



UNRISD

United Nations Research Institute for Social Development

Challenging Elite Capital Control Through New Forms of Cooperation

*The Case of Small-Scale Fishers in the Coromandel coast,
Tamil Nadu*

Nitya Rao
University of East Anglia
UK

Renganathan Manimohan
Fisheries Management Resource Centre
India

Draft paper prepared for the UNRISD Conference

**Overcoming Inequalities in a Fractured World:
Between Elite Power and Social Mobilization**

8–9 November 2018, Geneva, Switzerland

The United Nations Research Institute for Social Development (UNRISD) is an autonomous research institute within the UN system that undertakes multidisciplinary research and policy analysis on the social dimensions of contemporary development issues. Through our work we aim to ensure that social equity, inclusion and justice are central to development thinking, policy and practice.

UNRISD ▪ Palais des Nations ▪ 1211 Geneva 10 ▪ Switzerland
info.unrisd@un.org ▪ www.unrisd.org

Copyright © United Nations Research Institute for Social Development

This is not a formal UNRISD publication. The responsibility for opinions expressed in signed studies rests solely with their author(s), and availability on the UNRISD website (www.unrisd.org) does not constitute an endorsement by UNRISD of the opinions expressed in them. No publication or distribution of these papers is permitted without the prior authorization of the author(s), except for personal use.

Abstract

This paper explores new forms of cooperation emerging amongst small-scale fishermen in the east coast of Tamil Nadu, as responses to wider transformations in fisheries and coastal landscapes. Increase in competition for limited, open access resources, has pushed towards a greater capitalization of fisheries, with those able to invest reaping benefits and others reduced to a labouring class. In order to retain their status as fishers rather than labourers, and gain a voice in decision-making structures, dominated by the traditional elites, several men, especially younger men have been experimenting with new forms of cooperation involving the shared ownership of large boats, engines and other modern technologies. In the process, one finds shifts in class, caste, gender and generational roles, relations and identities.

Based on data collected from a survey of 200 households and in-depth interviews with about 20 households in Cuddalore district of Tamil Nadu, we explore the processes of negotiation and renegotiation of both gender and class identities, and their intersections. How are new institutional practices and forms of cooperation (and conflict) enabling a more equitable sharing of resources and benefits, and in which ways are they further entrenching inequalities? What are the possibilities for sustaining and further developing progressive alliances for social change?

Keywords

Elite capital; cooperation; shares; Tamil Nadu; fisheries

Bio

Nitya Rao is Professor, Gender and Development at the School of International Development, University of East Anglia, UK. With over 30 years' experience as a field-level practitioner, trainer, researcher and teacher, she has worked extensively in the fields of gendered land relations, food and nutrition security, migration, education and intra-household relations, and has published in a range of international journals.

Renganathan Manimohan is Research Coordinator with Fisheries Management Resource Centre (FishMARC) at Trivandrum, India. His research interests include the political economy of natural resource management and policy, particularly focusing on land, water and fisheries in Tamil Nadu, India.

Introduction

India has witnessed a gradual mechanisation of marine fisheries since the 1960s, popularly called the 'Blue Revolution' (Bavinck 2001). The introduction and expansion of trawl fishing coincided with the location of rich shrimp grounds in the Indian Exclusive Economic Zone and development of an export-oriented industry for shrimps (Pillai and Katiha 2004)¹. State investments in infrastructure such as boatyards, harbours and post-harvest technologies, the establishment of the Marine Products Export Development Authority (in 1972), and subsidies for craft, gear and fuel, provided impetus to this shift. The growth in marine fisheries, focusing on commercialization and export oriented reforms, reiterated by the National Policy on Marine Fisheries, 2017 (GoI 2017), has attracted investments by the private sector in a range of support industries (Kurien 1978; Subramanian 2009), making India 7th in global marine capture fish production (Sathianandan 2017).

This early period marks the beginning of visible class formation amongst the fisher-people – between trawl owners and small-scale fishers; alongside a working class employed on the trawl boats and in the service sector surrounding each harbour (Bavinck 2014; Ram 1991). Today, 34 percent of the marine fishers in India are in the mechanised sector, but they account for 70 percent of the catch – twice that of the motorised, and nine times more than the traditional fishers (Sathiadas, 2009). Average incomes reflect this disparity, with the annual per capita earnings of fishing labour ranging from Rs 13,200² for a motorized *dingi* with bagnet to Rs 1,27,200 for a mechanized purse seiner. Significant variation is also observed within groups of crafts namely trawlers, gillnetters, purse-seiners, motorized, and traditional crafts (Ibid.). It is therefore not surprising that while marine fisheries in India have often been considered better paying than other primary sectors (Bavinck 2014), nearly 61 percent of fisher families are classified as *Below Poverty Line* (CMFRI 2010a).

The same trends are visible in the fisheries sector in Tamil Nadu. Following the introduction of mechanisation (trawling) in the late 1960s and its expansion in the 1970s due to the attractive international prices of shrimps, conflicts emerged with the artisanal sector (Vivekanandan and Kasim 2011). To resolve these conflicts and protect artisanal fishermen, the State Government in 1978 devised the 3-4 day rule in the Palk Bay that restricted the trawler fleets venturing into the sea to three days in a week, allowing the artisanal fishers the remaining four days. In 1983, the Tamil Nadu Marine Fisheries Regulation Act (TNMFRA) stipulated a three-nautical mile zone for the exclusive use of artisanal fishers (Bavinck 2001).

The 2004 tsunami was, however, a turning point. Debilitating losses of both lives and property led to an uncontrolled distribution of fishing equipment leading to the near total motorization of artisanal fishing on the east coast of Tamil Nadu (Pillai and Thirumilu 2005; Bavinck 2008). Alongside the expansion in the trawl fleet, this intensified the density of craft and competition within the artisanal sector. Overlapping of fishing territories and violations of TNMFRA (Lawrence and Bhalla 2018) lead to a sharp decline in the catch per unit effort (Bhathal 2014:98-99; Vivekanandan et al. 2005). The post-tsunami reconstruction of fisheries thus intensified class divisions, based on the ability of fishers to invest in mechanised boats and

¹ Facilitation of exports through the establishment of seafood processing units with modern machinery for freezing and value-addition, has contributed to an exponential growth by over 55 times of seafood exports from India (15, 762 MT to 862,021 MT) between 1961 and 2012 (MPEDA 2012).

² 1 GBP = INR 95.

modern gear. Conflicts re-emerged and attempts to deal with them have thrown up institutional innovations by small-scale fishers. Their strategies to remain viable, however, often framed within the dominant discourses and practices of neoliberal capitalism (Mansfield 2007; Sundar 2010), involve processes of accumulation, albeit circuitous and indeterminate (Sneddon 2007). They also involve the search for new fishing grounds, further away from home, with implications for labour mobility and labour relations (Rajan 2002).

In this paper, based on data collected from Cuddalore district in Tamil Nadu, we explore how small scale artisanal fishers are coping with the decline in near-shore fish catches and the rapid mechanisation of the sector. In particular, to what extent are changes in labour relations and institutional mechanisms, with the emergence of new forms of cooperation (and conflict), enabling a more equitable sharing of resources and benefits, and in which ways are they further entrenching inequalities? What are the possibilities for sustaining and further developing progressive alliances for social change? Our focus is on the interlinkages between technology, capital and labour, and its implications for classed and gendered subjectivities in fisher communities.

After briefly setting out our conceptual starting points in the next section, we move to a discussion of our methodology and study context. We then discuss our main findings, analysing the implications of changes in patterns of capital and labour mobilisation on norms for sharing and cooperation, and inequalities more broadly, before briefly concluding.

Conceptual Starting Points

Much social science research in the field of marine or inland fisheries, as indeed in the realm of common property more broadly, has adopted a political ecology approach to enquiry and analysis, unpacking nature-society interconnections and power relations across multiple scales. This field has emerged from simultaneous concerns around the politics of environmental degradation and conservation, sustainable livelihoods in a context where nature is privatised through new forms of accumulation and dispossession, and social justice amidst growing inequalities between winners (those who benefit) and losers (those who bear the costs).³

At the same time, in the context of the growing privatization of nature-society relations, supported by neoliberal states and markets, there is a renewed interest in processes of capital accumulation and labour relations, as implicated in growing income inequalities (Piketty 2013). New forms of cooperation are emerging, but so are new axes of differentiation. While political economy processes remain a key driver of environmental change, they can only provide partial explanations and need to be accompanied by the analysis of cultural and techno-scientific changes. Consumption, seen as a social communication system that goes beyond status, to reflect people's life-projects (Appadurai 1986), of fulfilling aspirations (Appadurai 2004), or providing spaces for cultural assertion (Gidwani and Sivaramakrishnan 2003), can help understand the often circuitous and non-linear processes involved in accumulation, but also its contradictory outcomes across scales and social institutions. In our study, the desire to be a boat owner drives high levels of indebtedness, and while there is no guarantee of success, women as wives are willing to gamble with the only assets they have - their gold jewellery - to support

³ Rocheleau 2008; Elmhirst 2011; Mansfield 2007; Campling et al. 2012; Bavinck et al. 2018.

these projects, demonstrating not just relations of interdependence, but their centrality in advancing collective life-projects.

Finally, migration and labour mobility are central to our analysis, as they shape the possibilities for class formation amongst fishers: locals against migrants, small-scale against large-scale, one gear group against another (c.f Bavinck et al. 2018). As Rajan (2002:6) notes in the context of small-scale fisheries in Kerala, India, the growing movement of people is driven by a host of reasons – geographic, oceanographic, demographic, differences in skills, knowledge and abilities, demand and supply, employment potential, political and religious factors, to name a few. Importantly, the changed availability of fish species, with oil sardines and mackerel moving from the west to the east coast (Vivekanandan 2011), new modes of fish production and distribution influence work relations and income-sharing systems.

Mobility has two dimensions – the temporal, which could be intra- or inter-generational; and spatial. In our research, we found a diversity of movement patterns, including daily trips, voyages for a few days or weeks, and longer duration stays, often involving movement to a different destination. Overseas migration could be for fishing itself, or other forms of labour, the objective being to generate resources for investment in their own enterprises at home (Rao 2013). Given the multiple drivers, such migration is not always voluntary or aspirational, at times it could be led by distress, as is the case with many of the in-migrants in the study area. Mobility then needs to be understood in a social and cultural context, as a gendered process, differently experienced and coded by men and women, contributing in particular ways to both challenging and enabling further accumulation (Cresswell and Merriman 2011).

Context and Methodology

Emergence and development of ring seine in Cuddalore district

Periyapattinam is a large fishing village, considered the ‘head village’ (thalai gramam) for a notional 64 fishing villages. The fishing community in the village belong to the Pattinavar caste, with two sub-castes - Chinna Pattinavar and Periya Pattinavar. Since the late 1960s, with state encouragement to modernisation and mechanisation, a section of the traditional elite, the Periya Pattinavars, purchased trawlers and with rising incomes, gained both economic and political dominance. They controlled the traditional *Ur panchayat*, the main governing institution in the village, responsible for resource allocation, management and conflict resolution, as well as organizing the annual temple festival (Bavinck and Vivekanandan 2017). They also controlled the harbour association, responsible for regulating the large number of people employed both directly and indirectly in the provision of goods and services, whether ice providers, mechanics, cleaners or hoteliers.

Post-tsunami, with the growing availability of oil sardines on the east coast of India, small-scale fishermen in the neighbouring district of Nagapattinam adopted the ring seine gear, developed in Kerala in the 1980s, using two types of nets – the *adarntha valai* (for oil sardine and mackerel), and the *peyarntha valai* (for tuna and other large fish species). As Manikkavel, 53, one of our key informants noted:

When surukuvalai (ring seine) was used initially, we were against it. It was banned by our ur panchayat. In Pazhaiyaru (Nagapattinam district), they had started using these nets in kanna boats. Once they came close to our village for fishing. We protested, as the gear both destroys the sea bottom, and intensifies the unequal distribution of income and wealth amongst us fishers. When they didn't stop, in 200 boats, fishermen from our and neighbouring villages went to Pazhaiyaru and burnt their nets. Yet the technology spread, we could not control it, but were losing out in terms of fish catch.

Ring seine being a destructive gear, is banned by the Tamil Nadu state, yet the small-scale fishers in Periyapattinam, mainly china pattinavars, and especially the youth, started arguing with the *ur panchayat* to lift the restrictions on ring seine. They were encouraged by traders from Kerala, given the high demand for oil sardines and mackerel there. This didn't happen, as the *Ur panchayat*, controlled by the trawl owners, wanted to minimize competition and conflict with the ring seiners using the *peyarnta valai* to target larger fish (c.f Lawrence and Bhalla 2018). They then started using it in any case, bringing together their FRP (Fibre Reinforced Plastic) boats fitted with Outboard Motors (OBM) of 10 HP capacity, received as part of tsunami relief. Challenged in their control over capital and decision-making, both at the harbour and in the village, the trawl owners convened a meeting, and it was agreed to restrict ring seine operations to six months in a year.

Over the past 8-10 years, ring seine units have rapidly increased in the district, doubling in Periyapattinam from 56 in 2010 (CMFRI 2010a socio-demographic data) to 107 in 2017. With growing competition, small-scale fishers are willing to make larger investments in steel boats (in preference to the *kanna* boats), fitted with high-speed engines⁴, as with sufficient storage and other facilities to enable longer voyages, they hope to increase profits. The owners of steel boats, while still working on-board, employ labour, both kin and migrant, and generally live in better houses. It is not surprising that several chinna pattinavars are prepared to lease in steel boats till such time as they can afford their own.

The study villages

Cuddalore, one of the 13 coastal districts of Tamil Nadu, with a relatively small coastline of 57.5 km, nevertheless accounts for the third highest fish catch in the state (15 percent of the total in 2010), following Ramanathapuram and Kanyakumari districts (CMFRI 2010b). This paper is based on a study of two villages in Cuddalore district, Periyapattinam and Uppanankuppam, both severely affected by the 2004 tsunami. Both are primarily fishing villages, dominated by the Pattinavar caste. While there is a small group of trawl owners in Periyapattinam, the majority Chinna Pattinavars are small-scale fishers, now involved in ring seine technologies.

Periyapattinam is a relatively large settlement with 2024 households, 66 percent (1335) of which are fishing households (CMFRI 2010a; Census 2011). It is a part of Cuddalore municipality, well connected by buses and share-autos. The non-fishers include the Vanniyar (250), Hindus designated as a Most Backward Caste (MBC), engaged in dairying, floriculture and auto driving, and Dalits (150), mostly small cultivators and wage-workers. They live in separate habitations within the village. The sandy beach around the village has gradually eroded and post-tsunami, the government has erected a 1-km long groyne, reducing considerably the space

⁴ Caterpillar or Chinese engines with a capacity of 500 HP.

available for shore-based activities, including vending and drying fish, especially by women. To compensate perhaps, a fish market has recently been constructed in the village. At the northern end of the groyne, there is some space for docking FRP boats, and at the southern end a sandy beach, a local tourist attraction. This has however led to growing concerns about plastic pollution. A police station and government college are located in the village.

Uppanankuppam is a smaller village of about 450 households, mostly Pattinavar. Close to 60 percent of our sample households owned FRP-OBM boats, and many used these to get shares in ring seine units. In fact, while not necessarily in support of the ring seine technology, they found they had no choice, many complaining that the biggest challenge they encountered was from the larger fishing villages like Periyapattinam, which put at risk their livelihood. The village has a long and sandy beach, where boats are moored, and operate as small units during the 6 months when ring seine is not allowed⁵.

While a majority in both villages lived in brick-walled houses, with concrete roofs⁶, and had electricity, almost a third complained of poor quality water and the need to purchase drinking water. Interestingly, 20 percent of the Chinna Pattinavars in our sample did not have access to toilets. Yet given the wide-ranging state welfare provision in Tamil Nadu, most households had access to LPG cylinders for cooking, mixer-grinders and television sets. Many had refrigerators, and mobile phones were near universal.

Coming to craft ownership specifically, Periyapattinam had 20 trawlers and 56 ring seine boats in 2010, apart from 490 motorised and 50 non-motorised craft; while Uppanankuppam had 4 trawlers and 15 ring seine units, apart from 215 motorised and 50 non-motorised craft (CMFRI 2010a). Table 1 presents data from our primary survey, and what is interesting to note is that while the numbers of non-motorised craft remain stagnant, as probably the motorised craft (FRP-OBM), Uppanankuppam seems to have lost its trawlers, while demonstrating a significant rise in ring seine shares.

Table 1: Number of boats owned by households in the study villages

Village	Rowing boats		FRP-OBM			Mechanised boat				Ring seine	
	No of HH	No of boats Owned	HH	Own	Share	Own		Share		HH	No. of shares
						HH	No.	HH	No.		
PERIYAPATTINAM	15	15	40	40	7	4	4	1	1	59	62
UPPANANKUPPAM	10	9	49	55	9	0	0	2	2	48	51
Total	25	24	89	95	16	4	4	3	3	107	113

Source: Survey data

⁵ The fishermen use a range of gear in these smaller boats, including gill nets, long line and scoop net (kachavalai) depending on the availability of various species in different seasons.

⁶ While Periyapattinam had several 'tsunami houses', constructed by the government or NGOs, this was not the case in Uppanankuppam.

With the ring-seine units now operating out of harbours rather than village beach landing sites, the organisation of fishing has changed, with implications also for gender relations, roles and identities. The harbour located in the Old Town (OT) of Cuddalore has become the major business centre for both villages. While men are increasingly seeking shares in boats, working as crew at the same time, the possibilities open to women for fish vending and allied activities have shrunk, and one finds a process of ‘housewifisation’ amongst fisherwomen (Table 2).

Table 2: Occupational profile

Occupation	PERIYAPA TTINAM	UPPANAN KUPPAM	Total
Fishing Boat owner/share	81	84	165
Fishing crew/labour	27	30	57
<i>Fishing allied</i>	<i>4</i>	<i>17</i>	<i>21</i>
<i>Fish vendor (shop/market place)</i>	<i>14</i>	<i>8</i>	<i>22</i>
<i>Fish vendor (going to village)</i>	<i>13</i>	<i>17</i>	<i>30</i>
<i>Auctioneer</i>	<i>0</i>	<i>9</i>	<i>9</i>
Fish trader/ agent	2	0	2
Petty business	6	6	12
Private employee	12	1	13
Government employee	1	1	2
Student	129	103	232
Too old to work	7	14	21
<i>Household work</i>	<i>100</i>	<i>77</i>	<i>177</i>
Working abroad	10	27	37
No job	22	13	35
Fishing boat owner/share holder and fishing crew/labour	29	13	42
Under aged children not in school	31	15	46
Total	488	435	923

Note: Number in bold and italics refer specifically to women’s occupations.

Mixed Methods Design

The study used a combination of a household survey with 100 households in each village, followed up by qualitative in-depth interviews with 10 households (husband and wife) in each village. Alongside the surveys, we conducted focus group discussions with different categories of men, women and youth, in order to understand their different perspectives and aspirations. This was important as part of the ring seine conflict appears to be generational, with educated youth, unable to find suitable employment, seeking greater profits and incomes within fishing. Details about the challenges and opportunities within marine fisheries was collected through key informant interviews with ring seine share-holders, crew members, women auctioneers, traders, NGOs, and in-migrants. The data was collected between March 2017 and February 2018. In line with ethical procedures of ensuring confidentiality, all names have been changed.

Challenging elite control: emerging findings

We start this section with the narrative of Ranjith, 39, of Periyapattinam, to illustrate the social and economic processes involved in challenging elite control.

After the introduction of ring-seine, we got a lot of fish - oil sardines and mackerel. Initially, sixteen families, all close relatives, came together to form a ring seine unit. We set a norm that each family contributes Rs 20,000 as their share, so could mobilise Rs 320,000. We bought a boat with equipment from Cuddalore harbour. Thirty members from our sixteen families came as crew for fishing. We selected a person from amongst the shareholders to manage the day-to-day activities such as account keeping, purchase of fuel and water, arranging finance and equipment repair and maintenance. Everything went well for two years, but then problems arose and we stopped working together. Some of the shareholders questioned the trustworthiness of the accountant (kanakkupillai), but importantly people wanted to share the income only within a small group in order to accumulate wealth quickly. We sold the boat and shared the money amongst the partners. With others doing the same, today there are over 100 ring seine units in the village.

The current ring seine unit is my third one. The kanna vallam was replaced by a steel boat with a powerful engine, gear, GPS and other equipment. Now we are only five shareholders. The value of a share is Rs 2 million (100 times what we first contributed) and altogether ten million rupees were mobilised from the shareholders. This time I managed to buy only half a share as I was unable to mobilise sufficient money. We have taken an advance of Rs 2 million from an auctioneer.

Along with the five shareholders, we have 40 crew members working on the boat. Most of the crew members are small farmers and agricultural workers, in the age group of 20 to 40 years, and come from the agrarian hinterland. Some take advances from the boat owners to pay their children's school fees, for health care expenses, or household consumption needs, so are obliged to work on the boat until they repay the loan. We shareholders also work with the crew, but our tasks are more skilled - casting the net, observing the wind and water currents, and identifying the shoal (maappu) – and managerial in nature. We give instructions, which the workers follow.

With our steel boat, we can go for Thangal (stay) fishing, staying at sea for about a week. We use both gears – the Adarndha valai for smaller fish, and the peyarnda valai for the bigger ones. In case of the former, we return within a day, otherwise stay longer. Once we have our catch, we inform the auctioneer, so she can reach the harbour to auction our fish. The auctioneer gets 10 percent of the value of the catch as her commission for the advance given to the boat. During the ring seine season, there are always traders or their agents at the harbour to buy the catch.

We share the income on an equal basis, that is, after deducting the operational costs (including fuel costs of the main and carrier boats, food rations, water and ice), 50 percent goes to the owners and the remaining 50 percent goes to the crew. The crew includes the shareholders and the group of four to eight FRP boat operators, who serve as carrier boats, transporting the catch to the harbour, in addition to the labour. As most of the shareholders are working partners in the boat, they will get a share from the

labour component of the income as well as their owner's share. The carrier boats are paid three labour shares (one share for the boat operator and two for the boat). An extra half share is given to the boat driver in addition to his labour share. Another half share is kept for giving incentives to efficient workers.

We do not share the income on a daily basis. Usually once in a month we check the accounts and calculate the income and expenditure and divide the income between owners and crew. If the catch and income is good, we may do this fortnightly. In case someone (whether owner or labour) needs cash, he can get it as an advance from the accountant, to be deducted when the shares are calculated. The accountant is responsible for the money; some may clandestinely lend for short-term interest, and this is one of the reasons for doubt about the accountant's honesty.

The above case brings out a range of issues around the mobilisation of capital and labour and the social organisation of ring seine fishing. We discuss these in turn before moving on to analysing the new forms of cooperation and the potential for challenging elite capitalism, by focusing specifically on the concept of 'share' and 'sharing'.

Capital mobilisation

What emerges from Ranjith's narrative is the need for large capital to set up a successful ring seine unit. With growing competition and declining catches per unit, fishers are seeking to set up partnerships and share-holding arrangements with a smaller group of people, in order to enhance or at least maintain adequate earnings. Not all have sufficient capital to buy these shares, so depend on a range of sources, both collective and individual.

At a collective level, the shareholders approach auctioneers, mainly women, who in return for their contribution, get the rights to auction the catch and earn a commission. As Arathi, a 52-year-old woman auctioneer noted, "In addition to my own resources, I borrowed Rs 10 lakh for interest from various sources such as *seettu* (local chit fund) and private money lenders. My co-auctioneer also brought her own share". Despite the contributions of the partners and the auctioneers, the shareholders at times can't avoid additional borrowing from moneylenders. The interest rates are as high as 60 percent per year, yet as several people noted, the catch at that time (2009) was good, incomes high, and they could repay their loans after a few trips.

At the individual level, there are a range of strategies, apart from personal savings. As 70-year-old Annamalai of Uppanankuppam noted, "my younger son has been working in Singapore since 2011. From his earnings, he gave me Rs 40,000 to buy a share in the ring seine here. He was very helpful and it is a good investment". Several of the younger fishermen have migrated themselves. Selvam went to Singapore in 2006 and worked there for three years to accumulate enough money to buy a share in a ring seine unit. In 35-year-old Satish's case, his brother worked in Singapore and sent him money to buy a share. Additionally, he had to borrow a little from relatives. In fact, a huge push for labour migration from these villages, especially by youth, is to raise money to buy a share in a boat. Many of them are well educated, yet in the absence of other employment, find this the best route to livelihood security. Others like 52-year-old Muthu, considering himself too old to migrate overseas, nevertheless worked as a labour in a trawler, and bought a share from this income.

Yet this is not sufficient and loans from private lenders are often based on mortgaging women's assets – their gold jewellery – received as dowry (Swaminathan et al. 2011). Bhavani, 37, of Periyapattinam, said:

As ring seine became popular and a money spinner, we wanted to buy a share too, but we did not have sufficient cash or savings. My husband had already started working in a ring seine boat as a crew member. We decided to raise capital by pledging my gold jewellery with a private finance company. While people say that fishermen can get jewel loans from banks at low rates of interest, in practice it is difficult. There are several hurdles, including the need for repeated visits to the bank.

While the fishing sector is increasingly masculine, with much of the post-harvest work at the harbour too being done by men (including migrant workers), rather than women, as was the case when boats landed on the village beach, women continue to play a central role in money matters, especially mobilising capital. But fewer income earning opportunities for women, alongside a demand for more capital, has contributed to dowry inflation in the fishing communities, raising questions about women's 'declining' status.

Labour mobilisation

Ring seine fishing requires a relatively large crew (compared to trawlers). In the initial years, labour was provided by kin, as noted by Ranjith, but as the number of ring seine units grew, the demand for labour increased manifold. Fishing villages were unable to fulfil the high demand, so owners started recruiting labour from the agrarian hinterlands. As farming in Cuddalore district is rainfed and seasonal, a section of the agrarian population had already moved to the coast, OT harbour becoming an attractive centre for several shore-based and post-harvest activities, such as loading and unloading fish, or working in ice factories, that provided employment during times of drought. Boat owners have day-to-day interactions with these shore workers, and they became the channel for the recruitment of crew. While some of the shore workers themselves shifted to ring seine fishing, they importantly acted as informal agents, bringing more people from their farming villages to the shore. Some of the owners also made visits to these villages with their contact persons and directly recruited young workers by giving advances (loans) and *beta* (allowances for travel and food).

As several ring seine owners from both villages confirmed, a ring seine unit requires at least 30-40 labour, and at least half of them come from farming villages.

These men belong to the Vanniyar and SC castes. They get a share of the total catch value, but also get a daily beta of Rs 100 when there is little or no catch, or 200 when it is more. We treat them equally, sharing food during thangal, and gifting them clothes on festivals. Yet they often spend their beta money on alcohol. We have no choice but to hire them due to severe labour scarcity here (Arumugam, Uppanankuppam)

Mujith, 27, of Periyapattinam however admitted that often labour comes from further afield. Instead of recruiting locally and providing advances, they get workers from Ramnad district, who stay in the boats, cooking their food on portable stoves. But it is not just labour from other districts of Tamil Nadu. We found a large settlement of 300 to 400 migrant workers from North India between the two villages. While several of them work in the local industrial complex, over

150 Muslim labour from Farrukhabad district in Uttar Pradesh were working on ring seine boats. With no prior experience of the coast or indeed fishing, the need for income and employment are driving them to work as crew. As Chote Mian noted, “I came to this area 16 years ago to sell Kulfi, but about 8 years ago, found that fishing was more lucrative, so moved here and brought others from my village. There is no work at home”. Bhaiya continued, “We have rooms in a large house, sharing 10 to a room. We cook ourselves. We buy wheat from the neighbours as we don’t have access to the PDS here. Our wives are involved in bidi rolling to earn some extra money at home”. These migrant workers have no security of earnings, their living conditions are poor, and while polite with the boat owners, admitted to experiencing stigma as *Hindikara* or the ‘Hindi-speaking people’. Here too there are no agents, but workers follow their kin and relatives in search of work. As Bhaiya reiterated, “the season is only for six months. We then go home to help with farming. When we return, other boys come with us”.

A further dimension of labour mobilisation was a generational one. In a focus group of young men, they were candid about the feeling of intergenerational injustice and lack of recognition.

We did not like to work with our previous unit as we youngsters were dissatisfied with the behaviour of some of the elders in the unit. They are our relatives, yet they tried to extract work from us, and kept abusing us for not working hard enough. We did not like it. Some of us have worked on ring seine boats for almost five years, yet they constantly undermined our experience and skills, so we decided to start our own new ring seine unit.

A key informant confirmed that the boys are running their boat successfully, and in the village, it is popularly called the boys’ boat (*pasanga valai*). While earlier they were ridiculed, they are now recognised as capable fishermen.

Unpacking Cooperation

The meanings of ‘sharing’

Kandan, 40, from Uppanankuppam, narrating a similar process of capital and labour mobilisation as Ranjith, elaborated on the sharing of incomes and expenditures.

After the ban period this year, we launched the boat. We went for thangal fishing. The expenditure was high (4000 litres of diesel for Rs 250,000; 200 pieces of ice for Rs 22,000, ration Rs 30,000 including Rs 15,000 for liquor, water Rs 2500; other costs Rs. 1000), but the catch was good on our first trip – tuna and skipjack worth Rs 600,000, and other fish worth Rs 200,000. We deducted the operational costs from the net amount, after the payment of the auctioneer’s commission, and shared the income on a 60:40 basis – 60 percent for owners and 40 per cent for the workers. The driver gets an extra half share. In the following trips, we made huge losses, and were unable to even recover our costs. We have an outstanding debt of Rs 6 lakhs.

While there is considerable discourse about treating the workers equally, there are some interesting points to note. In terms of the division of income, the owners get two shares – as owners and as workers. As noted by Manikkavel,

About 60 to 70 percent of the owners are genuine in sharing the income along these lines; others cheat the labour by inflating the operational costs. For instance, even if all the diesel is not used, it is charged to the trip; liquor is added, and so on. The labourers from North India work for even lower shares than the local labour because they are new and don't have the skills.

Fishing being a risky venture, the norms for sharing also change, depending on the fish catch. Mujith explained that if the catch is good, owners divide shares on a 50:50 basis, otherwise on a 60:40 basis. So, while people in different positions get different shares, there is a conceptual distinction from wages. Wages clearly establish the status of a worker or employee; they tend to be fixed, even if low. Here the position is somewhat ambiguous. If there is no catch, the labour too get no 'share', yet as all the share-holders noted, they still give the labour their daily *beta* (allowance), often from their own pockets.

In small-scale fishing earlier, there were few workers involved, often related by kin, such as two brothers, or a father-son duo who managed the boat. Now, especially in steel boats a disproportionate number of labour are required, 5 owners and 35 labour, giving rise to visible class relations, which even if they existed, were muted in the past. Rather than one owner, there may now be 20 share-owners, so the dominant, capitalist status is more broadly shared. Is the discourse of 'worker-shares' perhaps then a way of appropriating labour, particularly of migrant workers, for capital accumulation by the boat owners?

The North Indian labour clearly get the worst deal, as they do not have any back-up support in terms of household assets in the study locality. They live in rented rooms and have to buy their food, including basic grains from the market. In 2017, as Kandan said, after a first bumper catch, the ring seine season collapsed, and led to huge losses. The migrant workers were unable to withstand these losses, and many left for their villages in Uttar Pradesh, even though they felt they had failed their families in terms of incomes. Once home, some worked on their small plots of land, others took up temporary rickshaw-pulling for survival,

Even amongst the owners, as Ranjith pointed out, there is a desire to restrict the size of the share-holding group, so those with shares can earn higher incomes. This often leads to conflicts for a range of reasons, including family jealousies or lack of trust in the accountant. Ramamurthi, 55, of Uppanankuppam suggested that "it is often a perception that the accountant has manipulated the accounts in favour of his own family that creates splits in the group. But once the view that a small coterie is looting the rest spreads, it is hard to continue, as labour too are unwilling to work on the boat".

The real issue appears to be growing competition and the need to prioritise individual over collective interests. In the process, a sense of ethics and equity, vis-à-vis other fishermen, and the sea, regulated in the past by community institutions, is fast disappearing. Apart from a class divide, we also find a generational divide, with most of the elderly fishermen feeling that the ring seine is a destructive fishing gear, but even if here to stay, that the fish caught should be shared more widely, rather than being concentrated in the hands of a few. This would protect the livelihoods of small-scale fisher families, and indeed the sea from destruction.

Differentiating identities to maintain class

As noted above, ownership of boats is restricted by the Pattinavars to their own caste group, and preferably close kin. In exceptional cases, when they are unable to raise sufficient money for investment, they may allow a few Vanniyar friends to buy shares, but we did not find any instances where capital ownership was democratised to the extent that the workers, especially migrants, were admitted as share-holders. This is perhaps meant to maintain their primary claim to the sea as fishers, but equally to mark their distinction as skilled workers, relative to the crew. Many fishers emphasized that they allocate only non-professional activities like lifting (dragging) the nets to the migrant workers, and themselves do the skilled tasks like holding the ring-seine in the drum. The differences in skills justify the differential returns. Mujith noted, “People who are not fishermen by birth will not be able to learn a few things about fishing. They can only see a few fish. They will not be able to knit the nets, they will not be able to learn the direction of the water current”. So apart from practical skills, there were also the less visible skills of observation and intuition that the migrants lacked. The idea of ‘specialisation’ a common technique for maintaining wage gaps in globalised labour markets, is clearly visible here (Standing 2011).

At the same time, the share-owners were keen to show that they were generous and treated the workers well. Muthu, 52, of Uppanankuppam mentioned paying the labour both their ‘share’ and *beta* regularly.

We also give them fish to take home, as they can't afford to buy fish. The workers are mostly Vanniyars; they never ate at a fisherman's house in the past. Now the situation is changing; as they are working on our boats, they have also started dining with us. This is a big change, but still, we don't like to eat in the homes of the Dalit workers.

It is interesting that Muthu signals their own upward mobility in detailing the relationships with the labour. The Vanniyars, though higher to them in the caste hierarchy, are now employed as labour, and in the process have overcome their prejudices. Here class clearly trumps caste in establishing status.

The Dalits remain at the bottom of the social hierarchy. While he did not mention wage differentials, there could be subtle forms of differentiation practised, as in the case of the North Indian immigrant labour. Interestingly, Arumugam, 44, of Uppanankuppam is also a ring seine shareholder, but he belongs to the caste of inland fishers (paruvatharajakulam). While receiving equal shares, he noted the derogatory language that the chinna pattinavars often used to address them. He said, “It is humiliating and hurtful. They say that we do not know how to fish in the sea. But in fact we are teaching them our techniques. Just because they are in a majority, they say what they please. I do not like such discrimination, so came out of the group. 10 partners from our caste have now formed a group.” There is a clearly an increasing use of caste and ethnic identities, but also generational difference, in maintaining class divides.

Class, Gender and Generation: Challenges and aspirations

What we have tried to demonstrate in this paper are the complex ways in which capitalisation of a traditional sector leads simultaneously to new opportunities and inequalities. To take

advantage of the opportunities, small-scale fishermen (and women) engage in new forms of cooperation, especially pooling financial and material resources. Yet this entails establishing new criteria for exclusion, widening the gaps between the haves and have-nots.

It is not that differentiation did not exist in marine fisheries in India. The mechanised trawl sector, encouraged by state initiatives since the 1960s, was already in control of a disproportionate share of the fish catch. Yet the majority of fishers, 70 percent, remained in the small-scale sector, working on principles of social equity and ecological sustainability, similar to the agrarian sector in India, dominated by small and marginal farmers. With growing perceptions of injustice (Bavinck et al. 2018), alongside the need for more resources for household reproduction and future aspirations, they have challenged elite capital through group formation as a route to capital accumulation, thus widening the base of boat owners.

Their pathways for appropriating resources are however not linear (Sneddon 2007), as it is the big traders and export agents (35 and 20 respectively), organised as the 'Cuddalore District Fish Traders' Association', who control the processes of auctioning, pricing and profit-making. They regulate and curtail competition by acting as brokers for traders from other places, marking up prices by as much as 20-25 per cent. Accumulation is also both a dynamic and circuitous process, as small-scale fishers have varying capacities to bear seasonal losses. Conflicts within groups, with some withdrawing their capital to reinvest in small-scale fishing or other small businesses, ultimately leads to only a few boat owners able to successfully accumulate.

The pathways of accumulation are also contradictory, involving a host of actors and livelihood practices, simultaneously resisting and engaging in projects of accumulation. This has led to a sharpening of divides based on class, caste, gender and generation. While still operating within the contours of neoliberal capitalism, there is some diffusion in the concentration of capital locally. The new class alliances are however restricted to the fishing communities, the Pattinavars, in the case under study, unwilling to allow other caste groups to join as partners /share-owners. Greater capitalization has meant a greater demand for labour, met in this instance by migrant workers, both from the agricultural hinterland and more distant and less developed parts of North India (Rao and Mitra 2013). Despite the discourse of equal treatment, their labour is expropriated for the purposes of building and sustaining the capital of the new 'elite' share-owners, justified on grounds of skill and experience.

A relatively new form of differentiation and indeed conflict is the generational one. Young men of the fishing communities, often well educated, are confronted with a lack of remunerative employment in the public or private sector. They aspire to return to fishing as boat-owners, seeking higher incomes than their fathers, and keen to capitalise in order to earn more within a shorter time frame. This leads to a willingness both to over-exploit marine resources through the use of destructive gear, but also accept and indeed reproduce unequal social relationships. In the absence of adequate financing from banks and other public financial institutions, they raise resources for initial capital investment by undertaking short-term labour migration overseas, working for relatively low wages in poor working conditions (c.f Gidwani and Sivaramakrishnan 2003), or incurring debt, mainly from private moneylenders at high rates of interest. An easier route to raising capital appears to be demanding large dowries during marriages, with those opposing this increasingly marginalised. Their experiences highlight the contradictions in the process of capital accumulation.

While some of these changes have opened up new opportunities for women, as in auctioning, for a majority, their small-scale trading activities are increasingly threatened by their inability to access fish, and are now driven by desperation rather than choice. They have lost access to incomes and indeed fish for household consumption. Both capitalization and the recruitment of male migrant labour for subsidiary tasks have marginalised women's active role in fisheries, and as if to compensate, dowry has emerged as an important source of both capital and status. Worryingly, the growing dowry demands on women's families is reflected in the rapid decline in child sex ratios (GoTN 2017).

Ultimately, we find unequal power relations and inequalities being both challenged and reproduced through formal and informal institutions governing property rights, access to finance and capital, availability of remunerative employment and decent work, consumption practices that favour expensive displays of wealth, and social norms veering towards a reprivatization of social reproduction. While there is some diffusion of capital within the fishing caste, it remains exclusive to this group, with outsiders, especially of the labouring classes, not allowed entry. In the present neoliberal context, everyday forms of resistance (Scott 1985) appear to have given way to more overt forms of collective action, seeking to renegotiate relations of inequality and perceived injustice. These contain elements of exclusion, yet open some possibilities for justice.

Bibliography

- Appadurai, A. 1986. *The social life of things: commodities in cultural perspective*. Cambridge: Cambridge University Press.
- Appadurai, A. 2004. The Capacity to Aspire: Culture and the Terms of Recognition, in Rao, V. and Walton, M., (eds.) *Culture and Public Action*, Stanford University Press, Palo Alto, California, pp 59-84.
- Bavinck, M. 2001. *Marine Resource Management: Conflict and Resolution in the Fisheries of the Coromandel Coast*. New Delhi: Sage.
- Bavinck, M., 2008. Collective strategies and windfall catches: fisher responses to tsunami relief efforts in South India. *Transforming Cultures eJournal* 3, 76-92.
- Bavinck, M. 2014. Investigating poverty through the lens of riches – Immigration and segregation in Indian capture fisheries. *Development Policy Review*. 32(1): 33-52.
- Bavinck, M and V. Viveknandan. 2017. Qualities of self-governance and wellbeing in the fishing communities of northern Tamil Nadu, India - the role of Pattinavar ur panchayats. *Maritime Studies*. 16(16): DOI 10.1186/s40152-017-0070-8.
- Bavinck, M, Jentoft, S and J. Schoeltens. 2018. Fisheries as social struggle: A reinvigorated social science research agenda. *Marine Policy*. 94: 46-52.
- Bhathal, B. 2014. *Government-led Development of India's Marine Fisheries Since 1950: Catch and Effort Trends, and Bioeconomic Models for Exploring Alternative Policies*. Unpublished PhD thesis, University of British Columbia.
- Campling L, Elizabeth, H and P. H. McCall. 2012. The political economy and ecology of capture fisheries: Market dynamics, resource access and relations of exploitation and resistance. *Journal of Agrarian Change* 12(2/3):177–203.

- Census of India. 2011. <http://censusindia.gov.in/2011-Common/CensusData2011.html>
- CMFRI. 2010a. *Marine Fisheries Census: Socio-demographic data*. CMFRI, Kochi.
- CMFRI. 2010b. *Marine Fisheries Census: Fish landing data*. CMFRI, Kochi.
- Cresswell, T and P. Merriman. 2011. *Geographies of Mobilities: Practices, Spaces and Subjects*. Ashgate. London.
- Elmhirst, R. 2011. Introducing new feminist political ecologies. *Geoforum*. 42: 129-132.
- Gidwani, V and K. Sivaramakrishnan. 2003. Circular migration and the spaces of cultural assertion. *Annals of the Association of American Geographers*. 93(1): 186-213.
- Government of India. 2017. National Policy on Marine Fisheries. <http://vikaspedia.in/agriculture/policies-and-schemes/fisheries-related/national-policy-on-marine-fisheries-2017>
- Government of Tamil Nadu. 2017. Tamil Nadu Human Development Report 2017. State Planning Commission. Chennai <http://www.spc.tn.gov.in/tnhdr2017.html>
- Kurien, J. 1978. 'Entry of Big Business into Fishing: Its Impact on Fish Economy.' *Economic and Political Weekly* 13(36):1557–1565.
- Lawrence, T.N and R.S. Bhalla. 2018. Spatially explicit action research for coastal fisheries management. *Plos One*. 13(7): e0199841.
- Mansfield, B. 2007. Privatization: Property and the remaking of nature-society relations. *Antipode*. 39(3): 393-405.
- MPEDA. 2012. 'Seafood Export–Growth in Export of Indian Marine Products (1961–62 to 2011–12).' Marine Products Export Development Authority, India. <http://www.mpeda.com/Overview/exports.htm>
- Pillai, N.G.K. and P. Katiha. 2004. Evolution of Fisheries and Aquaculture in India. CMFRI, Cochin.
- Pillai, S.L. and Thirumilu, P., 2005. Increased penaeid shrimp catch by indigenous gears in post-Tsunami period off Chennai coast, Tamil Nadu. *Marine Fisheries Information Service* 185, 19-20.
- Rajan, J.B. 2002. Labour mobility in the small-scale fisheries sector of Kerala. *Discussion Paper No. 44*. Centre for Development Studies. Thiruvananthapuram.
- Ram, K. 1991. *Mukkuvar Women: gender, hegemony and capitalist transformation in a south Indian fishing community*. Zed. London.
- Rao, N. 2013. Migration, mobility and changing power relations: Aspirations and praxis of Bangladeshi migrants. *Gender, Place and Culture*. 21(7): 872-887.
- Rao, N & A. Mitra. 2013. Migration, Representations and Social Relations: Experiences of Jharkhand Labour to Western Uttar Pradesh, *Journal of Development Studies*, 49(6): 846-860.
- Rocheleau, D. 2008. Political ecology in the key of policy: from chains of explanation to webs of relations. *Geoforum*. 39: 716-727.

- Sathiadhas, R. 2009. "Inter-sectoral Disparity and Marginalization in Marine Fisheries in India." *Asian Fisheries Science*. 22: 773-786.
- Sathianandan, T. V. 2017. Marine fish production in India – present status. ICAR-Central Marine Fisheries Research Institute. <http://eprints.cmfri.org.in/12164/1/2-Marine%20fish%20production%20in%20India.pdf>
- Scott, J.C. 1985. *Weapons of the weak: everyday forms of peasant resistance*. Yale University Press. New Haven.
- Sneddon, C. 2007. 'Nature's Materiality and the Circuitous Paths of Accumulation: Dispossession of Freshwater Fisheries in Cambodia.' *Antipode*. 39(1):167–193.
- Standing, G. 2011. *The precariat: The new dangerous class*. Bloomsbury. London.
- Subramanian, A. 2009. *Shorelines: Space and Rights in South India*. Stanford: Stanford University Press.
- Sundar, A. 2010. Capitalist transformation and the evolution of civil society in a South Indian fishery. *Unpublished PhD thesis*. University of Toronto.
- Swaminathan, H., Suchitra, J.Y., and R. Lahoti. 2011. *Karnataka Household Asset Survey: Measuring the gender asset gap*. Indian Institute of Management. Bangalore.
- Vivekanandan, E. 2011. Climate change and Indian marine fisheries. *CMFRI Special Publication No. 105*. Central Marine Fisheries Research Institute. Kochi.
- Vivekanandan, E., Srinath, M., and S. Kuriakose. 2005. Fishing the marine food web along the Indian coast. *Fisheries Research*. 72: 241-252.
- Vivekanandan, V, and H M Kasim. 2011. *Fisheries Management Options for Tamil Nadu & Puducherry*. Chennai: Food and Agriculture Organization of the United Nations, The World Bank, Government of Tamil Nadu and the Government of Puducherry.