

# The Beauty of the Small

An examination of the role of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication in the context of the small-scale fishery of Kerala, India

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The marine fishery of the Kerala state in India is globally well-known for its high productivity, species diversity, skilled fishers and also, importantly, for sustaining a vibrant small-scale fishery on its once-sandy beaches. Kerala's fishery has been a trendsetter. It hosted the world's first development project in 1952 when Norway, India and the United Nations (UN) came together to create the much written-about Indo-Norwegian Project for Fisheries Development. Kerala became one of the globally leading exporters of shrimp from the early 1960s and

itself in limbo. It is struggling to redefine itself. It seems caught in a race against itself. The old dichotomies of non-mechanized and mechanized, small and big, artisanal and modern are irrelevant. The struggles of the mid-1980s and 1990s to create a well-defined realm in the coastal sea—where only the small, the diverse and that which is harmonious with nature—will operate has been defeated. Today it is open access. There are only possession rights—first come, take all!

This is the background against which the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines), recently endorsed by the Food and Agriculture Organization of the UN (FAO), is being introduced into Kerala.

The small-scale fishing (SSF) communities of Kerala form the backbone of its marine fisheries sector. The active fishers today number about 150,000. Over the last 40 years, the SSF sector has undergone a great metamorphosis on all fronts—socioeconomic, technological, ecological and political.

## Collective action

Measured by conventional socioeconomic parameters of development, the SSF communities were once seen as a rank 'outliers'. Today their conditions have greatly improved. This can be attributed to the combined result of collective action and the positive responses of the state arising from it. This has resulted in significant improvements in housing, education and health. There has also been a significant

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claims the distinction of being a pioneer in introducing the small-sized trawlers to harvest the shrimp. It also undertook the first long-term study of the economics of artisanal small-scale non-mechanized fisheries and the mechanized fisheries. The fishery also lays claim to having given rise to one of the earliest independent fishworker trade union movements demanding simultaneously for ecosystem management and socioeconomic development.

These processes have been documented by a large number of Indian and non-Indian researchers in the form of articles and books which have been published globally. The fishery has also been a subject of many films and documentaries.

But all that is history. Today Kerala's small-scale fishery finds

This article by **John Kurien** ([kurien.john@gmail.com](mailto:kurien.john@gmail.com)), Member, ICSF, summarizes case studies undertaken by **Nalini Nayak, Titto D'Cruz, A J Vijayan, D Shyjan** and **D Nandakumar** of Protsahan

increase in fish prices and appropriate organizational interventions in fish marketing, which account for increase in household incomes. Family incomes from other sources—such as remittances from the Middle East countries where some members of the family may work—have also become a source of funds for making social and fishery-related investments.

From total dependence on human and renewable energy sources to propel their fishing boats, SSF communities have shifted almost totally to the use of mechanical propulsion. The same can be said about the shifts which have taken place in the size and in the materials used for their fishing gear. From small, easily manageable nets and tackle made from cotton and other natural fibres, they have upgraded to using large gear made from nylon and monofilament nets requiring mechanical power for their paying out and retrieval after fishing.

The realm of management of the fishery resources remains a matter of contention. Significant steps were taken in the 1980s for legal enactments which had important resource and ecosystem conservation implications, with positive results in the fishery as a whole. But the unbridled investment spree in the SSF (mentioned above) has created a context where the SSF fish economy, taken as a whole, is economically unviable and shows some disturbing ecosystem changes such as significant fishing down the food chain. However, given the phenomenon of bumper harvests that bring lottery rewards, individual fishers may still be operating profitably from a strict private costs and earnings perspective.

The physical ecosystem of the state's 600-km coastline has also been undergoing a major change. Over the last 40 years, it has become interspersed at frequent intervals with physical structures such as piers, groynes and breakwaters, which are intended as safe landing centres for the evolving bigger craft and gear. The resultant unintended and unpredicted erosion and accretion caused by these structures have

converted what was once a predominantly sandy coastline into one which is lined with granite seawalls.

The combined effect of the technological changes in fishing and the physical changes in the coastline have had a significant bearing on the occupation and work pattern of the women in the SSF communities who were once an important part of the economic lifeline of the sector. This transformation in their lives affects the well-being of the whole community.

The combination of the factors mentioned above pose a serious question about the future of the SSF communities and the SSF sector in the state. This was the motivation for the team of activist-researchers of Protsahan, an NGO based in Kerala, that has long experience in the SSF sector of Kerala, to re-engage with the sector after long and take stock of the situation.

One of the important strategies of this initiative to re-establish and rekindle their contacts with the 'transformed SSF sector', in an effort to comprehend what indeed was happening at the local levels, was to use the SSF Guidelines as an entry point for this action.

The first task was to make a brief summary of the essence of the

ROBERT PANIPILLA



Fishing at sea, Kerala, India. The marine fishery of Kerala is known for its high productivity, skilled fishers and also, importantly, for sustaining a vibrant small-scale fishery

SSF Guidelines in English and then translate it into the local language—Malayalam. This summary was printed and the booklet was widely distributed across the state to the key community leaders of the SSF and to the representatives of their social, economic and political organizations.

The summary was well received and commented upon, both informally and formally. An important community leader, who is also the Chairperson of the state-sponsored small-scale fisheries cooperative, popularly known by the acronym MATSYAFED, referred to the SSF Guidelines as the Magna Carta of the small-scale fishing community.

The team met key individuals from the SSF community personally—men and women fishworkers, community leaders, cooperative leaders, trade union activists, fishery scientists and bureaucrats, NGO representatives—so that they could hear their perspectives about the changes which had taken place over the last four decades. This was also used as the opportunity to invite them personally to attend the seminars in their respective regions to discuss the SSF Guidelines.

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These visits also helped the team members to make field-level contacts and collect information and data for five studies which were considered to be appropriate for understanding how to re-configure the SSF in Kerala.

In this article, a summary of the studies undertaken is reported.

**A. CHANGING FISHING TECHNIQUES**  
Over the last fifteen years, there have been very significant changes that took place in the small-scale fishery of Kerala, particularly with regard to the nature and investment in the fishing units. The main factors which spurred these changes are the ‘open-access’

nature of the coastal waters and the hugely increased demand for fish in the local, national and international markets.

The trigger for these changes came as far back as the 1980s when the mechanized trawlers pushed the traditional non-mechanized fishing units to a corner and alienated their production and livelihoods. At that juncture, outboard motorization of traditional crafts came as a great saviour of the small-scale sector. For example, the modification of the traditional encircling net into the ‘ring-seine’, aided by motorized canoes, brought traditional small-scale fishers back into the competition for fish.

This big olympic race for fish between sectors and within the ‘traditional’ sector has resulted in a huge excess capacity in ring-seines and introduced the tendency for destructive methods like mini-trawling and pair trawling. This was an unfortunate trend that was wilfully overlooked by the state, the fishers and civil society.

The overall result has been fewer number of fishing days for all and bulk landings of small pelagics for the lucky ones—the first person to reach the fish/fishing ground gets all the fish. The fish is being diverted to fishmeal manufacturers because only they accept such bulk landings.

The investment levels have reached unbelievable heights and a fishing unit is more like a naval unit—a steel hull boat, two fibre-reinforced plastic (FRP) carrier boats, a 550 horsepower (hp) inboard engine and three outboard motors (OBMs), an echo sounder, global positioning system (GPS), wireless sets, a mechanized hydraulic winch—and a bus to transport the workers to the port. And we still call this ‘traditional small-scale’!

An important consequence of this increased investment is the vastly increased levels of indebtedness of the fishermen to merchants. The result is that they have to make the first sale of their fish at the price and place dictated by the financiers. The autonomy of fishers has been lost. Today we have close to 500 ring-

seine units in Kerala and the annual production is stagnating at 500,000 to 550,000 tonnes. There is growing inequality in the fisheries sector and the overall average income in real terms is falling.

#### B. COASTAL STRUCTURES AND THEIR IMPACT ON THE COAST AND THE FISHERY

One important effect of increased size of fishing boats and their overall numbers is the demand for safe harbouring facilities. Given the earlier highly decentralized spatial settlement pattern, the SSF communities have been clamouring for structures such as harbours and breakwaters built perpendicular to the coast, in order to create these 'safe havens' for landing the new motorized fishing boats at every important fish landing site. With their increased political power as a vote bank, their demands are readily conceded by the politicians.

The shoreline changes on the coast are monitored by the Irrigation Department, which systematically collects and collates data about the physical changes of the entire coast of the state. According to their observations, the natural processes of erosion and accretion over the different seasons of the year along the coast has radically changed over the last four decades due to human intervention. The National Centre for Sustainable Coastal Management (NCSCM), the Society of Integrated Coastal Management (SICOM) and Ministry of Environment and Forests (MoEF), Government of India, compared five historical shorelines (1972–2010) extracted from satellite imageries and concluded that over 63 per cent of Kerala's 588-km coastline is eroding.

The erosion of the beaches quickly threatens the houses of the SSF which have been traditionally built close to the sea-face. This then gives rise to demands for construction of seawalls and groynes for protection from the wrath of the sea. More than half of Kerala's coast (53 per cent) is now lined with granite. However, it should be noted that it is not only these

coastal structures that cause beach erosion. Interventions far away from the coast along the 41 west-flowing rivers of Kerala—such as building dams, mining of sand upstream of rivers, dredging of river mouths and the destruction of coastal vegetation—are also important, but often hidden, causes for erosion.

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It is now recognized that seawalls, in the long run *do not* provide protection for the shoreline. The waves of the Arabian Sea are far too strong for them. Seawalls only provide profits for the contractors, and quarrying for granite is contributing to major ecological problems in the interior parts of Kerala, far from the coast. If the SSF of Kerala disappears in the next decade, it will be mainly due to seawalls as they destroy beach-based fish landing. Every kilometre of sea wall costs Rs 70 mn to build and Rs 30-40 mn to maintain every two to three years! This is a vicious circle.

There is a radical solution to this intractable dilemma—remove all structures, move the fishers to behind the 200-m hazard line from the sea, use all the granite to re-build the new houses and let the sea re-establish its old natural relationship with the coast of Kerala.

#### C. THE CHANGING ROLES OF WOMEN IN THE SMALL-SCALE FISHERY

The increasing size of the SSF vessels, their shift to new landing centres and the stone-walling of the beaches of Kerala have been detrimental to the occupations of women in the SSF communities who have traditionally been involved in pre-harvest and post-harvest activities and marketing of the fish from the beach landing centres.

The changes in fishing technology resulted in the greater role of male

merchants in financing the fishing, which required larger investments. The shift to bigger fish-landing centres more distant from the fishing villages has also given male merchants the advantage, leading to a major impact on the earlier independent and autonomous roles of women. It has reduced their role in local marketing and forced them to travel to more distant landing centres and face more competition from richer male merchants. Many women have thus opted to do wage jobs under male merchants, boat owners and fish-processing centre owners.

Where there are no landing centres/ports, women are then forced to shift their purchases of fish to the wholesale markets and buy (poor quality) iced or frozen fish for sale in retail markets. Given the masculinization of the wholesale and retail markets, women involved in marketing are marginalized mainly due to their weaker financial capital base. Added to this, there is the whole discrimination of women due to the lack of basic facilities in markets (clean water, lack of toilets, no changing and resting rooms, poor waste

Travancore, now part of Kerala. Thereafter, when Kerala state was formed in 1956, the government organized separate credit, producer and marketing cooperatives for the fishers.

These top-down initiatives failed miserably, with a few notable exceptions, such as the fisher cooperative in Marianad, Trivandrum, which integrated all the three functions of credit, production and marketing. In 1984, following the unionised struggles of the small-scale fishers demanding a better deal for their sector, the government initiated the formation of cooperatives on the lines of the Marianad model. This network was called 'Matsyafed'. It currently has 666 cooperatives under its fold.

Matsyafed was envisaged as an economic organization which was to develop a business plan and strategy to maximise the economic benefit of its members—men and women. It had a Business Development Plan (BDP) that was meant to elevate Matsyafed into a business organization that would not be a burden to the government (like many of the loss-making public sector organizations) and also serve the economic and social welfare needs of the SSF communities.

In the initial phases, Matsyafed took the right approach of building cooperatives through community-based contacts. The activities were also diversified into non-fishing activities for generating self-employment opportunities, particularly targetting women and youth. The formations of self-help groups (SHGs), thrift and credit mobilization, and the promotion of microenterprises were some of the initiatives.

However, Matsyafed has not really updated itself with the evolving hard realities in the SSF sector today, which include—too many people chasing the same fish in the same coastal waters, higher capital and operational costs, falling productivity; huge disturbance to the ecosystem and reduced income to fishers.

Matsyafed needs an updated perspective to cope with the changes and the opportunities. New policies,

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disposal) which further put them at a disadvantage.

#### D. ORGANIZATIONAL ARRANGEMENTS FOR THE SMALL-SCALE FISHERY

Collective action has been a sustained theme among the labouring sections of Kerala's population. There has always been a commitment by the state to provide organizational support for rural producers. Whether these initiatives led to genuine participation is quite another matter.

Organizational arrangements in the fishery have a long history in Kerala. The first cooperative was organized in 1917 in the state of



strategies and business plans are needed in the changing scenario. The need of the hour is for the Matsyafed core team and the line staff to revive its earlier phase of close community contacts. This will be the only way to rectify the unsustainable fishing practices and accomplish the major challenge of attaining prosperity of the SSF in the state. There needs to be a balance between attaining profitable business endeavours without loss of the perspective of ecological sustainability and social responsibility.

#### E. FISHING COMMUNITIES AND THEIR PROGRESS IN HUMAN DEVELOPMENT

The issues detailed above have had varying effects on the social and economic well-being of the fishing communities of Kerala.

The state is known the world over for its unique human development experience. The population of Kerala has a high quality of life—high literacy, high life expectancy, favourable sex ratio (more women than men), low infant mortality. All this has been achieved in the 1970s and 1980s despite the relatively low per capita income of the state.

However, studies have shown that this high quality of life of Kerala was not applicable to two communities—the fisherfolk along the coast and the tribals in the hills. They were the ‘outliers’ in the Kerala development experience even as late as 1980.

The major socio-ecological movement of the small-scale fishers in the 1980s led to greater politicisation of the fisherfolk, and the attention of the state turned to them in a limited way. The preference accorded to the mechanized sector of fishing, which started in the 1960s, was stopped. The focus was turned to the small-scale fishery from the 1990s onwards. Through the creation of the Matsyafed, considerable funds were provided for motorization of small fishing vessels. The Fishworkers Welfare Board contributed to greater welfare measures for significant improvements in housing, education and health facilities of the fisherfolk.

However, in the last two decades (1995–2015), the fishery sector production and its contribution to net state domestic product (NS DP) have been declining at the macro level. The fishery resources too have declined in stock and variety, which have mostly hurt the small-scale fishery. This seems to reinforce the fact that the huge increase in investments and the new organizational arrangements

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have not been adequate to compensate for the initial disadvantages faced by the communities. This outcome can be attributed importantly to the lack of any collective resource management accompanying increased investment.

At the micro level too, there is evidence of increasing poverty and indebtedness among the fishers across the selected districts. The poor socioeconomic situation of the fishers is closely related to their increased population and the initial lack of land ownership. The situation of very congested housing still prevails as a serious challenge among the small-scale fishers. This, together with deprivation in basic amenities, leads to poor human development outcomes. The incidence and prevalence of communicable diseases are much higher among the marine fishers, so also occupation-related ailments and lifestyle diseases.

On the educational front, there has been considerable improvement in literacy and educational status among the marine fishers. However, they lag far behind in higher and technical education achievements. This then inhibits their access to the new opportunities in the changing labour market at the state, national and global levels. Dependence on fishing continues.

Since fishing was not a source of increased income for the vast majority of the working fishers, we

must conclude that whatever higher human development outcomes have resulted can only be explained by income sources from outside the fishery and state welfare support.

Migration to the Middle East and employment in government and other sectors outside the fishery are important income-accruing channels among the fishing communities. But there is lack of credible data to support this observed change and, therefore, further detailed enquiry is warranted.

One important observation is the spatial disparity in the development outcomes. Fishers in the Christian-dominated district of Trivandrum and the Muslim-dominated district of Malapuram are much poorer and have lower human development outcomes compared to the rest of the fishing community in Kerala.

Another observation is that there is a historical disadvantage in the initial conditions of development, which resulted in the fishing communities being 'left behind' in the initial human development progress of Kerala. The three historically important factors of land reform, the presence of social reform movements and the role of missionaries in spreading English education were absent in the fishing communities. Having been deprived of these processes, the community continues to lag behind and continues to be unable to overcome this initial disadvantage.

#### THE RELEVANCE OF THE SSF GUIDELINES AND KERALA'S SSF SECTOR TODAY

The scenario which emerges from the five studies is certainly not an encouraging one. This fact was readily accepted at all the three workshops organized to feed back the consolidated results of the studies.

Situating the above context against the background of the SSF Guidelines, provided an important element of hope and determination to the men and women fisherfolk, community leaders, civil society organization representatives, the leaders of the cooperative entities

and trade unions, and fishery scientists and policymakers attending the workshops.

The most significant resolve of this multi-stakeholder group was the need to redefine and reconfigure the constituents of the small-scale fishery. How do we define what is small and what is not? This is a major challenge. It is also an evolving process.

Related to this was the discussion on the unbridled increase in investment in fishing crafts and gear which were harmful to the fish stocks and the aquatic ecosystem. How do we limit this financially and ecologically unsustainable growth?

Partly in response to the above was the call for reviving the discussions on 'aquarian reforms' in Kerala—giving the rights to own fishing assets solely to those who are actually working at sea. In other words, there should be no absentee ownership. Such changes are easier said than done. There are many vexing questions. Should this right be given to any worker? Or is it reserved primarily to anyone from 'traditional fishing communities'? Or should it be only for the workers from among them? In the socio-political context of Kerala today, the answer is not straight forward.

The SSF Guidelines provide a good template and a fair starting point from which the SSF of Kerala, as it finds itself today, can negotiate its way to a brighter and sustainable future. For the moment, this is the only definite statement that can be made. 📌

#### For more

[igsf.icmf.net/en/page/1064-Background%20Papers.html](https://igsf.icmf.net/en/page/1064-Background%20Papers.html)

**Background papers from West Coast workshop**