# Local Capitalisms and Sustainability in Coastal Fisheries: Cases from Papua New Guinea and Solomon Islands

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#### **Abstract**

*Purpose:* To critically assess engagements with capitalism in coastal fisheries development, considering their success or otherwise for coastal villagers.

*Approach:* Using field research and written reports of projects and the concept of 'social embeddedness' we analyse two fisheries development projects as local instances of capitalism.

Findings: Coastal peoples in the Pacific have been selling marine products for cash since the earliest days of contact with both Europeans and Asians. Since the 1970s, there have also been fisheries development projects. Both types of engagement with capitalism have had problems with commercial viability and ecological sustainability. One way to understand these issues is to view global capitalist markets as penetrating into localities through the lens of local cultures. We find, however, that local cultures are only one factor among several needed to explain the outcomes of these instances of capitalism. Other explanations include nature, national political and economic contexts, and transnational development assistance frameworks. The defining features of 'local capitalisms' thus arise from configurations of human and non-human, local and outside influences.

*Social implications:* Development project design should account for local conditions including: 1) village-based socioeconomic approaches, *and* 2) national political economic contexts, *and* 3) frameworks that donors bring to projects, *and* 4) (in)effective resource management.

*Originality/value of paper:* The paper builds on years of experience of the authors across multiple projects. The analysis provides a framework for understanding problems people have encountered in trying to get what they want from capitalism, and is applicable outside the fisheries sector.

**Category:** research paper

**Keywords:** coastal fisheries, coastal resource management, Papua New Guinea, Solomon Islands, aid projects, social embeddedness

#### Introduction

Engagements with capitalism are inevitably shaped by the particular configurations of local, national and global influences in those engagements. Village-based social and economic institutions and market opportunities affect the ways coastal and island peoples in Papua New Guinea (PNG) and the Solomon Islands exploit their marine resources. National government institutions also affect engagement with markets, especially via services for economic activities (such as transport and market infrastructure) and regulation of economic activities (such as environmental protection measures). Engagements with capitalism via the sale of fisheries products are also affected by global markets and corporations, as well as trends in development assistance (aid), the practices of national and international non-governmental organizations (NGOs), and intergovernmental agencies (such as the Food and Agriculture Organization, or the Secretariat of the Pacific Community). The constraints and opportunities these configurations have offered to Pacific Islanders have changed over time through colonialism and globalization, and continue to change with shifts in aid interventions and in the export markets to which villagers sell.

There are several features that distinguish village-level engagement with capitalism in the Solomon Islands and PNG (and many other Pacific Island Countries) including: 1) production for sale is usually part of a household livelihood strategy involving multiple sources of income – fishing, food gardening, cash cropping, market selling, wage-earning, and so on – and in which production for home consumption/gifting to kin and neighbours and production for markets can be mixed; 2) the time and effort spent on any one cash-earning activity may fluctuate due to better opportunities in another cash-earning activity, or due to non-capitalist social obligations overriding the imperative to earn cash; and 3) imperatives to use cash for non-capitalist purposes may drain cash away from a business and cause its financial failure.

Governance frameworks for engagements with capitalism in coastal fisheries in both PNG and the Solomon Islands have two highly significant features. The first key feature is a clientelist, dependent approach to projects on the part of governments and communities. This approach has emerged over a long and complex history of

interactions between local political systems, colonialism and processes of decolonization, and the later activities of aid donors and NGOs. The second feature is that there is often very little governance capacity to conserve natural resources from the excesses of fishing for cash or other cash-earning activities affecting coastal environments. Resource management, either from communities themselves, governments, and NGOs have been unable to provide systematic medium- to long-term protection of small or large scale fishing by locals or foreigners, or from other impacts such as pollution and coastal developments (this problem is, of course, not restricted to the Pacific Islands).

There have been two main outcomes of engagement with capitalism as influenced by these configurations: 1) fisheries that were readily profitable were quickly exploited and stocks were depleted in classic 'boom-and-bust' cycles; 2) fisheries that were not so readily profitable have been subject to several decades of government and donor attempts to develop them, with little success in terms of sustained cash-earning activity, and in some cases has led to overfishing.

The post-development movement has raised a number of important questions about what 'development' actually is and whether it is indeed a desirable aspiration (Sachs 1997). Nevertheless, in low-income counties such as PNG and the Solomon Islands, the fact remains that most, if not all, people want development, including greater access to cash. While development can be pursued in many ways, earning cash by selling produce in markets is a long-established approach and is still one of the main ways rural people in Pacific Island societies pursue their development aims.

The environmental problems with growth-oriented capitalist development are obvious all around the world. Much work has been done on how capitalism may be rendered more sustainable (for example: Daly 2005; 2009; Jackson 2009; OECD 2009; Stiglitz et al., 2009). The United Nations Council on Environment and Development Earth Summit in Rio in 1992 proposed integrated conservation and development projects, which have

<sup>&</sup>lt;sup>1</sup> For critical discussions of the meanings of development in various Pacific Island countries see Barclay (2008); Robbins and Wardlow (2005); Hanlon (1997); Gegeo (1998); Schoeffel (1997) and Sillitoe (1998).

over time evolved into measures such as 'conservation incentive agreements' and 'payments for ecosystem services'. As part of the Green Economy approach, market mechanism solutions to ecological problems are currently dominant in global policy circles, as evidenced by the official report of the 2012 United Nations Conference on Sustainable Development Rio+20 *The Future We Want*.<sup>2</sup> These mechanisms are intended to address local peoples' needs for development from their environmental resources while also addressing the need to maintain global biodiversity values. These approaches, however, treat capitalism as a universal and do not account for varied influences on capitalism at the local level, nor do they consider the social inequalities that may be exacerbated by their implementation. Because capitalist activities are shaped differently in different places, it is also necessary to have knowledge of the locally specific nature of the activities under investigation. The approach taken in this paper to understanding the sustainability of capitalist activities is to explicate the locally specific nature of those activities.

One approach to understanding locally specific human factors in capitalism is that of 'social embeddedness'. This concept was pioneered by Karl Polanyi (1944) who stated that completely unfettered markets would lead to social and therefore economic breakdown, so markets must always be embedded within the law, politics and morality of any given society. Although thinking has moved beyond some of Polanyi's earlier ideas (Swedberg 1994; Granovetter 1985, 2005; Curry 2003), the approach of looking at economic activities as being shaped by local contexts is still proving fruitful for many social scientists (Hann and Hart 2009).

A lot of work on socially embedded economies details how local contexts can cause particular economic forms to develop. This may be at the national level with the salient factors being legal, financial and political, or in industrial sectors affected by their own organizational and business frameworks. The particular economic forms that arise,

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<sup>&</sup>lt;sup>2</sup> There are many critiques against using market mechanisms to try to protect the environment (see for example Thematic Social Forum c.2012; Sullivan 2010). One is that these solutions involve an intensification of capitalism, and since capitalism is the root cause of the problems, solutions should instead focus on de-intensifying capitalism and use non-capitalist modes to address the problems. Another is that these solutions entrench continued denial of diversity of systems of knowledge and of social and economic systems.

especially at the national level, have been analysed by some scholars as 'varieties of capitalism' (Hancké 2009; Boyer 2005; Hall and Soskice 2001). Scholars focusing on groups whose economic system has been predominantly non-capitalist, have argued against conventional understandings of a universal transition to capitalism model, such as that first posed by W.W. Rostow (1960) and still evident in the approaches taken by many development agencies. These scholars have noted that even after many decades of engagement with capitalism, the nature of that engagement is best understood, for some groups, not as a form of capitalism, but as the extraction of material goods from the capitalist system that are then used within local society for non-capitalist ends (Gregory 1982; Sahlins 1992; Curry 2003; see also this volume, especially the chapters by Mosko, Yang, Macintyre and Bainton, and Sharp).

In light of the above, the approach taken in this paper utilizes the social embeddedness approach, but is slightly different from most work on social embeddedness in two ways. The first being, that the locally specific is examined not only as the bilateral interaction between sub-national or national contexts and externally introduced capitalism but rather in terms of sub-national, national *and* transnational influences (including capitalism) simultaneously. The second is that ecology is included with social activities as part of the locally specific nature of capitalism.

The paper first introduces fisheries production for cash markets that have arisen without government assistance, and that have existed since the early days of contact with Europeans and Asians. The paper then moves to its main focus; cash-earning fisheries that in recent decades have been subject to government and aid donor efforts to develop them. The thinking behind this paper emerged from the authors' involvement in several projects. Kate Barclay was involved in postdoctoral research in 2005 looking at tuna as a resource for development for Solomon Islands, PNG, Fiji, Kiribati, Marshall Islands and Cook Islands. Since then, she has done contract research on trade opportunities in fisheries in Solomon Islands in 2008 and on social impacts from tuna industries in PNG in 2012. Jeff Kinch has been involved with implementing aid donor-funded fisheries development projects in PNG since the late 1990s, as well as conducting a wide range of reviews of coastal fisheries projects in both PNG and the Solomon Islands, and the wider island Pacific. To supplement our primary research we

also draw on reports and reviews of coastal fisheries development and resource management projects in the Pacific Islands Region.

#### Coastal Fisheries in Solomon Islands and PNG

Fisheries have long been an important social and cultural component of many coastal peoples in the Pacific Islands Region (Hau'ofa 2008; Darcy 2006). Since frequent contact with Europeans and Asians began in the mid-to late 1800s, Pacific Islanders have increasingly been pulled into the orbit of capitalism through the sale of their fisheries products.

PNG is made up of the eastern half of the island of New Guinea and the islands of New Britain, New Ireland, Bougainville, Manus and thousands of smaller islands. PNG is home to just over 7 million people, with its population growing at around 2.8 % per annum. The PNG economy during the 1990s was characterized by macro-economic instability, stagnation and unemployment. In the last decade increased investments in oil, gas and mineral extraction projects have brought significant inflows into the economy. There are still doubts however as to whether sustained development will occur as projected in the national government's *Vision 2050*, since this will require massive improvements in infrastructure and government services. Economic opportunities are severely restricted for the majority of people in rural areas.<sup>3</sup> PNG is ranked 153<sup>rd</sup> out of 187 countries and territories in the Human Development Index (UNDP 2011).

Solomon Islands to the east and south of PNG is made up of a double chain of six main islands (Guadalcanal, Malaita, New Georgia, San Christobal, Santa Isabel and Choiseul) surrounded by thousands of smaller groups of outlying islands. The population is around 500,000, and is growing at 2.7 % per annum (NSOPNG 2004). Like PNG, Solomon Islands suffers from limited infrastructure and government services, and limited economic opportunities for the majority of its population. In late 1998, long-

<sup>&</sup>lt;sup>3</sup> The 2000 census indicated 85 per cent of the population lived in rural areas (Hanson et al., 2001). This is likely to have reduced with urban drift since then, but the 2010 census figures were not available at the time of writing.

running dissatisfactions about the lack of economic development in some areas on Guadalcanal flared along ethnic lines. Sporadic incidents increased in frequency during 1999 and 2000, culminating in the overthrow of the government in June 2000. Government services were severely curtailed and all major industries scaled down or closed. In 2003, the Regional Assistance Mission to Solomon Islands (RAMSI), led by Australian police and military personnel, re-established order. Solomon Islands is ranked 142nd out of 187 countries and territories in the Human Development Index (UNDP 2011).

PNG and Solomon Islands<sup>4</sup> have some of the largest coastal fisheries in the Pacific Island Region. PNG's coastal fisheries produced an estimated 5,700 tonnes (mt) from commercial fishing and 30,000mt from subsistence fisheries in 2007, with Solomon Islands producing 3,250mt in its commercial fisheries and 15,000mt in its subsistence fisheries. The only other Pacific Island countries with coastal fisheries exceeding 3,000mt for commercial and 10,000mt for subsistence in 2007 were Kiribati and Fiji (Gillett 2009).<sup>5</sup>

As populations grow there will be increasing pressure on fisheries resources, especially around urban areas (Lock 1986, Brewer 2007), and these resources need to be carefully managed to prevent overfishing and to maintain food security (see Bell et al. 2009). There is a paucity of scientific evidence about coastal fisheries stocks in both countries (FAO 2001; Gillett 2010a), making it difficult to determine what sustainable yields might be.

## **Coastal Fisheries Success in Generating Cash**

There have been several fisheries products that for many decades coastal people in PNG and the Solomon Islands have sold for cash (Gillett 2010a). We use the term 'cash fishery' here to mean products that are sold for cash income, but in a production and

<sup>4</sup> In this paper we follow Solomon Islanders' lead in (generally) referring to their country with no preceding 'the'.

<sup>&</sup>lt;sup>5</sup> Since there is no systematic collection of data on subsistence catches in either country these estimates are extrapolations based on previous studies. For further details see Gillett (2009, pp. 128-29, 163-64).

exchange system that may well not be 'capitalist' in terms of the villagers' mindsets and practices with regard to the activity. These include sea cucumbers, various species of shellfish and shark fins.

Shark fins have been a long-term cash product in both PNG and the Solomon Islands (Juncker et al., 2006). Shark fins contain proteinaceous fibres highly prized for use in shark fin soup. The fins are dried and can thus be easily stored for long periods. They are high value relative to their bulk and weight. These features mean they are profitable, even though freight is infrequent and freight costs can be very high in both countries. Shark fins are taken in PNG and the Solomon Islands by artisanal fishing from island communities; and also from industrial longline fishing, some of which are licensed to target sharks directly (in PNG under the National Shark Long-line Management Plan), whilst others catch shark as by-catch when targeting tuna. Most shark species are vulnerable to overfishing primarily due to their long lifespan, late maturation, slow growth rate, and low fecundity. Overall, there is very limited knowledge of the status of shark populations across the Pacific (see Clarke et al., 2007; Lack and Sant 2009). Given regional and global trends (Stephens et al., 2000; Clarke et al., 2007; Opu 2007; Lack and Sant 2009; Graham et al., 2010), and despite more recent regional efforts to manage sharks (Lack and Meere 2009), it is more than probable that shark populations are being damaged by fishing in both countries.

Sea cucumbers have long been caught by Pacific Islanders for export to markets in East and South East Asia (Kinch et al., 2008a). Sea cucumbers are also high value product relative to their bulk and weight. Like sharks fins they are dried so are easy to store. In 2009, PNG was the third largest supplier of sea cucumber, supplying around 10 per cent of the world trade (Kinch et al., 2008a). Previous surveys have shown that sea cucumbers have been overfished in both PNG (Skewes et al., 2002; Kinch et al., 2008b) and the Solomon Islands (Kinch et al., 2006; Ramohia 2006). To address overfishing, the Solomon Islands instituted a fishing moratorium in 2005 (Nash and Ramofafia 2006; Pakoa 2012), and PNG instituted one in 2009. Both are still ongoing, although there is a black market continuing exports.

Shells such as trochus, blacklip and goldlip pearl shells, giant clam, and green snail have all been sold for cash by villagers (Kinch 1999, 2002, 2003; Skewes 1990). Giant clam adductor muscles and mantle and trochus meat are regularly sold at local markets (Kinch 2003) and clam meat has also been exported from Solomon Islands. The export markets for trochus have been for shells for buttons or other decorative purposes, and clam shells have also been exported. Like the other products mentioned in this section, shells are high value relative to volume and can be easily stored until there is suitable transport. Green snail, blacklip pearl shell, and giant clam stocks have all been greatly damaged by overfishing (Kinch, 2002, 2003; Foale 2008a).

These fisheries have been important sources of cash for rural coastal communities. The approach to fishing here is arguably not capitalist, in that people were not accumulating cash to reinvest and thus accumulate more cash. They were raising cash to then use for some other immediate purposes. They were nevertheless engaging with capitalism through these activities, in that the markets they sold in were competitive, with prices set by supply and demand. In addition, foreign traders to which they sold their products did approach the trade in a capitalist way, so the sales were an *engagement* with capitalism, even if the villagers themselves were not approaching the sales as capitalists. For the purposes of this paper, therefore, we use the term 'cash fisheries' to refer to the activities of coastal villagers' engagement allowing that from their perspective the activity may or may not have been capitalism.

Many coastal communities in PNG and Solomon Islands started having some contact with capitalist markets in the early 1800s with whaling boats, and then in the second half of the 1800s trader vessels were plying the coasts. Villagers have been selling marine and agricultural products from this time onwards. Prior to the introduction of capitalism, coastal resources had been utilized for subsistence and local trade. Community-based resource management based on pre-contact systems of resource access and use, however, altered greatly under colonization and exposure to capitalist markets (Johnannes 1982; Polunin 1990; Foale and Manele 2004; Foale et al. 2011). Communities' capacity to manage their own resources varies from place to place, being more effective in villages where local leaders have strong social authority, and less effective in villages where there is high migration or social fragmentation. Villages in

general are not socially cohesive units but are riven by various interest groups (Schoeffel 1997). Furthermore, customary systems of resource management that have functioned well for subsistence fisheries have been less effective when the resources become commoditised (Foale 2005; 2008a). Villagers with few other opportunities to earn cash often exploit their cash fisheries to the detriment of the resource.<sup>6</sup>

Even if community-based management was more effective at controlling the cashearning activities of villagers, many key factors affecting coastal environments are beyond the control of villagers. This includes transnational markets that products are sold to, as well as larger national and international processes affecting coastal environments and fisheries resources. The role of governments is thus key to improving coastal resource management, in regulating environmental impacts, collecting data on coastal environments, and working within intergovernmental efforts for conservation (such as the Western and Central Pacific Fisheries Management Commission). NGOs and aid donors have also played a role through initiatives to try to improve conservation, and through funding livelihoods projects to provide coastal and island villagers with incentives to promote conservation (for example, the Coral Triangle Initiative). Unfortunately, these efforts have also thus far failed to institute effective, systematic, long-term management of coastal resources in both countries (Kinch, 2010).

The supply chains taking marine resources from the commodity-producing periphery to the metropolitan core of shops and restaurants in Asia and beyond illuminates the nature of contemporary capitalism as it manifests in those locations, and the political economy of relations between the various players along the chain. Much could be learned also by going more deeply into the local and exploring the role of these cash fisheries in village economies and cultures (for example, Fabiyini et al., 2012). Our main focus in this paper, however, is the forms of coastal fishery interventions that have been supported by government and donor projects. The importance of the non-project-supported fisheries for sharks fin, sea cucumber and shells for the purposes of this paper is to lay groundwork for understanding project-supported fisheries. First, most

<sup>&</sup>lt;sup>6</sup> The overexploitation of cash fisheries by coastal villagers is frequently noted by people working on coastal fisheries in the region. For example, it was raised by people working at the WorldFish Centre station at Gizo in discussions with Barclay in July 2008.

funded fisheries projects have 'failed' in one way or another, so it is easy to fall into thinking that coastal villagers in Solomon Islands and PNG are simply unable to engage effectively with capitalism. The non-supported fisheries show that villagers are able to conduct ongoing cash-earning activities, selling commodities in markets, so we continue with the rest of our discussion on that basis. Second, the experiences of the shark fin, shell and sea cucumber fisheries highlight the necessity of effective resource management for sustainability in coastal fisheries.

# **Coastal Fisheries Development Projects**

While some of the above mentioned fisheries for dry products have been going on for over a century, very few coastal villagers have supplied fresh chilled or frozen commercial food fish markets in any ongoing way. It has been widely assumed by the public, government and aid donors that it should be profitable to catch fish in rural areas and transport them chilled or frozen for sale in urban areas, or to export them (Lindley 2007; RFEP c.1997; Foale 2008b; Gillett 2010a). From the 1970s, governments and aid donors started projects to provide infrastructure, equipment and/or training for rural fishers to kick-start commercial food fisheries. Most of these activities however, collapsed soon after the withdrawal of support from government or the funding agencies. The types of support given in the projects have also changed somewhat over the decades, partly due to lessons learned from prior projects, and partly in response to changing policy directions in aid, particularly the shift in emphasis from government provision of extension services to a focus on enabling private sector-driven development through partnerships with village fishers and established fisheries businesses (Barclay and Cartwright 2007).

Considering all the investment, why have cash-earning food fisheries not taken off in most rural coastal and island areas in PNG and the Solomon Islands to date? The main reason would appear to be that such fisheries are usually not profitable without high external inputs. Unlike high-value, easy-to-store-and-transport shells and dried marine products, fresh, chilled and frozen fish are low value to weight and are tricky to store and transport in good condition. The costs and difficulties involved in getting fish from rural areas out to markets, and getting fuel and mechanical repairs into rural coastal

areas, usually outweigh the prices fetched by the fish. When the project funding stops, therefore, the fisheries stop soon after (Gillett 2010a; Lindley 2003; 2007; RFEP c.1997; Brewer 2007).

The fishery centre model has for several decades been seen by donors as an appropriate template for projects in the Pacific Islands region (Lindley 2003). A fisheries centre consists of a small building and staff providing services to support coastal fisheries. The kinds of services they usually offer include sales of ice and fuel, buying fish from fishers, and selling fish to villagers. Gillett (2010) estimates that approximately 150 rural fisheries centres had been established across the Pacific Islands Region during the 1970s-1990s, with funding still continuing for some of these. The trajectories taken by fisheries centre projects demonstrate mix of local, national and international socioeconomic and political influences, interacting with biological factors, that make up local instances of capitalism. Revealing these instances of capitalism in this way helps show where coastal villagers have been able to get some of what they want from capitalism, and where they have not, as well as why.

Solomon Islands: Rural Fisheries Centre Projects

In Solomon Islands, 31 fish landing and marketing centres have been set up since the 1980s by various organizations, including government agencies from Japan, Australia, the European Union (EU), and Solomon Islands itself, and an international conservation NGO.

One of the major projects that previously funded rural fisheries centres in Solomon Islands was the EU-funded Solomon Islands Rural Fishing Enterprises Project (RFEP), which had three phases, starting in 1989 and finally finishing in 2004. Initially the centres owned the infrastructure for production and paid local fishers who used them to catch fish. Towards the end of the project, centres adopted a loan scheme for fishers to buy their own boats, with the idea that fishers would have a greater incentive to fish (Lindley 2003). RFEP centres also administered the buying and selling of fish, fuel supply, undertook banking, transport services and marketing to urban areas.

The original fiberglass fishing boats utilized by the RFEP were built locally under the project, but could not carry enough fish, and later versions were redesigned. By 2003, none of the RFEP boats were operating due to a lack of maintenance and mechanical failures. The assumptions made in calculating the profitability of the boats included that fishers would do more than 100 trips a year, but fishers involved generally only did 60-70 trips a year. Reasons fishers did not do more trips included being busy with other farming activities or social obligations, and also factors such as mechanical breakdowns. Even after the project had been going for over ten years, the loan scheme for private ownership of vessels was based on too optimistic catch projections. Another complicating factor was the increase in fuel prices in the early 2000s, and mechanical breakdowns in many of the fisheries centres. Mechanical failure is a difficult problem in rural areas, as new parts have to come in from town or overseas. Consequently, boats or refrigeration equipment may lay idle for weeks or months waiting for repairs. Overall, the fishers did not manage to repay their loans and the boats were all repossessed (Lindley 2007).

Getting the fish from the rural centres to urban markets proved to be an intractable logistical problem for the RFEP. Due to the geographic spread and small population of Solomon Islands, shipping is infrequent and sometimes irregular (see Brewer 2007). In recognition of this, the RFEP trailed using a fish collection vessel, but the large areas needing to be covered meant that the collection vessel became a substantial cost to the project (Lindley 2003; 2007).

It was also hoped export markets would help make the REFP centres profitable (Russel and Buga, 2004). Meeting the food safety standards for Australian markets however was a major problem, which was not helped by the high costs, limited space and general unreliability of airfreight out of Solomon Islands. The low volumes and irregular supply of fish from small-scale Solomon Islands production could not compete against product from industrial-scale operations in Australia and New Zealand (pers. comm., Patrick Purcell [who managed a Fisheries Cooperative project in Gizo from 1991-1998]; Lindley 2003; 2007).

Another aspect of the RFEP that did not work according to plan was that by the end of Phase II, the RFEP centres were to be handed over to local organizations, such as fisher groups and provincial government agencies. These organizations had no track record of managing commercial ventures, and in light of the profitability issues, all attempts to handover quickly floundered (Lindley 2003). The RFEP also suffered from business environment problems during 2000-2003, when the Solomon Islands was gripped by social and political upheaval.

Of the various activities undertaken under the RFEP, one was considered by subsequent evaluations of the project to be worth continuing – that of ice-making in rural fisheries centres. Ice-making was not commercially self-sustaining, the maintenance of ice-making equipment had to be supplemented by donor funding. But the costs and difficulties of this level of support were found to be small relative to the very significant level of commercial fishing it generated. Ice is the key to being able to get fresh fish to market at a reasonable level of quality. In 2007, it was estimated that more than SBD 5.5 million worth of fish annually was supplied to the central market in Honiara (Lindley 2007). Regional Fisheries Centre, such as Gizo in Western Province, and Auki in Malaita Province supplied ice to fishers in their area who in turn brought fish to sell in these regional population centres. The single input of ice enabled these fishers to independently engage with markets in much the same way as they have engaged with markets for sharks fin, sea cucumber and shells since contact with outsiders began in the 1800s. In 2007, 11 of the 31 centres that had been built around the country since the 1970s had been selling ice for 20 or more years (Lindley 2007).

Indications that the socio-economic benefits of the cash-generation enabled by ice-making outweigh the financial costs of maintaining ice-making equipment has been used to argue that ice production should be provided as a public service (Lindley 2007; Gillett 2010). If reliable ice production is maintained in rural areas that have good access to markets to make food fisheries profitable, however, it is more than probable that these same fisheries are likely to run into the sustainability problems that have bedeviled the sea cucumber and trochus fisheries (Gillett 2010a). In parts of Solomon Islands where rural finfish could be harvested for sale, overfishing has occurred (Donnelly, 2001; Foale 2008b; 2006). Without sound resource management systems in

place, enabling commercial food fishing in rural areas may spread overfishing problems from urban areas to areas surrounding rural fisheries centres. The cash fisheries involved in these types of projects that only run for the period of funding then cease, therefore, may not be significantly affected by biological limitations, because the resources are not pushed to the point of depletion. Where the cash fisheries are supported long term, or are taken up independent of support, however, they run into the problem capitalism causes worldwide; environmental damage. The non-human element is thus central to considering why particular instances of capitalism unfold as they do, and whether people are able to make use of it to achieve their goals.

Case Study: Rural Fisheries Centres (RFCs) at Kia, Isabel Province

The Bahana RFC at Kia was originally constructed in 1987 with Australian government funding, and was revamped in 1993 with support from The Nature Conservancy (TNC) as part of a community incentive program centred around the Arnavon Islands conservation program. The Bahana RFC was again rehabilitated as part of the EU's RFEP project (1994-1998), but did not operate during this period due to technical problems with its generator (MPGRD, 1999). In June 2001, a new generator was installed and production started, with 20,880kg of fish and crayfish being purchased by the center in its first year of operations alone (Russell and Buga, 2004). Production dropped, however, in 2002, when the transport of fish from Isabel Province to market in Honiara was disrupted. This disruption was due to concerns for passenger safety as eskies (insulated cold boxes) were blocking passageways on deck. The lack of shipping greatly impacted production as there were no alternatives for shipping seafood to market in Honiara.

As an alternative fishery, the RFC started buying trochus shells, which could be stored until transport to Honiara was available. In 2002-2003, 3,250kg of trochus was bought by the Bahana RFC. The following year only 1,268kg was bought. This was possibly due to a decline in the resource because of increased dependency on it for income, or because other marine resources buyers in Kia were offering better prices than the RFC.

In mid-2003, the policy of not allowing eskies on the MV Isabella was changed, with six eskies now allowed each week (Russell and Buga, 2004). This volume of eskies

amounted to around 30 mt of seafood per year. The Bahana RFC was originally set up with the assumption that it would have a through-put of approximately 50 mt per year (Preston, 1996; TNC, 1995; Telesis, 1995). Furthermore, shipping routes were later changed, on alternate trips the vessel came not to Kia, but to Babahairo on the other side of the peninsula. The extra leg of travel added to transport costs.

In addition to problems getting fish to market, the Kia fishers suffered problems with equipment failure, unreliable supplies of fuel, and in being paid on time due to the station often not having enough cash on hand. For these reasons, none of the fishers for this RFC took up any of the loans made available by the RFEP, but preferred the better money they could make from diving for sea cucumbers (Kinch 2004). The catch rates under the RFEP in 2004 were significantly lower than those recorded in an evaluation of the TNC project in 1996 (Preston, 1996), but it seems likely the lower catch rate was caused by the problems noted above, rather than by stock depletion (Kinch 2004).

The social impact study associated with the RFEP project found communities with fisheries centres had more children attending school; better health indicators; improved lighting and improved communications (summary of evaluations from Lindley 2003; 2007). Preston (1996) determined average net earnings per trip (after paying expenditures, such as fuel, but not including depreciation or maintenance costs) gave a per-person income of between SBD10-20 per day, which was considerably higher than the average basic rural wage in the mid 1990s. Between 1993 and 1996, the number of households receiving some of their income from fishing rose from 58% to 83% (Lindley 2003; 2007).

#### PNG: Rural Coastal Fisheries Development Programme

Like Solomon Islands, PNG has also had many rural fisheries development programs implemented since the 1970s to the late-1990s. These include: the Coastal Fisheries Development Programs in the Gulf and Milne Bay Provinces which ran for almost 20 years and were supported by a series of donors (ANZDEC, 1995); the MOMASE (Morobe-Madang-Sepik) Coastal Fisheries Development Project (MCFDP) which ran for ten years was funded by the German Development Corporation (Pfuhl, 1991; Jarchau,

1995; Hermes and Jarchau, 1993); and numerous smaller UNDP-funded fisheries projects (UNDP 1989). As an example to show the magnitude of this investment, one coastal fisheries project conducted from 2003-2007 cost USD9.5 million, of which the Asian Development Bank (ADB) provided two thirds and the PNG National Fisheries Authority provided one third. Despite large investments over many years, these efforts did not stimulate the development of ongoing substantial village commercial fisheries.

In the early 2000s, the EU Rural Coastal Fisheries Development Program (RCFDP) was implemented in several Provinces (Madang, New Ireland and Morobe Provinces initially and later in the Central Province) around PNG, with the purpose of targeting deepwater snapper. This project aimed to build in lessons learned from the previous decades of coastal fisheries development projects, and was based on the premise that the appropriate role of governments in fisheries development was to provide a framework for the private sector to engage in fisheries production, transportation, marketing, and service and supply industries for fisheries, rather than for governments/donors to do these things. Because most of the recipients of the project did not have a track record in running commercial businesses, the project built in a scheme by which the recipients would be teamed up with established private sector partners (MIRC 2006; pers. comm., Sean Marriot who managed the RCFDP). Fishers were supposed to market all of their catch through their private sector partner, who was also to provide fuel and ice, and cash advances for wages and other costs. The private sector partners were also responsible for extracting cash from the sale of fish and making the monthly loan repayments for the beneficiaries (Kinch 2005).

The RCFDP provided: 1) loans for fishing vessels; 2) fishing equipment; 3) training for fisher groups in fish handling for quality and food safety, and in export marketing; and 3) training for Provincial fisheries officers and fishing groups in resource use and planning involving monitoring and assessment of production data (MIRC 2006). The vessel loans were interest free and had to be repaid within a three-year period. Groups who defaulted on loan repayments had vessels repossessed and the vessels were then given by the project to another group meeting the project selection criteria (Kinch 2005).

In Madang, the RCFDP project was used to provide eight 23 ft fiberglass dinghies which proved to be inappropriate as they did not have the required fuel efficiency, and were not suitable for deep water snapper fishing in the Madang environment.<sup>7</sup> The fuel efficiencies of the vessels in the context of high fuel costs meant fisher groups were restricted to a small range area, with subsequent depletion in fish stocks, notably the larger snappers, and long-lived cod and grouper species (Kinch 2005; Kinch et al., 2005). The climate around Madang was problematic also as the weather made snapper fishing impossible for about six months of the year (Sullivan et al., 2004; Kinch 2005). Some groups that were given vessels were also not experienced fishers (Kinch 2005). All of this affected the ability of fisher groups to fish profitably and their ability to repay their vessel loans (MIRC 2006), especially when fuel costs rose steeply during the project period and fish buying prices remained the same, with profit margins greatly reduced (MIRC 2006; Sullivan et al., 2004; Kinch 2005). As a way to work around this, fishers often chose to sell their fish in local markets, where they could get higher prices and did not have to expend more on fuel taking fish all the way back to the private sector partner as required by the project (Sullivan et al., 2004).

There were also other problems with the private sector partner system, with none of the private sector partners facilitating the project as envisaged in the project design. In Madang, the first private sector partner faltered and left the country. Another private sector partner was involved in tuna catching and canning and this primary concern detracted from its commitment to the project. A third partner moved away from the province (MIRC 2006). Sometimes partners refused to sell ice and fuel when fishers did not land fish back to them, or changed their preference for what kind of fish they wanted to buy but failed to communicate this to the fisher groups (MIRC 2006; Sullivan et al., 2004).

By early 2005 all but two vessels were defaulting on their loans. Three had already been repossessed and redistributed (Kinch 2005). By 2006 only three groups were still fishing, and none of these were targeting deep-water snapper (MIRC 2006). No doubt

<sup>&</sup>lt;sup>7</sup> More appropriate vessels were provided for the project in New Ireland, Morobe and Central Provinces, but there were problems with delays and quality problems in construction (MIRC 2006).

Papua New Guineans involved in the RCFDP, like Solomon Islanders involved in RFEP and similar projects, have garnered skills and equipment from the project and will continue to use these in their economic activities, but this outcome could have been achieved with much less investment.

## Local Approaches to Cash-Earning Activities

Part of the profitability problem in the projects discussed previously lies in unrealistic projections written into projects of the cash incomes fishers would generate from their involvement in these projects. Some targets were definitely unrealistic, but also did not take into enough account the particular ways rural people in PNG and the Solomon Islands generally approach cash-earning activities, including fishing. Reviews of fisheries centres in the Pacific Islands Region have found that a lack of profitability was usually in part due to more modest catches than planned caused by competing agricultural production activities and social obligations (Carrier 1988, Gillett 2010b, Kinch 2008, Kinch et al., 2005, MIRC 2006).

One of the founding assumptions of the RCFDP in PNG was that coastal communities in Madang were primarily fishing people, and that vessel recipients would spend all their working time fishing and sell their whole catch through their private sector partner. Recipients did not, however, fish full time, nor sell their whole catch to the partner. The prevalent economic pattern in the area is that households balance multiple (sometimes competing) sources of income over a yearly period. People make choices among these various options concerning where to put their time and labour, often depending on the relative profitability of the activities. Even if people had fished full time, this would not have improved the financial viability of the project. In fact, because of the seasonality of fishing in Madang, the type of fishing supported by the RCFDP was not possible from June-September, so owning a fishing vessel with loan repayments under the RCFDP was only viable with other sources of income supplementing fishing (Sullivan et al., 2004; Kinch 2005).8 This was also the case with another fishing vessel loan scheme in PNG, for 'pump boats' in Lae (Kinch 2008).

<sup>8</sup> Problems from assuming fishers will work full time when many small scale fishers fish part time also arise in other countries, see the chapter by McCormack in this volume.

In the Solomon Islands people also generally fish only in conjunction with other activities, such as copra production or running a small store. One reason for this is that there are long periods of bad weather when it is not possible to fish but also 'nobody would commit themselves into an occupation full time which might just cease the next month due to the breakdown of equipment over which they have no control, and which may stay broken for several months' (Lindley 2007, 6). Historian Judith Bennett (1987) found that this pattern of engaging in several diverse economic activities rather than committing to any one activity full time has been economically effective and has been the predominant economic strategy for rural households in Solomon Islands since first contact with Europeans and Asians. Prices for tropical commodities in global markets are often volatile, there is no government-funded welfare safety-net and most donor-funded services cannot be relied upon in the medium- to long-term.

The assumption that recipients will fish full time for cash was thus one mismatch between donor expectations and local approaches to capitalism. A related mismatched expectation was about the way people conceive of and use fishing vessels. Projects such as the RFEP and RCFDP conceived of a vessel as primarily used for fishing, having it in constant use for that purpose, and also of connecting the income from the sales of fish to costs of repairs and replacement of equipment and eventually the vessel. Considering the marginal profitability of rural coastal fishing, covering these costs with fish sales may in any case be unviable, but it is also not the way things are done. In Solomon Islands, the only cost usually deducted from the fish price was fuel, after that the money from fish sales was distributed among the people who did the fishing. The vessel, motor and other equipment are bought, repaired and replaced from savings, or development projects (Lindley 2007; pers. comm., Cletus Pita of WorldFish & Patrick Purcell, both in Gizo, July 2008). In general, fishers do not just use their boats for fishing alone, but rather for multiple activities, some of which are cash-earning transport activities, which can help with the economics of running the vessel (Lindley 2003).

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<sup>&</sup>lt;sup>9</sup> The main people in Solomon Islands who fish full time are landless 'Fishing Village' communities in areas around Honiara and Gizo, who do not have the option of agriculture, and for whom ice and markets are accessible (Lindley 2007).

The majority of small business efforts in PNG have been affected by a variety of cultural expectations, including social pressure on the would-be entrepreneur to be seen to be generous. Generosity is typically achieved by redistributing accumulated wealth amongst kin and/or the community. This impedes the accumulation and maintenance of capital, in the form of assets or cash (see discussion on redistribution vs accumulation in relation to capitalism in other chapters in this volume by Bainton and Macintyre; Boyd; Yang; Sharp). One study of a fish freezer project in Manus in the late 1970s found that benefits from the project were carefully and extensively distributed among all people contributing to the project, and that strong norms against anyone accruing more material benefits than anyone else acted as a disincentive for people to try to accumulate wealth, with concomitant effects on capitalist development (Carrier 1988).

The accumulation of money in PNG and Solomon Islands is often cyclical in nature, following forms of co-operation within kin groups. Usually, high levels of co-operation are required, planned for and achieved, for a single event or goal, such as a feast or church offering. For these communal efforts, or for smaller family enterprises, a business or other income generating activity is often initiated to achieve a set goal, then is allowed to decline. For many rural people, therefore, business is not an end in itself, that is, it is not a long-term asset, but rather a means to fulfill a short-term goal (Brooks 1996; Kinch 2007).

Rural people living on their land are able to treat business in this way because they do not depend for their survival on the long-term success of their business; the environment still has the capacity to provide food and shelter. Having the capacity to live off the land also influences the calculations people make about effort in a cashearning enterprise relative to the cash returns and the value they place on those returns. Some oil palm producers in PNG have chosen not to put in extra effort that would result in larger incomes, because they felt the drop in quality of life that would occur from putting in that extra effort was not worth it (Koczberski et al., 2006).

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 $<sup>^{10}</sup>$  Particularly in PNG the proportion of people able to live off their land is already changing with urbanization. With population growth the proportion of people relying on cash for their survival will increase in future.

The motivation to be involved in development is not just about material needs and wants, but is also about prestige. George Curry (1999) has noted that the ownership of a trade store in PNG may be a source of continuing prestige as a manifestation of the modern cash economy, even if the shop itself has closed down for financial reasons. Similarly, the boats and engines in fisheries development are a source of prestige for the group managing them, even if only for a short time and the business aspect of the project fails.

Social obligations around important customary events also influence the operation of businesses. For example, a man leading one of the recipient groups in the RCFDP project stopped selling fish to the private sector partner for some months when one of his children died. During this time he continued to draw down on fuel and ice from the partner because he was fishing for cash to use for funerary costs and other social obligations related to his child's death (Kinch 2005). This recipient thus 'failed' according to the project criteria, although from his perspective the project may well have helped him fulfill his required social obligations.

Local cultures and their influences on the ways people engage with capitalism, however, are only part of the picture of why villagers, governments and aid donors continue to invest in rural coastal fisheries projects despite ample evidence that the project aims are likely to be unfulfilled. Indeed, to look only at local cultures for the reasons for project 'failures' may feed the idea that there is some problem with local cultures that needs to be fixed for local people to be able to enjoy the fruits of modernity. People engage with capitalism not only from within their local cultures, but also from within their national and global contexts. And indeed, engaging with capitalism is not a one-way process in which all the variables lie on the local side of the people doing the engaging, with capitalism being some kind of normal universal constant. Capitalism is a multifaceted phenomenon, and the particular strands that are salient in any given locality are part of the variability of the local. In other words, the types of influences from outside cannot be assumed but must also be investigated (Paulson and Gezon 2005). For the purposes of this argument we discuss national and transnational

<sup>&</sup>lt;sup>11</sup> This idea took root in the colonial era, but continued through modernization theory, and survives in some discourses of development (Sachs 1997).

influences on rural fisheries together as aspects of a kind of capitalism that arises in aid projects.

#### Project Capitalism

Development projects have a political economic meaning derived from histories of colonialism, decolonization, independent government, and decades of aid. This kind of engagement with capitalism through development projects for food fisheries has been quite different to the engagement in markets for sea cucumbers, sharks fins and shells. Engaging with capitalism through a 'development project' is a very particular activity.

The RFEP (Solomon Islands) and RCFDP (PNG) projects are representative of a trend since the 1990s by many of the large aid donors that development should be driven by the private sector, and that aid projects should therefore aim to support the emergence of commercially viable enterprises. This is in part because an earlier generation of fisheries development projects implemented by governments failed (Barclay and Cartwright 2007). But it is also related to the rise to prominence of neoliberalism in policy circles, especially among the Western powers and in international financial institutions such as the World Bank and International Monetary Fund (Mosse and Lewis 2005). It has also been part of the post Cold War 'Washington Consensus' norms about ways of encouraging economic and political development internationally.<sup>12</sup>

It is interesting that donors who are on the one hand concerned that projects facilitate the emergence of ongoing commercially viable businesses have, on the other hand, included key elements in their fisheries development projects that prevent profitability. We have highlighted several of these points for the RCFDP and RFEP already, but to underline the point it is worth expanding on two features of the RFEP. Phase II of RFEP included a collection vessel to bring fish to market. Five such vessels for Solomon Islands coastal fisheries had been funded by donors from Japan, New Zealand, and United Kingdom over the decades (, and for all of them, the costs involved in covering large areas were not met by the sale price of the fish. The same was found in PNG and

<sup>&</sup>lt;sup>12</sup> This is not to say all donors have followed the same pattern. Japan, for example, has focused on subsistence fishing rather than commercial fishing for much of its aid program (Barclay and Cartwright 2007).

Vanuatu. Despite all this evidence, the RFEP Phase III included a fish collection vessel, which detracted again from the project's commercial viability (Lindley 2003). The RFEP Phase II also included a financial analysis of operating a fisheries centre and showed clearly that if depreciation, wages and administration costs were taken into account, the fisheries centres would not cover their costs (RFEP c.1997). Experiences with rural fisheries centres elsewhere in the Pacific also echo this finding. Yet Phase III of the project included an objective for the centres to be operating on a self-funded basis for at least three years after the end of the project (Lindley 2003).

It is not just donors who have failed to grasp the commercial realities of coastal fisheries. Pacific Island governments and recipient communities are active (if subordinate) participants in aid projects, and the message about the lack of profitability of fresh food fisheries from most rural locations seems not to have penetrated here either. Pacific Island governments and recipient communities generally continue to believe that rural fisheries centres can be profitable, or at least cover their costs, despite several decades experience showing that most, if not all, have cost money to run (Gillett 2010b).

Why do aid donors and recipient countries persist with such projects even after ample demonstration of project failure and flaws? Many authors over the years have grappled with this question about the aid industry (for example, Easterly 2007; Ferguson 1990; Mosse and Lewis 2005). For fisheries projects in the Pacific in particular, several explanations have been suggested. One review found that international agencies and government people operating coastal fisheries projects rarely had any business experience as such, but rather tended to have backgrounds in development bureaucracy and biology-based fisheries management respectively (Gillett 2010b). Another problem is that the business development objectives of aid donors can come into direct conflict with the poverty alleviation objectives of those same aid donors. Poverty alleviation and related concerns are articulated in the Millennium Development Goal approach to development, which coexists with the Washington Consensus as a key normative framework for development assistance for many of the main donors, including the EU. Fisheries centres have sometimes been located where there is most need for livelihoods

support, but since proximity to markets is a key factor for commercial viability, these dual aims may cancel each other out.

Furthermore, aid donors and recipient fisheries departments have reasons for wanting projects to go ahead. The self-interest of donor states or the internal concerns of their development agencies may drive projects. Aid flows have made up a significant proportion of government revenues for PNG in the past, and still do for Solomon Islands, so it is unlikely recipient governments will reject aid for not meeting the donor's criteria. Recipient government officials' political and pecuniary interests may also be at play. When decision makers determine that a project will go ahead even if it is not commercially viable, but donor policies stipulate projects can only go ahead if they are commercially viable, clearly there is an incentive to inflate the likely financial returns to facilitate the release of funds. Such projects may be beneficial for some, even if they are not profitable for the stated beneficiaries. One review of the RFEP found that donors, fisheries department officials and the politicians whose constituencies receive projects were happy with the system by which unreachable financial returns are knowingly built into projects (Lindley 2007).

The role of national political culture in this phenomenon was explained in an analysis of a fish freezer project in Manus, PNG (Carrier 1988). Politicians need to bring visible development projects, such as fish freezers, to their constituencies to fulfill expectations of development and to be reelected. Voters continue to demand such projects even though they are usually disappointed in the outcomes because projects require ongoing systems of government regulation and support to work well. Mundane services, however, do not have the same political cachet, and are not widely understood as being as important to development as the visible project. There is thus not the same political incentive to provide such services (Carrier 1988), and they continue not to be provided.

National political contexts also affect the operation of projects in other ways. Projects such as the RFEP and RCFDP were predicated on the assumption that people would take the project and run with it independently. This assumption runs counter to the fact that donor activities and national political processes over the decades have given rise to a dependent and clientelistic approach to projects. In both PNG and the Solomon Islands,

political culture is very much organized along patron-client lines.<sup>13</sup> The roots of this may be in indigenous authority systems, but no doubt the nature of colonial government, post-Independence government and the ways the aid industry has functioned in these countries have entrenched the patron-client approach to the distribution of goods in society. Tobias Haque (2012) has argued that many of the commonly identified problems with development in Solomon Islands are the result of "perverse material incentives prevailing under existing policy and institutional settings" (p.1). John Cox (2009) has pointed out that patron-client relations are the prism through which Solomon Islanders view government and the development projects that form such a large part of Solomon Islands government. The result is that people approach projects as supplicants, not as equal and independent actors. Bennett (2002) has described this historical process in Solomon Islands as giving rise to 'mentalities of dependency' with regard to government and donor-funded projects.

The patron-client approach has clearly influenced the ways people have related to fisheries projects in Solomon Islands. An institutional analysis of the Solomon Islands Ministry of Fisheries and Marine Management found patronage was a strong feature of the organizational culture (Wilson 2007). An evaluation of the RFEP project found that the project itself had over time encouraged a dependent approach to the project on the part of recipients. That is, in Phase I and II the RFEP, fishers did not have to maintain their boats and fishing equipment, the project did that for them through the centres (RFEP c.1997). The history of the project itself, as well as the wider context of project funding and government, therefore contributed to fishers relating to the project in a dependent and clientelistic fashion.

The mistaken assumption that an independent entrepreneurial approach would be taken in the projects was just one of problems that arose from misunderstandings of how the projects would work in local/national contexts. Both the Solomon Islands and PNG rural projects analysed here suffered from a lack of care in political positioning, meaning that provincial government stakeholders, and even recipients themselves blocked parts of the projects (Lindley 2003; Kinch 2010). In Solomon Islands rural stakeholders were not engaged in the project design phase but were asked to comment

<sup>&</sup>lt;sup>13</sup> Scott 1972 used this model to explain SEA politics.

on the project after it had already been decided on (Lindley 2003). Communities were treated as groups with homogeneous interests, whereas in fact there were significant divisions within communities. Groups who felt their interests were not being furthered by the project thus caused problems with 'political interference' and 'lack of cooperation' (Lindley 2003 p. 6).

Another misunderstanding of how projects would be received was related to the norm that development should be driven by the private sector. As mentioned earlier, in international development circles since the 1990s, capitalist entrepreneurs have come to be seen in a very positive light as the most appropriate drivers of economic development. In PNG, the national level of fisheries administration was thoroughly renovated in the 1990s to form the National Fisheries Authority (NFA). NFA staff are better versed in international discourses about private-sector driven development. NFA, however, is an exception. Fisheries bureaucrats elsewhere in the Pacific, including provincial government fisheries bureaucrats in PNG, do not necessarily share a positivist view of capitalist entrepreneurs. For example, in a Fijian fisheries centre project government officials represented 'middle men' not as a dynamic part of a private sector that enables fisheries producers to get their fish to market, but as a parasitic problem to be 'done away with' by government-run fishing centres (as quoted in Gillett 2010b). In PNG, Provincial Fisheries Officers, who have always been the administrators and managers of fisheries projects, regarded the private sector with 'deep suspicion' (MIRC 2006) and did not take on the role of facilitators of private business development as envisaged in the RCFDP project design (Kinch 2010).

In sum, rural fisheries development projects in Solomon Islands and PNG have constituted a very particular type of capitalism. In fact, it could be argued that the projects were not capitalist at all, as the recipients did not approach their activities within the projects in a noticeably capitalist manner and donors and recipient governments did not orient their handling of the projects to optimise capitalist approaches. However, the projects may be considered capitalist in different ways. One is that they were about using market sales as the way to generate wealth. Even if fishers did not approach their activities in a capitalist way, the markets they participated in were arguably capitalist. More significantly, the projects were underpinned by a certain

vision of economic development driven by private sector entrepreneurialism. The normative thrust of these projects is that fisheries development *should be* capitalist. These projects failed because they were based on the assumption that the activities would be capitalist, when so many influencing factors discouraged a capitalist approach. Moreover, even if all players had approached the activities in a more capitalist manner, and government had been more prepared to support the activities, the projects still would have failed because the activities were not profitable. And even if the activities could be rendered more profitable they would most probably run into biological sustainability problems.

#### Conclusion

Donor-funded projects are a prominent part of the development landscape in Solomon Islands and PNG. The activities that these projects have attempted to develop however, have not been commercially viable, because they have not taken into sufficient account the locally specific aspects of capitalism. By locally specific aspects of capitalism we do not just mean village-level cultural approaches to market activities. Examples given in this paper show that local capitalism is shaped by a combination of village-level, national-level and transnational-level human influences in interaction with ecology. Projects have been stymied by assuming a full time work ethic (village-level), by ignoring the patron-client nature of government and projects in PNG and Solomon Islands (national-level), and through the counterproductive approaches donor agencies themselves may bring to projects (transnational-level). If these problems were fixed and the projects rendered more commercially sustainable then, like the longer-running fisheries for sharks fin, sea cucumber and shells, biological sustainability would become an issue.

Sustainability is key for Solomon Islanders and Papua New Guineans to be able to pursue their development aspirations through their coastal resources. Although there are various ways development may be pursued through coastal resources, selling fisheries products in markets is the most easily accessible and widely accepted model. Fisheries development projects as they have been conceived since the 1970s have not effectively facilitated sustainable cash fisheries, in a commercial or environmental

sense. Increasingly people working in fisheries development recognize this, and especially in the last decade have attempted to rectify the situation, but have still met with limited success. Determining how future projects will be shaped by the particular configurations of village-, national-, and transnational-level influences, as well as ecological factors, and considering the kind of capitalism the project hopes to develop, would better facilitate long-term commercial viability while maintaining social cohesion, cultural integrity and resource sustainability.

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