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Editor's note

In this issue we have three articles plus a note on new books. In the first article, "Migrating islanders and related community aspects: Effects on community-based marine resource management", Annette Breckwoldt examines the effects of domestic migration on community-based marine resource management in four coastal communities in eastern Gau Island, Fiji. Based on her own field research, Dr Beckwoldt examines, in particular, some positive aspects of "circular migration" that emerge when educated people return from urban centres to their native villages, and in so doing contribute importantly to re-stabilising communities, and to community-based marine resource management. Also discussed are the definition of community and the balance between development and tradition, because villagers must decide which of the old rules remain important to them but require adapting to serve the community in the future.

Simon R. Bush and Peter Oosterveer of Wageningen University are the co-authors of the second article, "Linking global certification schemes and local practices in fisheries and aquaculture", based on their field research in Thailand and Vietnam. The eco-labeling of fish and seafood products from certified fisheries is a concept introduced by Western non-governmental organizations and civil society with the objective of improving fisheries management and environmental conservation. Success in implementing the concept rests ultimately on the purchasing power of consumers — who theoretically energize the entire process — fish wholesalers and retail businesses. Whereas information flows are now well understood for exporters, those linking exporters with producers mostly remain to be clarified. To achieve the environmental and social sustainability objectives for which eco-labeling and fisheries certification schemes have been established, there is a need to understand more completely the relationships that link local production practices and relationships with the export trade.

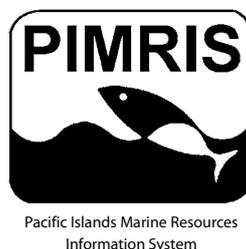
In the third contribution, "Global partnership for small-scale fisheries research: Too big to ignore," Dr Ratana Chuenpagdee describes the origins and objectives of a project that will concentrate its activities on small-scale fisheries. We include it here to advertise the existence of this project to people in the Pacific Islands region who might wish to contribute or otherwise become involved. (Please contact Dr Chuenpagdee directly.)

The final item in this issue is "Recent publications". This time we feature seven fisheries-related books published by Eburon Academic Publishers, located in Delft, the Netherlands. We include information on 1) Interactive

fisheries governance: A guide to better practice compiled by M. Bavinck, R. Chuenpagdee, M. Diallo, P. van der Heijden, J. Kooiman, R. Mahon and S. Williams; 2) R. Chuenpagdee (ed), World small-scale fisheries: Contemporary visions; 3) S. Cunningham and T. Bostock (eds), Successful fisheries management: Issues, case studies, and perspectives; 4) B. Hersoug, Unfinished business: New Zealand's experience with rights-based fisheries management; 5) B. Hersoug, Fishing in a sea of sharks: Reconstruction and development in the South African fishing industry; 6) B. Hersoug, Closing the commons: Norwegian fisheries from open access to private property; and 7) B. Hersoug, S. Jentoft, and P. Degnbol, Fisheries development: The institutional challenge.

Kenneth Ruddle

PIMRIS is a joint project of five international organisations concerned with fisheries and marine resource development in the Pacific Islands region. The project is executed by the Secretariat of the Pacific Community (SPC), the Pacific Islands Forum Fisheries Agency (FFA), the University of the South Pacific (USP) and the Pacific Regional Environment Programme (SPREP). This bulletin is produced by SPC as part of its commitment to PIMRIS. The aim of PIMRIS is to improve the availability of information



on marine resources to users in the region, so as to support their rational development and management. PIMRIS activities include: the active collection, cataloguing and archiving of technical documents, especially ephemera ('grey literature'); evaluation, repackaging and dissemination of information; provision of literature searches, question-and-answer services and bibliographic support; and assistance with the development of in-country reference collections and databases on marine resources.

Migrating islanders and related community aspects: Effects on community-based marine resource management

Annette Breckwoldt¹

Abstract

International and national interisland migration has always had a major influence on Pacific Island societies, cultures and economies. Although always necessary for survival, migration has also destroyed community functions. In many cases, however, migration is not uni-directional (e.g. young people leaving the village to seek an education and/or to work elsewhere), but circular, as when young islanders return to their home village after some time away. This article draws on information from a case study in rural Fiji to examine the effects of national migration on community-based marine resource management as embedded in the social, cultural and economic realities of the village. The negative effects often seem obvious: villages become depleted of their young members, leaving the elderly to perform everyday tasks, thereby destabilising the community. But the positive trend of circular migration for financial or family and/or social reasons, also becomes obvious as these often educated “agents of change” return and contribute to the re-stabilisation of communities.

Introduction

The migration of young people — both among islands of the same country and regionally — has always had a major influence on Pacific Island societies, cultures and economies. The three most prominent directions — to New Zealand, Australia and the USA — are not the focus of this article however. Rather, the focus here is on national migration that was initially indispensable for survival, then later for labour and financial reasons, and for education. However, such migration also disrupts the functioning of communities and islands. Effects can include changes in land and resource use, decreased agricultural output, loss of capital, and worsened skill composition within communities (Faust 1996). Migration formed part of traditional life, as when people left their villages for marriage (Faust 1996; Ram-Bidesi and Mitchell 2005), but has now become a general and common phenomenon throughout Fiji. Rural-urban migration increased after WWII as people sought a better education than was available in rural areas, or improved access to labour, or simply “for a perspective” or “a more exciting life”, and even to escape from social obligations (Faust 1996).

But what does a small island community do when its young, working-age people are leaving? This question is more relevant today than ever. Now it is complicated by the fact that, on the one hand, each

family is trying to ensure the best possible education and employment for its children away from the home island, whereas on the other hand, there exists the silent conviction that island and village settings are the best (not only morally) places for living and raising a family. This ambivalence is ubiquitous and unresolved for Fijian rural families in places such as Gau Island.

A reverse trend, however, has also been observed. In the 1990s, 25% of urban-rural migrations were accounted for by “circular migration” or re-migration to native villages, mainly for social and family reasons (Bedford 1985; Faust 1996). National (internal) circular migration from village to town and back to the village is the predominant form of movement in Melanesian countries (Minerbi 1990). Thus, home islands and communities remain the principal centres of life, even if people experienced and were influenced by urban environments (Bedford 1985). Emigration and re-immigration have consequences for social interaction, community action, stability and identity (Faust 1996).

At the same time, these factors are the core ingredients for successful, community-based marine resource management (CBMRM), which is more prominent in Oceania than in any other tropical region (e.g. Johannes 2002). For decentralised multi-island states such as Fiji, CBMRM seems an

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outright necessity, one that brings both benefits and obstacles (e.g. Hviding and Ruddle 1991). By paying attention to the more traditional notion of local communities as “webs of social interaction tied to place, history and identity” (Jentoft et al. 1998:429), an increasing number of managers and researchers have recognised these core ingredients for CBMRM.

The realities of an island’s complex and changing environment and people’s perception of this environment are embedded in social, cultural and economic community factors that influence CBMRM regimes, often in ways that have not hitherto been fully acknowledged. These aspects are highly inter-linked with CBMRM, partly because they determine everyday community activities, people’s attention to and participation in them, and community structure and social capital. They are challenges to their thinking and behaviour, and are directly important to the management of their environment and marine resources and, hence, way of living. The role of migration must be acknowledged in these terms because young “change agents” play a vital role in CBMRM, sometimes disruptively, but also often constructively, by assisting with community efforts and specific concerns. This paper attempts to define the status of communities as they balance between development and tradition, new and old. Is it still realistic for rural Fijian communities to aspire to be “traditional”?

Study site and methods

This article reports on an aspect of research conducted in 2007 for a PhD dissertation. Fieldwork was conducted in four coastal communities in Fiji (Malawai, Vanuaso, Naovuka and Lamiti), which share the same fishing ground (*qoliqoli*) in Vanuaso District (*tikina*), eastern Gau Island (Figs. 1 and 2). Gau belongs to the Lomaiviti group of islands that forms the eastern centre of the Fijian islands. Spread over an area of more than 12,000 km², the islands in the Koro Sea are an important part of the Fijian reef system (WWF 2005), even though they have received little attention in the scientific literature (Lovell et al. 2004; Spalding et al. 2001). Over the past decade, community workshops on conservation issues and the development of management plans for the *qoliqoli* and coast in general (e.g. protected marine areas, gear restrictions, mangrove rehabilitation, waste management) offered close contact with and access to the communities.

During fieldwork, eight life history interviews were conducted to provide information on village life and demographics, village environment, development and livelihood issues, and traditions. Selected interviewees were all over 60 years of age and had lived on Gau for most of their lives. Towards the end of the interviews, the older people were asked how they saw the future of their respective village

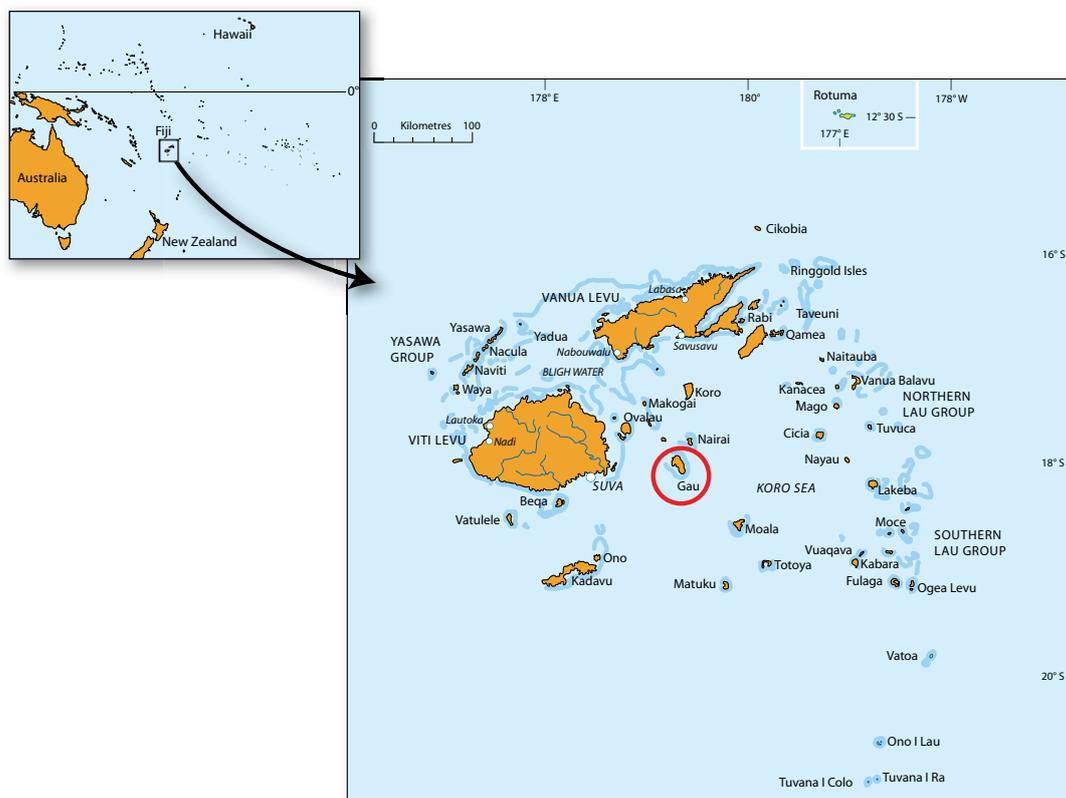


Figure 1. Fiji and the Gau Island (red circle).

and its people, and what the future holds. This was complemented by information derived from four focus group meetings. In each community, a focus group meeting was conducted with four working-age women, using guiding questions on subjects concerning family life and perspectives on the future of the villages. Participant and non-participant observation was conducted for eight weeks, during nine visits to the villages. In this way, information complementary to that generated through the interviews could be obtained on village life, family issues, habits and responsibilities. This involved the author participating in and observing the daily activities in the communities.

Interviews and focus group meetings were held with people from at least 10 different *mataqali* (clans) in order to prevent interviews from taking place with members of the same family, thereby potentially restricting the breadth of information. Individual interviews took place in the houses of the respective interviewee, while focus group meetings in each village were held in the house of one of the interviewed women. The information gained during focus group meetings was recorded in a notebook; when asked, women often said they preferred this method to using a tape recorder. Life history interviews were taped because the elders had no objections and the interviews were of a more narrative and extensive nature. Quotes used in this article were extracted unchanged from interviews. Interviews were conducted with both men and women, and with people of different ages, in order to gain a variety of perspectives on the individual villages and their respective situations.

Migration and CBMRM

Resource management involves restrictions on the ways in which people exploit resources, behave or move (Jentoft 1998). These decisions need to be made, approved and shared by young villagers, who are simultaneously searching for their way as adults in a rapidly changing world.

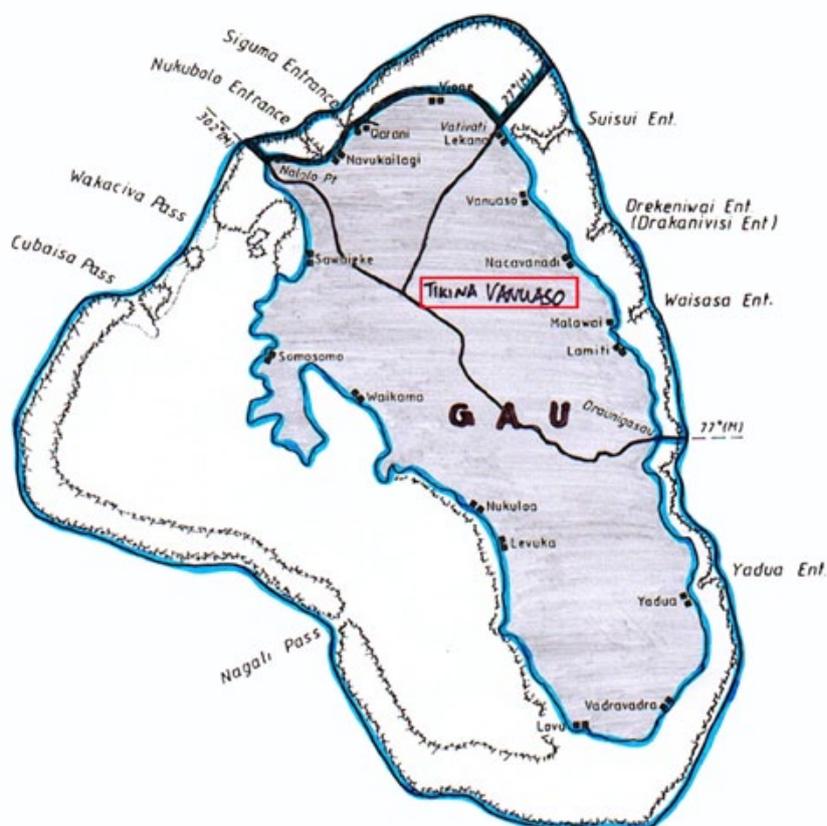


Figure 2. Gau Island, with *tikina* Vanuaso outlined in red.

The migration of young islanders could facilitate CBMRM, because deliberately (successful) returning villagers can take on responsible social tasks within the community after their education and experience with labour and life in urban areas. These circular migrants may want to invest their savings into agricultural production and assume economic tasks to maintain their urban living standards (Faust 1996). Returning villagers can also mediate and impart information and innovation between the community and the “outer world”.

Based on interviews for this research, it is possible to generalise about the reasons for migrants returning to their home village.

- A person likes being in the community; wants to contribute to the well-being of one’s village’s and assume responsibility; has a strong identification with one’s village and island and feels out of place when away from it; has very positive childhood memories.
- Economic conditions are seen as preferable and income possibilities as better in the village; a person can own land in a village, unlike in town, and can plant and harvest their own food; because it is necessary to pay taxes in the home

village, even when living abroad, one might as well live there and take advantage of what the islands offer.

- A person may not return to the community by choice, but rather must come back because they could not keep a job or got into some sort of trouble, or did not want to integrate into a regular job-structure (i.e. getting up at eight every morning); a person may find village life hard and would prefer to be in town with all of the amenities, such as food stores and cinema; a person may also be jealous of others living in urban areas.
- A person may have to return (often temporarily) to take care of an old or sick family member, and will only feel free to move again once that person passes away.

Obviously, involuntary “returner” may have a very different and potentially less helpful contribution to make to local management regimes, depending on which of the above reasons made them return home (e.g. whether they were successful during their time away). Rural-urban migration can also be an obstacle to CBMRM, as in the case of conflicts. Contentious relations between family or clan members, decreased social security and productivity can be a consequence of a community losing important individuals and innovative potential (e.g. a chief or skilled young adults; Kreisel 1991). In most cases, this loss cannot be compensated for by money transfers back into the communities. People remaining in the communities will be the present and future CBMRM managers, and changes within will require adaptations in the management scheme, and thus require attention in the management planning process.

The above mentioned bias in people’s perceptions of village and city life, of “future” and “home”, could be found in each of the island communities. People in town laughed somewhat about “bush life”, saying that life is easier in town: “There are so many social obligations in the community”, “You are never alone”, “All the responsibilities you have to fulfil”, and “Work all day long”. However, when thinking about raising a family, most interviewees (independent of age and gender), considered the village environment to be the preferable place, often hoping and knowing that life could indeed be better in the villages than it often is (see below the discussion regarding community factors). Often, the village is still seen as the one place where values, responsibilities and roles are best transferred from one generation to the next, and where young people grow up without the temptations and distractions (or even negative impacts) of urban areas.

This bias shows that Fiji would do well to accept that the future must start and be based in rural communities, not just in urban areas. Circular and even

multiple migrations are becoming more prominent, with young islanders returning to their home village after a period away.

In the same way, CBMRM and customary marine tenure cannot be considered as unchanging, rather as heterogeneous and dynamic social inventions, shaped by historical processes and local experience, influenced by external forces, and quite variable even on a small geographical scale (Aswani 2005; Bailey and Zerner 1992). Attempts to create or strengthen CBMRM systems should be based on a realistic assessment of the motives, ethics, interests and cultural conceptions that drive local actors (Bailey and Zerner 1992:11). The more research that is done on CBMRM, the clearer Jentoff’s notion becomes that resource management is more about resource users (the community) than about resources (1998). Human management and conservation activities are driven by various mutually linked forces such as support by networks (e.g. contact with government officials), knowledge and education, religion, community dynamics and hierarchy, or perceptions. Changes to these aspects of the complex social and natural community environment take place within each generation, and may affect the everyday life of the fishing communities, including those involved in CBMRM.

Over the last two decades, the development and management of Fiji’s inshore fisheries have slowly moved up on the government’s priority list because of their importance to the local economy and their vulnerability to overexploitation (Lambeth et al. 2002; Novaczek et al. 2005; Veitayaki 2000). But many development projects have failed because they were not commercially viable and the expectation of improving villagers’ living conditions were not met (Veitayaki 2000), and did not underpin the potential strengths of CBMRM. After decades, strategies still focussed on development rather than conservation, and resulted in the overexploitation of (mostly traditionally owned) resources and the collapse of fisheries development activities (Veitayaki 2000). The Pacific Emerging Environmental Leader’s Initiative, a regional project, is tightly linked to already existing efforts by the University of the South Pacific, government departments and non-governmental organisations. Young islanders participating in this initiative will be important for local CBMRM efforts, but they will have to deal with diverse and constantly intensifying factors such as resource exploitation, waste, water pollution, island deforestation and soil erosion. Young islanders, including those migrating, deserve special attention in such CBMRM situations because they can either provide crucial support or pose challenges to an already fragile management system; young people must understand, be informed and be involved in developing CBMRM measures.

Relating local community aspects to migration and CBMRM

In this section the principal changes in Gau communities are examined and related to migration and CBMRM, and include changes in 1) community leadership, 2) church settings, 3) school responsibilities and other financial obligations, and 4) development such as electricity, communication, transport, food and government contact. This analysis is required in order to understand CBMRM failures and successes.

Community leadership

Eroding traditional community leadership has changed communities (Muehlig-Hofmann 2007). In many cases this loss has been reflected in losing the one voice responsible and needed for decision-making. In the worst case, the result has been a sense of being without identity and power where, for example, there are long periods between chiefly installations, or the chief lives away from the community. The overall atmosphere in communities has thus changed, with villagers focussing less on community and more on the individual. In some cases there seems to be no reason for young islanders to remain in the village, and no visible incentive for them to do so. The rules and guidelines that people traditionally adhered to have also been influenced and changed, and this has affected community consensus, the basis for CBMRM efforts. As a result, new ways of (potentially non-traditional) community leadership may become necessary (Muehlig-Hofmann 2007). For CBMRM in *tikina* Vanuaso, the feeling of powerlessness was reflected mostly in decision-making, distribution of management responsibilities, evaluation of management plans and measures, enforcement of regulations against outside fishers, as well as in terms of possibilities for income generation.

Some communities feel increasingly powerless, and this is likely to have an impact on any CBMRM regime. The basis for good CBMRM — consensus on issues concerning the entire community and traditional respect accorded to chiefs — is declining everywhere in Fiji (Cooke 1994; Faust 1996; Ruddle 1995; Tomlinson 2004; Toren 2004). This lack of respect, in addition to pressures arising from increasingly different economic statuses and religious beliefs among families, is dividing villages (Tomlinson 2004). Those who live a more modern, individualistic and self-determined life independent of *kerekere* (the Fijian social kinship system; Nayacakalou 1978) have tended to separate themselves from those that still respect the traditional social structure, and deem it to be a precondition for community functioning, leadership and security (Faust 1996). The notion of having “too many people who talk”, meaning the lack of and inability to find a

consensus at the village level, was emphasised in the villages of this study. Faust (1996) also highlighted the role of migration in the ongoing loss of chiefly and *mataqali* authority through the weakening of sanctions for breaking traditional *tabus* and codes of conduct. Increasing urbanisation increases governmental responsibilities because problems can no longer be solved traditionally, having moved beyond the influence of the weakened traditional system (Faust 1996).

How can an indigenous community recover its social strength and function, which is needed for implementing CBMRM, and for conserving the local (not only marine) environment? How can it move away from being fragmented and unstable? In relation to community stability and its necessity for successful CBMRM, there is increasing research interest in aspects of social capital within fishing communities, and on its importance for the resilience and management of local coastal environments (Adger et al. 2005; Hughes et al. 2005; Yae 2008). The reasons for the decline in traditional authority, respect and traditional community function are widely speculated on, and could be many. One is the adoption of westernised standards, enhanced through rural-urban migration. Every family in rural Fiji has a relative residing in an urban area; in towns, chiefs increasingly share the same problems and rights as any person of non-chiefly origin, and this is also occurring in the outer islands. At the same time, circular migration can also show a way towards community power, depending on individual people, their education and character, together with finding an educated and respected leadership.

The church

The second important feature of village life and structure on Gau is, besides chiefly authority, the church. To officially attain the status of “village”, and thus the respective financial support from the government, settlements need a church. This aspect becomes more important — both for migration and CBMRM — through the formation of youth groups, linked environmental projects, choir contests, and other groups. In *tikina* Vanuaso, however, there were (at the time of this study) three Christian denominations: the Methodist church, of which most indigenous Fijians were members, the Seventh-Day Adventist Church, and the Christ for all Nations (CfaN, an American and South African originated evangelistic church group), of which an increasing number of indigenous Fijians were becoming members. These church groups have separate church locations, service times, songs and guidelines in *tikina* Vanuaso, and one can frequently observe discussions among members of the Methodist and CfaN churches, for example, about different church fees and regulations. Generally, church obligations

and duties are quite time-consuming for the people, including visits to other villages (possibly a walk of one to two hours). There could be, for example, choir study on Monday in Vanuaso for the men of the entire *tikina*, bible study on Tuesday, verse and psalm study on Thursday, Friday evening service for CfaN members, Sunday morning and afternoon service for both Methodists and CfaN members (independently); and occasionally there are events such as choir competitions for the entire island, or the visit of a minister or church member from Suva or one of the other islands. Apart from time, these church obligations also include financial donations (monthly, sometimes weekly), which every family must pay and which over the past decades are said to have increased significantly. Although these activities may tie more youth to the villages and also be the basis for community projects, they may also cause distraction and diversion from common community tasks and consensus, sometimes even leading to conflict and communities splitting up internally (which could again be a reason for emigration).

Village schools

In addition to time-consuming activities and increasing fees associated with the church, there may be the same with village schools. Although school fees in Fiji have generally increased, at least in rural villages, people still pay less for sending their children to school and supplying them with books, pens and other supplies, than in Suva and other smaller towns such as Nadi, Levuka or Sigatoka. Nevertheless, apart from the financial question, education is said to be better in Suva and in schools on the main islands of Viti Levu, Vanua Levu and Ovalau.

The time-consuming duties of parents, mainly mothers, attached to village schools and observed during this research need to be considered. These duties are assigned by village (alternating every week) and include preparing food for the children in the school kitchen. If it is a boarding school, such as the one in Lamiti/Malawai (starting from age 11), this duty includes preparing breakfast, lunch and dinner. The roster for cooking in the school within a certain week is assigned by the women themselves during meetings. In these school and/or community meetings, it is also announced which group must clean the school and school ground, when this must be done, and how much every mother must pay (e.g. for school exercise books, school uniforms, such special events as sports competitions or other activities, including international children's day; Fig. 3). Other duties (apart from contributing financially) are done by men; for example, regular weeding and mowing of the school grounds. Apart from school and community meetings there are also teacher-parent meetings at the schools. Considerable effort is, therefore, invested in children's education, a challenging task also for schools as, for example, in Lamiti/Malawai, with 100–110 children, aged 6 to 14 years. Therefore, the school depends on parents, especially mothers, whose personal ambition, enthusiasm, engagement and financial support determine whether the school is good or not. The reputation of a family and the effort they put into their children and their education is also reflected in a child's appearance; although there is little money and little time, almost without exception the children have clean clothes every day.

Financial and other obligations for each family are increasing, posing unprecedented burdens on



Figure 3. School children in a sport tournament in Lekanai, Gau Island.

villagers. People's perspective, focus, interests and self-understanding change with these increased burdens, as well as their relation to and dependence on Suva and its institutions. This results in the perception that people lack free time because of obligations such as church gatherings, school gatherings, and the need to earn money. The costs for these obligations may increase further, and if they do, money will become even more important, a fact that most villagers in *tikina* Vanuaso seem to have accepted already.

The main source of income in the villages is from the sales of coconut (*niu*, copra; *Cocos nucifera*) and *yaqona* (*kava*, grog; *Piper methysticum*) from the plantations. Many younger men also have their own *yaqona* garden. The planting and selling of *dalo* (*taro*; *Colocasia esculenta*), and the occasional selling of a pig, bring income to the village. The main income source for women is from the sales of *talitali* (mat weaving), either in Suva through an agent, or directly to relatives. The larger mats on which three women might sit for five to eight hours a day for two or three days, brings between FJD 100 and 180 each, depending on the quality of the *voivoi* (dried leaves of *Pandanus* sp.), the weaving style, patterns and colours. Money is also sent to villages from relatives in the towns or abroad, the amounts varying with the wealth of the relatives and the closeness of the relationship. This means of supporting villages has taken place for generations in the older village, and remains important. The changing presence and composition of family members in villages also affects their functioning. Whether boarding is a first step out of the village or not, young men nowadays are trying to find jobs outside the villages, and young women and young couples (in search for labour) are also moving out. Therefore, education and employment are still the major drivers for rural-urban migration, while medical reasons are also a reason in some instances. These reasons need to be considered when developing CBMRM measures and actions.

Finally, in terms of future interests of the interviewee's children with regards to their livelihood, most interviewees (83%) stated that their children "like the way of life, plant grog, go out to sea fishing, etc.". For all children, however, it is planned that they will go to boarding school in Suva or Levuka, and despite the observed joy of the children playing with small nets and spears and seeming very happy generally in the village, most older children seem to want to leave ("they want to go to town later"). Whether or not the children then come back to the villages or islands as adults, often depends on their success in town (see above). One interviewed mother said that the "kids should go to school and work, open their minds, don't stay in the village; and if they then come back, then at least they have

something in their mind to improve the situation in the village. It's hard to live in the village, they should learn to preserve, not only the sea, but also the land."

Contact with government

Another factor of importance to both migrants and CBMRM is the feeling of isolation from the rest of Fiji. This is linked to certain development shortcomings. Apart from the government station in Qarani, a village in the neighbouring *tikina* on the northern tip of Gau, the people in *tikina* Vanuaso have little contact with government representatives such as ministers or fisheries officers. Doctors, nurses and health inspectors from the medical department responsible for this district, are the ones who visit the villages the most regularly, every one to three months. Other representatives (e.g. from the Ministry for Information Communications and Media Relations) come only one to three times a year, and then stay for one to three days at most, for all three *tikina* on Gau. The Lomaiviti islands provincial meetings are the main way for villagers to make contact with the government. These meetings usually take place two to three times per year, for a duration of three days each, and not on one of the small islands but on the larger island Ovalau or in Suva; hence, away from the village context. Several hundred people attend each meeting, with delegations from each village of two to eight people, depending on who is available and can afford travel costs. When asked what they generally thought about Suva and the government, the eight interviewed elders initially responded positively, but later said: "We don't know whether it's good or bad; we don't even know the government"; "The people working in the government, they do know, that's a good government, but we here in the village we don't know"; "[If] the government they tell lies to us, we don't know"; "In the election for the government, we tick them, but we don't know"; "There are so many politics around today"; "The politics seem to neglect the village people and rural areas"; "Most of the good things seem to focus on the urban people."

Government departments seemingly have little interest in the outer islands (Koroiwaqa 2004; UNESCAP 2003), possibly because of their low level of infrastructure, and *tikina* Vanuaso has not yet attracted any private investors. Nevertheless, Gau's people are able to survive through their own labour and skills, which constitutes an involuntary independence of communities on which the government seems to depend.

Developmental shortcomings include power supply, communication (especially telephone) and transport (especially ferries). Every village in *tikina* Vanuaso has one large village-owned generator that supposedly supplies the entire village with

power between 6:00 pm and 10:00 pm, and with every house paying around FJD 1.50 (USD 0.84) per week for its usage. The power is intended to be used mainly for light (including lights along a main village path), but also for radio, television and video, and freezers (in the village shops). However, because of a lack of fuel or breakdowns, the main generators work at most for two months a year. Some families have bought additional smaller generators for private use that have the capacity to supply one or two households with power. Repairs of the generator (as with TVs, video recorders and radios) must be made by the villagers themselves; and what cannot be repaired locally has to be sent to Suva. This is both costly (e.g. FJD 400 or about USD 220 for the village for the main generator) and time-consuming. Thus, for most of the time, kerosene lamps are still the main source of light, and batteries are the only source of power for radios. Telephone connections in the villages are equally unreliable.

In the 1970s, a coastal road was built on Gau, leading from Lamiti, on the east of the island, to Qarani, in the north. At the same time, trucks were introduced to transport people and goods among the government station in Qarani, the ferry landing, schools and villages, including shops. However, the trucks have not been maintained since the 1980s and have been sold back to Suva. There are plans to reintroduce a truck shared by the villages. In the absence of trucks, fibreglass boats are used for transport among communities and islands. Additionally, a ferry operates irregularly (every two to four weeks, depending on the weather; Fig. 4) between the Lomaiviti islands and the villages, but the service has changed over the past 30 years. "The cargo vessels, they used to stop around the villages [of Gau]"; "Now we have to go to Qarani [northern tip of Gau] and Navuikama [western side of Gau] to arrange your own transport there, or even to the airport, in the south. Before they used to board in our own harbour [Vanuasolo]"; "Today this [the regular transport of goods and people] is time consuming and a financial burden, because you always first have to go there (Qarani or Navuikama)." The exact date of arrival and passage is not known in advance, and everything must be brought by fibreglass boat to the ferry that waits outside the fringing reef. Villagers who have their own boats and have good seamanship skills, go to the mainland by themselves, and sometimes accept paying passengers with their goods (depending

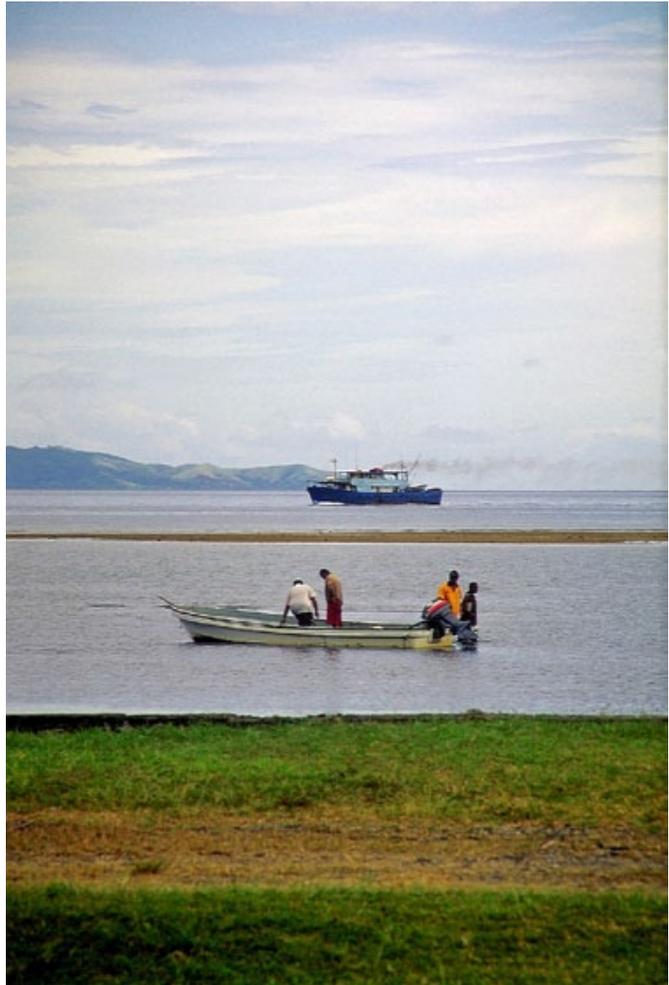


Figure 4. Transport ferry from Suva with local boat waiting, Qarani, Gau Island.



Figure 5. Gau airport with luggage carrier, southern Gau Island.

on the weather and relationships with the passengers). Gau also has its own small airport, with a grass airstrip and small terminal (Fig. 5), which at the time of the study received one weekly flight from Suva (compared with the planned

introduction of two to three flights per week). The ferries, however, are the standard method of travelling between islands, and flights are only used by wealthier community members or by visitors. Transport off the island and contact with other islands, let alone Suva, is rare and unreliable. Regular transport options may be a key factor for decreasing the serious consequences of migration, for supporting CBMRM measures, and for mitigating the effects of these above development shortcomings and the associated isolation.

Diets

People's diet has also changed. Almost every village has at least one small village store selling everyday commodities such as soap, canned meat and fish, coffee, and chocolate powder. Prior to the 1980s, villagers used to eat mainly Fijian food (*kakana vakaviti*). Afterwards, they began buying additional food from the store (*kakana voli*), (literally "processed foodstuffs" "from the foreign people"). As one respondent reported: "Cassava [*Manihot esculenta*] was introduced for the pigs, not for us, not for the family, only for the pig; now, all the human beings eat it." It was also mentioned that people are less healthy today because of these changes, healthy being perceived as strong, fit and active. "There was no sickness like now; before, the men were big and healthy." Despite this complaint, many people still buy food at the store when there is not enough time to garden and fish, or when storms make fishing impossible. For special occasions, however, people continue to prepare more traditional food. Some food, such as prawns or larger fish, are reserved for official guests or for special purposes or events such as Sundays, church meetings, weddings, funerals and Christmas.

It is perceived that traditional foodstuffs — such as local fresh fish and vegetables — were the basis for former strength and healthiness, and that processed food does not deliver these benefits. For CBMRM and the future use of marine resources, this underlines the value these resources have for the islanders' way of life. Nevertheless, if they chose to do so, conditions still allow people to live traditionally from their plantations, eating less sugar and noodles.

Water, the main asset for independent life on small islands, is abundant on Gau, although it varies in quality among the villages. In Malawai, tap water runs 24 hours a day and is of high quality (as confirmed by University of the South Pacific laboratories). In Lamiti, water quality can sometimes be bad, owing to sanitation problems with a recently introduced flush toilet system and land clearing. People from Lamiti sometimes go to neighbouring Malawai to buy or obtain water, especially for newborn babies. Hence, some villages are more attractive to young islanders than others.

Discussion

The considerations described above contribute to the framework of each community's everyday reality in *tikina* Vanuaso into which CBMRM is to be integrated. The fact that these aspects are important for the communities should motivate CBMRM managers to know and understand them because they affect the possible range of their actions. These mainly logistical factors could influence the acceptance and ultimate success or failure of CBMRM regimes in the communities.

Income generation, transport needs and communication technology (e.g. telephone) should be interlinked with CBMRM. When income is generated from the selling of marine products, the link to CBMRM is quite obvious: selling activities should be monitored and registered to record what is being taken and by whom, and where it is sold and to whom. This has yet to been done in *tikina* Vanuaso. There needs to be a mutual adaptation and integration of introduced management activities and income generation from marine resources.

Improved air and sea transport facilities may have multiple effects (Dickhardt 2001), most of which may be relevant for CBMRM. On the one hand, improved transport could increase income generated by non-marine (re-)resources such as crops, which could reduce pressure on marine habitats, an important aspect of CBMRM. On the other hand, better transport could increase the income from marine products owing to more regular access to markets (including tourism), which could easily create conflicts with CBMRM measures. Marine resources could be exploited increasingly and potentially beyond sustainable levels, if sold to newly accessible off-island markets. Only if regulated and monitored carefully, would the selling of marine products accompanied by CBMRM measures be beneficial to communities in the long term, and would potentially enhance interest in and acceptance towards CBMRM and conservation measures.

Increased possibilities of travelling to and from the island might also stimulate information exchange among the islands, enhance the mutual understanding of local and national governance levels through such exchanges, and decrease migration to urban areas, which would have an impact on local management regimes.

Improved communication and a reliable year-round, local power supply could promote income generation, by attracting projects such as a planned fisheries centre with cooling and storage facilities (Alefaio 2003). Such projects would have consequences for employment and for CBMRM plans, for example by restrictions on catch sizes or enforcement of *tabu* area boundaries.

Differences between life on the islands and life in town are constantly increasing, and are perceived differently by the people interviewed. One interviewee commented: "One has to adapt to this [village] life again, it is hard." Observations confirm that some "returnees" seemed unhappy and restless, or without clear direction. Some people seem to be "just hanging around", listening to the radio, or have no skills or now lack the will to do hard plantation work. Some people are viewed as having no specific function within the community or argue with family members about responsibilities. Nevertheless, some of those coming back perceive a better quality of life in the village than in town. For example, they find support (e.g. help with the children) from family members and relatives, there is always something to do, there is no job to lose (and no boss), they can survive on much less money than in town, and there is a closer social life (which, however, could also become a burden in the case of conflicts). For many people, it makes additional sense to return to the village because they maintain general residual rights in their home village (and thus a safe alternative with possible access to land and self-sufficiency), and a village tax must be paid to the native village, no matter whether one still lives there or not.

One useful observation from Gau's recent history is a kind of backward development in the form of an economic and social stagnation of the island during the past 25–30 years. This is also the case for the Lomaiviti and Lau islands (Bedford 1985). Gau had an annual turnover of FJD 900,000 (≈ € 500,000), whereas the more developed neighbouring island of Ovalau had an annual turnover of FJD 92 million (≈ USD 51.5 million) (Alefaio 2003). Gau Island was once economically vibrant but is now economically stagnant (Koroiwaqa 2004). Between 1970 and the 1990s, Gau had a road that was used by small trucks, but that road is now overgrown by vegetation most of the year. Up to 2003, there were a few regular flights to and from Gau, now however flights are only once a week. In comparison, neighbouring Ovalau has retained flights several times daily from Suva. Also, there used to be a regular ferry service between Suva and the villages on Gau, but, this service did not exist in 2003. Alefaio (2003) reported that, "The sustenance of socioeconomic livelihoods in Fiji's maritime provinces depends on shipping, which remains the backbone of island economies." This backbone has been broken, together with the deterioration of the island's main jetties. The largest village jetty, on the island's west coast, collapsed during cyclone Kani in 1992. This was a starting point for the reversed development. Lacking a place to dock, ferry service ceased, thereby deepening the gap between offshore islands and urban centres. The reduced and then arrested development, therefore, had a negative feedback on progress, offering

insufficient development to attract and secure projects and young islanders. The situation worsened, and little was done to help the islanders break out of this discouraging cycle. In short, villagers reported that they needed more money than ever before for everyday obligations, but had fewer possibilities to make or receive an income. At present, rural communities on Gau are becoming increasingly less traditional and correspondingly more undeveloped compared with urban regions of Fiji.

This study demonstrates how villages can become caught between needing development and wanting adaptation and improvement for future generations (for which migration is necessary), and their former traditions, which they lose but still mourn (and for which migration is also a reason). The introduction and also loss of modern technologies such as transport vehicles and electricity, the influence of the church, a growing desire for consumer goods, and the drive to provide education for children have all influenced how and with what intensity people fish and manage their marine coastal resources (Veitayaki and Novaczek 2005). People value the benefits of migration and development (e.g. improved health and education services, skill transfer, remittance payments), but they also recognise "the costs incurred over time, such as the erosion of traditional values, loss of communal spirit, increased stress associated with the need for cash", and tensions between generations and genders (Veitayaki and Novaczek 2005:7). People on Gau are becoming less dependent on traditional cultures, a situation that, a few decades ago, they never would have imagined. Similarly, many people who have made their way to towns or to another country cannot imagine returning to the village.

Finally, correlated with those social and environmental factors are the basic preconditions for making conservation management work — personal security, health and nutrition — which do not exist at any place and time and often are reasons for migration. An almost no-win situation exists in places where these preconditions are critically dependent on a healthy environment (WRI 2005). This dependence is the case in every country where subsistence lifestyles are still prevalent, including in Fiji. In such cases, social resilience — the ability of groups or communities to cope with external stress and disturbances as a result of social, political and environmental change (including migration) — can be linked to ecological resilience (a characteristic of ecosystems to maintain themselves in the face of disturbance; Adger 2000). Therefore, while resilient ecosystems alone may not result in resilient communities, or vice versa, their mutual relevance must be kept in mind for successful CBMRM, with the community — with all its social and ecological characteristics — forming the basis of CBMRM.

Conclusion

In *tikina* Vanuaso on Gau Island, changes in the social and natural environment over space and time are perceived by villagers. The factors observed here may not accurately represent the situation of communities in Fiji as a whole; nevertheless, they are vital and have led to the present status of rural communities. The changes and specific day-to-day concerns that influence management are different in each community, even on such a small scale as along one coastline on Gau Island. This is because they are so highly dependent on the individuals involved who must reorganise their lives and actions in the middle of this change, integrate these issues in their plans in order to prepare themselves to be conservationists and managers of their own environment, while ensuring that their community retains or retrieves an identity, structure and function, and transfers it to the next generation.

For this task, the term “traditional community” is inaccurate, although this romantic idea persists. The community is a basic element of island life. Villagers need to select and decide which of the old rules are still important to them, and which are adaptable. In other words, it is a balancing act between development and tradition.

An easy conclusion cannot be made. Will increasing migration reduce the pressure on marine resources? Possibly not. In general, they will continue to be used more than conserved. Who will take care of the resources that belong to the community? Very few villagers will. Should villagers stay or should they go? They should go and come back to their fruitful islands as successful returners. Thus, there is a need to promote increased options for multiple circular migrations, to attract young educated families and ensure a more flexible and adaptive exchange and management planning.

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Linking global certification schemes and local practices in fisheries and aquaculture

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Abstract

Global environmental certification systems base their legitimacy on consumer concerns, which are facilitated by non-governmental organisations and retailers, and which steer fishers and fish farmers to comply with pre-determined production standards. But while such information flows are clearly demonstrated in complying exporters, it is often less clear how the information is transferred from them to producers. Evidence suggests that in the absence of strong vertical integration, the link between exporters and producers remains a “black box”, confounding assumptions that producers have transparent access to global markets. In order for certification schemes to foster environmental and social sustainability in fisheries and aquaculture, new arrangements for engaging local practices and relations of production and trade are needed.

Introduction

There has been a push to link trade and the environment through new governance mechanisms such as certification schemes. Seafood has been one of the main frontiers of this new wave of environmental certification, with more than 50 schemes currently on the market for capture fisheries and aquaculture combined (Jacquet et al. 2009; Parkes et al. 2010). The Marine Stewardship Council is currently the most well known scheme for capture fisheries, with 139 fisheries or 6% of the total wild capture harvest certified.² There are a number of competing schemes for aquaculture, including the Global Aquaculture Alliance, GlobalGAP and the nascent Aquaculture Stewardship Council (ASC). As major retailers in the USA and Europe continue to make claims of only selling sustainable seafood by some time up to 2020, the role that these certification standards will play is set to increase in importance.

From the perspective of food retailers and processors, environmental certification is a means of ensuring that the conditions of production meet generally agreed upon standards in the sites of consumption (Oosterveer 2005). For them certification is a means of setting auditable standards against which they can claim responsible provisioning of seafood. For their customers, sustainability certification is supposed to also be a means of enacting what has been labelled political or ethical consumerism (Barnett et al 2011; Micheletti 2003) — a process by which consumer knowledge and concerns guide production often in distant locations through

their purchasing power (Whatmore and Thorne 1997). However, this transfer between retailers and/or consumers and producers is complicated by a myriad of other actors that facilitate and influence this transfer of information and market supply and demand through the global value chain — including actors both directly involved, such as traders, exporters, importers and processing companies, and indirectly, such as non-governmental organisations (NGOs), producer associations and governments. Whether and how producers can respond to market demand, and consumers to the complexities of global trade remains an ongoing area of inquiry.

Increasingly evident in global seafood certification is a divide between “developed” and “developing” world fisheries and aquaculture. Of the 139 fisheries that the MSC has certified to date, only 7% are from developing countries (Cambridge et al. 2011). Aquaculture certification schemes have been more successful, given the vast majority of production that comes from tropical countries, especially Asia, but the extent of certification remains patchy at best. Despite the promise of certification as a truly global environmental governance tool, there has been continued failure to effectively target and improve production processes in information-poor developing countries where rules, norms, values and control over production are neither clear nor easily amenable to modern auditing and traceability practices.

In this article we summarise the findings of an earlier study (Bush and Oosterveer 2007) and address some of the challenges related to the successful

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2 See <http://www.msc.org/business-support/key-facts-about-msc>, visited 24 February 2012.

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implementation of certification in developing countries. More specifically, we focus on the practices that exist within the value chain that influence the transfer of market information and pressure between consumers and retailers in Europe and producers in developing countries, using examples from coastal aquaculture in Southeast Asia. First we present the “nitrofurans case” from Thailand, which illustrates how consumer food safety concerns are translated down the supply chain. The second case involves a coastal village in Vietnam where small-scale farmers and fishers have developed new combinations of existing and novel arrangements to sell their produce up the commodity chain. In presenting these cases, we explore how these dynamics both directly and indirectly influence the livelihood decisions of producers and the requirements for more effective governance arrangements that cover not only the quality and safety of food, but also the social and environmental sustainability of the production systems involved.

Value chains and certification

Fish products are now a widely commercialised food commodity in the world, with 50% being traded from developing to developed economies (OECD 2010). The value chains that these products are traded through are, therefore, global in reach and remain one of the most challenging to understand because of the complex interrelations between inputs, outputs and the diversity of actors involved (Thorpe et al. 2005). This is not to say that other value chains are not complex, but only to stress that much of the current literature has focused on industrial or agroindustrial sectors that have a more predictable structure and set of functions than what is found in fisheries. What makes fisheries and aquaculture, especially those in developing countries, more complex is not so much the global commodity flows, but the local relations of production and trade.

To unpack these local relations, and put them into the wider global context, the “new” value chain literature is enlightening. By not only taking vertical relations, which are conceptually emphasised in the “chain” metaphor, but also horizontal relations of production, a more substantive sociological understanding of the influences over transactions and commodity and/or information flows is made possible (Coe et al. 2008; Gereffi et al. 2005; Gibbon and Ponte 2005;). Such analysis also emphasises the specific relations of production and trade at the local level. As fish are caught, processed and transferred to local, national and international markets they pass through a series of scaled networks along the chain, each with their own formal and informal norms, rules and regulations that control and manage activities and social relations. As Goodman and

Dupuis (2002) argue, the extent to which producers can respond to signals in the value chain, such as certification, requires understanding how they respond to institutions that emerge from horizontal networks, such as customary access arrangements, trade cooperative rules, state legislation and global food safety standards.

The linkages between global and local dynamics in global value chains do not consist of a simple process of translation (Oosterveer and Sonnenfeld 2012). Different kinds of dynamics take place at different locations along the global value chain, so it requires an active process of intervention to accommodate them all. In this process not only chain actors are involved, but also non-chain actors such as scientists, politicians and NGOs.

Certification is a governance tool that implies that normatively “good” production practices can be objectively verified, and that in the process, producers are made accountable for their practices. When production is seen as a vertical process of supply and demand, devoid of external social, cultural or political influences, such a cause and effect relation may be possible. But when production is seen in the wider context of horizontal networks the certification process is made considerably more difficult. In addition, the lack of capacity for accreditation, the lack of quantitative scientific data on production practices and high cost of entering certification programs has been a major stumbling block for increasing the participation of small-fishers and fish farmers. In information-rich countries, where there is a relatively clear understanding of the commodity flows certification has proved effective. In information-poor developing countries, where globally networked flows are first and foremost grounded in complex informal sociocultural institutions, relatively free of outside intervention, control may be minimal or considerably distorted.

The effectiveness of certification is, therefore, not measured in terms of consumer steering and producer compliance. Adopting a value chain approach opens up a wider set of questions about the connectivity of vertically related actors who influence the flow of information, finances and materials, as well as the influence that horizontal relations and institutions have on the other hand. But while a considerable amount is known about the flows of goods and information from consumer to exporter in global chains, much less is known about the flows between those exporters and local networks of traders and producers operating in information-poor environments. As illustrated in Figure 1, this missing link between local producers and global networks constitutes a black box that obscures our understanding of both the vertical flow of commodities and the horizontal dynamics between formal and informal actors

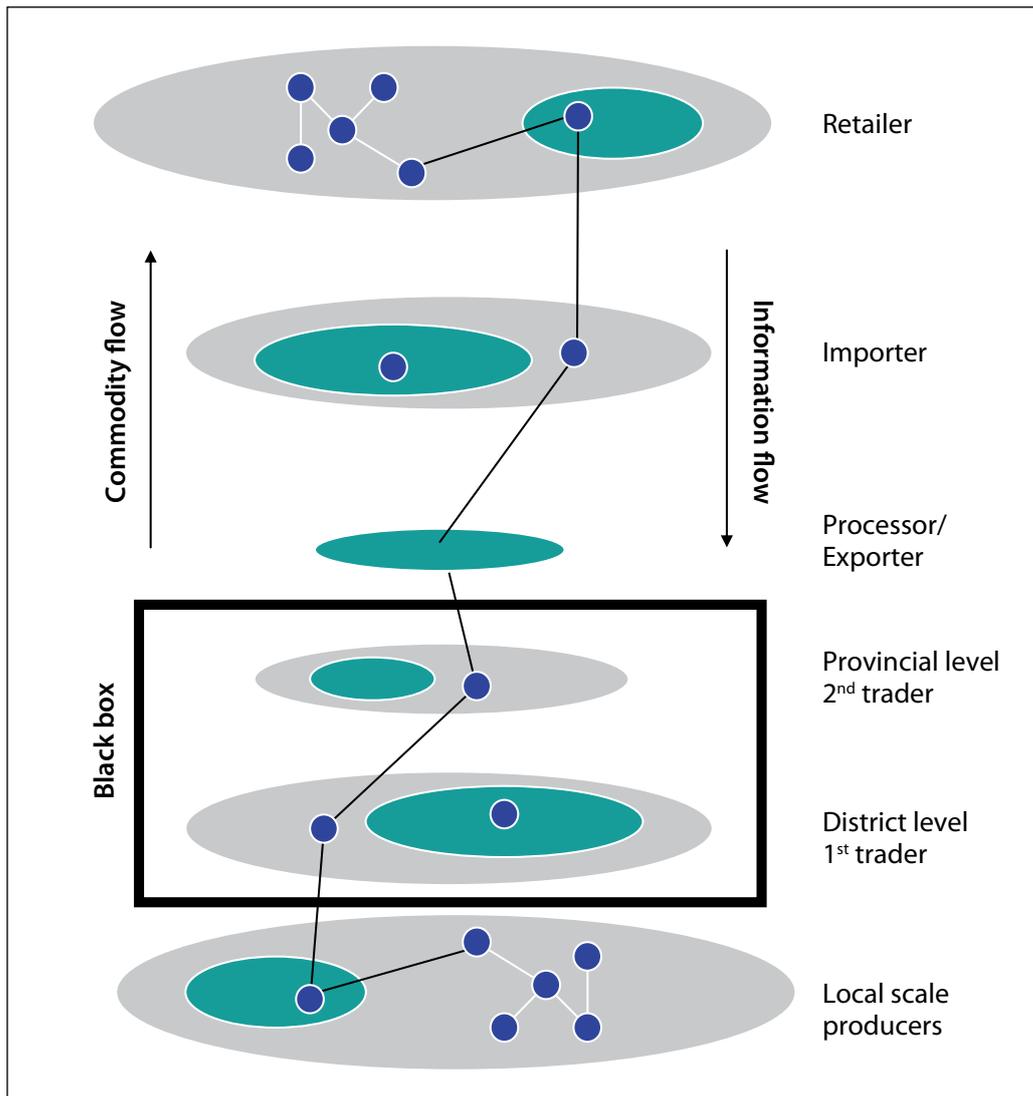


Figure 1. Intersection of global and local commodity chains and networks.

The diagram indicates the flow of information and commodities between nested hierarchical scaled networks. Individuals (dark blue circles) exist either independently or as part of collectives or firms (dark green ellipses). The “black box” bounds the link between producer and consumer, indicating the break in transparent, information flows.

Source: Bush and Oosterveer 2007.

existing within any number of familial, communal, state and non-state based networks.

In practice, this black box means that for certification-led environmental change to be effective, both standard-setting bodies and auditors will have to go beyond the information-rich and transparent segments of the fisher chain, from consumers to exporters, to engage with those actors in horizontal networks that influence capital and information flows through informal, diffuse trade networks. As such, opening up the black box of global value chains remains a key challenge for the inclusion of social and environmental sustainability within certification-led governance. We now turn to two case studies that illustrate diverging examples of how vertical and horizontal dimensions of value chains

influence the capacity of global market actors to influence production practices in Southeast Asia.

Nitrofurans in Thai shrimp aquaculture

The “nitrofurans” incident can be singled out as an example of how global market relations impact local production practices. Thai shrimp production from aquaculture is part of a transnational flow of food, linking producers and consumers at very large distances and bringing together impacts at different scales. Thailand is a leading exporter of farmed shrimp with a global market share of about 25%, representing a value of USD 2 billion (Manarungsan et al. 2005). Local practices of shrimp farmers are closely linked to the transnational commodity flow of shrimp, including related capital

and information. For example, food safety requirements are translated from consumer concerns in the European Union (EU) into production guidelines for shrimp farmers in Thailand. This information dynamic explains why and how pressures to reduce the environmental impact of shrimp production in Thailand have not only been domestic but also foreign in origin, as shown in the case of the use of nitrofurans.

Nitrofurans, a group of antibiotics used in shrimp farming to inhibit bacterial growth, is recognised as a cancer-causing chemical and has been banned by most countries, including the EU, which since 1994 completely forbids its presence in shrimp and other food products. In practice, however, the restricted sensitivity of the techniques used by the EU could only detect the presence of antibiotics above 5 ppb (parts per billion), thereby setting a “de facto” limit in the view of exporting countries. However, the subsequent introduction of new testing techniques lowered the detection threshold to 0.05 ppb, resulting in February 2002 in the discovery by EU customs officials of the presence of nitrofurans in shrimp imported from Thailand.

In response, the EU decided to test all shrimp imports from Thailand and other Asian countries instead of the usual random sampling procedure. As a direct consequence, shipments of frozen shrimp from Thailand to the EU fell from 7,000 tonnes (t) in 2001 to 1,850 t in 2002, and less than 700 t in 2003 (TFFA 2005). Initially, the Thai shrimp industry reacted furiously, claiming that this measure constituted imposing unjustified trade barriers and demanded retaliation by the Thai government. The exporters’ spokesperson complained this was a one-sided measure, misusing the Sanitary and Phytosanitary agreement within the WTO (Manarungsan et al. 2005). However, rather swiftly the shrimp buyers’ association accepted the new requirements and introduced new testing measures to prevent the export of shrimp with unacceptably high levels of prohibited antibiotics.

The European shrimp market is challenging because of a growing range of environmental and food safety concerns among consumers (Knowles et al. 2007). These consumer concerns include sustainable and controlled farming, antibiotic regulation, ethical employment standards, traceability, absence of genetically modified feed ingredients, fishmeal sustainability, animal welfare, no application of genetics in shrimp breeding, and no presence of dioxins, PCBs, heavy metals, agrochemicals or irradiation in the final product (FAO 2004). At the same time, the EU imports about 50% of all shrimp traded internationally and, thereby, constitutes the largest market for shrimp in the world. Therefore, although Thailand at the time only supplied a small

part (3.5%) for this market, the international publicity on the EU ban prompted an overwhelming response from both private and government sectors in other importing countries (Manarungsan et al. 2005).

Under pressure from European consumers, the Thai government enforced a national Code of Conduct for Sustainable Shrimp Farming. This code was developed already in the 1990s to obtain a framework to meet the expressed shrimp farming industry’s goal to take responsibility for its environmental, social and economic impact (Nissapa 2002). The guidelines in this code were, however, never implemented nor effectively enforced because previous to the detection of nitrofurans by the EU, they were not taken seriously. Key elements of the code were the ban on the use of forbidden antibiotics, including nitrofurans, intensified and improved testing, and the introduction of contracts with trusted suppliers and improved traceability and transparency throughout the shrimp supply chain. If all actors involved in a shrimp production chain would abide by this code, the final product could be labelled as “Thai Quality” shrimp. After several years of active promotion of the scheme, it has become an accepted standard for international trade in Thai shrimp.

The national Code of Conduct forced shrimp farmers to abandon the use of banned substances and become much more tightly controlled on their adherence to this regulation than in the past. In reaction, a proportion of farmers left shrimp farming altogether; a choice facilitated by the drop in their income resulting from the decreased demand for Thai shrimp on the global market. However, it was the processing factories, notably those owned by CP (Charoen Popkhand) the largest food processing firm in the country, that were required to submit the necessary information to the EU to avoid substantially larger economic losses. This led to their own process of imposing direct control over farmers with the assistance of state extension services. The shrimp farmers themselves were not actively involved and were simply confronted with strict quality requirements and informational demands from the processing firms. In this role CP, and other processing firms in Thailand, became key players in translating global market requirements into local production practices in coastal Thailand.

The introduction of this Code of Conduct makes clear that contemporary governance cannot be organised by conventional nation-states alone. Production areas, structures of trade and places of consumption may move swiftly without national governments being able to control them. Effective governance of global shrimp trade has to combine various governmental structures and non-governmental actors at different levels and establish

connections between the local dynamics in the production and consumption ends of the global value chain. This case also shows how consumer concerns are often translated by governments and traders or processing firms into standards and guidelines for producers without their active participation. Shrimp farmers seem to be passive recipients of such guidelines although in practice they have to apply them in practice and in doing so they necessarily interpret them in a specific manner.

Artisanal trade networks in the Mekong Delta

The majority of shrimp farmers in Southeast Asia still operate outside the direct intervention of the kind of standards and certification outlined in Thailand. However, these producers remain influenced by a combination of global and local value chain arrangements. Leaving the “consumer-down” chain illustrated by the nitrofurans case we now turn to the case of Ab Cho in the Mekong Delta of Vietnam to illustrate the dynamics of value chain access and governance from the perspective of producers.

Ap Cho is a coastal hamlet in Tra Vinh Province that exemplifies the complexity of customary production and trade arrangements faced by small-scale fishers and fish farmers in marginal coastal areas (Bush 2006). The village was historically dependent on coastal fisheries. But by the mid-2000s, approximately 90% of households in the hamlet had developed shrimp aquaculture farms in mangrove-forested areas with the support of the government. Like many extensive shrimp production systems in Southeast Asia, the farmers have been exposed to a range of production and economic vulnerabilities (Bush et al. 2010). Continual outbreak of diseases such as white spot syndrome has meant that only a third of ponds are successfully harvested, leaving farmers with considerable debt.

When successful, farmers sell their shrimp through a convoluted network of collectors and traders to processors that export to international markets. Unlike the relatively “information-rich” farmers in the Thai case, the farmers of Ab Cho only have a vague idea of where and how the shrimp they produce is finally retailed and consumed. The information they do receive is communicated by local government officials, media sources and local traders, and focuses on farming techniques, such as stocking, feeding and disease management, and market prices. Technical information from traders and local elites is often more trusted by farmers given their closer association with the community. Market information is also channelled through these local traders who pass by the farmers sometimes several times a day on their motorbikes.

The farmers are connected to global commodity flows, but their access is mediated by the complex

trade networks that are in turn directly open to a range of social, cultural and political influences. Meeting either national or international production standards or planning production based on market information is not simply process of compliance, education, and technical capacity. Rather improved production and trade is based on their capacity for negotiating complex local relations in what can be labelled “artisanal trade networks” — often patriarchal and debt-tied. Those farmers that are able to successfully negotiate access are often those with pre-existing social connections to traders, or those with formal ties with local elites (a point supported by Belton et al. 2011; Ruddle 2011). As the head of the women’s union of the commune stated, surviving as a shrimp farmer requires being introduced to reliable and fair traders rather than having information or capital alone. Typically, farmers will establish and maintain patron-client relationships with traders who give lower farm gate prices in return for ongoing access to credit, cash flows, information and market.

For processing companies, these artisanal trade networks provide a means of collecting low volumes of shrimp across a wide area at low cost. But the convoluted nature of collection and trade means that any attempt to provide current information to producers on safety requirements, let alone emerging environmental standards, is severely limited. The companies, therefore, have a choice. They can either draw these traders into their own trade system, or alternatively bypass them by trying to connect to farmers directly. The processing company most directly involved in Ab Cho chose the latter option, and established a series of collection points or trade-posts for farmers. These decentralised branches of the company also provided technical and market information to the farmers, as well as feed on credit. Based on the model presented, it appeared rational for the farmers to engage with the company directly. However, in practice, the approach taken by the company did not appear to be succeeding. Despite overcoming many of the constraints that farmers themselves identified, they were reluctant to break their relationship with local traders.

This then questions the role of so-called middlemen. Should they be seen as rent seekers that limit the income of farmers and drive up the costs of processing companies? Or, should they be seen as essential, socially and culturally embedded actors that enable market access and translate information flows in marginal areas of the global economy? If processing companies do not engage with these actors then the black box of global value chains will likely be maintained. If they do engage traders and collectors more directly, enrolling them into the informational as well as market channels of the global shrimp value chain, then they will harness

the ability of traders to establish and translate both formal (business) and informal (patriarchal) flows of information. This in turn may create more flexible, trusting relationships that allow farmers to gain more predictable market access while at the same time offset the risk and uncertainty associated with production, finance and trade.

Conclusions

Analysing the global dynamics of trade and regulation illustrates how global governance arrangements can influence locally embedded production practices. The combination of vertical and horizontal features in commodity chains is illustrative of these multi-scalar global dynamics, but attention also needs to be given to the specific arrangements under which fishers and farmers operate within their local context, including access to land, technology, market information, finance and trade. As global governance arrangements operating through value chains become increasingly important in the Asia-Pacific region, as illustrated by the growing number of fisheries and aquaculture systems applying for MSC and ASC certification, it is imperative that more attention be given to their influence over local production practices of coastal communities.

As society, and especially consumers, demand greater accountability of how fish are produced, labels are seen as a means of consumer-driven governance. Greater understanding of how interactions between value-chain actors can lead to more meaningful social and environmental outcomes (Bush 2010). Where information and commodity flows are well documented between retailers, wholesalers, importers and exporters, we still know far too little about the interactions between exporters and producers through local trade networks. If small-scale fish producers are to comply with ever-greater production requirements, then certification standards need to better reflect local conditions, including the conditions through which they gain access to markets, finance and information. If they fail to do so, governance tools such as certification will continue to be confronted with limited participation of small-scale “developing world” producers — a problem long identified for MSC (Gulbrandsen 2009) and one which is in risk of being ignored by ASC.

By focusing on capabilities to access artisanal trade networks we can determine how producers, within their local context, can respond to political consumerism aimed at improving social and environmentally sustainability of production practices. Facilitating more socially and environmentally equitable production systems involves engaging with complex, socially embedded networks that control information and capital flows through global value chains, finding novel ways for producers to maintain ownership of successful farming

practices, and enabling support from local authorities before establishing global governance mechanisms through local, regional and global markets.

Further research is particularly needed to elaborate how “artisanal” trade networks facilitate global-local connections. In doing so, emphasis should be given to policy interventions that promote a global auditing culture ahead of local knowledge and social contracts. If assumptions continue to be made about the modernising, and therefore vertically integrating global value chains, then the function of trader networks to absorb risk and facilitating long-distance trade from areas that would otherwise not be accessible to global trade will be lost. Describing the complexity of both formal and informal trade networks above producers and below exporters therefore becomes a key challenge to understanding global commodity chains in both their vertical and horizontal entirety and formulating effective governance arrangements that promote both social and environmental sustainability.

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Global partnership for small-scale fisheries research: Too big to ignore¹

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Abstract

Fisheries support about 8% of the world's population. Fishers tend to be small-scale operators, and so information and knowledge about them is scattered and scarce. Contributions of small-scale fisheries to food security, well-being and resource conservation are mostly unaccounted for in policy and decision-making. The lack of detailed information about small-scale fisheries has resulted in systematic underestimation of their importance in addressing global crises, including malnutrition, poverty and biodiversity loss. The Global Partnership for Small-Scale Fisheries Research, "Too Big to Ignore", has been established to rectify the marginalisation of small-scale fisheries in national and international policies, and to develop research and governance capacity to help address global fisheries challenges.

Introduction

Fisheries support about 560 million people, or approximately 8% of the world's population, and the number is growing (Eide et al. 2011). Of about 34 million active fishers, more than 90% are small-scale operators (Béné 2005; FAO 2010). Small-scale fisheries are known for the diversity of their fishing techniques, methods, and gear types, their intimate knowledge of aquatic ecosystems, their household livelihood diversity, the significant proportion of catches that is shared and consumed at household and community levels, and their contributions to the local and global trade in fish products (Allison and Ellis 2001; Bavinck 2011; Chuenpagdee 2011). Despite their social, cultural, and economic importance, small-scale fisheries have been largely marginalised, ignored or dismissed (Pauly 2006). In many countries, this marginalisation is shown by inadequate financial, institutional, and scientific support for small-scale fisheries, and an under-representation of the concerns of people working in this sector in policy discussions (Béné and Friend 2011; Salas et al. 2007). The prevailing narrative about the dismal state of world fisheries has further obscured evidence about the contribution of small-scale fishing communities to conservation, food security, poverty alleviation, social well-being and resilience, and cultural heritage (e.g. Srinivasan et al. 2010; Symes and Phillipson 2001; Thorpe et al. 2007). In addition, the under-appreciation of the economic importance of small-scale fisheries in sustaining coastal livelihoods is a global phenomenon and concerted efforts are required to preserve the ability and "freedom" of small-scale fishers to provide economic and social well-being locally, and to contribute to global environmental sustainability (Jentoft 2011).

Following the inaugural World Small-Scale Fisheries Congress (WSFC), held in Bangkok, Thailand in October 2010, the Global Partnership for Small-Scale Fisheries Research, "Too Big to Ignore", was established as a forum for collaborative research, policy dialogue and advocacy on issues pertinent to small-scale fisheries around the world. The partnership aims to elevate the profile of small-scale fisheries, to argue against their marginalisation in national and international policies, and to develop research to address global food security and sustainability challenges in fisheries policy. The specific objectives of the partnership are to:

- provide evidence to promote recognition and understanding of the importance of small-scale fisheries to livelihoods, well-being, poverty alleviation and food security;
- explore their potential contributions to economic growth and development, environmental sustainability, stewardship, and community resilience;
- assess their vulnerability to anthropogenic global change processes such as the growth of large-scale fishing operations, climate change, aquaculture development, tourism, marine protected areas, the private enclosure of coastal spaces, urbanization and migration;
- encourage policy discussions and contribute information for improving decision-making about small-scale fisheries; and
- advance knowledge and build local and global capacity in research and governance for the future of small-scale fisheries.

¹ Based on the partnership proposal submitted to Social Sciences and Humanities Research Council of Canada; see www.toobigtoignore.net for more information.

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Key components

The “Too Big to Ignore” partnership consists of three related components. First, the Information System for Small-Scale Fisheries (ISSF) will be developed to capture key parameters of small-scale fisheries, for the undertaking of multi-level and multi-scale analysis of their contributions. Building on the early effort by Chuenpagdee et al. (2006), the ISSF will include, among other things, information about small-scale fisheries across the “fish chain” from aquatic ecosystem to plate (Johnson et al. 2005), including the nature and type of fisheries and fishing activities, fishers’ livelihood portfolio, their relationships with fish buyers and money lenders, rules and norms governing the fisheries, and key issues and challenges. ISSF will be an online, open access, web-based system, made available freely to anyone interested in data sharing and learning about small-scale fisheries. User-friendly interface, analytical tools and visualisation will be key features of the database to encourage user participation, facilitate communication and support decision-making.

The second component of “Too Big to Ignore” is concerned with the major research questions about small-scale fisheries that are important to address given the challenges they face. Based on contributions from WSFC participants, research priorities submitted by 161 people through an online survey, and regional discussions with stakeholders, including members of fishers’ groups and environmental organisations, five main research questions have been formulated to guide in-depth studies of small-scale fisheries. 1) *What options exist for improving economic viability of small-scale fisheries and increasing their resilience to large-scale processes of change?* This question stems from the realisation that the contributions of small-scale fisheries to income and employment have been noted, but there is insufficient understanding regarding the economic viability of this sector. Similarly, large-scale economic, social, political, and ecological change processes are known to affect small-scale fishing people everywhere, but the extent to which these people cope with these impacts is not known. These knowledge deficits create an environment of uncertainty for policy interventions and responses to changes, such as those related to climate change (Cheung et al. 2009), trade and subsidies (Sumaila et al. 2007) and product certification schemes (Goyert et al. 2010; Ponte 2008), which will likely increase the vulnerability of small-scale fisheries.

Decades of social science research have shown that small-scale fisheries are integral to community well-being and contribute significantly to food security, men’s, women’s, and children’s livelihoods, health, community identity, and social cohesion (e.g. Acheson and Gardner 2010; Bennett 2005). The fact that

these contributions are unaccounted for in fisheries policy suggests that comprehensive evaluation may be beneficial. Thus, question 2) asks, *What aspects of small-scale fisheries need to be accounted for and emphasised in order to increase awareness of their actual and potential social contributions and their overall societal importance?* Research to address this question will focus on understanding values of small-scale fisheries beyond economic benefits to consider, for instance, cultural, historical and inter-generational aspects.

The next big question — 3) *What alternatives are available for minimising environmental impacts and fostering stewardship within small-scale fisheries?* — recognises the various levels of impacts from different gear types (Chuenpagdee et al. 2003) and the need for a balanced consideration of factors such as differential capacity and flexibility of gears and fleets in fisheries management (McConney and Charles 2010). Because small-scale fisheries are large in number, and often operate in remote areas, often in the absence of monitoring systems, assessing the impacts of this sector on the environment is a major challenge. An integration of scientific methods, modelling and local knowledge is required to fully capture small-scale fisheries’ footprints, along with efforts to promote sensible conservation and stewardship initiatives.

Fishing is certainly not the only activity taking place in coastal areas. Population expansion, aquaculture, a growing tourism sector, marine protected areas, the emergence of other marine industries such as offshore oil and gas extraction and transportation, and increasing demands on fish and other seafood products have contributed to intensifying competition within coastal zones (e.g. Chen 2010; Pascual 2004). Effects of such competition are mostly felt by small-scale fishers who depend heavily on access to shorelines that are their homes for activities such as shellfish gathering, gleaning, and near-shore or beach seine fisheries, landing and anchoring boats. Thus, we ask, 4) *What mechanisms are required to secure livelihoods, physical space and rights for small-scale fishing people?* Research into factors and conditions underlying displacement of small-scale fishers and reallocation of their *de facto* access, use and management rights are at the heart of this research question (Pinkerton and Edwards 2009).

The final big question is related to governance is 5) *What institutions and principles are suitable for the governance of fisheries?* The underlying observation is that current governance systems are aimed largely at large-scale fisheries and do not sufficiently address the interests of small-scale fishing people, nor enable them to become directly involved in the process of governance. The diversity, complexity and dynamics of small-scale fisheries worldwide,

and the differences between small- and large-scale fisheries, pose major challenges to governance (Jentoft and Chuenpagdee 2009). More effective institutions or new ones may be needed in order to provide places for small-scale fishers to manoeuvre in the changing economic, social and political landscape within which they operate. Recognising that governance principles, norms and values that align well with those of small-scale fisheries are likely to be different from those applicable to large-scale fisheries (Kooiman and Jentoft 2009), research will examine the extent to which existing institutions and governance systems contribute to fostering or inhibiting the quality of fisheries governance.

The final component of “Too Big to Ignore” encompasses synergy creation, knowledge mobilisation and capacity building. Findings from the global analysis of small-scale fisheries, based on ISSF data, and from the in-depth research in multiple case studies to address the big questions will be integrated, synthesised, and communicated to fisheries stakeholders and policy-makers. They will also provide the basis for the development of a trans-disciplinary fisheries course, offered in various languages, and in appropriate ways, such as distance learning, online and off-line self-taught packages, field course training, or as part of the curriculum for degree programmes and other educational initiatives. Innovative tools and approaches in teaching and learning that encourage multidirectional flows of knowledge about small-scale fisheries will be introduced in each module of the training course. The practicum will contain both region-specific and globally applicable case studies. Trainees will be able to interact and communicate with “resident experts” from the partnership group and elsewhere, and among themselves to encourage exchange and learning. Institutions and community groups interested in using the courses will be invited to contribute to the case studies to enrich our knowledge about small-scale fisheries around the world.

Conclusion

Small-scale fisheries are complex and dynamic social-ecological systems. As such, they pose major research and governance challenges, which require a comprehensive research framework to address, one that not only draws on multiple disciplinary foundations but also moves beyond individual disciplines towards a transdisciplinary approach (Tress et al. 2003). While the theoretical and methodological framework for in-depth case study research will be based on disciplinary foundations, and involve the use of tools and approaches drawn from anthropology, conservation biology, ecology, economics, geography, history, political science, public administration, and sociology, a transdisciplinary research approach to fisheries will be

formulated and tested in several small-scale fisheries contexts. “Too Big to Ignore” brings senior and junior scholars from a wide range of disciplinary backgrounds to work in partnership and to interact with fishers, fisheries management professionals, and other non-academic and community members in problem-driven and context-specific research and comparative analysis of fisheries at the global scale. Lessons from these case studies and global syntheses will lead to knowledge synergy and new ways of understanding the dynamics of small-scale fisheries, and offer guidance to help reduce the vulnerability of small-scale fisheries to natural and economic shocks, while increasing their adaptability and empowerment in the face of global change processes. Ultimately, the partnership will augment the profile and capacity of small-scale fisheries in policy agendas and in areas of food security, poverty alleviation, local community development, and environmental and economic sustainability.

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Book reviews

In this edition we feature some of the fisheries-related publications produced by Eburon Academic Publishers, based in Delft, the Netherlands. The company has published more than 1,600 monographs, theses, dissertations, and other academic publications since 1983, and each year Eburon publishes more than 60 books and journals. Well known within the social sciences and humanities, Eburon provides a comprehensive publishing service to societies and individual researchers. Eburon Academic Publishers can be contacted at PO Box 2867, 2601 CW Delft, the Netherlands, or by telephone at (+31) 15 213 14 84, or by Fax at (+31) 15 214 68 88, or by email at info@eburon.nl. Orders can be placed via the website: www.eburon.nl.

Interactive fisheries governance: A guide to better practice

Bavinck Maarten, Ratana Chuenpagdee, Mamadou Diallo, Peter Van Der Heijden, Jan Kooiman, Robin Mahon and Stella Williams. 2005. *Interactive fisheries governance: A guide to better practice*. ISBN 9059720792 / 9789059720794. Pages 72. Paperback, sewn. Price € 17.50.

This guide aims to promote a new way of perceiving and understanding fisheries and aquaculture by presenting a concept that the authors term “interactive governance” to examine the diversity, complexity and dynamics of fisheries and aquaculture. It also provides a framework to understand governance, and based on learning and best practices resulting from fisheries development and management, and tries to provide a set of “guiding principles”. It was aimed at policy-makers, scientists and others involved in fisheries and aquaculture.

The book is divided into four chapters: 1) About this guide, 2) Challenges and concerns in fisheries and aquaculture, 3) The interactive governance perspective, and 4) The ways forward. As implied by its title, the first chapter tells the reader what the book contains. The second briefly examines the challenges and choices facing fisheries and tries to explain the nature of these challenges to make a case for governance that responds to them. The third chapter describes so-called “new interactive governance”. Chapter 4 introduces “the concept of governability”, and suggests that governance can be strengthened by introducing principles and values, promoting inclusion, and learning “to adapt and assure quality”.

World small-scale fisheries: Contemporary visions

Ratana Chuenpagdee (ed.) 2011. *World small-scale fisheries: Contemporary visions*. ISBN 9789059725393. 400 pages. Paperback. Price € 42.50.

This book is about the diverse contexts of small-scale fisheries around the world. The essays included were first presented as papers at the first World Small-scale Fisheries Congress, held in Bangkok Thailand in October 2010. The book is divided into seven sections, of which the first is an introduction entitled “A matter of scale: Prospects and small-scale fisheries”, by Ratana Chuenpagdee.

Section Two, “Challenges and Issues”, contains four essays: 1) Survival of small-scale fisheries in the post-war context of Sri Lanka, co-authored by Gayathri Lokuge and Mohammed Munas; 2) Overcapitalization in a small-scale trawler fishery: A study of Palk Bay, India, co-authored by Jyothis Sathyapalan, Jeena T. Srinivasan and Joeri Scholtens; 3) Vulnerability and adaptation of traditional fisheries to climate change, co-authored by Abdellatif Khattabi and Guy Jobbins; and 4) What restructuring? Whose rationalization? Newfoundland and Labrador’s memorandum of understanding on its fishing industry, by Deatra Walsh.

Section Three, “Livelihoods and communities”, consists of four essays: 1) Women’s contribution in small-scale fisheries in the European Union, by Katia Frangoudes; 2) Fish and fisheries in the evolution of Newfoundland foodways, by Kristen Lowitt; 3) Preserving and managing aboriginal small-scale fisheries: The experience of the Labrador Inuit, by Lawrence Felt and David Natcher; and 4) Contemporary visions for small-scale aquaculture, by Ben Belton and David C. Little.

Section Four, Instruments and reforms, contains six essays: 1) Whose fish is it anyway? Iceland’s cod fishery rights, by Gabriela Sabau; 2) Do all answers lie within (the community)? Fishing rights and marine conservation, by Maria A. Gasalla; 3) Conflicting gears, contested territories: MPAs as a solution?, co-authored by José J. Pascual-Fernández and Raquel de la Cruz-Modino; 4) Governance reforms to develop a small-scale fisheries policy for South Africa, by Moenieba Isaacs; 5) Fishing is our gold mine: Lessons learned from participatory fisheries management in Malawi, by Steve J. Donda; and 6) Towards decentralized coastal management policy in Indonesia, by Sapta Putra Ginting.

Section Five, “Governance and principles”, contains five essays: 1) The national fisheries department and small-scale fisheries management: Fit for purpose?, co-authored by Robin Mahon and Patrick McConney; 2) Fisheries networks in the Caribbean, co-authored by Patrick McConney, Robin Mahon, Kemraj Parsram and Shelley Ann Cox; 3) Good practices for governance of small-scale fisheries, by Anthony Charles; 4) Towards a sufficiency economy for small-scale fisheries, co-authored by Kungwan Juntarashote and Ratana Chuenpagdee; and 5) Subsidiarity as a guiding principle for small-scale fisheries, co-authored by Maarten Bavinck and Svein Jentoft.

Section Six, entitled “Reflections and visions”, contains the following four essays: 1) Governance arrangement for small-scale fisheries: Some reflections from negotiating small-scale fisheries government arrangements in real life, by John Kurien; 2) Views from below: Student reflections on fisheries research, by Andrew Song and Ahmed Khan; 3) What is this thing called “community” good for?, co-authored by Henrik Angebrandt, Lars Lindström and Maricela de la Torre-Castro; and 4) Fisheries development as freedom, by Svein Jentoft. The final section is a summary and conclusion entitled, Too big to ignore: Global research network for the future of small-scale fisheries, authored by the book’s editor.

Successful fisheries management: Issues, case studies, and perspectives

Stephen Cunningham and Tim Bostock (eds) 2005. *Successful fisheries management: Issues, case studies, and perspectives*. ISBN 905972061X / 9789059720619. Pages 240. Paperback, sewn. Price € 24.99.

Fisheries management has experienced more failures than successes. Weak or dysfunctional governance has given rise to perverse incentives for fisheries, which in turn have caused an economic and biological overexploitation of resources, and even threatened some species with extinction. Whereas failures of fisheries management have been widely examined, studies of its successes are relatively rare. This book presents seven case studies of successful fisheries management, with each showing different reasons for success.

After an editorial “overview”, E. Bennett examines “Success in fisheries management: A review”, which is followed by seven case studies. In the first, J.M. Gates describes “The management of the Pacific halibut fishery”. The second, co-authored by S. Cunningham, S. Iyaye and D. Zeine, is “The experience of the Mauritanian Fish Trading Company (SMCP) in the management of the fisheries sector in Mauritania”. Next, by J. Goodlad, is “Co-management and community-based fisheries management initiatives in Shetland”. This is followed by “Traditional community-based management systems in two fishing villages in East Godavari District, Andhra Pradesh, India”, authored by V. Salagrama. S. Alioune and J. Catazano wrote “Self regulation of Senegalese artisanal fisheries: A case study of Kayar”. This is followed by “The Namibian hake fishery”, by P. Manning. The last case study is “The Australian northern prawn fishery”, by I. Cartwright. The first author concludes the volume with his “Conclusions: Factors for success in fisheries management”.

Unfinished business: New Zealand’s experience with rights-based fisheries management

Bjørn Hersoug. 2002. *Unfinished business: New Zealand’s experience with rights-based fisheries management*. ISBN 9051668821 / 9789051668827. 256 pages. Paperback, sewn. Price € 39.99.

This book makes a balanced and coherent assessment of the first 15 years of the New Zealand Quota Management System for fisheries. It consists of 12 chapters: 1) Why study New Zealand’s fisheries?; 2) Background and context – the prehistory of QMS; 3) The initial Quota Management System – From idea to practice; 4) Evaluating the costs and benefits of the QMS; 5) Maori fishing rights – Coping with the aboriginal challenge; 6) Recreational fisheries – Losing out on buying in?; 7) Aquaculture – A new competitor?; 8) Resource rental and cost recovery – See money but for different reasons?; 9) Towards a new fisheries management organisation?; 10) Co-management; 11) Environmental interests – Between use and conservation; and 12) Learning from New Zealand?

Fishing in a sea of sharks: Reconstruction and development in the South African fishing industry

Bjørn Hersoug. 2002. *Fishing in a sea of sharks: Reconstruction and development in the South African fishing industry*. ISBN 9051669127 / 9789051669121. Pages 224 Paperback, sewn. Price € 39.99.

Economic reforms were badly needed in South Africa following the end of apartheid. In the fisheries sector, for example, ownership, vessels, quotas, and processing plants was mostly in the hands of the South African minority of European ancestry. With a New Marine Living Resources Act passed in 1998, the nation could

begin redistribution in fisheries, aiming to create more equal access. This book explains the transformation process that occurred in fisheries from 1994, and focuses on allocation and the use new entrants to the fishery made of their quotas. It provides the first coherent analysis and description of the reform process that occurred in South African fisheries from 1994.

The book contains the following nine chapters: 1) Transforming of Africa's fishing industry; 2) Fishing in a sea of sharks – Reconstruction and development in the South African fishing industry; 3) Change without redistribution: An institutional perspective on South Africa's new fisheries policy; 4) Bringing the state back in – The choice of regulatory system in South Africa's new fishing policy; 5) According to need, greed or politics – Redistribution of fishing rights within South Africa's new fisheries policy; 6) Chaos, adjustment problems or business as usual? – Implementation of a new fisheries policy in South Africa; 7) It's all about the money! – Implementation of South Africa's new fisheries policy; 8) South African fishers on the road to equal access? – From "informal fishers" via "subsistence fishers" to "micro-commercial entrepreneurs"; and 9) The 2001/2002 allocations – A modus vivendi for the South African fishing industry?

Closing the commons: Norwegian fisheries from open access to private property

Bjørn Hersoug. 2005. Closing the commons: Norwegian fisheries from open access to private property. ISBN 9059720741 / 9789059720749. Pages 286. Paperback, sewn. Price € 35.00.

This book traces the development of limited access in Norway back to the 1930s, when the licensing system was established for trawlers. The process is followed through the closing of the offshore fleet in the 1970s, and the coastal fleet in the 1990s. By 2005 more than 90% of all Norwegian fisheries had been closed via various license systems and rights of participation. There are 13 chapters: 1) Norway – The hesitant reformer; 2) The Norwegian fishing industry: Background and context; 3) How to understand the closing process; 4) Limiting access for trawlers: From social policy to conservation of privileges; 5) Capital management on the extreme certainty: The introduction of limited entry in purse seine fisheries; 6) From IVQs to I(T)Qs: The gradual closing of the coastal commons; 7) Long-term allocation keys: Between fine mathematics and crude politics; 8) From IVQs to I(T)Qs: Development of a new structural policy; 9) Paying for limited entry: Fishing fee or cost recovery?; 10) Coping with the aboriginal challenge: The Saami fisheries; 11) Recreational fisheries: A safety valve in the closing process?; 12) Aquaculture: Limited entry but for different reasons; 13) The closing of the Norwegian Marine Commons.

Fisheries development: The institutional challenge

Bjørn Hersoug, Svein Jentoft and Poul Degnbol. 2004. Fisheries development: The institutional challenge. ISBN 9059720253 / 9789059720251. 240 pages . Paperback, sewn. Price € 29.50.

This book results from a long-term research programme on fisheries in developing countries. It explains how fisheries development strategies have gradually changed from simple ideas of modernizing the production and technologies, to complex programmes of management and institution building. The authors highlight the role of the state and community in resource management, and examine the challenges of new concepts like ecosystem management in a developing country context. The book consists of six sections: 1) Introduction: The fisheries development challenge; 2) Exporting fish, importing institutions – Fisheries development in the Third World; 3) The community in fisheries management: Experiences, opportunities and risks; 4) Fisheries science in a development context; 5) To be a Norwegian means you are an expert, Norwegian development assistance in fisheries 1952–2002; 6) Institutions in fisheries: What they are, what they do, and how they change.

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