same societies at different stages of development, but different societies facing each other at the same Time.

The Bajo fishery is complex, fluid and fluctuating, constantly reinventing itself in changing circumstances (Marcus & Fischer 1986). Bajo have always operated as a commercial fishery in Australian waters. They exist in the same time as Australians.

Continuing illegal Bajo fishing activity occurs as a direct result of the ineffectiveness of the 1974 MOU, as well as social and economic consequences resulting from the apprehension,
confiscation of boats, equipment and catch. Ethnographic investigation into the way in which sailing and fishing in the AFZ are conceived and carried out by the Bajo themselves has implications for understanding why Bajo continue to fish in the AFZ.

The 1974 Memorandum of Understanding was a goodwill attempt to recognise the long standing interests Indonesian fishermen had in the northern Australian region and to provide ongoing access for Indonesian fishermen in waters that came under Australian control. Unfortunately it has largely failed to provide for marine resource management, recognition of fishing rights for specific groups and stopping illegal activity outside the permitted areas.

The MOU was largely designed to accommodate fishermen particularly those from villages on Roti and from the islands of Madura and Raas targeting sedentary species at offshore reefs and islands. The banning of fishing at Ashmore Reef resulted in concentrated activity at other reefs by these fishermen which in turn has resulted in over-exploitation of sedentary species there. Because of this and changes within the trade in shark fin in Indonesia in the late 1980s more Pepela boats joined the Bajo and turned to targeting shark fin. This resulted in an increase in the number of boats targeting shark fin in the MOU box and competition between different groups of fishermen over the same resource. In addition, since there are no restrictions on the number of boats allowed to operate in the MOU area, restrictions on technology did not have the desired effect in limiting the number of boats operating in the area and providing for protection of marine resources.

Since the MOU box area is a relatively poor area for shark resources, fishermen are forced to embark on illegal shark fishing voyages outside the MOU box area, in an attempt to settle debts and obtain profitable returns. Fishing activity outside the permitted areas also occurs due to technological restrictions under the MOU, and the limitations of sail power in particular weather and sea conditions. The boundaries of the MOU and the AFZ negotiated under UNCLOS III are, for the Bajo, arbitrary lines on a map unconnected to any environmental or geographical features and have little connection to boundaries of their traditional fishing grounds. Bajo navigational techniques which are based on reference to familiar islands, reefs and other sea features, navigation and oil rig lights, and other environmental conditions make it difficult to determine the location of boundaries. This also contributes to illegal activity outside the allowed areas.
For nearly 25 years the Bajo have been in contact with Australian government surveillance and enforcement measures. This began in the early 1970s following the signing of the 1974 MOU. Fisheries officers have boarded Bajo boats each year since the late 1970s. The first Bajo boats were apprehended in 1975. The second in 1985 and again in 1990, 1991 and 1992. Since 1994 Bajo boats have been boarded and apprehended in the AFZ every year until the present time. However illegal fishing continues. The policy of apprehension and prosecution of crews, and confiscation and destruction of boats and equipment adopted as a solution to deter illegal fishing, which costs the Australian government and taxpayer millions of dollars each year has, with the exception of a small number of Bajo, largely been ineffective. Many captains and crew previously apprehended continue to participate in return voyages to the AFZ. In addition, in recent years, the number of apprehensions each year has increased.

Apprehension always results in some level of debt for the crew and affects the entire families of crew. This includes the cost of the voyage to be repaid, the loss of the equipment and the boat, a loss of earnings while the fishermen are in detention, and the necessity for families to borrow money to support themselves while men are away, and once they return, until they can go fishing again. For a minority of Bajo previously apprehended and prosecuted, who can face a jail sentence for recidivism, they are confronted with a difficult situation in securing adequate returns to pay off previous debts in relatively unproductive legal fishing grounds, which in turn creates further debt and penury. For the majority of Bajo, the deterrence policy not only does not discourage further illegal activity but actually contributes to further illegal incursions. Because of debt and indebtedness to traders and money lenders, as a result of an unsuccessful fishing trip ending in apprehension and the subsequent confiscation of perahu, equipment and catch, the only way crew can attempt to pay off debts is to return to sea. Since the most profitable fishing grounds are located outside the permitted areas under the MOU, illegal fishing may be the only option to secure adequate profits to clear previous debts arising from prior apprehension.

Other historical, social-cultural and economic reasons motivate continued Bajo fishing activity in the AFZ. A belief in the right to fish in the north Australian region continues to be reaffirmed among the Bajo through narratives relating to an early period of voyaging at a time when there were few restrictions on their activity. The ongoing experiences of following generations over the last 70 years or so reinforces this right. These past events provide a link with the present activity particularly for the contemporary Bajo sailors. A history of activity in
the region reinforces the continuation of current activity in the AFZ despite a range of ongoing restrictions and policies enforced by the Australian government.

Economically, voyaging continues due to the potential for making large profits from the high prices currently offered for shark fin. Profits from voyaging are in many cases the main financial contributions to the household economy. On the other hand, voyaging also continues because of fishermen's indebtedness to bosses, traders or money lenders as a result of poor fishing trips or apprehension and confiscation of boats and equipment by Australian authorities. Ironically, the conditions of the MOU actually promote the ongoing use of non-motorised perahu \textit{lambo} at a time when most fleets of \textit{lambo} across eastern Indonesia are motorised. For the owner of a \textit{lambo} there are few economic opportunities in the Indonesian maritime sector available that have the potential to provide large profits through the use of perahu \textit{lambo}.

Bajo interest in the sea encompasses a great deal more than economic interest. The marine environment represents more than a source of natural resources. Bajo religious beliefs and ritual behaviours are embedded in economic production. An investigation of Bajo cosmology and rituals conducted during fishing voyages has shown that permission to fish is obtained through ritual offerings and prayers with spirit beings thought to inhabit the sea. Success in fishing is contingent on cordial relations with these spirits who govern the appropriation of marine products. At this cosmological level, the Bajo do not recognise the Australian nation-state's ownership of the fisheries resources in the AFZ and the boundaries that demarcate sovereignty of such resources. Cosmology and ritual defines how the Bajo “define their sea rights” (Cordell 1989:5) inside the 200 nm Australian Fishing Zone. Continued Bajo activity, in waters now claimed by Australia is not driven only by economics and resource depletion in the Indonesian archipelago (JSCFADT 1993) but because the Bajo believe they have a genuine right to fish in waters controlled by their ancestors. The right to fish is an ongoing exercise of \textit{adat} or customary practice articulated through rituals performed during fishing activity.

In Mola and Mantigola a considerable amount of time, energy and money goes into building and maintaining a \textit{lambo}. Boats function as a vehicle to pursue a livelihood. Although boats represent a significant financial investment they are not operated as a capital investment. Boats have a cultural value and also express ideas about Bajo world views. An analysis of boat and sailing rituals has shown the perahu expresses ideas about household processes and the perahu itself is symbolically represented as a person participating in the voyage. The navel of the perahu represents the source of the vitality of the boat and good fortune in fishing is believed
to derive from a regularly ritually strengthened navel. The implications of this are that the destruction by burning of a perahu *lambo* represents not only the destruction of a source of livelihood on which many families are dependent, but it is also effectively the destruction of the child of the owner of the boat. For a landless nomadic maritime people, the confiscation and destruction of boats is devastating. A more anthropologically informed understanding of such dimensions of Bajo fishing activity in Australian waters should underpin policy decisions.

In light of these findings, the apprehension and confiscation of Bajo and other perahu should cease. Alternative short and long term strategies should be developed and implemented. To date the Australian government has largely failed in its attempt to deal with the issues associated with “traditional” Indonesian fishing activity by treating all groups, regardless of whether or not they have a historic interest the north Australian region, in the same fashion. The treatment of “traditional” fishermen should be separated from the activities of those other groups operating illegally in the AFZ and strategies developed suited to each particular fishery. This requires some political will, which to date has been absent.

I have identified the Bajo as one group of Indonesian fishing peoples who have a historic interest in the north Australian region. This needs to be formally recognised by way of a renegotiation of the MOU with Indonesia with the, interests and rights of the Bajo and other groups of fishermen taken into account, in addition to upholding the economic, legal, territorial and sovereign principles, rights and interests of the nation state.

A new agreement should be negotiated with Indonesia. This agreement should abandon notions of “traditional” regulating access based on use of unchanging technology. It should also afford access rights under a licensing system for specific numbers of Bajo and other fishermen to fish in a newly defined area which incorporates appropriate fishing grounds. A re-orientation of the current management regime in allocation of user rights to specific groups of fishermen who have historically operated in AFZ would offer incentives to fishermen to protect their interest and resources from illegal fishing, and reduce the high costs associated with current policies.

A more flexible approach to maritime boundaries is needed within an integrated resource management framework. In managing an Indonesian fishing problem, success depends on a more inclusive, rather than exclusive, approach with concerted multinational actions both at the government level as well as consultations with the fishermen themselves. Such an approach should incorporate an anthropologically informed level of cross-cultural awareness.
and understanding of the dynamic condition of these traditional fisheries, combined with biological science assessments and fisheries co-management tools. There is no one quick fix solution to the problem of legal and illegal Indonesian fishing activity in the AFZ. However, new strategies need to incorporate an ongoing processional approach involving all parties jointly working at the issues, so when new problems or situations arise and changes occur, as they inevitably will, all stakeholders can be involved in designing and implementing appropriate strategies and responses. Anything short of such an approach means that some level of success is unlikely to occur. As Fox (1998:135) has noted, it is only the “widening of mutual perspectives—that steps can be taken to achieve solutions”. To date there has been relatively little detailed ethnographic analysis of Indonesian fishing communities operating in the AFZ. Because of a lack of ethnographic insight, and poor understanding of the issues, numerous problems concerning Indonesian fishing activity have arisen. Bajo perspectives have not been adequately considered in relation to protection and regulation of their livelihood. It is hoped this research will make some contribution to an understanding and recognition of Bajo rights and perspectives on fishing activity in the AFZ.

Topics for further research into Indonesian fishing activity in the AFZ could include similar studies as this one on the two other main groups operating in and around the MOU area in the Timor Sea: fishermen from the villages of Pepela and Oelaba, and different groups of Madurese fishermen hailing from the islands of Madura and Raas. Such information could then be used for further investigation of proposed solutions to managing a traditional Indonesian fisheries in the AFZ, which could include an analysis of different types of approaches to co-management in other parts of the world and suggestions for suitable systems which could apply to regulating an international offshore fishery in northern Australia.

The Australian government has legal global obligations and responsibilities to sustainable management of its oceans and marine resources as a signatory to UNCLOS III and other bilateral and multinational instruments. But it also has rights and obligations to protect and promote the livelihood of mobile, maritime Bajo and their families, who have fished in the north Australian region since the early decades of this century, but under current policy conditions involves greater risks, threats and uncertainties. What Bajo need most of all for cultural and economic survival within present systems of modern political economy are proper recognition of their specific sea rights and claims to access resources and sea territories within the expansive Australian 200 nm fishing zone.
International maritime boundaries and legal and sovereign principles behind their enforcement represent “foreign impositions” for indigenous peoples (Schug 1996:209) and they were seldom drawn with the interests of indigenous peoples considered. Bajo still regard northern Australia as part of their cultural and economic world and have openly challenged this system that obstructs them from access to economically important resources and customary practices (Schug 1996:209). New policies incorporating a more anthropologically informed approach will assist in dissolving the ongoing conflict between Indonesian fishermen and Australian authorities at international frontiers in the Timor and Arafura Seas.
Appendix 1. CONSTRUCTION OF A PERAHU LAMBO

The following description of the construction of a counter-sterned perahu lambo derives from discussions with Gunda, one of the chief boat builders (tukang perahu) in Mola and observations of him and his team of men at work in Mola Utara. Some of the methods and techniques of construction were observed during the construction of small motor boat (bodi), as well as during the construction of the hull of a perahu lambo. This description can be taken as representative of lambo boat building in Mola, however each tukang perahu has his own style and there is some variation in methods, materials or techniques between boat builders.

The fitting out and rigging of a lambo is described in general terms and based on observations and information collected from Gunda and various boat owners. It is supported by technical information found in Burningham (1996: 69–107).

The dimensions, size and style of the hull form of a perahu lambo are decided upon by the owner in discussions with the builder. For vessels built ‘on spec’ this is decided by the builder. The style of the hull (commonly referred to as the stomach of the boat perut or bettah), its size (ie. large or small), and the style of the stern has to be decided. In the case of a counter-stern (pantat bebe) lambo, the counter can be built as either a flat stern (pantat pa’abba) or a high stern (pantat tinggi). The builder does not make any drawings or plans of the perahu; he works from a mental template and by ‘lining up’ the hull symmetry by eye.

Negotiations are made over the cost and fee between the boat builder and the owner. Gunda provided the following examples of how such fees and costings are decided:

If a person wants a perahu around 3 m wide and around 12 m in length built, it is around 234 planks of wood which would cost around Rp7,000,000. The perahu Tunas Baru cost Rp8,000,000 to finish; it is 3.04 m wide and has 303 planks. The wage is usually costed out per plank according to its length. For example, a plank of wood 1.5 m in length cost Rp4,000 to fit. A plank 3 m long cost Rp9,500. If we work together in a group we do not count how many each person has fitted. Usually the head builder asks the owner for a cash advance, part of which is divided among the workers so they have money to buy food for their families, and the other part is used to buy materials and timber. When the perahu is finished the owner pays the builder the difference which is then divided among the workers.
The time taken to build a lambo can vary from a few months to a few years, depending on the pace of work, finances and availability of timber.

Most perahu built in the Tukang Besi Islands are constructed from Vitex sp. usually Vitex gotassus called kayu kalimpapa in Sama language (kayu bitti) (Burningham 1996:23). Other timber considered to be ‘first class’ are kayu bissi (ironwood) and kayu matekuli. These timbers are considered to be strong and suitable for boat building and very resistant to rot and ship worms (Burningham 1996:71). Most of the timber comes from Buton - from Langkumbe, Lawele, Lasilimu and from Kulingsusu and Ereke in the north.

Boat builders have a basic tool kit. These include the adze (bingku), wooden mallet (palu kayu), machete (badi), saw (gara gadji), chisel (paha), auger bitt (ulai ulai), plane (kattah) and iron-headed mallet (tukul).

**Construction of the Hull**

The construction of a lambo begins with the laying of the keel (lunas) and joining the keel to the stem (pamaruh munda) and stern posts (pamaruh bulli). In Mola, the keel is made from a single length of wood, in contrast to lambo constructed at Lande on Buton (Southon 1995:99) and at Bonerate (Burningham 1996:73), where the keel consists of three sections of timber. According to the Bajo, a keel made of a single length of timber is much stronger than a keel consisting of three separate pieces. The stem and stern posts are made from grown timbers. A ceremony is carried out at the time the keel is joined to the stem and stern posts.

Once the keel sections are joined the construction of the hull begins. The hull shell is constructed from rows of short planks of timber carved to shape and fitted edge to edge with wooden dowels (pasa’) made from mangrove wood (kayu langka). The next plank to be fitted is selected and roughly trimmed to the approximate shape required to be fitted above the preceding plank. On the top edge of the preceding plank the position of the dowels is marked, then the holes are drilled at intervals (with a hand brace and augerbitt). The wooden dowels are inserted into the holes and hammered into place. On the edge of the plank to be fitted the position of the dowels is marked corresponding to the position of the preceding plank and holes drilled. When this is completed, liquid asphalt or tar (teer) which acts as an adhesive is smeared along the edge and a layer of refined paper bark (lulu) (*Melaleuca leucadendron* or yellow hibiscus tree) is stuck to the adhesive. The new plank is then hammered into place.
using a steel headed mallet and shaped by trimming the excess timber with a chisel, adze and machete (see Photos 54 and 55).

Photo 54: The hull is constructed of planks of timber fitted edge to edge with wooden dowels. The edge is smeared with liquid asphalt and paper bark.
The first plank to be fitted immediately following the joining of the keel and stem and stern posts, is the *papang pangeppe* (sometimes also called *iyyah timbau*). This plank sits directly over the centre of the keel and is the first plank fitted along each row. The exact literal meaning of *papang pangeppe* in Sama language is unclear but this plank is also referred to as the *papan induk* in Indonesian meaning the “mother plank” indicating some symbolic association (see also Southon 1995:108).

The rows of planks that form the hull follow a strict pattern and are assigned different names. The number of rows depends on the size of the perahu. The rows of planks that form the hull are joined using a joint called *subbah*. The most difficult section of the hull construction is the lower section of the stern and the fitting of the *salurēh* planks to the stem and stern posts because of the difficulty in obtaining curved lengths of timber. At the stern, a hole called the *jollo* is left behind the top of the stern post where a rudder trunk will later be sealed into the hull. The overhang ‘butterfly’ *peddo-pedo* planks (see Photo 56) are fitted up to a place where a curved transverse piece of timber called the *pipisah* is fitted. Above the *pipisah* or knuckle of the counter, 2–3 wide pieces of curved timber are fitted to form the actual wall of the stern called *umpa buli*. With the counter in place, the last row of hull
planks is completed with one long plank called the **guntur** running from the stern to the bow of the hull on each side. The counter stern section can be completed at this stage or towards completion of the fitting of the frame.

![Photo 56: Planking layout of the counter stern above the stern post.](image)

After the shell has been constructed, the floors and ribs are added, fastened to the shell using wooden nails, and placed at intervals along the length of shell (see Photo 57). A hole is drilled through the floor or rib and the shell plank from the inside of the shell and the wooden nail is hammered through the hole, to hold the timber in place. There must be one wooden nail for every shell plank. Steel bolts are also used to bolt the floors to the keel and some of the ribs to the hull. The floors and ribs are selected from conveniently shaped pieces of timber. The floors are made from a single piece of v-shaped timber (**kilu**). The ribs, called
tajoh if made from two lengths of timber fitted together, and called solor, if made from one long continuous length, are trimmed to shape to follow the curve of the hull and fitted at intervals between the floors.

In order to obtain the correct curvature of the shape of the hull, a piece of reinforced steel wire (papanoh) is bent to the shape of the hull at the place where the rib is to be positioned, and this is then placed on the edge of the length of timber selected, and the curve of the hull is marked with a pencil. The rib is trimmed to match the curve of the hull, until the rib eventually fits.

After all the floors and ribs have been fitted, the projecting ends of the wooden nails are cut off and the outside of the hull is planed smooth and caulked with paper bark. The tops of most of the ribs are cut off, with the exception of four, on either side of the hull, to which standing rigging will be attached later on. At this stage, the stringer planks (leppe) running lengthways along the inside of the hull are fitted to the ribs and after, the thwarts or deck beams (singkar) are fitted which will support the deck floor.
Before the decks are laid, the rudder trunk (pipa kamudi), made from a hollowed out tree log is fitted and sealed into the deck and hole (jollo). The rudder (kamudi) (stock and blade) is usually made from a single piece of timber, but sometimes extra pieces of timber are added to the blade. Steel fastenings are inserted through the stern post which the rudder blade hinges upon. The tiller (piutang) used to steer the perahu fits into the top of the rudder stock that extends through the rudder trunk above the deck.

Once construction reaches this stage, before the decks, cabin, bowsprit, toilet box or balcony, mast and rigging are fitted and/or completed, the perahu can be sold or handed over to the owner who then carries out the final fittings himself. At this stage also, the drilling of the navel and the launching of the perahu can take place.

The cabin or deck house is built over the middle part of the hold in either one of three basic designs. The cabin walls are made from planks of timber and sometimes the sloping roof is made from thatched palm leaf and covered with bamboo matting or vinyl to make it more waterproof. One or two extra lengths of bamboo (teteang laa’) are usually placed longitudinally along the cabin roof to walk along to avoid damage to the roof. Access to the cabin is through small sliding wooden doors fore and aft. The floor of the cabin consists of loose planks laid over beams which can be removed to gain access to the hold (moa).

The deck (katabah) planking is laid fore and aft of the cabin to the inside edge of the hull planking and a gunwale (tengkang) made from thick timber is carved to shape and fitted over the tops of the cut off ribs and the top of the decking all around the side edges of the hull. The seams between each deck plank are caulked. Blocks of timber for supporting rails or other structures such as awning posts can be attached to the gunwale. At the time of decking, the bilge pump (kompang) made from bamboo or plastic must be fitted. The pump is positioned near to the stern post, close to the aft end of the cabin in order to access the lowest part of the bilge and when operated the pump discharges water onto the aft deck. Usually a space for a hatch (bongka peta) on the fore and aft decks is left during construction of the deck.

**Fitting Out and Rigging of the Perahu**

The tripartite bowsprit (anjoh) is built projecting over the bow of the perahu. Either one or two bobstays (samah anjoh) made from reinforced steel rods are attached to the forward end of the bowsprit and secured to the stem post at the waterline with iron hooks/pins (koe). The mast (tikala) is usually made from one tree, but since it is often difficult to obtain a
suitably straight tree for the mast, some masts are made of two pieces joined together. The mast passes through the deck and the lower end is supported by a strong wooden platform (the mast step) which lies across three or four floors and ribs inside the hull. In the top of the mast is the mast head finial, which sprouts tufts of black ijuk which comes from the bark of the ennau tree (Verheijen 1986:47 lists ennau as Arenga pinnata) believed to keep away hantu laut (sea ghosts) which appear during electricity storms (see also Burningham 1996:95). The mast is stepped (raised) by using a set of bamboo poles and cross braces lashed to each other and the mast, which are later used as a ladder for the attachment of the standing rigging (Burningham 1996:91–95).

The standing rigging is made from a variety of materials including steel reinforcing rods or galvanised fence wire, sail ropes are made from polypropylene rope, and blocks are carved from timber. The mainsail boom (bong lama ting'nga) and jib boom (bong lamaanjoh) are made from lengths of giant bamboo (Gigantocloaasp). The gaff boom (panggilih lama) can be made from bamboo or timber. Jaws (ga') made from forked timbers are fitted to the booms which are attached to the mast. Sails are made from a polyweave cloth that is relatively cheap and readily available. Once the sail has been cut to shape, it is spread flat and sewn to a border of polypropylene rope and later laced to the boom, mast and in the case of the mainsail, to the gaff boom.

Depending on the owners’ preference, a wooden platform or toilet box is built over the stern. A box or old drum is used for a cooking box. A perahu will be outfitted with a couple of anchors (jangkar) mostly forged locally (Burningham 1996:95–103).

Before a perahu can go to sea, the area of the hull below the water line is covered in a white putty called palepa. This is made from pounding powdered lime (apo) from fired coral rock, and coconut oil (ansillang) in a large mortar and pestle by a group of four or five men for an hour or more. Most of the Mola perahu now paint over the lime putty with an anti-fouling paint (rust red in colour) called anti lummu to protect the hull. Perahu are painted, often in very bright colour schemes to the personal taste of the owner.

Following discussions held in Jakarta on 6 and 7 November, 1974, the representatives of the Government of Australia and of the Government of the Republic of Indonesia have agreed to record the following understandings.

1. These understandings shall apply to operations by Indonesian traditional fishermen in the exclusive fishing zone and over the continental shelf adjacent to the Australian mainland and offshore islands.

   By “traditional fishermen” is meant the fishermen who have traditionally taken fish and sedentary organisms in Australian waters by methods which have been the tradition over decades of time.

   By “exclusive fishing zone” is meant the zone of waters extending twelve miles seaward off the baseline from which the territorial sea of Australia is measured.

2. The Government of the Republic of Indonesia understands that in relation to fishing in the exclusive Australian fishing zone and the exploration for and exploitation of the living natural resources of the Australian continental shelf, in each case adjacent to:

   Ashmore Reef (Pulau Pasir) (Latitude 12° 15′ South, Longitude 123° 03′ East), Cartier Islet (Latitude 12° 32′ South, Longitude 123° 33′ East), Scott Reef (Latitude 14° 03′ South, Longitude 121° 47′ East), Seringapatam Reef (Pulau Datu) (Latitude 11° 37′ South, Longitude 122° 03′ East), Browse Islet (Latitude 14° 06′ South, Longitude 123° 32′ East).

   The Government of Australia will, subject to paragraph 8 of these understandings, refrain from applying its laws regarding fisheries to Indonesian traditional fishermen who conduct their operations in accordance with these understandings.

3. The Government of the Republic of Indonesia understands that, in the part of the areas described in paragraph 2 of these understandings where the Government of Australia is authorised by international law to regulate fishing or exploitation for or exploitation of the living natural resources of the Australian continental shelf, in each case adjacent to:

   Ashmore Reef (Pulau Pasir) (Latitude 12° 15′ South, Longitude 123° 03′ East), Cartier Islet (Latitude 12° 32′ South, Longitude 123° 33′ East), Scott Reef (Latitude 14° 03′ South, Longitude 121° 47′ East), Seringapatam Reef (Pulau Datu) (Latitude 11° 37′ South, Longitude 122° 03′ East), Browse Islet (Latitude 14° 06′ South, Longitude 123° 32′ East).
resources of the Australian continental shelf by foreign nationals, the Government of Australia will permit operations by Indonesian nationals subject to the following conditions:

a. Indonesian operations in the areas mentioned in paragraph 2 of the understandings shall be confined to traditional fishermen.

b. Landings by Indonesian traditional fishermen shall be confined to East Islet (Latitude 12° 15′ South, Longitude 123° 07′ East), and Middle Islet (Latitude 12° 15′ South, Longitude 123° 03′ East) of Ashmore Reef for the purposes of obtaining supplies of fresh water.

c. Traditional Indonesian fishing vessels may take shelter within the island groups described in paragraph 2 of these understandings but the persons on board shall not go ashore except as allowed in (b) above.

4. The Government of the Republic of Indonesia understands that the Indonesian will not be permitted to take turtles in the Australian exclusive fishing zone. Trochus, beche de mer, abalone, green snail, sponges and all molluscs will not be taken from the seabed from high water marks to the edge of the continental shelf, except the seabed adjacent to Ashmore and Carrier Islands, Browse Islet and the Scott and Seringapatam Reef.

5. The Government of the Republic of Indonesia understands that the persons on board Indonesian fishing vessels engaging in fishing in the exclusive Australian fishing zone or exploring for or exploiting the living natural resources of the Australian continental shelf, in either case in areas other than those specified in paragraph 2 of these understandings, shall be subject to the provisions of Australian law.

6. The Government of Australia understands that the Government of the Republic of Indonesia will use its best endeavours to notify all Indonesian fishermen likely to operate in areas adjacent to Australia of the contents of these understandings.

7. Both Governments will facilitate the exchange of information concerning the activities of the traditional Indonesian fishing boats operating in the area west of the Timor Sea.

8. The Government of the Republic of Indonesia understands that the Government of Australia will, until the twenty-eighth day of February 1975, refrain from applying its laws relating to fisheries to Indonesian traditional fishermen in areas of the Australian exclusive fishing zone and continental shelf other than those specified in paragraph 2 of these understandings.

Jakarta, November 7, 1974

First Assistant Secretary Director of Consular Affairs
Fisheries Division

Australian Department of Agriculture (A.G. Bollen)

Department of Foreign Affairs of Indonesia

(Agus Yaman)
Appendix 3. AGREED MINUTES OF MEETING BETWEEN OFFICIALS OF AUSTRALIA AND INDONESIA ON FISHERIES

1. In accordance with the agreement reached by Mr. Ali Alatas, the Foreign Minister of Indonesia and Senator Gareth Evans, the Foreign Minister of Australia in Canberra on 2 March, 1989, Officials from Indonesia and Australia met in Jakarta on 28 and 29 April 1989 to discuss activities of Indonesian fishing vessels under the Memorandum of Understanding between the Government of the Republic of Indonesia and the Government of Australia regarding the operation of Indonesian traditional fishermen in an Area of the Australian Fishing Zone and Continental Shelf, concluded in Jakarta on 7 November 1974. They also discussed activities of Indonesian fishing vessels in the Australian Fishing Zone off the coast of North West Australia and in the Arafura Sea, and fishing in the waters between Christmas Island and Java.

Memorandum of Understanding of 1974

2. Officials reviewed the operation of the MOU. Both sides stressed their desire to address the issues in a spirit of cooperation and good neighbourliness. They noted that there had been a number of developments since 1974 which had affected the MOU. In 1974 Australia and Indonesia exercised jurisdiction over fisheries on 12 nautical miles from their respective territorial sea baselines. In 1979 and 1980, Australia and Indonesia respectively extended their fisheries jurisdiction to 200 nautical miles from their respective territorial sea baselines, and in 1981 a provisional fishing line was agreed. Since the areas referred to in the MOU are south of this line, new arrangements are necessary for the access by Indonesian traditional fishermen to these areas under the MOU.

3. The Australian side informed the Indonesian side that there were also changes in the status of Ashmore Reef and Carrier Islet as a separate territory of the Commonwealth of Australia and the establishment of the Ashmore Reef National Nature Reserve. The Australian side further informed that there had been a considerable increase in the number of Indonesian fishermen visiting the Australian Fishing Zone and a depletion of fishery stocks around the Ashmore Reef, that wells on Middle Islet and East Islet where Indonesian traditional fishermen were permitted under the MOU to land for taking fresh water had been contaminated; that Australia had also incurred international obligations to protect wildlife, including that in the territory of Ashmore and Carrier Islands. The Indonesian side took note of this information.

4. Since the conclusion of the MOU, both Indonesia and Australia had become parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
5. The Indonesian and Australian Officials discussed the implications of the developments mentioned in the preceding paragraphs. They affirmed the continued operation of the MOU for Indonesian traditional fishermen operating by traditional methods and using traditional fishing vessels. An Australian proposal that Indonesian traditional fishermen could conduct fishing not only in the areas adjacent to Ashmore Reef, Carrier Islet, Scott Reef, Seringapatam Reef and Browse Islet as designated in the MOU, but in a wider ‘box’ area in the Australian Fishing Zone and Continental Shelf was welcomed by the Indonesian side. A sketch map and coordinates of this ‘box’ area appears in Annex 1 of this Agreed Minutes.

6. In view of the developments that had occurred since 1974 as highlighted above, C considered that to improve the implementation of the MOU, practical guidelines for implementing the MOU as appears in the Annex of these Agreed Minutes were considered necessary.

7. The Indonesian side informed the Australian side on measures that had been and were being taken by the Indonesian authorities to prevent breaches of the MOU. The Indonesian willingness to assist in preventing breaches of the MOU and to [ ] inform Indonesian fishermen of the practical guidelines annexed Agreed Minutes.

8. The Indonesian and Australian Officials agreed to make arrangements for cooperation in developing alternative income projects in Eastern Indonesia for traditional fishermen traditionally engaged in fishing under the MOU. The Indonesian side indicated they might include mariculture and nucleus fishing enterprise scheme (Perikanan Inti Rakyat or PIR). Both sides mutually decided to discuss the possibility of channelling Australian aid funds to such projects with appropriate authorities in their respective countries.

North West Coast of Australia

9. The Indonesian and Australian Officials discussed matters related to the activities of Indonesian fishing vessels in the Australian Fishing Zone off the coast of North West Australia. They noted that those activities were outside the scope of the MOU and that Australia would take appropriate enforcement action. The Australian side indicated the legal and economic implications of such activities.

10. The Indonesian and Australian Officials felt the need for a long-term solution to the problem. To this end, they agreed to make arrangements for cooperation in projects to provide income alternatives in Eastern Indonesia for Indonesian fishermen engaged in fishing off the coast of North West Australia. The Indonesian side indicated that they might include mariculture and nucleus fishing enterprise scheme (Perikanan Inti Rakyat or PIR). Both sides decided mutually
to discuss the possibility of channelling Australian aid funds to such projects with appropriate authorities in their respective countries.

Arafura Sea

11. Indonesian and Australian Officials discussed the activities of Indonesian non-traditional fishing vessels in the Arafura Sea on the Australian side of the provisional fishing line of 1981. Officials agreed that both Governments should take effective measures, including enforcement measures, to prevent Indonesian non-traditional fishing vessels from fishing on the Australian side of the provisional fishing line without the authorisation of the Australian authorities.

12. Officials agreed to make arrangements for cooperation in exchange of information on shared stocks in the Arafura Sea for the purpose of effective management and conservation of the stocks.

Fishing in waters between Christmas Island and Java and other waters

13. The Officials of Indonesia and Australia noted that fisheries delimitation in waters between Christmas Island and Java and in the west of the provisional fishing line remained to be negotiated and agreed. Pending such an agreement, the Officials noted that both Governments would endeavour to avoid incidents in the area of overlapping jurisdictional claims.

Wildlife Cooperation

14. The Indonesian and Australian Officials considered the mutual advantages of the exchange of information on wildlife species populations believed to be common to both countries. It was agreed that each country's nature conservation authorities would exchange information on such wildlife populations and management programs and cooperation in the management of wildlife protected areas. In the first instance Indonesian authorities would be consulted on the management plan for the Ashmore Reef National Nature Reserve.

Consultations

15. The Indonesian and Australian Officials agreed to hold consultations as and when necessary to ensure the effective implementation of the MOU and agreed minutes.

Jakarta, 29 April 1989

Alan Brown               Nugroho Wisnumurti
Head of the Australian   Head of the Indonesia
Delegation               Delegation

**CO-ORDINATES OF MOU AREA (‘THE BOX’)**

The area bounded by the line:

a. commencing at the point of Latitude 12° 11’ 50” South, Longitude 123° 48’ 00” East;

b. running thence south-westerly along the geodesic to the point of Latitude 12° 19’ South, Longitude 123° 21’ East;

c. thence generally north-easterly, northerly, north-westerly, westerly, south-westerly, southerly and south-easterly along the line every point on which is twelve nautical miles seaward of the baseline from which the breadth of the territorial sea is measures, around Ashore Islands, to the point of Latitude 12° 30’ South, Longitude 123° 06’ East (along Provisional Fisheries Line);

d. thence south-westerly along the geodesic to the point of Latitude 13° 15’ South, Longitude 121° 49’ East;

e. thence south-westerly along the geodesic to the point of Latitude 13° 22’ 17” South, Longitude 121° 30’ 00” East;

f. thence south along the meridian of Longitude 121° 30’ East to its intersection by the parallel of Latitude 14° 25’ South;

g. thence east along that parallel to its intersection by the meridian of Longitude 123° 40’ East; and

h. thence north along that meridian to the point of commencement.

**ANNEX II PRACTICAL GUIDELINES FOR IMPLEMENTING THE 1974 MOU**

1. Access to the MOU area would continue to be limited to Indonesian traditional fishermen using traditional methods and traditional vessels consistent with the tradition over decades of time, which does not include fishing methods or vessels utilising motors or engines.

2. The Indonesian traditional fishermen would continue to conduct traditional activities under the MOU in the area of the Australian Fishing Zone and the continental shelf adjacent to Ashmore Reef, Cartier Islet, Scott Reef, Seringapatam Reef and Browse Islet. In addition, Indonesian traditional fishermen would be able to conduct traditional fishing activities in an expanded area as described in the sketch map and coordinates attached to Annex 1 of the Agreed Minutes.
3. To cope with the depletion of certain stocks of fish and sedentary species in the Ashmore Reef area, the Australian Government had prohibited all fishing activities in the Ashmore Reef National Nature Reserve, but was expected soon to adopt a management plan for the Reserve which might allow some subsistence fishing by the Indonesian traditional fishermen. The Australian side indicated that Indonesia would be consulted on the draft plan. Because of the low level of stock, the taking of sedentary species particularly *Trochus nilotocus* in the Reserve would be prohibited at this stage to allow stocks to recover. The possibility of renewed Indonesian traditional fishing of the species would be considered in future reviews of the management plan.

4. As both Australia and Indonesia are parties to CITES, Officials agreed that any taking of protected wildlife including turtles and clams would continue to be prohibited in accordance with CITES.

5. Indonesian traditional fishermen would be permitted to land on West Islet for the purpose of obtaining supplies of fresh water. The Indonesian side indicated its willingness to discourage Indonesian traditional fishermen from landings on East and Middle Islets because of the lack of fresh water on the two islets.

Jakarta, 29 April 1989.
Appendix 4. MAPS PRODUCED BY THE DEPARTMENT OF FOREIGN AFFAIRS AND TRADE AND THE AUSTRALIAN FISHERIES MANAGEMENT AUTHORITY FOR DISTRIBUTION AMONGST INDONESIAN FISHERMEN.

The first maps produced in late 1994 were A4 black and white photocopies. These were accompanied by two handouts. These maps were replaced a few months later with larger A3 plastic colour coded maps.
AUSTRALIAN EMBASSY

JAKARTA

PESAN PEMERINTAH AUSTRALIA UNTUK NELAYAN

Australia melakukan patroli zona perikannya secara teratur dengan menggunakan pesawat terbang dan kapal angkatan laut. Badan berwenang Australia menangkap nelayan yang menangkap ikan secara ilegal.

Adalah perbuatan melanggar hukum untuk menangkap ikan di selatan Batas Pengawasan dan Pelaksanaan Perikanan Sementara (lihat peta) tanpa izin dan otorita Australia. Juga merupakan perbuatan melanggar hukum untuk mencari teripang dan lola di sebelah s perbatasan dasar laut (lihat peta) tanpa lisensi Australia.

Reef dan Pulau Browse (lihat peta). Hanya kegiatan penangkapan ikan secara tradisional
dengan menggunakan perahu/kapal tanpa mesin yang diizinkan di kawasan ini. Mereka yang
menggunakan perahu/kapal bermotor akan ditangkap.

Akan tetapi, Ashmore Reef adalah cagar alam khusus dan penangkapan ikan sama sekali
dilarang di sini. Tidak seorang pun dibenarkan menangkap atau membunuh ikan, teripang, lola,
penyu, kerang-kerangan, dugong, burung, telur atau binatang lainnya dari kawasan Ashmore
Reef.

Para nelayan yang ternyata bersalah melanggar undang-undang Australia, harus membayar
denda atau dikenakan hukuman penjara. Perahu/kapal mereka juga dapat disita jika mereka
terbukti bersalah. Para nelayan jangan sampai terbujuk oleh orang tertentu untuk menangkap
ikan di perairan Australia. Risikonya tidak seimbang.

9 Januari 1995

** ** ** **

AUSTRALIAN EMBASSY

JAKARTA

PESAN PEMERINTAH AUSTRALIA UNTUK PEMILIK PERAHU/KAPAL DAN
OTORITA PELABUHAN

Australia melakukan patroli zona perikanannya secara teratur dengan menggunakan pesawat
terbang dan kapal angkatan laut. Banyak nelayan Indonesia yang menangkap ikan hiu, teripang
dan lola telah ditangkap dan dihukum berdasarkan undang-undang Australia.

Adalah perbuatan melanggar hukum untuk menangkap ikan di selatan Batas Pengawasan dan
Pelaksanaan Penkanan Sementara (lihat peta) tanpa izin dari otorita Australia. Juga merupakan
perbuatan melanggar hukum untuk mencari teripang dan lola di sebelah selatan perbatasan
dasar laut (lihat peta) tanpa izin dari pihak berwenang Australia.

Hanya terdapat satu kawasan di sebelah selatan Batas Pengawasan dan Pelaksanaan Penkanan
Sementara dimana nelayan tradisional Indonesia diizinkan menangkap ikan tanpa izin. Kawasan


Para nelayan yang ternyata bersalah melanggar undang-undang Australia, didenda atau dikenakan hukuman penjara. Pihak berwenang Australia juga mungkin menyita perahu/kapal dan membakarnya. Alat penangkap ikan dan hasil tangkapan juga dapat disita.

Para nelayan dihimbau untuk tidak ikut atau membantu siapa saja yang bermaksud melakukan kegiatan penangkapan ikan secara ilegal di perairan Australia. Kemungkinan tertangkap sangat besar. Risikonya tidak seimbang.

9 Januari 1995

* * * * *
### Uraian Koordinat

#### Pernyataan Antara
Pemerintah Pemerintahan Australia
dan Pemerintah Republik Indonesia

#### Nota Salinan Pertanggungjawaban
Pemerintah Republik Indonesia
dan Pemerintah Australia

#### Pengesahan Resolusi
Pengesahan resolusi

#### Perlakuan Keamanan
Perlakuan keamanan

### Waktu dan Daerah Asal Gara-

<table>
<thead>
<tr>
<th>Title</th>
<th>Gars Inting</th>
<th>Gars Buju</th>
</tr>
</thead>
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<td>A1</td>
<td>10550</td>
<td>13912</td>
</tr>
<tr>
<td>A2</td>
<td>10505</td>
<td>13836</td>
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<tr>
<td>A19</td>
<td>11075</td>
<td>13939</td>
</tr>
<tr>
<td>A20</td>
<td>11075</td>
<td>13939</td>
</tr>
</tbody>
</table>

### Cagar Alam Nasional Karang Armore

**Pengaruh Kemanan di dalam cagar alam ini**

*Gambar Cagar Alam Nasional Karang Armore*
Appendix 5. DIMENSIONS OF LONGLINE GEAR USED BY 18 BAJO PERAHU CREWS, 1994.

<table>
<thead>
<tr>
<th>Name of Perahu</th>
<th>Number of snoods (hooks)</th>
<th>Distance between each snood (depa)</th>
<th>Length of snood rope (depa)</th>
<th>Length of wire trace (m)</th>
<th>Total Length approx. (depa)</th>
<th>Total Length approx. (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkat Nelayan</td>
<td>107</td>
<td>11.5</td>
<td>3.5</td>
<td>1</td>
<td>1,231</td>
<td>1,970</td>
</tr>
<tr>
<td>Cahaya Baru II</td>
<td>70</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>910</td>
<td>1,456</td>
</tr>
<tr>
<td>Cahaya</td>
<td>125</td>
<td>13.5</td>
<td>3</td>
<td>0.5</td>
<td>1,688</td>
<td>2,701</td>
</tr>
<tr>
<td>Dagang</td>
<td>99</td>
<td>17</td>
<td>2.5–3.0</td>
<td>1</td>
<td>1,683</td>
<td>2,693</td>
</tr>
<tr>
<td>Cinta Lalesa</td>
<td>110</td>
<td>12.5</td>
<td>2.5</td>
<td>0.5</td>
<td>1,375</td>
<td>2,200</td>
</tr>
<tr>
<td>Karya Satu</td>
<td>87</td>
<td>15</td>
<td>3</td>
<td>1</td>
<td>1,305</td>
<td>2,088</td>
</tr>
<tr>
<td>Nurjaya</td>
<td>91</td>
<td>17.5</td>
<td>2.5</td>
<td>0.5</td>
<td>1,593</td>
<td>2,549</td>
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<tr>
<td>Putra Bahari</td>
<td>87</td>
<td>21.5</td>
<td>5</td>
<td>1</td>
<td>1,871</td>
<td>2,994</td>
</tr>
<tr>
<td>Putera</td>
<td>125</td>
<td>17</td>
<td>5</td>
<td>?</td>
<td>2,125</td>
<td>3,400</td>
</tr>
<tr>
<td>Langara</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roti Indah I</td>
<td>150</td>
<td>13.5</td>
<td>– (no rope) 80cm</td>
<td></td>
<td>2,025</td>
<td>3,240</td>
</tr>
<tr>
<td>Sejati 01</td>
<td>113</td>
<td>13.5</td>
<td>3.5; 5.5</td>
<td>1</td>
<td>1,526</td>
<td>2,442</td>
</tr>
<tr>
<td>Sejati 02</td>
<td>71</td>
<td>11.5</td>
<td>3.5</td>
<td>0.5 depa</td>
<td>817</td>
<td>1,307</td>
</tr>
<tr>
<td>Suka Bakti II</td>
<td>100</td>
<td>9.5</td>
<td>2</td>
<td>1</td>
<td>950</td>
<td>1,520</td>
</tr>
<tr>
<td>Sumber Jaya</td>
<td>100</td>
<td>17.5</td>
<td>2.5</td>
<td>1</td>
<td>1,750</td>
<td>2,800</td>
</tr>
<tr>
<td>Takbir Illahi</td>
<td>115</td>
<td>12.5</td>
<td>?</td>
<td>?</td>
<td>1,438</td>
<td>2,301</td>
</tr>
<tr>
<td>Tunas Baru</td>
<td>141</td>
<td>17.5</td>
<td>3,5,7,9</td>
<td>1</td>
<td>2,468</td>
<td>3,949</td>
</tr>
<tr>
<td>Usaha</td>
<td>73</td>
<td>11</td>
<td>– (no rope) 9</td>
<td></td>
<td>803</td>
<td>1,285</td>
</tr>
<tr>
<td>Bersama</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waja Baru</td>
<td>73</td>
<td>13.5</td>
<td>2.5</td>
<td>1</td>
<td>986</td>
<td>1,578</td>
</tr>
</tbody>
</table>

Note: Based on the dimensions of longlines provided by Bajo crews, the total length has been calculated in depa and then converted to metres. The conversion from depa to meters provides an approximation of the total length of some longlines.
## Appendix 6. BAJO SAILING FLEET OPERATING OUT OF PEPELA, AUGUST-DECEMBER, 1994

1. Perahu departing from Mola operating out of Pepela

<table>
<thead>
<tr>
<th>Perahu</th>
<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
<th>Total POB</th>
<th>Voyage details</th>
<th>No. days at sea</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Berdikari</strong></td>
<td>MS (joined owner perahu)</td>
<td>2 Mola; 2 Pepela</td>
<td>2</td>
<td>5</td>
<td>dep Mola 24/7; arr ?</td>
<td>24</td>
<td>Perahu sold to Pepela Boss Oct 94 (Rp 4,000,000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 20/8; arr 13/9</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 18/9; arr 8/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Berkat</strong></td>
<td>MS (brother of owner MS in Mola)</td>
<td>8 Mola; 2 Pasar; 2 Wajo</td>
<td>8</td>
<td>11</td>
<td>dep Mola 5/8; arr ?</td>
<td>37</td>
<td>Captain joined Sejali 01.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 7/9; arr 14/10</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 21/10; arr 19/11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 23/11; arr 4/12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 This section includes two perahu (*Rahmat Bahan and Rahmat Bahari*) owned by ex-Mola Bajo living in Lasilimu (Buton) and one perahu (*Korea Baru*) owned by a Kaledupa land person borrowed by a Mola crew.

**MS** = Mola Selatan

**MU** = Mob Utara
<table>
<thead>
<tr>
<th>Perahu</th>
<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
<th>Total POB</th>
<th>Voyage details</th>
<th>No. days at sea</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cahaya Baru I</strong></td>
<td>MS (didn't join owner MS perahu) Also owner of Cahaya Baru II</td>
<td>? Mola ?</td>
<td>dep Mola</td>
<td>31 dep Mola 27/7; arr Pepela 35 11 dep 6/9; arr 4/10 dep 14/10; arr 18/11 dep 23/11; arr 4/12 Dep Pepela ?/12; arr Mola 12/12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cahaya Baru II</strong></td>
<td>MS (joined owner perahu) (also owner of Cahaya Baru I)</td>
<td>6 Mola 7</td>
<td>dep Mola 21 Mola ?; An Pepela ?/8 39 dep 7/9; arr 8/10 dep 15/10; arr 23/11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total POB</td>
<td>Voyage details</td>
<td>No. days at sea</td>
<td>Notes</td>
</tr>
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<td>-------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep for Mola</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Putera</em></td>
<td>MS (joined owner</td>
<td><em>Langara</em> perahu)</td>
<td>8</td>
<td>Mola</td>
<td>dep Mola 5/8</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dep 7/9; arr 11/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>dep 19/10; arr 19/11</td>
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</tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>dep for Mola 22/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Rahmat</em></td>
<td>ex-MS</td>
<td>brother of owner MS</td>
<td>?</td>
<td>Mola</td>
<td>arr? 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Bahari</em></td>
<td>lives in Lasilimu</td>
<td>(remained in Pepela)</td>
<td></td>
<td></td>
<td>dep 8/9; arr 36</td>
<td>5/10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 1/10; arr 6/11</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 10/11; arr 21/11</td>
<td></td>
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<td></td>
<td>dep for Mola 28/11</td>
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<tr>
<td><em>Rahmat</em></td>
<td>ex-MS owner</td>
<td></td>
<td>?</td>
<td>Mola</td>
<td>arr? 30</td>
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<tr>
<td><em>Bahari</em></td>
<td>lives in Lasilimu</td>
<td>(joined perahu)</td>
<td></td>
<td></td>
<td>dep 5/9; arr 35</td>
<td>5/10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 15/10; arr 19/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total POB</td>
<td>Voyage details</td>
<td>No. days at sea</td>
<td>Notes</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
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<td>------</td>
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<td>----------------</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Sejati 01</td>
<td>MS (joined owner perahu)</td>
<td>8 Mola</td>
<td>9</td>
<td></td>
<td>dep 1/12; arr ?</td>
<td></td>
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<td></td>
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<td>arr Mola 26/1/95</td>
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</tr>
<tr>
<td>Sejati 02</td>
<td>MS (joined owner perahu)</td>
<td>1st: 3 Mola 7 3 Buton 8 2nd: 7</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>arr 31 Pepela ?/8 32</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 7/9; arr 8/10</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 19/10; arr 20/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep Pepela 28/11; arr Mola 5/12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sinar Jaya II</td>
<td>MS (remained in Mola)</td>
<td></td>
<td>10 Mola</td>
<td>11</td>
<td></td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>arr Pepela ?/7</td>
<td>25</td>
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<td><strong>Tunas Baru</strong></td>
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Perahu sold to Pepela Boss Dec 94.
Perahu sold to Pepela (Darwin).
Paid security bond and
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<th>Notes</th>
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<td>returned to Mola, via Papela mid Dec with perahu</td>
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<td>Crew</td>
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<td>11</td>
<td>arr Pepela 26/8</td>
<td>dep 28/8; arr 21/9</td>
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2. Perahu owned by Mola Bajo living in Pepela

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<td><em>Ardil</em></td>
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<td><em>Makmur</em></td>
<td>1st &amp; 2nd trip: owner</td>
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<td>3rd: ?</td>
<td>dcp 29/9; arr 1/11</td>
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<td>dep 10/11; arr 1/12</td>
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<td><em>Bintang</em></td>
<td>MS (joined owner</td>
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<td>dcp 22/8; arr 4/9</td>
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2 This section includes one perahu (Cinla Lalesa) owned by a Bajo from LaManggau village, Tomea.
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<th>POB</th>
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<tr>
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<td>MU (didnt</td>
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<td>Barn</td>
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<td>1 Samp</td>
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<td>join) MU</td>
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<td>1 Kendari</td>
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<td>La relative Manggau, Tomea (joined perahu)</td>
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<td>MS relative of (remained owner MS in Pepela) Owner also owns Jaya Bahari, Teluk Pepela I and Teluk Pepela II</td>
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<td><strong>Hidup Merdeka</strong></td>
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<tr>
<td><strong>Rote Indah</strong></td>
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Pepela | Teluk | Sumber | Rote Indah | Rote Indah | POB | Voyage Details | Notes | dep 6/11; arr 29/11 | dep 15/10; arr 7/11 | dep 1/12 | dep 1/12 | dep ?/12 | dep 15/10; arr 14/11 | dep 26/11/94 & confiscated in Broome |
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<th>Total</th>
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<td>Mola</td>
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<tr>
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<td>perahu remained in Pepela</td>
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<td><em>Remeja</em></td>
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<td>arr 23/9</td>
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356
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<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
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<tr>
<td>Gaya Mulia</td>
<td>Mantigola relative</td>
<td>?</td>
<td>5</td>
<td>6</td>
<td>dep</td>
<td>?</td>
<td>Sold perahu to Pepela captain.</td>
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<td>(didnt join) of owner</td>
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<td>?</td>
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<td>dep Mantigola</td>
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<td>arr Pepela</td>
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3. Perahu departing Mantigola operating out of Pepela
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<th>Crew</th>
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<th>Voyage Details</th>
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<th>Notes</th>
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<tbody>
<tr>
<td>Hati Jujur</td>
<td>Wife of deceased Haji Mantigola (did not join)</td>
<td>relative Mantigola</td>
<td>4</td>
<td>5</td>
<td>dep?; arr 13/9</td>
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<td>dep 20/9; arr 10/10</td>
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<td>dep 15/10; arr?</td>
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<td>Mantigola (didn’t join perahu) Mantigola</td>
<td>relative Mantigola</td>
<td>4</td>
<td>5</td>
<td>dep 31/7; arr 30 Pepela 4/8</td>
<td>18</td>
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<td>dep 21/8; arr 13/9</td>
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<td>dep 20/9; arr 20/10</td>
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<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total POB</td>
<td>Voyage Details</td>
<td>No. Days at sea</td>
<td>Notes</td>
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<td>dep 28/10; arr 15/11</td>
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<td>dep 21/11; arr 4/11</td>
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<td>returned to Mantigola</td>
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<td>Pantai</td>
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<td>6</td>
<td>7</td>
<td>dep Mant?; arr?</td>
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<td>Amura</td>
<td>Mantigola</td>
<td>Mantigola</td>
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<td></td>
<td>dep?; arr 13/9 7</td>
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<td>Mantigola</td>
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<td></td>
<td></td>
<td>dep 20/9; arr 7/10</td>
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<tr>
<td></td>
<td>Mantigola</td>
<td>dep for Mantigola</td>
<td></td>
<td></td>
<td>dep ?/10; arr 3/11</td>
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<tr>
<td>Pulra</td>
<td>Mantigola</td>
<td>relative of owner</td>
<td>4</td>
<td>5</td>
<td>arr Pepela ?14</td>
<td>sold perahu to Pepela Boss.</td>
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<tr>
<td>Malia</td>
<td>Mantigola</td>
<td>Mantigola</td>
<td></td>
<td></td>
<td>dep 18/9; arr 2/10</td>
<td>Captain joined <em>Hati Jujur</em> to return to Mantigola</td>
<td></td>
</tr>
<tr>
<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total</td>
<td>POB</td>
<td>Voyage Details</td>
<td>No. Days at sea</td>
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</tr>
<tr>
<td><em>Tanta Mulia</em></td>
<td>Mantigola owner (joined perahu)</td>
<td>Mantigola</td>
<td>5</td>
<td>6</td>
<td>Mantigola</td>
<td>dep 18/9; arr 11/10; dep 10/11; arr?</td>
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4. Perahu owned by Mantigola Bajo living at Pepela

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<th>Captain</th>
<th>Crew</th>
<th>Total</th>
<th>POB</th>
<th>Voyage Details</th>
<th>No. Days at sea</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Kembali Muda</em></td>
<td>Mantigola brother (didn't join) of owner Mantigola</td>
<td>Mantigola</td>
<td>?</td>
<td>Mantigola?</td>
<td>dep?; arr 18/9; ?</td>
<td>?</td>
<td>Didn't go out again; trying to sell perahu. Perahu in Mola Feb 95</td>
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<tr>
<td><em>Suka Bakti</em></td>
<td>Mantigola relative (joined perahu) of owner Mantigola</td>
<td>Mantigola</td>
<td>?</td>
<td>Mantigola?</td>
<td>dep 18/9; arr 1/10; dep 15/10; arr 1/11; dep 10/11; arr 27/11</td>
<td>13</td>
<td>dep for Mantigola?/12</td>
<td></td>
</tr>
<tr>
<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total POB</td>
<td>Voyage Details</td>
<td>No. Days at sea</td>
<td>Notes</td>
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<tr>
<td><em>Sitka Bakti</em></td>
<td>Mantigola brother of owner Mantigola</td>
<td>5</td>
<td>7</td>
<td></td>
<td>dep 27/8; arr 19/9</td>
<td>23</td>
<td>Sold to Pepela Boss for Rp6,300,000 to pay debts Nov 94.</td>
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<tr>
<td>II</td>
<td>(Joined perahu Mantigola 4/10)</td>
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<td></td>
<td>dep?; arr 10/10</td>
<td>36</td>
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<td>dep 14/10; arr 19/11</td>
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5. Pepela owned Perahu borrowed by Bajo from Mola and Mantigola.

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<thead>
<tr>
<th>Perahu</th>
<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
<th>Total POB</th>
<th>Voyage Details</th>
<th>No. Days at sea</th>
<th>Notes</th>
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<tbody>
<tr>
<td><em>Budi Manis</em></td>
<td>Pepela MS Also owner of Roma Irama</td>
<td>?</td>
<td>?</td>
<td></td>
<td>dep?; arr 29/9</td>
<td>?</td>
<td>captain returned to Mola early Jan 95</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>dep 4/10; arr?/10</td>
<td>?</td>
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<td></td>
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<td></td>
<td></td>
<td>dep 14/11; arr?</td>
<td></td>
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<tr>
<td><em>Harapan I</em></td>
<td>Pepela MS Boss A</td>
<td>4</td>
<td>6</td>
<td></td>
<td>dep ?/8; arr 31 1/9</td>
<td></td>
<td>captain returned to Mola in Jan 95</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dep 14/11; arr?</td>
<td></td>
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<tr>
<td><em>Harpita</em></td>
<td>Pepela owner of Cemerlang MU Boss A</td>
<td>5</td>
<td>6</td>
<td></td>
<td>dep?; arr 24/9 24/9</td>
<td>?</td>
<td>captain returned to Mola in Jan 95</td>
</tr>
<tr>
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<td></td>
<td>dep 29/9; 9/10 9/10</td>
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<td>(capt sick)</td>
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3 Pepela Boss A, B, C, D designates ownership of different perahu by same person.
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<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
<th>Total POB</th>
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<th>No. days at sea</th>
<th>Notes</th>
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<tbody>
<tr>
<td><em>Kembang Harapan</em></td>
<td>Pepela</td>
<td>Boss D</td>
<td>5 Mola</td>
<td>6</td>
<td>dep 14/9; arr 10/10</td>
<td>26</td>
<td>captain returned to Mola in Dec 94</td>
</tr>
<tr>
<td><em>Mekar Indah</em></td>
<td>Pepela</td>
<td>Boss D</td>
<td>7 Mola</td>
<td>8</td>
<td>dep 14/8; arr 13/9</td>
<td>30</td>
<td>captain returned to Mola with Cahaya Dagang Dec 94</td>
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<td><em>Mista Jaya</em></td>
<td>Pepela</td>
<td>Boss B</td>
<td>?</td>
<td>?</td>
<td>dep 10/9; arr 24/9</td>
<td>14</td>
<td>captain remained in Pepela</td>
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<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Total POB</td>
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<td></td>
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<td>arr 1/12</td>
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<td><em>Roma</em></td>
<td><em>Pepela</em></td>
<td><em>Mantigola</em></td>
<td>?</td>
<td>dep?; arr?</td>
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<td>captain moved to his own perahu 14/10</td>
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<td>arr 1/10</td>
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<td><em>Setia</em></td>
<td><em>Pepela</em></td>
<td><em>MU</em></td>
<td>? Mola</td>
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<td><em>MS</em></td>
<td>? Mola</td>
<td>dep 7/9; arr 10</td>
<td>17/9</td>
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<td>No. days at sea</td>
<td>Notes</td>
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<td>Horuo,</td>
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<td>arr 2/12</td>
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<td>MS owner of Harpita</td>
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<td>5</td>
<td>dep 10/11 –</td>
<td></td>
<td>Apprehended 17/11/94 &amp; confiscated in Broome</td>
</tr>
<tr>
<td>Nelayan</td>
<td>Boss A</td>
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6. Bajo perahu from other areas (with relationship to Mola) operating out of Pepela

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<thead>
<tr>
<th>Perahu</th>
<th>Owner</th>
<th>Captain</th>
<th>Crew</th>
<th>Total POB</th>
<th>Voyage details</th>
<th>No. days at sea</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bunga</td>
<td>Tanah brother</td>
<td></td>
<td></td>
<td></td>
<td>arr 19/8</td>
<td>28</td>
<td>owner is related to owner of Sejati 01 from MS</td>
</tr>
<tr>
<td>Mawar</td>
<td>Besar, Tanah</td>
<td></td>
<td></td>
<td></td>
<td>from Buton</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Besar, Buton</td>
<td></td>
<td></td>
<td></td>
<td>dep8/9; arr 6/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Besar, Wajo,</td>
<td></td>
<td></td>
<td></td>
<td>dep 15/10;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buton Wajo,</td>
<td></td>
<td></td>
<td></td>
<td>an-10/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buton</td>
<td></td>
<td></td>
<td></td>
<td>dep 20/11;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buton</td>
<td></td>
<td></td>
<td></td>
<td>arr?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidup</td>
<td>Saponda, MS</td>
<td></td>
<td></td>
<td></td>
<td>arr early Oct</td>
<td>?</td>
<td>returned to Kendari</td>
</tr>
<tr>
<td>Bahagia</td>
<td>Kendari</td>
<td></td>
<td></td>
<td></td>
<td>dep?; arr 1/11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(joined perahu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perahu</td>
<td>Owner</td>
<td>Captain</td>
<td>Crew</td>
<td>Total POB</td>
<td>Voyage details</td>
<td>No. days at sea</td>
<td>Notes</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>------</td>
<td>-----------</td>
<td>----------------</td>
<td>-----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Binbira</td>
<td>Wowonii</td>
<td>? Langara ?</td>
<td>arr 2/12</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(didn't join perahu)</td>
<td>? Langara ?</td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
<td>Langara</td>
</tr>
<tr>
<td>Sumber</td>
<td>Sulamu owner</td>
<td>? Langara ?</td>
<td>dep 13/11;</td>
<td>?</td>
<td></td>
<td></td>
<td>remained in Pepela</td>
</tr>
<tr>
<td>Jaya</td>
<td>owner</td>
<td>? Langara ?</td>
<td>arr 19/11;</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(joined perahu)</td>
<td>? Langara ?</td>
<td>arr?</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Glossary

### Sama

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>a'a Sama</td>
<td>Sama people</td>
</tr>
<tr>
<td>a'nakoda</td>
<td>captain and owner of a perahu</td>
</tr>
<tr>
<td>baca doa'</td>
<td>prayer</td>
</tr>
<tr>
<td>bagai</td>
<td>non kin, other people, foreigner</td>
</tr>
<tr>
<td>bagu</td>
<td>tree bark</td>
</tr>
<tr>
<td>bala</td>
<td>trepang</td>
</tr>
<tr>
<td>balur</td>
<td>dried strips of salted shark meat</td>
</tr>
</tbody>
</table>

### Baong Sama

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>barra'</td>
<td>west; west monsoon</td>
</tr>
<tr>
<td>bebol</td>
<td>navel of a perahu</td>
</tr>
<tr>
<td>bidu</td>
<td>a large boat or perahu</td>
</tr>
<tr>
<td>bodi</td>
<td>small motorised boat</td>
</tr>
<tr>
<td>bokko</td>
<td>Green turtle (<em>Chelonia mydas</em>)</td>
</tr>
<tr>
<td>bos</td>
<td>boss</td>
</tr>
<tr>
<td>dalle</td>
<td>good fortune</td>
</tr>
<tr>
<td>depa</td>
<td>fathom measurement</td>
</tr>
<tr>
<td>gogoro</td>
<td>shark rattle</td>
</tr>
</tbody>
</table>
jonson  a type of canoe with an outboard motor
juragang  perahu captain
Kaka'  supernatural older brother or sister of new born child
kareo  shark
koelangan tansi  handline
kulitang  Hawksbill turtle (*Eretmochelys imbricata*)
lalaq  trochus shell (*Trochus niloticus*)
lama  sail; to sail
lama cangking  gaffrig used on perahu
lama lambo  gaffrig used on perahu lambo
lama sande  gunterrig used on perahu lambo
lama tanja  titled rectangular sail rig
lana  fishing ground
lepa  dugout canoe
lepa kaloko  a type of canoe
lunas  keel of a perahu
maluntu  a condition of weakness, faintness, exhaustion or lack of enthusiasm
mata sangai  points of origin of winds; wind compass
Mbo Madilau'  ancestors of the sea
nabbi  
prophet

nduga  
lead line used to measure depth of water

ngambai  
fish netting technique

nginda allau  
calendar

nyawa  
life or soul of a person or boat

pamali  
taboo

pamaruh bulli  
stem post of a perahu

pamaruh munda  
stem post of a perahu

pangatongang  
esoteric knowledge

pantat bebe  
counter stem of a perahu lambo

pantat kadera  
double-ended or chaired stem of a perahu lambo

pantat puppa  
transom stem of a perahu lambo

Papu  
God (Allah)

pedoman  
compass

perahu sande  
perahu lambo with a gunter rig

pinah  
betel nut; items used in ritual offering

pissi borroh  
longline gear

punggawa dilao'  
sea captain

rempo-rempo  
offerings
<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>saduh</td>
<td>system of money lending</td>
</tr>
<tr>
<td>salatang</td>
<td>south; east monsoon</td>
</tr>
<tr>
<td>Sama</td>
<td>Bajo people</td>
</tr>
<tr>
<td>sandro</td>
<td>healer, spirit medium, ritual expert</td>
</tr>
<tr>
<td>sangai</td>
<td>wind</td>
</tr>
<tr>
<td>sapa</td>
<td>reef</td>
</tr>
<tr>
<td>Sapa Taringan</td>
<td>Seringaptam Reef</td>
</tr>
<tr>
<td>sawi</td>
<td>crew</td>
</tr>
<tr>
<td>setang</td>
<td>malevolent spirits</td>
</tr>
<tr>
<td>soppe</td>
<td>a type of small boat</td>
</tr>
<tr>
<td>sumangaq</td>
<td>spirit or zest of a person, perahu or thing</td>
</tr>
<tr>
<td>tamuni</td>
<td>placenta</td>
</tr>
<tr>
<td>tuba</td>
<td>fish poison, made from tree roots</td>
</tr>
<tr>
<td>umpang</td>
<td>bait</td>
</tr>
</tbody>
</table>

**Indonesian**

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>adat</td>
<td>local customary law, institutions and ritual connected with customary practices</td>
</tr>
<tr>
<td>air putih</td>
<td>white water; shallow waters along the Australian continental shelf</td>
</tr>
<tr>
<td>barat</td>
<td>west; west monsoon</td>
</tr>
</tbody>
</table>
Baruselan  Browse Island

bos  boss (trader)

desa  village

dukun  healer

dusun  hamlet

gerombolan  Kahar Muzakkar Rebellion in South Sulawesi during 1950s-1960s

gula air  sugar from the lontar palm

Haji  a person who has made the pilgrimage to Mecca

Haring Selatan  South Scott Reef

Haring Timor Laut  Hibernia Reef

Haring Utara  North Scott Reef

hookah  surface supplied breathing apparatus used for diving

ilmu  esoteric knowledge

juragon  perahu captain

Kabupaten  Regency

kapal motor  a large motorised boat or ship

Kecamatan  Sub-district

kepala desa  village head

kotika  calender
lola  trochus shell  
layar lete  lateen sail rig  
layar nade  gunter sail rig  
lontar  white-spotted shark (*Rhynchobatus djiddensis*)  
modal  capital  
musim barat  west monsoon  
musim timur  east monsoon  
nakoda  captain who is also the owner of the perahu  
orang Buton  Butonese  
orang Marege  Aboriginal people  
pembeli  buyer of marine products  
pemilik perahu  perahu owner  
perahu  traditional sailing boat  
perahu lambo  a type of perahu  
perahu layar motor  motorised perahu with auxiliary sail  
perahu lete lete  a type of perahu sailed by Madurese  
perongkosan  capital cost of voyage  
potong biasa  crude or straight cut of shark fin  
potong full  full half moon cut of shark fin
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>potong semi</td>
<td>half moon cut of shark fin</td>
</tr>
<tr>
<td>Pulau Baru</td>
<td>Cartier Island</td>
</tr>
<tr>
<td>Pulau Bawah Angin</td>
<td>Rowley Shoals</td>
</tr>
<tr>
<td>Pulau Datu</td>
<td>Scott Reef</td>
</tr>
<tr>
<td>Pulau Haria</td>
<td>Adele Island</td>
</tr>
<tr>
<td>Pulau Pasir</td>
<td>Ashmore Reef</td>
</tr>
<tr>
<td>punggawa laut</td>
<td>sea captain</td>
</tr>
<tr>
<td>pusat</td>
<td>navel</td>
</tr>
<tr>
<td>rezeki</td>
<td>good fortune</td>
</tr>
<tr>
<td>selatan</td>
<td>east monsoon; south</td>
</tr>
<tr>
<td>semangat</td>
<td>spirit or zest of a person, perahu or thing</td>
</tr>
<tr>
<td>tukang perahu</td>
<td>boat builder</td>
</tr>
</tbody>
</table>
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