

Negotiating changing livelihoods: The sampan dwellers of Tam Giang Lagoon, Việt Nam

Elsa DaCosta, Sarah Turner *

Department of Geography, McGill University, 805 Rue Sherbrooke West, Montreal, Que., Canada H3A 2K6

Received 10 January 2006; received in revised form 11 August 2006

Abstract

Central Việt Nam is one of the most vulnerable areas in the country to natural disasters. In 1985 a major typhoon hit the Tam Giang Lagoon coastal area in the province of Thừa Thiên-Huế, Central Việt Nam, with severe impacts on the sampan dwellers who lived there on boats and fished for their livelihoods. Since then, the government has attempted to resettle them on land in order to decrease their vulnerability to such events. Consequently, this process has changed the livelihood options as well as the social networks of the sampan dwellers. This study of the resettlement village of Thụy Điền analyses the social networks and different forms of social capital being utilised by the resettled sampan dwellers as part of their changing livelihoods and questions whether the social capital formed will indeed lead to a long term decrease in vulnerability. It is found that while bonding and linking social capital have been newly formed, the trust required for bridging social capital formation is still missing, and this in turn is hindering the possibilities of sustainable livelihood formation.

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Keywords: Tam Giang Lagoon; Việt Nam; Sampan dwellers; Social capital; Livelihoods; Typhoon

1. Introduction

In the last 15 years, climate change has become a growing concern among governments, environmental groups and human populations at large. Though the implications and consequences of climate change are not completely understood, scientists have argued that human activities such as industry and deforestation have indeed altered climate patterns and trends by increasing climate variability and extreme weather events (Intergovernmental Panel on Climate Change (IPCC), 2001). Such environmental change has had many negative impacts on human activities around the globe. At world forums like the United Nations Framework Convention on Climate Change (UNFCCC), country representatives have reported devastating droughts and floods, increased salinity in agricultural soils and water resources, and changing seasonal climatic patterns. The

consequences of these impacts have been shattering for many agricultural communities, altering methods of production in ways that have adversely affected livelihood strategies. At times, such climatic events have even led to increased migration from rural to urban areas and from coastal areas to inland locations (IPCC, 2001).

Việt Nam is vulnerable to climate variability and extreme weather events due to its geographical location as well as its economic and political context (Adger and Kelly, 2001). About 80% of the population of approximately 84 million lives in rural areas supported by agricultural and coastal livelihoods (Kerkvliet and Porter, 1995). In 1986, to strengthen development, the government of Việt Nam set forth a new economic policy, *Đổi Mới*, which has opened the country to international trade and by extension, development initiatives by multi-lateral organisations such as the United Nations Development Programme (UNDP) and the World Bank. In May of 2002, Việt Nam provided these organisations with its ‘Comprehensive Poverty Reduction and Growth Strategy’

* Corresponding author.

E-mail address: turner@geog.mcgill.ca (S. Turner).

in order to have access to funding aimed at reducing poverty while promoting the Government's vision of 'development'.

The Comprehensive Poverty Reduction and Growth Strategy specifically aims to help poorer populations in the country. One of these groups, sampan dwellers, live and work on boats in coastal areas. Among these are the inhabitants of the Tam Giang Lagoon considered to be one of the largest lagoons in Asia, located in Thù'a Tiên-Huế Province, Central Việt Nam (Fig. 1). Bordered on the east by the South China Sea and on the west by Laos, Thù'a Tiên-Huế Province is home to approximately a million people (Bui, 2003). The lagoon itself, over 60 km long and covering approximately 22,000 ha. has two openings to the sea (Phap, 2000). Its coastal location and brackish water make the lagoon a favoured area for natural resources which include 42 fish species, three on the rare fish list of Việt Nam (Truong and Brzeski, 2000).

In Việt Nam, sampan dwellers are a marginalized group within Kinh society (ethnic lowland Vietnamese) and a clear division exists between Kinh people who live on land, and those – the sampan dwellers – who live on water (Vo and Nguyen, 2000; Ennebeck, 2002).¹ The sampan dwellers tend to have low incomes, are landless, lack accessibility to government services such as health and formal education, and have poor living conditions (Ennebeck, 2002; Vo and Nguyen, 2000). They are scorned by land-living Kinh society in general who consider them not only landless, but also poor and uneducated (Ennebeck, 2002).² In turn, the sampan dwellers consider themselves isolated from those who live on the land. Together, such visions mean that the sampan dwellers have become disconnected from land-based society with their relationship limited mostly to trade (Vo, 2002).

The Vietnamese State considers sampan dwellers to be a semi-nomadic group with livelihoods that revolve around fishing, water and natural resources for which seasonality plays an important role (Vo and Nguyen, 2000). Yet, not only is this group subject to the uncertainties of rural livelihoods in general, but central Việt Nam is reported to be one of the most vulnerable areas to natural disasters in

the country (Canadian Centre for International Studies and Cooperation (CECI), 2003a). As a response to the region's weather, concerted efforts have been made by governmental agencies and local and international non-governmental organisations (NGOs) to reduce the impacts of natural disasters. One such effort has been the formation of the Natural Disaster Mitigation Partnership (NDMP) with the mission to mitigate the impacts of natural disasters by helping communities adapt to changing climate patterns (NDMP, 2004).

In 1985 a typhoon hit the Tam Giang Lagoon, home to around 100,000 sampan dwellers, causing over 600 deaths and significant destruction (Phap, 2000; CECI, 2003a). Shortly afterwards the government launched a resettlement programme with the aims of moving a large proportion of this population onto land, reducing poverty, decreasing environmental degradation of the lagoon resources, and lowering the vulnerability of the sampan dwellers to natural disasters (Socialist Republic of Việt Nam, 2002).

In this context, this paper explores how their move to land has affected the livelihoods of the sampan dwellers of Tam Giang Lagoon in Việt Nam. In particular it focuses upon how State sponsored relocation has broadened their livelihood options and the extent to which these livelihoods have become entwined with the use of social networks and social capital. The paper begins with the formation of a conceptual framework incorporating livelihood and social capital literature to gain a greater understanding of the livelihood opportunities now available to relocated settlers, and how they have been operationalised. We then contextualise the research, introducing the sampan dwellers in more detail and outlining the specific programme of resettlement implemented for them in Tam Giang Lagoon. This is followed by an analysis of the impacts of the resettlement process on the population now living in Thùy Điền village, with a focus upon their diversifying livelihoods and the different types of social capital underpinning these.

Field research that informs this study was conducted in the resettlement village of Thùy Điền, in Phú Xuân commune of Phú Vang district, Thù'a Tiên-Huế province (Fig. 1).³ Thirteen in-depth interviews with key informants were undertaken in the village during May–June 2004. Twelve of the respondents had resettled after the 1985 typhoon, including the village chief, and one after a 1999 typhoon. Additional key informant interviews were undertaken with a number of NGO employees working with the sampan dwellers regarding their resettlement.⁴

¹ There are many theories on the history of the sampan dwellers in Việt Nam. Amongst others, there are anthropologists who think they may be Cham descendents who fled to the water when their kingdom was lost to the Vietnamese in the 17th century. The Vietnamese government believes that they are of Vietnamese (Kinh) descent, mainly people who attempted to settle in the area from the 11th to the 19th century during the Ly, Le and Nguyen dynasties (Vo and Nguyen, 2000). At that time, many agricultural villages had already been established leaving only the poorest land for cultivation. Newcomers to the area had less opportunity for agriculture and were marginalized by society, eventually moving onto boats which became their home and source of livelihood. The government also argues that there was another wave of sampan dwellers who fled to the water trying to escape the Second Indochina War (also known as the Việt Nam War) (Vo and Nguyen, 2000).

² Being landless in Việt Nam means, among other things, that families cannot bury their dead in permanent burial grounds, considered essential in Vietnamese society to ensure a successful after-life (Nguyen, 2001).

³ Việt Nam is divided into 59 provinces and five municipalities as of 2004. Within the provinces there are districts, and within these communes and then villages.

⁴ The key informant interviews with relocated sampan people were conducted in the early morning to accommodate the fishers' schedules. In total, 10 respondents were men, and three were women. They were between the ages of 35 and 55, and had between three and seven children. Interviews were conducted with a Vietnamese interpreter from the *Viet-Phap Society* (Vietnamese–French Society).

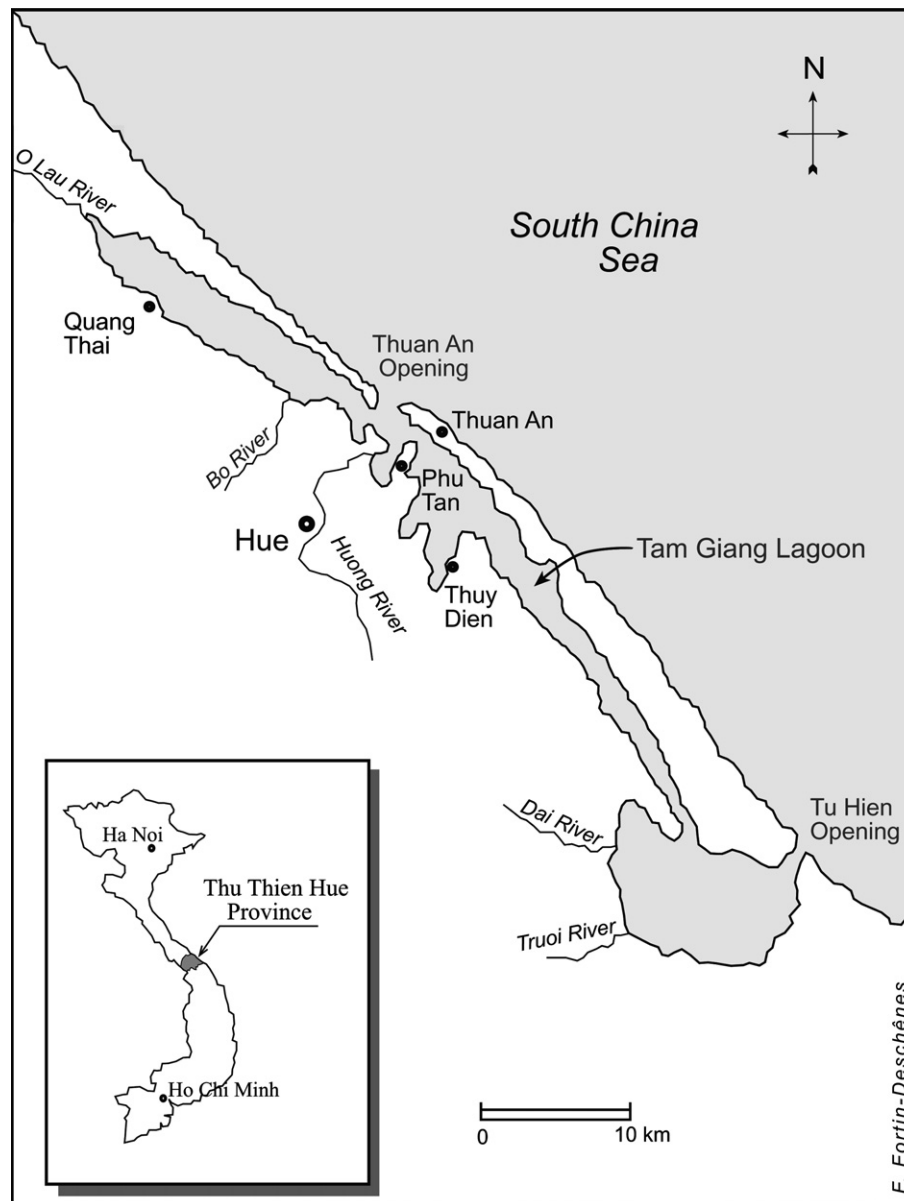


Fig. 1. Tam Giang Lagoon, Việt Nam. *Source:* Adapted from Cartographic Publishing House, 2002.

Undertaking field work in Việt Nam, a socialist state, is often fraught with difficulties. Numerous official permissions are required from each level of government and with these come restrictions as to who may be interviewed, when and about what (see Scott et al., 2006).⁵ This has meant that, in this case, 12 interviewees were hand-picked for interview by the village chief, with the other being the chief himself, an unavoidable gatekeeper scenario since to gain access to any of the resettled sampan dwellers we had to declare the nature of our research to state officials. Clearly

this means that some voices amongst the resettled community have been silenced, including some women, younger resettlers and perhaps those that have experienced less favourable outcomes. Nevertheless, we have tried to counter this as much as possible by relying in addition on in-depth and multiple interviews with NGO workers who have been operating in the region since the 1999 floods, as well as reports written by Vietnamese and overseas researchers and NGOs. While clearly not an ideal research situation, we have attempted to ensure rigour to the best of our ability via the use of multiple methods and corresponding triangulation, the presentation of interviewees' comments and concerns via direct quotes, and a discussion of the analysis procedure, detailed later (Baxter and Eyles, 1997; see also Baxter and Eyles, 1999; Bailey et al., 1999a,b).

⁵ Authors such as Thurston and Pasternak (1983), Curran and Cook (1993), De Koninck (1999), Kurti (1999), and Dudwick and De Soto (2000) also highlight the difficulties of undertaking fieldwork in post-socialist countries. Moreover, de Haan and Zoomers (2005) discuss the difficulties in researching livelihood trajectories in any location.

2. Livelihoods, social capital and Việt Nam

The framework for this study draws upon two closely connected strands of thought, *livelihood analysis* and the debates surrounding the associated concept of *social capital*. The first part of the framework involves a consideration of the principal foundations of livelihood analysis and especially the concept of sustainable livelihoods. The second part highlights the connections between social capital and livelihoods, examines the different forms of social capital, and details how, to date, social capital arguments have been analysed in the Việt Nam context.

Understanding how livelihoods are constructed and maintained can provide insight into ways members of households make a living within their broader environmental context. Although access to resources is an integral part of building livelihoods, livelihoods should not be viewed solely as access to material assets such as economic capital, but also involve access to a diversity of assets including natural, physical, financial, human, and social capital, as well as the dynamic and complex strategies required to integrate these into making a living (Chambers and Conway, 1991; Ellis, 1998, 2000).⁶

Using different types of capital to maintain and diversify a livelihood is a strategy used, amongst others, by the rural poor in developing countries as a means to improve their standard of living without compromising their future (Ellis, 1998). Ellis (1998, p. 7) stresses the importance of directing attention to the “links between assets and the options people possess in practice to pursue alternative activities that can generate the income level required for survival”. Bebbington (1999) concurs that there is more than just a material aspect of livelihoods; there is the manner by which these assets give meaning to a person’s world, and how poverty is dealt with and is perceived by the groups involved (see also Sen, 1997; Long, 2001; de Haan and Zoomers, 2005).

Refining this line of thinking, the concept of sustainable livelihoods has been utilised to understand how livelihood strategies can increase the standards of living of rural populations in developing countries in a sustainable manner. Chambers and Conway (1991, p. 6) argue that such a livelihood is sustainable if it can

cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and pro-

vide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term.

Utilising a sustainable livelihoods framework thus not only extends the notion of access to different types of capital *over time* focusing on “long-term flexibility” (de Haan and Zoomers, 2005, p. 31), it also leads to examining critical elements such as a livelihood’s impact on resources, and issues of poverty reduction, security, equity, well-being and capability (Chambers and Conway, 1991; Scoones, 1998).⁷

To be able to provide sustainable livelihood opportunities and enhance their livelihood security while mitigating risks, resisting shocks and stresses, and increasing their resilience, individuals and households often attempt to diversify their livelihood strategies (Moser, 1998). This livelihood diversification is, according to Ellis, 1998, p. 4, “the process by which rural families construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standards of living”. Diversification can take place, for example, by engaging in new income opportunities, by taking advantage of a range of different crops to increase food security, or attempting to undertake a mixture of agricultural, livestock and off-farm activities (Chambers and Conway, 1991; Rigg, 2006).

The sustainable livelihoods concept therefore informs this research by allowing us to identify the ways in which the sampan dwellers have diversified their livelihood strategies over time and whether these changes have led to increased or decreased livelihood opportunities for them and future generations.⁸ We now turn to focus upon social capital, one of the five assets considered central to livelihoods, as we wish to gain a greater understanding of the role of this factor in the livelihood decision making of sampan dwellers after their resettlement in the village of Thuy Điện.

2.1. Social capital

Social capital, one fundamental element of the livelihoods approach, refers to the social networks, linkages and trust that are utilised by individuals or groups in order to ‘get by’ or ‘get ahead’ (Portes, 1998; Woolcock

⁶ These five assets – sometimes referred to as the ‘asset pentagon’ – are central to livelihood studies (Carney, 1998; Bebbington, 1999). There are two types of natural capital: firstly, non-renewable resources including minerals and soils; secondly, renewable resources including nutrient cycling and ecosystem services (Bury, 2004). Physical capital refers to infrastructure, such as buildings, transportation, and electrical services. Financial capital concerns supplies of cash that can be accessed, such as earned income, pensions and transfers from the state. Human capital relates to human capabilities such as skills, education, ability to labour, and health (Ellis, 1998), while social capital is defined later in this article.

⁷ For discussions regarding the links between livelihood studies and the terms ‘well-being’ and ‘capability’ see, in turn, Chambers (1995, 1997) and Sen (1984, 1987). It is often suggested that Sen’s capabilities work provided one of the main inspirations for livelihood research (de Haan and Zoomers, 2005).

⁸ In working with this concept, it must be noted, as Scoones (1998, p. 7) points out, that “no neat, simple algorithm for objectively measuring sustainable livelihoods emerges from this definition... The concept of sustainable livelihoods is a composite of many ideas and interests, the coming together of a number of different strands in the development debate. The important thing to recognize about the term is that it is always subject to negotiation”. See also Arce (2003).

and Narayan, 2000). There is a growing consensus that the seminal contributions to the conceptualisation of social capital emerged from Bourdieu's (1986) writing on forms of capital, Coleman's (1987, 1988, 1990) on education, and Putnam's (1993, 1995) on civic participation. The concept has since been used across a variety of disciplines and arenas to explain community cohesiveness (Portes, 1998), economic development (Woolcock, 1998; Fine and Green, 2000), poverty alleviation (Narayan, 1997), civil society (Putnam, 2000; Siisainen, 2000) and even natural resource management (Schuller et al., 2000). According to such literature, social capital is built amongst individuals, at community and at societal levels through formal and informal institutions to create stable linkages, networks and trust (Portes, 1998; Woolcock, 1998). Many academics, international organisations, and non-government organisations have enthusiastically embraced such interpretations of the concept and it has become a key term in development literature since the early 1990s in considering the resources available to individuals and groups through a variety of social connections and relations. As Fine (2001) suggests, and Bebbington (2004, p. 348) concurs, "for some social scientists concerned with development, part of the interest in social capital derived from its implicit concern for more empirical material and grounded analysis".

In 2000, Putnam sought to clarify his earlier work by introducing distinctions between *bonding* and *bridging* social capital, useful for interpreting social capital at a range of scales. In addition, a number of scholars have introduced a third term, namely 'linking' social capital (see amongst others Woolcock and Narayan, 2000; Schuller et al., 2000; Warren et al., 2001; Policy Research Initiative, 2003). Bonding social capital is viewed as a horizontal form, referring to the strong social bonds and effective organisations within a homogeneous group built through mutual trust. These include family members, neighbours, close friends and business associates of similar social standing. Bonding social capital is considered to be the 'social glue' often used as a means to 'get by' especially by members of poorer communities (Warren et al., 2001; Policy Research Initiative, 2003). Bridging social capital refers to a more heterogeneous form of social networks and is seen as encompassing weaker social ties than bonding social capital. However, it can provide individuals or groups with greater support to 'get ahead' as they pursue a collective goal (Warren et al., 2001). Such groups can include people from different ethnic, geographic and occupational backgrounds, but still of similar social status (ID21 Insights, 2000).

On the other hand, linking social capital is seen as a more vertical dimension of social capital which connects individuals, groups or communities of different backgrounds. Such linking networks can be a means by which resources, ideas and information are gained from formal institutions beyond the immediate community, particularly important for economic development (Policy Research Initiative, 2003). For example, this type of social

capital could include people with higher social status who link poor people to formal institutions like banks. Woolcock (1998) and Warren et al. (2001) argue that in order to alleviate poverty and to develop livelihoods, poor communities require strong bonding social capital, but even more so bridging and linking social capital to provide them with the financial resources and public services needed for success.

While much of the earlier work on social capital tended to focus on positive outcomes, there is now increasing recognition that social capital can indeed have costs, with social ties sometimes being more of a liability than an asset. Social capital is thus not "as benign a phenomenon as its advocates assume" (Durlauf, 1999, p. 2; see also Putzel, 1997). Indeed, Portes and Landolt (2000, p. 532) have identified four negative consequences, namely "exclusion of outsiders, excess claims on group members, restrictions on individual freedoms, and downward levelling norms" (see also Harriss and De Renzio, 1997; de Renzio and Kavanamur, 1999; Turner and Nguyen, 2005). Social networks can isolate non-members, while some individuals within social networks can undoubtedly place significant demands on other members' time, commitment and loyalty (Durlauf, 1999; Woolcock and Narayan, 2000). One therefore cannot ignore issues of power and inequality in relation to social capital research (Harriss and De Renzio, 1997).

2.1.1. Views on social capital in Việt Nam

Although the concept of social capital has been embraced with enthusiasm in much recent development literature, it is only relatively recently that it has begun to be used in the context of development and socio-economic change in Việt Nam. Such studies include those by Dalton et al. (2002), studies in the collection edited by Mutz and Klump (2005), and Turner and Nguyen (2005). Dalton et al. (2002) used findings from the 2001 *World Values Survey* to reveal that the family in Việt Nam continues to be the focal point of social life (suggesting that bonding social capital may be more important in this context than bridging or linking). Comparing their results with research from China, the Philippines and Japan, it was found that the gap between family and other networks was greater in Việt Nam than in the three other countries, and that friendship networks were noticeably less important in Việt Nam (Dalton et al., 2002). Recent work by Turner and Nguyen (2005) reported similar findings. Their study group – young small scale entrepreneurs in Hà Nội – tended to rely on bonding and bridging social capital more than linking social capital for the establishment and ongoing development of their enterprises.

In an interesting comparison, a study by Norlund (2005), a micro-level analysis of a series of rural households in four provinces, explored the use of social capital to cope with the daily problems of livelihoods amongst the poor. She concluded that the integration of households into the market and modernisation had sometimes weakened tradi-

tional networks, although these were being supplemented and in some cases replaced by new ones, at times organised by and associated with the government. Thus it might be argued that in certain cases forms of bonding and bridging social capital were being replaced by forms more in line with linking social capital.

In the same edition, [Luttrell \(2005\)](#) has reflected upon the importance of personal relations and social networks with both government officials and private resource owners for locals to gain access to natural resources in two different locations in coastal Việt Nam. Her work highlighted the importance for poor households in these locations to be able to rely on neighbours and friends in times of hardship. Likewise, [Winkels and Adger \(2002\)](#) and [Winkels \(2005\)](#), examining the role of social capital in long distance migration in Việt Nam, noted that informal migrant networks were vital. These allowed migrants to gain agricultural information relevant to their new location, as well as to gain access to more tangible forms of capital, such as credit. Taking another angle, [Carpenter et al. \(2004a,b\)](#) have written on how social capital can be mobilised to improve environmental conditions and increase public participation to address urban concerns. Their studies of low-income communities in Ho Chi Minh City and Bangkok have begun to decipher constraints in the relationships between participation and empowerment.

Together, key factors from such research provide the basis of a framework that allows us to undertake a micro-level analysis of the types of social capital deployed by the sampan dwellers to establish and maintain their resettlement livelihoods. Using this framework, we aim to discover to what extent, if any, social capital in its bonding, bridging or linking forms is now being utilised, the form and quality of these ties, as well as the norms and attitudes associated with such network relations.

3. Sampan dwellers and Việt Nam resettlement policies

3.1. The sampan dwellers

A sampan is a type of boat found in a number of South-east Asian countries. The name is derived from its construction, creating a flat bottomed boat used mostly on inland or coastal waters ([Fig. 2](#)) ([Phap, 2000](#)). Sampan dwellers, although considered marginalized by mainland Vietnamese society, as noted above, speak Vietnamese and have the same shrine-based belief systems, the main religious difference being that their shrines are dedicated to deities of the water such as the ‘Whale Shrine’ ([Ruddle, 1998](#)). In Việt Nam there are a number of sampan dwellers in locations such as Tam Giang Lagoon, the nearby River Huế, and Ha Long Bay in the north. Differences amongst these groups include the types of fishing undertaken, their relationships with local intermediaries for selling their catch, and the size of their boats.

Historically, in Tam Giang Lagoon each family owned their boat, with one family per boat. In turn, every family belonged to a fishing community called a *van* that could be considered a village or a community of approximately thirty to 50 boats ([Ruddle, 1998](#); [Vo and Nguyen, 2000](#)). The *van* system was formed as families grew over generations and established themselves in one designated area, informally regulating fishing by using one type of fishing gear ([Ruddle, 1998](#)). Over time however, the *van* moved from tight knit kinship based relationships, to a group of members of the broader sampan community in a geographic area, loosely based on the same type of fishing gear and family relations ([Ruddle, 1998](#)). One might argue then, that the *van* system provided the sampan dwellers with a form of bonding social capital, and sometimes even bridging as well.



Fig. 2. Sampan and sampan dwellers in Tam Giang Lagoon. Source: Elsa DaCosta (2004).

The management of Việt Nam's coastal areas has moved through four distinct periods – pre-colonial prior to 1858 (also known as the feudal system); the French colonial period from 1858 to 1954; the reunification struggle period from 1954 to 1975; and the reunified period after 1975, divided between the collectivisation period and the *Đổi Mới* era (Ruddle, 1998). During pre-colonial times the land around Tam Giang Lagoon belonged to the State but communes managed their own resources including the fishing activities of the sampan dwellers, using catch size to tax those sampan dwellers who practised mobile fishing. For those who practised fixed-gear fishing, the commune authorities were in charge of allocating 'water surface use-rights' to fishers through auctions, the user-rights acquired in this way often being passed down from generation to generation (for further details see Phap, 2000; Truong, 2002). During this period, many fishing grounds became quasi-private, that is 'owned' by the fixed-gear fishing households, leaving mobile fishers access only to areas considered 'open access' by the commune (Ruddle, 1998; Phap, 2000).

During the French colonial period the Vietnamese emperor lost ownership of areas that were declared 'national common property' and owned by the French government; however, the local fishing systems continued much as they had during the pre-colonial period (Ruddle, 1998). Then, in the initial post-colonial period, systems of economic production differed between northern and southern Việt Nam. While the management of coastal areas in the capitalist South, including Tam Giang Lagoon remained the same, the areas in the communist North were collectivized (Ruddle, 1998). At the end of the war in 1975 the reunified Socialist Republic of Việt Nam declared national ownership of all natural resources following the system already installed in the North (Truong, 2002). During this period, *van* fisher organisations in the lagoon were integrated within agricultural cooperatives that specialised in fishery (Phap, 2000). Yet these cooperatives were created with no regard of traditional community-based coastal management systems and tended to result in inefficient large fishing groups (Ruddle, 1998). Eventually, due to low production, among other factors, the State abolished the cooperative system, allowed for individual households to be independent economic units, and permitted areas of the lagoon to be allocated for use by individuals. Fishers and farmers were allowed to convert lagoon areas and lands around the lagoon into aquaculture facilities and apply legally exclusive rights of land use, which have quickly expanded (Truong, 2002).

Nowadays the lagoon sampan dwellers maintain a livelihood by two methods of fishing that have been practised for generations, and by aquaculture, a relatively new source of income discussed in more detail later (Truong, 2002). The first of the traditional forms, mobile fishing, is mostly practised by the poorest fishers who can only afford simple fishing gear and are restricted to the common prop-

Table 1

Typhoons and the human impact from 1980 to 2000 in Tam Giang Lagoon

Year	Human deaths and injuries
1980	173 Killed
1983	252 Killed, 115 injured
1985	604 Killed, 234 injured, 98 missing
1989	53 Killed
1992	7 Killed
1998	31 Killed
1999	373 Killed

Source: CECI (2003a, p. 7).

erty areas found throughout the lagoon. The second is based on fixed fishing gear that is inherited or bought. This gear includes fish corrals, fixed lift nets, mullet traps, or fish aggregating devices used by those who can afford more elaborate equipment fixed in private fishing areas in the lagoon (see Nguyen et al., 2000 for more details). These last methods usually generate greater income but require more initial financial capital (Truong and Brzeski, 2000). For sampan dwellers using these methods, the fish catch is often sold fresh at the local market by each family, while a middle person at the local market may then transfer the fish to a district or provincial market (Vo and Nguyen, 2003).

In the 20 years from 1980 to 2000 a number of typhoons have had severe impacts upon the sampan dwellers in Tam Giang Lagoon, causing many casualties and deaths (Table 1). While clearly not a new phenomenon in the region, typhoons are increasingly having an effect on an expanding human population that is exerting ever greater pressure on finite resources and at the same time intensifying processes of environmental degradation. Moreover, it is suggested that climate change has made typhoons more unpredictable and variable therefore making it harder to manage risk (IPCC, 2001). Of the more recent typhoons, two are especially remembered, one in 1985 that resulted in death and destruction in many communities, and a second in 1999 also with devastating results (CECI, 2003a).

3.2. Resettlement policies for the sampan dwellers

Current resettlement policies in Việt Nam are often aimed at reducing poverty.⁹ The village of Thụy Điền, established after the 1985 typhoon for sampan dwellers, is the result of such a resettlement policy (NGO worker

⁹ In Central and Southern Việt Nam since 1975 (earlier in the North), the Government established New Economic Zones (NEZ) to resettle lowland individuals and families to underpopulated areas where agricultural and work cooperatives were established as a new source of livelihoods (Vo and Nguyen, 2000). The resettlement process discussed here, is a more recent one than the NEZs, undertaken within a new framework developed since the late 1980s when the government began to realise the shortcomings of the earlier process. Hence the government "decided to change the way in which resettlement projects were established by designing integrated resettlement projects, that included direct migration-related socio-economic development investments as well as movement of people" (Guest, 1998, online).

3, pers comm). To operationalise the resettlement process, the National Assembly of Việt Nam provided direction to the Provincial People's Committee of Thừa Thiên-Huế to establish a policy regarding the resettlement of sampan dwellers (CECI, 2003b). In turn, the Province identified the coastal Districts of Phú Vang and Quảng Điền as priorities for resettlement.

The District People's Committees of Phú Vang and Quảng Điền were responsible for approving the resettlement plans. Their tasks included surveying the areas with Land Use Planning staff, organizing meetings with stakeholders, and discussing the use of the land, finally making decisions regarding resettlement plans (CECI, 2003b). The Districts' Agriculture and Rural Development Divisions were key stakeholders in the resettlement process. These Divisions were responsible for selecting the poorest communes with the poorest households for resettlement. At the Commune and Village level, one person was assigned to assist the District in the planning and resettlement process. This person generally attended meetings and provided information regarding the surveying of vulnerable households. They also assisted with the selection of land for the settlement area and organised meetings with the potential beneficiaries, encouraging sampan dwellers to resettle (CECI, 2003b).

In the case of Thụy Điền, the resettlement programme has been combined with the expansion of aquaculture. This was initially introduced to the lagoon in 1977 for seaweed, diversifying to include shrimp and fish in the early 1990s (Phap, 2000; People's Committee of Thừa Thiên-Huế, 2001; Phap et al., 2002). In 2004 the principal stocks raised in this manner included tiger shrimp, crab, fish (*siganus guttatus*), and seaweed (for specific information on species see Phap, 2000; Phap and Le, 2002). This expansion has provided resettled sampan dwellers with the possibility of livelihoods more familiar to them than a permanent move to land-based agriculture (Duong and Ton, 2002; Phap et al., 2002). However, land is already becoming scarce for aquaculture ponds in the area and people are having to move further inland to resettle while continuing to fish in the lagoon, a problem we return to later (Duong and Ton, 2002).

The coastal village of Thụy Điền, located on the edge of the Tiam Giang Lagoon, was home to a reported 142 households in 2004, all of them resettled sampan dwellers, no village having existed at this location prior to the resettlement (Thuc, village chief pers. comm.; CECI, 2003b).¹⁰ Nowadays as you enter the village, aquaculture ponds line the newly built road that crosses the commune. One can readily discern that some of the families, although still con-

sidered poor by government standards, have been relatively successful due to the resettlement, building themselves brick houses while others still live in houses made of woven bamboo walls. This success has been largely connected with different forms of fishing and fish raising since the area's sandy, highly saline soils are not conducive to agriculture (NGO worker 1, pers comm).

4. Resettlement outcomes for sampan dwellers

The building of new social networks and the reformation of old ones have played an important part in the ability of the sampan dwellers to establish themselves in this new community. A number of those resettled reported significant changes in local relationships and networks since relocation because, as noted by Tuan,¹¹ a male interviewee, "on water you can easily separate from your group, in comparison to land where you are sedentary and are likely to be neighbours for a lifetime". As a whole, Tuan felt that his social networks had become stronger "on a community level, I have closer ties with the villagers". Likewise, female interviewee Anh observed: "I ask friends and family for daily help and easy tasks which is different from being on a sampan". Indeed, it was suggested that on water it was difficult to maintain relationships over time, given the semi-nomadic nature of living on a boat.

As the voices of Tuan and Anh imply, change has permeated almost all aspects of life among resettled sampan dwellers in Thụy Điền village. Accordingly, we now turn to examine such change, focusing in particular on networks and relationships in the context of shifting and diversifying livelihoods, credit channels, and mass organisations, before outlining some of the continuing livelihood problems identified by the resettled sampan dwellers. These are *a posteriori* themes that emerged from interviews with the sampan dwellers when they were asked to identify the most important changes to their way of life and livelihoods as a consequence of resettlement. Additional concerns raised by NGO workers in the area are also included in our analysis.

4.1. Changing and diversifying livelihoods

A new range of livelihood strategies were made available to sampan dwellers by the expansion of aquaculture production in either human-made ponds on land, located behind the homes of villagers (Fig. 3) or in government designated areas of the lagoon for which they had 'use-rights' delimited by mounds of soil and fences (Fig. 4). Whether or not such new opportunities were taken up by different households however, was dependent on their financial capital. Production from both types of aquaculture was used solely to generate income via trade, rather than for personal consumption, with some villagers even managing to reach export markets, such as those who sold their produce

¹⁰ Using Việt Nam census data for 1999 the population of the district of Phú Vang is 169,267 individuals who dwell in 31,987 households. This provides an household average size for the district in which Thụy Điền village is located of 5.3 people. From this calculation, the approximate population of the village is 750 people (Socialist Republic of Việt Nam, 1999).

¹¹ Pseudonyms have been used to protect the identity of informants.



Fig. 3. Aquaculture production in human-made ponds. *Source:* Elsa DaCosta (2004).



Fig. 4. Aquaculture production in government designated areas of the Tam Giang Lagoon. *Source:* Elsa DaCosta (2004).

to large companies like the ‘Taiwan Company’ located in the area since 1995 (Bui, 2000; Le et al., 2000).

Interviewees calculated that it took a resettled sampan household, on average, 10 years to save enough money to establish their own artificial ponds for aquaculture production. This required a large initial financial capital investment but once established the sampan dwellers could earn up to two to three times the amount derived from traditional mobile fishing in the lagoon (see also Le et al., 2000). However, even resettled sampan dwellers engaged in aquaculture still tended to practise mobile fishing as well, especially for their own consumption needs. Those who did not practise aquaculture maintained traditional fixed gear in the lagoon and/or undertook mobile fishing, often while

they saved the financial capital required to make the switch.

Although the main incentive to practise aquaculture around Thụy Điền was to increase income levels, this livelihood move involved substantial risks. Over time the quality of water in the aquaculture ponds decreased due to contamination by fertilizers and animal faeces, leading to a high risk of disease outbreaks that could result in sizeable stock and financial losses. In addition, because the aquaculture ponds were vulnerable to damage and losses from natural disasters, large investments were required without any guarantee on returns (see Le et al., 2000; Phap et al., 2002). Indeed, sampan dwellers were very concerned about different aspects of this livelihood strategy. Tuan for exam-

ple had found that “raising fish is hard work. There is a lot of risk involved because when they get sick, it is very expensive to recuperate from the loss”. Another former sampan-dwelling male interviewee, Phuong, had also experienced many changes in his daily life since beginning the rather more demanding and less flexible practice of aquaculture compared to work on a boat:

Since I have set up my aquaculture production, I must always be on site to check on the shrimp. Sometimes the children help but I definitely find that I have more responsibilities. The work on the sampan would be more flexible and I could easily move my work to another day. With aquaculture there is work that must be done everyday without fault or I will risk my livelihood (47 years old, resettled in 1985, married with 5 children).

Thus for those like Tuan and Phuong who had made the shift in practice, the development of aquaculture had changed their livelihoods quite dramatically. Indeed change was an inherent element of the resettlement process with aquaculture and increasing access to the market economy resulting in new links with both government and private industry. As Phuong related, he had developed new relationships with the suppliers of his fish food, and had found that these had to be positively maintained in order to sustain his current livelihood:

I have more responsibility towards the supplier of my fish food; I must always repay the debt in order to keep the relationship healthy. Like most aquaculture producers in the village, I pay for the first half of the fish food before the harvest, and the other half after the harvest. In general I feel I have built good relationships with my suppliers and the bank.

Having access to local markets was also important in order to maintain the livelihoods of the sampan dwellers. In noting the differences in market access after his family's move to land, Phuong observed that “before, my wife had to row for an hour to get to the market, now there are bicycles and motorbikes”. Access to local markets was not only a spatial issue however, because new linkages with wholesalers had to be developed and maintained as well. Those practising aquaculture often sold their products to fish industry wholesalers who came to the village, networks created via bonding and bridging social capital. Villagers would recommend to a wholesaler other fishers considered trustworthy traders who had stock to sell, as well as proposing a reliable wholesaler to other villagers. Quite clearly then, it was bonding social capital links amongst the villagers that guaranteed them a ‘good word’ and a recommendation to a wholesaler. Bridging social capital allowed wholesalers to trust such recommendations coming from current clients and hence to expand their linkages. This point was well made by Thuc, the village chief, who had entered the fishing industry by this route: “I usually sell my goods to the

buyers that come to town. I met one of the buyers through a villager who had already done business with him”.

In general, such changes in livelihood practices had altered the relationships amongst the ex-sampan dwellers, resulting in new forms of bonding social capital that differed from those under the previous *van* system. As Tuan explained, “when I have difficulties I can usually get advice from my neighbours and discuss solutions”. This was, he continued, quite a change from living on boats where “people are not as able to help each other out because if one family has difficulties, chances are most are having the same challenges like natural disasters, poor fishing conditions or poor sales”. Thus comparatively, it appeared that bonding social capital was less likely to have formed under the *van* system because of a very limited range of livelihoods.

Although there was not a lot of available land in their new village, the resettlement programme had enabled the sampan dwellers to diversify their livelihoods in a range of directions and they were no longer solely dependent on fishing. Rather, as Tuan explained, they could “also raise livestock, like chicken and beef, as a food source instead of always depending on fish”. Diversification emerged as an important factor in stabilising livelihoods, especially in an area vulnerable to extreme weather. Livelihood diversification, as argued by Ellis (1998), was therefore used by the resettled sampan dwellers to increase both their food security and standards of living, which in turn decreased the vulnerability of households to adverse events such as typhoons. Nevertheless, as mentioned before, the land available for such diversification was not of high quality and thus such strategies could only be relied upon to a certain extent.

4.2. Credit channels

Sustainable livelihood activities were especially relevant to the resettled sampan communities since, if their livelihoods failed, they might return to the water and thus increase their vulnerability to natural disasters again or alternatively, migrate to urban areas (Dao, 1995). The opportunities for livelihood activities in Thuy Diên village were built through a range of networks that relied heavily on government initiatives, as well as on the involvement of private companies, suppliers and community relationships. One of the government's poverty alleviation programmes was run through the Agriculture Bank, which granted the rural poor access to credit (NGO worker 4, pers comm). Upon receiving their Land Use Certificates, the villagers of Thuy Diên were able to access credit via the Bank, using it to increase their income through investment. In sum, by moving onto land, the sampan dwellers were able to establish institutional networks to which they had been denied access in the past. This was very much the experience of Thuc who had accessed credit to enhance the development of his aquaculture enterprise:

When I first arrived, the commune only gave me a piece of land to build my home, so I continued to practise aquaculture in one hectare in the lagoon. In order to move my operation onto land [in ponds], I had to borrow money from the bank and use my savings. I started out with two harvests per year and felt it was too risky, so I moved to one harvest per year. The credit I received from the bank was very easy because I had a Land Use Certificate from the commune.

However, banks were not always willing to help the settled villagers, especially those who had borrowed before and had then run into difficulties. In such circumstances, credit could be obtained, in theory, through borrowing on reputation, with a community acting as the guarantor for a borrower (Dang, 1995). To do this, the community had to have a successful agricultural record and a proven reputation for being able to save money (NGO worker 4, pers comm). Nevertheless, it was difficult for individual villagers to gain such guarantor support, if they themselves had not been faring well. Clearly if the community realised that a member would be unable to repay the loan due to previous losses or an inability to save, they would not act as a guarantor. In part this was because relationships and reputations among many village members were still rather short lived, dating only from their move to land (NGO worker 4, pers comm.). It is scarcely surprising therefore that in contrast to other communities nearby, most villagers in Thuy Diên were unable or unwilling to take risks for their fellow villagers (Porter, 1995).¹² In effect, creating a sustainable livelihood could be quite a challenging task, much as Hau reported:

To set up my aquaculture production, I had to borrow money from the bank, but they only give three or four million VND (\$190–\$250 USD) so I had to borrow the rest from cousins. The interest on the money borrowed from family is higher than the interest on the money borrowed from the bank.¹³ Lately I had trouble with my harvest; I have been raising less shrimp and I am no longer able to get help. The last two years have not been good, so I have no collateral and cannot get any financial help. The other members of the village cannot help me and I have invested too much to change work (male, 44 years old, resettled in 1985, married with 6 children).

In other words, while some villagers were able to borrow from family members, thus confirming the existence of

bonding social capital – albeit with interest still being paid – networks had not expanded to provide the foundations for financial help amongst non-kin community members. As such, bridging social capital in this regard had not yet appeared to have developed.

4.3. *The role of mass organisations*

Given the limits of informal community financial support in the village as noted above, it is interesting to observe that State supported mass organisations have had a considerable role to play in livelihood development among relocated sampan dwellers. Son, a male interviewee, had enjoyed substantial positive changes in his social relationships and social capital since moving to land, in part because of his involvement with one such mass organisation. According to Son:

In general, I feel my life is much easier since I have been on land. Life on the boat is isolated. Now I have more friends, and my kids can go to school, and it is much easier for me to make a living. I saved for many years to build a house on land and borrowed from my brothers and other family members. The government gave me the land to build my home as part of the resettlement programme. I was married in 1989, and now live with my wife and six children in my own home. I make a living from raising shrimp in the lagoon. I work at night with my wife and the rest of the time I'm at home with some free time to spend with friends and neighbours. There are a lot of visits... I feel that I have stronger ties with the members of the village than on the boat. I also participate in the Farmer's Union; I go to meetings every two–three months (Male interviewee, 36 years old, resettled 1999).

For Son, because making a living on land was easier than from a sampan, he had free time nowadays to spend with his friends and neighbours. This allowed him to build stronger ties with other village members and, in turn, to gain information to aid his livelihood development. In effect therefore, Son's move to land and his change in livelihood had been instrumental in increasing his bonding social capital. In addition, by joining the Farmer's Union, one of Việt Nam's mass organisations, Son had effectively expanded his bridging social capital by socialising with a larger group of rural dwellers than he had before. Many of these contacts were of similar social status, but outside his immediate support network.

The Farmer's Union to which Son belonged is one of Việt Nam's many mass organisations that are prominent institutions of the state, two others of note being the Youth Union and the Women's Union (Thayer, 1995; Werner, 2002). Coordinated nationwide under the watch of the Communist Party, these organisations are recognized at four political levels, namely commune, district, provincial and national, with sub-organisations at the village and

¹² Also see Norlund (2005) for an analysis of the importance of traditional village ties for similar commitments elsewhere in Việt Nam. In addition, Dufhues et al. (2002) provide an interesting study of rural credit channels in Northern Việt Nam.

¹³ This unexpected statement was cross checked and indeed it was confirmed that when one borrowed money from family they might well charge more interest than banks because they knew how difficult obtaining a bank loan could be.

hamlet levels (Brzeski and Newkirk, 2000; Kerkvliet, 2004). On water, the sampan dwellers did not participate in such organisations. However, since arriving on land, participating in them had become an important aspect of the resettlement process. Access to the potential bridging and linking social capital they might provide could diversify one's 'social safety net' when coping with livelihood change, thus reducing vulnerability. In other words, mass organisations in Việt Nam serve several different purposes. For the Government they are used to disseminate information, while for the interviewees they provided an opportunity to become more involved in their community.

This last function was confirmed by the observations of two of the women interviewed, Anh and Dieu Huong. Both valued their participation in the Women's Union because it gave them an opportunity to learn, to meet other women in their village, and to discuss important issues. In effect, for Anh and Dieu Huong, this mass organisation and its associational capacity had contributed to increasing the bonding and bridging social capital in their lives (see also Scott, 2001). In addition, leaders from other branches of the Women's Union sometimes came to visit, as well as the head of the local branch being able to speak on the women's behalf to local officials. Our evidence then, confirms that linking social capital, a means by which resources, ideas and information might be gained from formal institutions beyond the immediate community, was sometimes provided via Việt Nam's mass organisations (Policy Research Initiative, 2003). That resettled former sampan dwellers might derive significant benefits from membership of mass organisations like the Women's Union was substantiated by Anh's testimony:

I am part of the Women's Union. I go to meetings every two or three months with members of my village to discuss life, how to raise the children, education and family life. I have been part of the Union for the last four years and I feel like I have built good relationships with the seventy or eighty women in the Union. Most of the women at the meetings are from my village. Sometimes women from the neighbouring village Women's Union come to speak at our meetings and bring us new information and new ideas (Female, 34 years old, resettled in 1985, married with three children).

Dieu Huong concurred. She too had been able to build strong social relations since moving to land and joining the Women's Union, commenting that:

My husband participates in the Farmer's Union and I participate in the Women's Union, allowing me to build relationships with the women in the village... I participate at the Women's Union about once a month to discuss work, daily life, children's education and the role of women. I have more responsibilities now because I am part of the Women's Union; I helped create a fund to help people like the elderly.

On the boats it was very hard to conduct any kind of meetings because of the mobility and lack of stability.

Like Dieu Huong's husband, resettled male sampan dwellers we interviewed were also members of the Farmer's Union where topics relating to aquaculture, harvests and local level politics were discussed at regular meetings. For example, if a member of the village had a diseased fish pond, this forum could be used to discuss the problem in the hope that other members might offer a solution. This approach was quite different from the options presented by the previous nomadic lifestyle of sampan dwellers, as explained by Thuc, a male interviewee, "on the sampan, there are no meetings to discuss these things, your livelihood depends on personal competence and physical aptitude; no exchanges are really done". Similarly, Tuan reported that "if the problem [with aquaculture] persists, I can get help from the commune which provides me with a free service of an aquaculture technician".¹⁴

The experiences of both Thuc and Tuan appear to demonstrate that mass organisations like the Farmer's Union provide the resettled sampan dwellers of Thuy Diên with new opportunities to strengthen their bonding and bridging social capital with other community members, and also to build linking social capital through information sharing with others from different communities, and from technical support officials. Such linking networks were a means by which resources, ideas and information flowed to resettled sampan dwellers from formal institutions beyond the immediate community, flows important for economic survival and progress (see Policy Research Initiative, 2003). It should be noted however, that although all villagers in the Vietnamese context do not have to participate in such organisations, they are 'encouraged' to do so. Thus the government's role in this respect might be considered somewhat ambivalent. While the actions it takes might be interpreted as an attempt to provide a positive environment in which the development of social capital might flourish, the same actions might equally be seen as providing coercive support (Dalton et al., 2002).

4.4. Problems

The move to land and a change in livelihoods have therefore resulted in a number of previous sampan dwellers becoming more involved in 'mainstream' Vietnamese society through not only greater contact with others because of road access to neighbours and markets, but also membership of mass organisations. Yet, the resettlement process for the sampan dwellers has not been without its challenges,

¹⁴ The Aquatic Animal Health Inspection Office (AAHIO), Department of Fisheries, is responsible for managing the health of cultured species in the lagoon. It guides fishers to improve pond conditions before stocking, and teaches them the basic indicators used to identify healthy fry (Phap et al., 2002).

one of the main concerns being the return of some of them to living on boats in the lagoon after their initial resettlement, pointing to the potentially limited sustainability of their new livelihoods (Vo and Nguyen, 2000; CECI, 2003b). In part, this return was due to land scarcity in the resettlement zone. Land allocated to sampan dwellers in the coastal lagoon area had not been sufficient and even for those who resettled successfully, the size of their land allocation would only sustain the present generation. Consequently, they could not afford to give land to their children.¹⁵ As a result, as families expanded, some offspring had returned to living on sampan and fishing for their livelihood because the income generated on land was not sufficient for their own families. In addition, a lack of available land near the lagoon had forced some resettled communities further inland, far from their livelihoods (CECI, 2003b). At the same time, those who undertook aquaculture, such as farming shrimp or using fixed fishing gear in the lagoon, needed to stay close to their assets to protect their capital investments. Consequently, most returned to living on boats during the summer season to remain near to their livelihoods, sometimes moving to their allocated land and houses during the rainy season (NGO worker 2, pers comm; see also CECI, 2000).

Once resettled, families were expected to build their own home, funding all but the foundations and the frame, for which the Vietnamese Government provided 2.7 million VND (approx USD\$170) (CECI, 2003b). However while families received government funding approval prior to building their homes, the money was distributed only *after* construction had been completed. As a result, economically poorer households often had no initial funds to start construction and were unable to resettle on land. Some families borrowed money to cover the cost of the house, however some already had outstanding loans and were unable to get credit, while others again simply did not have access to official credit due to their lack of Land Use Certificates (NGO worker 2, pers comm).¹⁶ In fact, there continues to be a lack of a legal framework for the allocation of land and for compensation for lost assets, while the planning process to date has not included either ongoing evaluation or monitoring (CECI, 2003b).

In summary, our interviewees voiced a number of connected concerns about the sustainability of their new livelihoods. These ranged from water contamination, reduced production levels and low produce standards, to the large initial investment of financial capital required without any guarantee of viable returns. Moreover, as time passes, such concerns seem bound to reduce the economic prospects of more and more of those dependent on the lagoon

for their livelihoods, perhaps even triggering the return migration of affected families to the water.

Nevertheless, concerns such as these, including the possibility of a return-to-water movement, might be mitigated if not obviated by more appropriate Việt Nam Government resettlement policies than presently exist. The more robust policies envisaged should include enduring support for the adaptation of resettled sampan dwellers' livelihoods to climate variability in ways that ensure their sustainability. In addition, government policies that resettle sampan dwellers and other populations must carefully consider not only economic development, but also the impact on livelihoods of the physical geography of a site, in the present case the flood prone land around Thuy Diên village. Indeed, Phap et al. (2002) argue that aquaculture development in the lagoon vicinity where the village is situated may not be appropriate because floods bring increasing contamination from fertilizer run-off and allow harmful species to enter the area.

Information gathered from interviewees such as Thuc also attested to the development of income disparities among resettled sampan dwellers in Thuy Diên village, much as has been found elsewhere in Việt Nam following the introduction of aquaculture (see Adger, 1999; Luttrell, 2001; Adger et al., 2002). In particular those who enjoyed better access to financial capital, and had been able to establish a viable aquaculture venture were better off financially than those who found such capital harder to access and who continued to use more traditional fixed or mobile fishing techniques. Thuc had observed "income differences in the village, there are about 70 richer families, about half the village". This situation puts at risk the maintenance of sustainable livelihoods in Thuy Diên because an imbalanced distribution of income and technology can lead to "differential access and entitlements to scarce environmental resources, and can result in both the undermining of collective action institutions and negative spillovers into the overexploitation of open access resources" (Adger et al., 2002, p. 360; see also Adger, 1999). In addition, Adger et al. (2002) argue that rising inequalities might well "exacerbate the vulnerability to external shocks of the marginalized and those who have failed to benefit from rising incomes. They often do not have the resources for coping with the damages from natural hazards, other risks, and potential downturns". Applied to the Tam Giang Lagoon area, this view certainly heightens rather than allays concerns regarding the potential over-use of certain areas, as well as continued vulnerability to events and developments of external origin, beyond the control or mitigating capabilities of the villagers.

5. Discussion and conclusions

In Putnam's (1993) analysis of social capital the State is treated as a dependent variable, and social capital as an independent variable that influences the State, rather than

¹⁵ In Việt Nam, farmers traditionally allocate a portion of their land to male offspring once they are married, female offspring usually following their husband (Dang, 1995).

¹⁶ It appears that Land Use Certificates are only issued when the foundation and frame of a house are complete and pass inspection (CECI, 2003b).

vice versa (Schuurman, 2003). Other authors however follow the communitarian view. They point to the role that the State can play in influencing social capital. While this latter view commonly suggests that the State's role is largely negative, often destroying social capital, it appears that in Việt Nam, following Hyden (1997), the Government has been able to facilitate the development of bridging and linking social capital in certain circumstances, providing evidence in support of the contention that, certainly within a country run by a Socialist Government, "local and national political contexts exert substantial influence on the kind and degree of mobilization of social capital" (Foley and Edwards, 1999, p. 160).

In the Tam Giang lagoon area, the creation of social capital via State initiatives has allowed the resettled sampan dwellers access to resources that they did not previously have. This includes information on fish and shrimp diseases and at times, access to credit facilities and technical support from members of different strata of society. In addition, the State has strongly encouraged all those resettled to form linking social capital via their membership of State organised mass organisations. Nevertheless, we must not forget the somewhat ambiguous role of the Government in this regard as discussed earlier.

At the same time bonding social capital has also been important for the villagers, especially amongst extended family and friends who could be relied upon for credit and support in times of need. Villagers also benefited from a flow of bonding social capital from their neighbours, notably in gaining access to marketing networks and greater levels of information about a range of production aspects. Some elements of bonding social capital that benefited villagers no doubt reflected a continuation of support and ties transferred from the previous water-based *van* system, but other networks and ties had been formed more recently, since relocation.

In turn, ties established by villagers with different marketing intermediaries could be construed as bridging social capital, as also might possible connections made with other members of mass organisations. However, it appears from our research that the role of bridging social capital has been rather less influential and is certainly not developing as robustly as the other forms of social capital. Bridging social capital, involving weaker social ties than bonding social capital and consisting of more heterogeneous social networks than those that form amongst close family and friends, could, in theory, have provided individuals or groups in Thuy Diên village with greater support to get ahead as they work towards creating a range of viable livelihoods. Nevertheless, our interviews revealed that these types of networks tended to be lacking in the resettled sampan dweller community, especially informal credit support.

While one could certainly argue that the bonding and linking social capital in place since resettlement and the villagers' diversification of livelihoods has rendered the villagers less vulnerable to livelihood stresses and external shocks

due to improved social safety networks, one needs to question whether this is sustainable. Such questioning begins to reveal some of the long term livelihood problems that might arise from less strongly developed bridging social capital, namely a continuing reliance on family and close friends, either of whom can only offer so much in the way of financial support. Another problem is a dependence and perhaps growing expectation of governmental support in times of need, for example aid when catastrophe strikes in the form of diseased harvests or natural disasters. Such concerns point to the potential downsides of an over reliance on specific social capital linkages (Portes and Landolt, 2000).

Also pointing to the downsides of relying upon social capital are concerns regarding the necessity of the resettled sampan dwellers to access loans to be able to establish diversified livelihoods on land. This, it could be argued, means that formally independent sampan dwellers become dependent on social capital in order to gain the connections necessary to gain such loans. Those who resettle must therefore maintain positive relations with credit institutions and possible lenders or guarantors in order to expand their new livelihoods or make a switch to aquaculture (cf. Luttrell, 2005). This clearly leaves room for social exclusion for those already marginalized due to their income, social status, or lack of specific paperwork. Undoubtedly, as argued by de Haan and Zoomers (2005), "livelihood activities are not neutral, but engender processes of inclusion and exclusion".

It is true that the relocation of the sampan dwellers as part of Việt Nam's poverty alleviation programme has decreased their physical vulnerability to natural disasters as they moved from a precarious water environment to a more stable location inland.¹⁷ It is also true that the Việt Nam Government has played a significant role in the creation of Thuy Diên village and in generating the linking social capital that has developed through villager access to and involvement with mass organisations. But it is also equally apparent from our analysis that the livelihoods of relocated sampan dwellers in Thuy Diên village would be considerably further enhanced by a number of initiatives designed, for example, to establish an adequate legal framework regarding land allocation, to build close associational ties with members of other communities, and to reduce inequalities amongst members of the same village. Of these initiatives, building effective associational ties is pivotal. This would make available a greater volume of proven knowledge on aspects like marketing channels, aquaculture techniques and water quality, thereby strengthening livelihood returns and perhaps promoting the mitigation of inequity among villagers. Moreover, these last two goals would be further advanced by encouraging intermediaries to provide more substantial credit to villagers than was available at the time of our field research, or even help with financial capital formation, a form of

¹⁷ It should be noted that the terms poverty and vulnerability are not synonymous, but are closely related. See Alwang et al. (2002), as well as Moser and McIlwaine (1997) for further discussion on this point.

bridging social capital support found across socially diverse groups in other parts of Southeast Asia such as Indonesia (Turner, 2003).

For these goals to be achieved however, it is essential that greater trust is generated (Turner, 2003; Chen, 2005). Indeed, it is this last factor, trust, that appears to be missing in a number of cases in Thuy Diên. By trust we mean understandings and agreements founded upon long term relationships like those found in communities that have not undergone the considerable upheaval of a relocation and the reorganisation of livelihoods. In other words, trust is “the expectation that arises within a community of regular, honest, and co-operative behaviour, based on commonly shared norms, on the part of other members of that community” (Fukuyama, 1996, p. 26). Reflecting upon this definition in the context of our research findings leads to the conclusion that trust is still at a fairly embryonic stage of development among Thuy Diên villagers. Yet we suggest that with some modest support, possibly via local NGOs bringing different actors and interest groups together, coupled with encouragement and time, perhaps trust and in turn, bridging social capital can be nurtured. Subsequently, livelihoods that are more sustainably developed, with the capacity to cope more effectively with future environmental stresses, may be able to flourish.

Acknowledgements

The authors would like to thank the sampan dwellers who took the time to talk about their livelihoods, and the CECI Viet Nam team for their help and insights. We would also like to thank Dr Brian Heenan for commenting extensively on an earlier draft of this work. Thanks also go to Christine Bonnin for her suggestions, three anonymous referees for their observations and comments, and Dr Katie Willis, editor of *Geoforum*, for her recommendations.

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