THE ROLE OF WOMEN IN COMMUNITY MANAGEMENT OF BIOSECURITY

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Abstract

This paper aims to identify and discuss the role of Balinese women in collective activities for community empowerment in two villages in Bali. The two sites are Legian (Site A) and Peninjoan (Site B). Information was collected using questionnaires and interviews with female leaders and other women in the two villages.

There are high levels of participation in community activities by women in both villages. Women are actively involved in social, cultural, spiritual, tourism and agricultural activities. However the capacities of women involved in community empowerment at Site A are higher than those at Site B. This is demonstrated by the success of the PKK (program for women to improve family welfare) at Site A, where the women have independently implemented a collective program for the eradication of mosquitoes carrying dengue fever. This activity involves the on-going clearing of laneways as an activity from the women, by the women, for the women. At Site B, participation of women in collective activities is still low. There continues to be failure in leadership in various women's activities, which are only implemented if they are pushed directly by the government. The women of the community depend on direction from traditional male leadership for implementation of village activities.

Female leadership exists in the organizational structure known as the PKK (Family Welfare and Empowerment). This organization usually sits below, or shadows, male leadership at the 'lurah' (village) or 'banjar' (hamlet) level. The wives of the Lurah and Banjar are automatically appointed as leaders of the respective levels of PKK. At Sites A and B decisions made by the PKK are still dependent on agreement from the lurah or banjar head. Women have potential in various aspects of social capital, but unfortunately this is often overlooked as women are subordinate to men within the community. This is apparent in various leadership structures such as BAMUS (Badan Musyawarah), the institution which coordinates between community administrative and traditional leaders at Site A and BPD (Village Representation Agency) at Site B. Women are not represented in either of these organizations. Women in these locations need to be encouraged and empowered to strengthen women's organizations and increase women's involvement in decision-making.

Introduction

Evidence shows that women are direct agents of social change and family unity within a community. Indonesian women are actively involved in social, cultural, spiritual, agricultural, and tourism activities and there are many documented cases where women have been successful natural resource managers (Nakatani, 1997; Walhi, 2007). In Bali, the role of women in almost all aspects of life is irrefutable. Women play an important role in social, cultural, spiritual, agricultural and domestic activities. According to Suryani (2006), it is essential that women realise that they are the ones responsible for fulfilling their obligations. Research by Meinzen-Dick and Zwarteveen (2003) shows that women have enough spare time to be able to participate in social activities and develop networks and use this time for these purposes of transferring knowledge and information. Women always have time to meet and have a relationship with their community (Maluccio *et al.* 2003). However, there has been little research to determine how women use this positive social capital to empower themselves through understanding and solving problems. There has also been little analysis of the position of women in organisational structures and decision-making at the village or hamlet levels. According to Pietra (2006), social capital is a resource that can be used to encourage a community to understand and contribute to overcoming community problems together, to address community interests and increase community awareness. Social capital held by women can be investigated and built on to empower women. According to Flora (2007), empowering the community to overcome their problems should be an on-going effort. This is particularly important in this era of globalisation which has brought on rapid developments in the movement and exchange of goods, services, money and communities. Globalisation means increased movement of pests and diseases in plants, animals and humans. If this issue is not taken seriously, food security and environmental balance could be threatened over the long term. To empower communities to address community problems requires making use of the existing social capital strengths that has developed among individuals or groups who have mutually beneficial relationships. Principals of cooperation already exist within communities, including in Bali where it is demonstrated by the Balinese irrigation system (sistem subak) and other traditional systems (suka-duka) which all demonstrate systems of community equality (Pietra 2006). This article aims to identify and expand on the participation and role of women within society, so it can be used as capital to contribute to future community empowerment in the area of biodiversity conservation.

Literature review

Developing a Definition of Social Capital

Economics, sociology and politics experts define social capital in various ways. In general, the concept of social capital has been developed in two main streams they are, socio-anthropology and organisational politics and economics (Vipriyanthi 2007). Coleman (1990) believes that social capital is a human centred attribute of social structure. Social capital adheres to social structures and is characterised as a 'public good' and is equal with financial capital, physical capital and human capital. This is expanded on by Adler and Woo Kwon (1999) who state that because social capital is for the public good, it is not owned by any particular person but depends on all members of a

network. The shared nature of public good tends to make individuals indifferent to ensuring its sustainability and most rely on others to ensure its preservation.

Community knowledge and understanding (community capital) are or can be directed to determining actions for addressing community problems. The community capital framework allows the use of local resources and integrates these resources with resources from outside to create a vital economy, social inclusion, and a productive environment. Additionally it was stated, that to empower communities to care about their issues we can use the developing social resources of individuals or groups that have a mutually beneficial relationship. These principles are actually already familiar to communities as demonstrated in the culture of 'gotong-royong' (mutual cooperation within the community), 'tepo saliro' (empathy), the Balinese system of water control, 'pela gandong' (in Ambon), Jagong (in eastern Java), and traditional community systems in Bali which all indicate a level of equality. These phenomena clearly demonstrate that Indonesian and Balinese cultures already have a high level of social capital (Pietra, 2006). Within 'eastern' societies, Balinese communities are recognised as having high capacity in terms of social norms. In this situation, community capital can be used to mobilise communities to create a new social order where traditional community systems can be modernised to increase community participation and empower local communities.

The World Bank (1998) gives a more specific definition for social capital, stating that it is the social norms and relationships that hold a community's social structure together and make it possible for people to coordinate activities in order to achieve common goals. Woolcock and Narayan (2000) have a similar view, stating that social capital is the norm and networks that make it possible for members of a community to work together. These community networks are a result of the presence of politics, law and organisational structures and development therefore requires a forum between government, community and private sectors which together can identify and achieve common goals. In this context, social capital acts as a bridge between groups.

Social capital can strengthen groups, communities, traditions, villages and nations, being one of five pillars of a pentagon describing the foundations of community empowerment for sustainable livelihoods. Each of the five corners of the pentagon represents an area of strength. They are physical capital, financial capital, human capital, natural capital and social capital. The five pillars must be present equally to achieve sustainable livelihoods (Pietra 2006). Flora (2007) however, divides community capital into 7 assets. They are physical, financial, cultural, political, human, social and natural assets. Human resources include skills and abilities of people to develop and increase their own resources, to access resources and to increase knowledge and identification of social norms and access to increase community capital. Often men and women learn about different aspects of their working environment. It is important that different facets of human capital are respected (Flora and Kroma 1998). Flora (2007) also states that community empowerment for problem solving must be on-going; particularly in an era of globalisation that has brought rapid change with increased movement and exchange of goods, services, money and communities. This phenomenon can lead to the movement of pests and diseases which affect animals, plants and humans. If this is not taken seriously, it could threaten food security and even potentially lead to environmental imbalance over

the long term. According to Falk (2007), if we look back at global events such as global warming, we can see human activities that have impacted on things such as water availability and thereby impact on the food security of communities. To overcome these issues there needs to be increased community concern and understanding at community and leadership levels. Flora (2007) adds that the best approach to community empowerment is a local approach so that identification of problems and their solutions are appropriate to the local situation.

The Role of Balinese Women

Women (particularly Hindu women in Bali) already fill a special role in the domestic household, a role in family lives, in spiritual and religious life, social life and in the agricultural sector (Pendit 2002). Suryani (2006) states that in these roles women feel that they have rights and fulfil their obligations according to the community's norms and regulations. Within the household women are responsible for looking after the family (husband, children and in-laws) and all aspects of family welfare. Within the culture of daily Balinese (Hindu) life, women must ensure the appropriate use and storage of household items. Kitchen equipment may not be used for other activities such as washing. Eating equipment is put in a specific place and may not be mixed with items for other activities (particularly with items used for prayers). This also applies for allocation of rooms within the household. For example, the living room, kitchen, laundry and bedrooms are in specific locations. If viewed as a health strategy, all of these actions explicitly address natural resource conservation. Besides fulfilling their private role, some women also have duties within the public arena such as careers and social networks (Indrayoga 2006).

Increased awareness amongst Balinese women will broaden their horizons and improve the capacities of Balinese women overall, protecting cultural identity and empowering the community (Suryani, 2006). Within the workplace, Balinese women only hold middle to low positions and very few ever make it to executive positions where they have decision-making powers.

Within spiritual practices, women have specific roles during ceremonies and many activities are done in cooperation with men. Through their role in spiritual life women already undertake activities that indirectly contribute to conservation of natural resources. These can be seen in the ceremonies of 'Tumpuk Uduh' to give thanks for plants, 'Tumpuk Uye' for animals and 'Tumpek Landep' for metal objects (Sudarsana 2005).

According to Indrayoga (2006), the most crucial women's issue is how to improve the position of women in society. He goes on to say that inequality between men and women is only due to a way of thinking, particularly men's attitude that women are of a lower status. This attitude has persisted so long that even women have come to see themselves as second class humans. So how do we change this attitude so that women can be considered equal to men? Hindu teachings actual provide a strong foundation for creating gender equality between men and women. A guarantee for equality, destroying the predication that women are second to men, is written in the Weda (the Hindu holy book), where it is one of the basic lessons in ethics (Pendit 2002). According to one expert on

women's issues, Sudarsana (2006), it is these ethical teachings that determine the social order of Hindu communities, creating a harmonious community life. Nowhere in the Weda is there any reference to dominance or subordination of either gender. Furthermore, discourse around the issue of gender equality is becoming louder throughout most of the world. The demand for equality is highly noble and humanistic, because through this demand, women have been given more confidence to speak out and to realise their rights and responsibilities. The demand for gender equality is considered a critique of men and acts as a brake to stop men treating women as they please. Principles of equality and harmony between men and women must be based on a sincere and heart felt belief according to the relevant norms of the society. In Hinduism, there are also the 'swadharma' teachings which say that the lives of all creatures in nature reflect activities that are dynamic, balanced, harmonious and compatible. If this swadharma is altered by humans for the sake of progress and technology, this is the same as changing the consciousness, balance and harmony of nature. This would cause imbalance or disharmony and will have a negative effect on the character, morals and behaviour of humans leading to unavoidable destruction.

Ardhana (1994) says that there are two major problems that currently grip Bali; problems associated with human capital and natural capital. According to Pietra (2007), these are two pillars of social capital which guarantee development and community empowerment for sustainable livelihoods. If people, particularly the Balinese, no longer have a system of values or social structure to govern relationships between humans, between humans and nature, and between humans and God, then Balinese culture will be wiped out. A feeling of cultural ownership which supports community empowerment will fade (Pietra 2007). This notion is supported by Suryani (2006), who states that harmony in life should be nurtured so that life is not only for working but also for creating good relationships with others.

Pietra (2007) discusses several phenomena that occur within the village that restrict the community's unique ability for self development, contribution to nation-building and development of the local culture of the village. However these strengths within the local community will play a role in facing globalisation and economic liberalisation. Villages possess strong social capital in the area of community development which can drive improvements in rural communities. A lack of understanding of social capital, work networks and local leadership may lead to negative effects on the relationship between communities and their environment. Without social capital, community cohesion is reduced so that communities may not be able to organise themselves to create sustainable livelihoods (Beeton 2006). This is also evident in the increased level of crime and other social issues in the community, particularly issues around traditional practices in Bali and a reduction in family cohesion and community participation (Grootaert 1998). Cases of violence (both physical and verbal) towards women are increasing and indicate that the values of equality and friendship are being destroyed. Narayan (2000), Dasgupta and Serageldin (2000) and Flora (2007) explain that bonding social capital relates to the cohesive ties within social groups that are relatively homogenous (such as in a family or ethnic group) and bridging social capital refers to social groups that are only loosely associated and can form a bridge between organisations and communities, between friends, associations or colleagues (for instance, human rights movement, seminar or

professional network). Putnam (2000) and Hanson *et al*. (2006) add linking social capital, which is a vertical relationship in the form of bridging between groups with different social status, wellbeing and strengths. An ideal community will be achieved if all three forms of social capital are present in equivalent amounts (ABS 2002).

Many women are active in agricultural activities particularly those activities that require perseverance and attention to detail, such as seed raising and harvesting. In Ndop, Cameroon, women are also heavily involved in agricultural activities which contribute to improving family welfare (Fonjong and Athanasia 2007). In Ndop women actually play a larger role in agriculture than men and the income they derive from farming has a greater effect on household income.

Below is an interesting example of the successful community empowerment through women's involvement in integrated pest management. There are two women: Romini, who is an active member of the Integrated Pest Control Field School (SLPHT); and Sunani, who is not a member of SLPHT. Romini is 45 years old, has four children and relies on rice farming to make a living. Romini's husband is a becak (pedal cab) driver who works outside the house almost very day, leaving Romini to do almost all of the work in the rice fields. Rice growing is not difficult for Romini as she has been involved in farming since she was a child. The income from her husband's becak driving is not enough to support the family. The family has only 750m2 of flooded rice fields so Romini needed to find a way to improve productivity. After joining the Integrated Pest Control Field School from 1995 to 1996, Romini was better able to prepare the soil in an environmentally friendly way and produce good results. By reducing the use of non-organic fertilisers and chemical pesticides and replacing these with organic fertiliser and biological control of pests, she has been able to increase productivity of her rice field by almost 100% and reducing her pest control costs by 50 %.

Since this success, Romini frequently sets out to meet with women in her community and has started to share the principles of integrated pest control. She encourages others not to use pesticides, because besides increasing production costs, pesticides may threaten ecological balance and have negative effects on human health. Pesticides and non-organic fertilisers are no longer used by farmers in Romini's area.

However, the story is different for Sunani who has never participated in the SLPHT, but has learnt environmentally friendly land preparation from her family and neighbours whoalready used these techniques. From the example given above, SLPHT is an example of an activity which can improve the capacity and skills of women in the community. It is hoped that the Integrated Pest Control Field School can also contribute to the development of sustainable lifestyles which includes empowerment of farmers, biodiversity conservation, food security, community learning and an effort for public health.

Methods

Research was conducted in two villages. The first village was Legian (Site A) in Kuta subdistrict, Badung district and the second was Peninjoan (Site B), Tembuku subdistrict

in Bangli district. Site A is a tourist rural community, where the majority of the community are engaged in businesses associated with tourism. Site B is an agricultural village, where the majority of the community is involved in farming activities.

Women from PKK (Family Welfare Empowerment) group and females from the youth group 'Sekeha Teruna Teruni' were interviewed. Information was collected over four months from April to June 2007. Questions in the interviews were about leadership structures, decision-making mechanisms, problem solving, women's group empowerment, community participation in group activities, communication at the family level and with other people in the community.

Qualitative methods (Creswell 1998) were used to identify and extrapolate the role of women using semi-structured interviews (Fontana 2002) and data were analysed based on discourse analysis (Silverman 1998). In-depth interviews were conducted with 28 respondents including 18 people from Site A and 10 from Site B.

In addition, three of the respondents from each site were chosen randomly and interviewed further regarding the role of women in collective activities and participation in group empowerment in the two villages.

Results

Women's Leadership
In terms of leadership within the government (village administration) in Kelurahan Legian and Kelurahan Peninjoan women already have an umbrella organisation, the PKK. The PKK exists at the Kelurahan (village) and Banjar (hamlet) levels and sits beneath the village and banjar heads respectively (Figure 1).

In general, the wife of the Lurah (village head) automatically becomes the head of the PKK at the Kelurahan level and likewise for the wife of the Banjar head at that level. At the two research villages, the PKK consists of PKK Head, secretary, treasurer and several sections which usually represent the different areas of activity of the PKK program. PKK programs are known as 'Dasa Wisma' and consist of: (1) Pancasila (the 5 basic principles of the Republic of Indonesia) teachings and implementation, (2) collective community work, (3) food, (4) clothing, (5) home management, (6) skills training, (7) health, (8) developing a cooperative life, (9) environmental conservation, and (10) health planning.
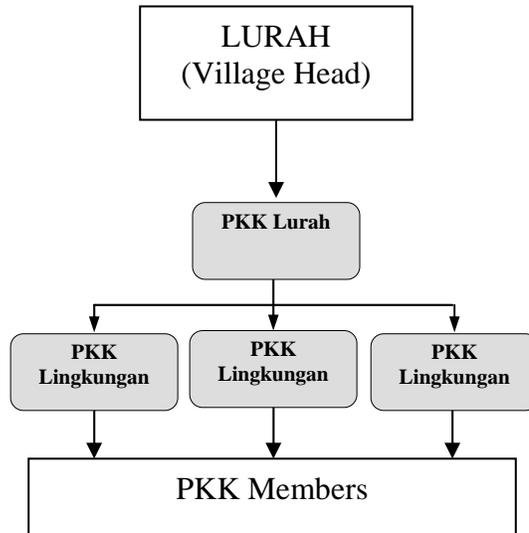
Figure 1. Organisational Structure of the Village

As an organisation, PKK has its own agenda but often conducts activities in cooperation with the village head. The PKK has routine activities such as monthly meetings, health clinics and arisan (where members contribute a small amount of money and take turns in winning the total amount each month). However for activities which involve local government or traditional leadership, the PKK must consult with the male leaders in the community.

At the traditional village leadership level at Sites A and B, there is also an informal women's group that is led by a woman known as the 'Krama Istri'. With a model similar to that of the more formal government structures, the leader of this group is generally the wife of the male traditional leader. The Krama Istri has a larger role in religious and cultural activities, such as religious ceremonies at the local temple (*e.g.* Kahyangan Tiga) and in funeral ceremonies.

At Site A there is a community structure known as 'BAMUS', which acts as a bridge between the village's government and traditional structures. Women are not represented within the leadership structure of BAMUS. This was revealed during the in-depth interviews, where one member of the PKK said:

> "Actually women need to be included in all leadership structures, including BAMUS, because in reality women are going to be involved in all activities and often in very important positions. Because of the lack of representation of women in BAMUS, which coordinates all government and traditional activities, there is often miscommunication and women are forced to forego their own interests".

This statement raises concern that women's interests will not be accommodated. There is no equivalent structure to BAMUS at Site B.

At Site B, traditional leadership has more influence than the formal government leadership. In sites A and B women still have little role in decision making because the

structure of women's organisations dictates that all decisions must be made by male-led organisations. Women's groups must consult with men's groups but not the reverse.

Women's Participation
Site A has a heterogonous community with almost half of the inhabitants originating from outside of the village. The majority of people have livelihoods associated with tourism and therefore the community is highly mobile. At Site A, there are some economically productive groups forming but unfortunately they are poorly organised. These groups have formed due to common interests and a common location. These groups include the local traders, women giving massages on the beach, and handicraft seller groups. According to one informant, these groups are sometimes formed only to make it easier to get credit from the bank. Besides the economically productive groups, groups also form between people with a common hobby such as a sport or art. Interestingly, in Site A, women all have a common awareness and concern about environmental cleanliness, particularly keeping urban laneways clean. This awareness has arisen as a result of a previous outbreak of dengue fever. From that experience all members of the PKK in all the banjars of Site A created a cleanliness competition which is judged weekly. Locations are evaluated by members of the PKK who have already become cadre for dengue fever eradication. Each banjar has 5 cadres who undertake a weekly inspection for mosquito larvae in all laneways. Laneway cleaning activities are undertaken independently by the PKK under the guidance of the local health clinics. This indicates that women already have skills to independently manage their local environment for the sake of their collective interests.

The majority of the community at Site B are farmers, and women are often involved in farming activities. Women's involvement in farming includes seed raising, planting, crop maintenance, harvesting through to post harvest activities. However, women do not participate in training activities provided by the Horticulture Agency covering topics such as pest and plant disease control as they are not included in the formal consultation by the agency of the community when visiting the community. It is important for women to understand pest control as they are involved in farming activities. Besides being involved in farming, women have previously formed economically productive groups such as a group for women making crisps from chicken's feet, another for making jack-fruit crisps and a group for pig rearing. These groups developed quickly as they were given on-going support from the Department of Industry. But as soon as this support ceased, many more small enterprises arose with similar products and competition became too high between products so now none of them are productive anymore. According to Ibu Darni (secretary of the PKK at Site B) this was because, in addition to reduced market access with the excess competition, it became increasingly difficult for members of the groups to divide their time between activities with the group and their individual interests so that group activities were often neglected. There are also several machines and pieces of equipment supplied by the government that are not used because the group activities are not running. This is an indication of the lack of ability of women to guide a functional group in this village as group members still prioritise their private activities over group activities. All collective activities must still be done in coordination with men's groups particularly with traditional leadership.

In Legian and Peninjoan, communication between women is frequent and in-depth interview results showed that the relationship between women within their village is very close. This is indicated by the close relationships between female relatives, friends and others in the community. There relationship is based on frequent visits to each others homes, via phone and through mail.

Discussion

There is some difference in the ways that Site A and Site B express their capacity to achieve collective goals. One example of this difference is the success of the women at Site A in motivating members of their group to undertake sustainable collective activities such as the successful dengue fever eradication program. Women at Site B on the other hand have a higher tendency to undertake individual activities as indicated by the failure of several groups to develop. As one element of social capital, human resources in Site B are also very low. The majority of respondents in Site B only completed high school and most work as farmers. According to Awan (2005), the meagre income of farmers is insufficient to meet the families' basic needs and the community of Site B is classed as having a poor quality of life. This low welfare means that women are fully occupied trying to meet their family's basic needs leaving them almost no time for group activities. This is in accordance with the opinion expressed by Collier (1998) who says that social capital emphasises the close relationship between social capital and human capital. Social capital can overcome opportunistic issues, thereby facilitating collective actions. Women at Site B prefer to implement activities in accordance with the policies of government and village leaders. As a result, women at this site can be said to be passive. This was demonstrated by the failure of women at Site B to guide their own collective activities. The ability of individuals to understand their common interests and goals is still very low as also described by Adler and Woo Kwon (1999) who stated that social capital is a public good that encourages individuals to neglect their obligations in maintaining a group, expecting other group members to ensure its continuation.

This phenomenon demonstrates that there is a lack of understanding amongst the women at Site B regarding the importance of social capital and working together for common goals. As a result, women at Site B, are greatly in need of support to empower them and help them understand common interests, common problems and increase their awareness of the environment. Women should also be made aware that they do not only have social obligations but also have the right to improve their collective well-being. Suryani (2006) states that there needs to be increased awareness among the women of Bali to increase capacities in Bali overall. This is important for maintaining cultural identity and harmony, and to improve the lives of the family and the broader community.

The female community of Site A appears to be more expressive and more capable of independently managing their collective activities than that at Site B. This is demonstrated by the success of the local PKK in eradicating mosquito larvae through routine cleaning of local laneways. This has become the basis for improving community capacity including in the area of biodiversity conservation. In addition, work networks in the community have become closer, even though many of the residents of Site A originate from outside of the village (BPS 2006). This may be a result of the leadership

structure at Site A where they have the slogan "Legian United" which has been a trigger for Legian to work and have collective activities to achieve common goals.

The disparity in the decision-making powers of men and women indicates a need for organisational strengthening of women's groups. It is hoped that the formation of strong integrated women's groups, will allow increased efforts to improve women's rights for collective development and increased capacity in areas such as agriculture and biodiversity conservation. Flora (2007) describes social capital as the relationship between people and organisations where there is mutual trust and collective action for a shared future and cooperation for common goals. If this does not occur, it will not be possible to create and maintain healthy ecosystems or a strong economy. Without social capital, cohesion in a community will decrease until the community is not able to organise itself to maintain a reasonable quality of life or sustainable livelihoods (Beeton 2006). According to the World Bank (1998) this is also true of social capital from an institutional perspective as community networks are a product of the political, legal and organisational situation of a community.

Available data indicate that women at both Site A and Site B have frequent communication between families, between friends and with business colleagues. This represents an opportunity for women to exchange information. This information is an asset that allows the formation of networks which in the future may strengthen the tie between members of the community to improve their ability to recognise, understand and overcome problems together. However, so far there is very little discussion about the basic needs for driving collective activities for a common goal. Communication amongst women is still generally limited to discussions about family, tradition and spiritual issues. This social capital should be further strengthened so that this communication can be directed toward addressing community issues and finding solutions together. Research conducted by Rodda (1993) found that women in the Papuan mangrove forests are able to have a positive impact on the environment in their role as consumers (using the environment for daily needs), educators (able to transfer knowledge) and as communicators (able to pass on and disseminate information to benefit others). From this success, women in Papua have been able to improve the quality of life of their families and disseminate their knowledge regarding the use of forest products to their children and their neighbours.

Synthesis

According to Suryani (2006), women should not continue to see themselves as victims of inequality. They need to demonstrate to the community that women have abilities equal to those of men. By demonstrating their success in getting an education, running a household and participation in community activities, community members, particularly men will automatically begin to not only see someone as a 'woman' but as a capable person.

The structure for women's leadership, the PKK, is a means for beginning to empower women at the village and Banjar levels, to increase understanding of their rights and obligations, to recognise issues, make decisions and overcome community problems

together. Efforts should be made to improve and facilitate the existing social capital amongst women, such as the ability to independently undertake collective activities, constant communication and success in forming groups to address common interests, so that these things can develop and become social capital for biosecurity.

It must be recognised that women's roles in collective village activities within the traditional and formal leadership have a major influence on the success or failure of these activities. Women have a special role that is not able to be filled by men. Cooperation between women and men's groups need to be strengthened to undertake collective activities for the common good. Inequality within the community culture occurs because of the social structure that has developed over many centuries and become unwritten law which is held and defended as a cultural inheritance. If this culturally ingrained inequality can be redirected in a positive direction such as strengthening the social capital already possessed by women, it may be used to empower the community's women to better address local issues and overcome problems together, including issues of biosecurity.

Summary, Conclusions and Implications

Results of this research show that women are already organised to address thier interests at the village and banjar levels within the structure known as the PKK. However, the position of women in this organisation is effectively only a shadow to the male leadership. Women do not yet have any real authority to make decisions. Women are not yet represented in the coordination organisations such as BAMUS in either Site A or Site B and their interests are therefore not accommodated.

Women actually play quite a large role in collective activities but continue to be in the shadow of men. Women have some experience in group organisation for improving wellbeing, but this is not being maximised and is still unprofessional. The ability and desire for effective communication among women's groups is high and should be used to assist women to impact on their local environment and undertake collective activities for achieving common goals. Women have the power to improve the strength of their social capital using the seven aspects of social capital as outlined by Flora (2007), increasing participation and action at the community level by identifying and overcoming social, cultural, spiritual and agricultural problems in the community and perhaps even for addressing the issue of biosecurity.

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