

# INCOME SPREADING MECHANISMS IN SMALL-SCALE FISHING THE KARANILA SYSTEM IN THE FISHERY OF KERALA STATE, INDIA

by

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## ABSTRACT

The coastal waters of the densely populated Indian state of Kerala are the most productive in the Indian EEZ. Efforts to modernize the fishing industry in the 1960s and 1970s resulted in over-investment and over-fishing leading to declining catches despite increased effort, conflicts between traditional fishermen and trawler/purse seine operators and inequitable distribution of the value of output. The response of the artisanal fishermen was to take collective action through unionisation and to adopt new technologies. Against this background, the paper examines the evolution of a custom-based mechanism for sharing the fruits of the catch across the community practised in the central maritime districts of Kerala. This traditional "karanila" system, used in the net-ring seine fishery, first ensures that not only are the consumption needs of the crew and its associates satisfied but also that the "rights" of widows, the handicapped and other needy persons in the community are met; the proceeds from the sale of the rest of the catch are then distributed through a complex sharing system which takes into account all the persons encompassed by the "karanila" concept which includes not only the crew responsible for the day's catch but also those classified as having "shore status" (semi-permanent crew members and temporary, stand-by members). The "modus operandi" of the system, its rationale and relative merits and demerits are discussed. The role that the system has played in sustaining the small-scale fisheries sector in Kerala is assessed and how the mechanism has further evolved under the pressures of over-fishing. The authors conclude by presenting an evaluation of how the "karanila" concept might help efforts to create a new, more effective and more equitable regime of fisheries management which would ensure the greater participation of the fisherfolk.

## 1. Introduction

An important characteristic of small-scale fishing communities in the IFPC Region is the existence of numerous community-evolved and community-sanctioned mechanisms to ensure that the benefits from the common property fishery are spread as widely as possible in the whole community.

These mechanisms for sharing and caring which have been instituted as an integral part of the distribution of the returns from fishing, have often disappeared under the pressures of modernisation and the wholesale incorporation of these communities into the world market.

Some have however withstood these pressures by being modified to suit the pressures of the times.

This paper examines one of these systems - an income spreading mechanism which assures a person fish for consumption and a share in the sales proceeds of the fishing unit's catch. It is a system practised in the coastal encircling net-ring seine fishery in the coastal state of Kerala in South India. It is called the karanila system. Karanila literally means "shore status" - a privilege granted to anyone who expresses a demonstrable interest in associating with a fishing unit by making his presence on shore when the unit is ready to set out to sea. Except on the very first occasion, there is no compulsion for the person to actually go fishing.

The origins of this income spreading mechanism and what has happened to it are traced, particularly against the background of economic and biological overfishing in Kerala.

## 2. Development of Kerala's Fisheries

Kerala state, situated in the south-western corner of India, is the most densely populated state in the country and the population density of its fishing villages is about three times the state average. Kerala accounts for only about 10 percent of the country's 6,000 km coastline but is the home of over a quarter of India's half a million active marine fishermen. The coastal marine waters of the state (upto a depth of 50 mts) are almost equal to its land area - 13,000 sq.kms. Consequently there are about 10 active fishermen for every single sq.km of coastal waters, over three times to the all-India average.

This high density of fishermen in Kerala is to an extent compensated by the fact that Kerala also has the most productive coastal waters in the country. Blessed with a highly productive upwelling system, the average fishery potential of this inshore sea is 30 tonnes per sq. km. while the all-India average is only 13 tonnes. The estimated MSY of Kerala's inshore sea is about 400,000 tonnes. This resource is composed of numerous fish species, each attaining varying sizes at maturity and available in relatively small stock sizes - a standard characteristics of tropical waters. The three major economic species are oil sardines, mackerels and penaeid prawns which together account for over half of the MSY.

Until the 1960s, fishing in Kerala was almost entirely dominated by the non-mechanised, traditional country-crafts - kattumarams, plank and dugout canoes - using a variety of tackle and gear. These traditional technologies had evolved over the centuries to suit the specific ecological context of the seas as well as the distinct characteristic of the various fish species. Most of these fishing gear were passive in nature and ecologically benign. With the coming of nylon nets and better marketing infrastructure the artisanal fishermen started harvesting more fish. By 1970 the marine fish landed by the traditional fishing craft reached the MSY level. The overall picture in Kerala fisheries was one of abundant fish availability in the inshore waters, easily accessible to the large number of artisanal fishermen. There seemed very little scope for significant improvements to the productivity of their craft and gear. The common property nature of the fishery also did not appear to pose any major threats. The technological barriers (the need to have fishery specific skills) and social barriers (artisanal fishing being the occupation of a lower social caste) prevented free entry of capital and labour from outside the traditional fishing communities into the fishery.

## **The Indo-Norwegian Fisheries Project**

The government had been making attempts to 'modernise' the fishing industry by introducing mechanised boats. The Indo-Norwegian Fisheries Community Development Project (INP for short) had as early as 1953 introduced mechanised gill net boats without much success. This was followed by introducing small trawlers using bottom trawl nets. The introduction of this new technology coincided with fast expanding markets for prawns in developed countries. Thus, the coastal waters off Kerala, which contain one of the world's richest penaeid prawn resources, became a main motivator of the state's modernisation attempts.

The efforts of the state between 1960 and 1969 to provide mechanised boats to the artisanal fishermen, failed. About 1,200 small trawlers distributed through cooperatives went into the hands of middlemen and outsiders. The monopoly of the skill-specific and caste bound nature of traditional fishing began to give way to a strong commercial sector. By 1980 Kerala had over 3,000 small trawlers and more than 30,000 traditional craft competing for space and product in the coastal waters. That year there was a sharp decline in the total fish catch, with the small trawlers accounting for about half the landing.

The introduction of mechanised purse-seiners in the early 1980s in the central maritime districts of Kerala further aggravated the resource crisis. Large quantities of oil sardine and mackerels, the mainstay of traditional fishermen began to be caught by these purse-seiners. As a result the productivity as well as the income of traditional fishermen plunged to very low levels.

## **Responses to Lopsided Development**

This lopsided development in the state's fisheries sector - declining catches with increased fishing effort and an unequal distribution of the value of output - forced the traditional fishermen to look for new ways of survival. Their reaction was mainly at two levels: collective action in the form of unionisation; and individual technological strategies such as motorisation of their craft and the adoption of a variety of more active fishing gear to compete with the trawlers and purse-seiners.

## **Collective Action**

Initially there were spontaneous clashes and conflicts in the open sea between traditional fishermen and trawlers/purse-seiner operators. Soon the traditional fishermen formed a militant agitation spearheaded by an independent trade union - the Kerala Swathantra Malsya Thozhilali Federation (KSMTF). Every year from 1981 onwards, Kerala witnessed organised struggles of the traditional fishermen. The main demands were: exclusive fishing zones for traditional fishing crafts; total ban on purse-seiners and night-trawling; and the banning of bottom trawling during the monsoon months, considered the breeding season for many fishes.

The struggles of the fishermen's movement continue and have had many favourable outcomes. Expert committees were set up by the state to examine the issue of overfishing and suggest proper management measures. The enactment of the Kerala Marine Fishing Regulation Act (KMFR Act) 1980, empowered the state to prohibit, restrict and regulate fishing so as to conserve the fish wealth and to protect the interests of traditional fishermen. Using this power, the government promulgated many management measures. They included a ban on purse-seiners and on trawling at night; zonal restrictions for mechanised boats,

registration and licence for fishing, etc. However many of these important management measures have remained largely on paper.

In 1989, the government acceded to the long-standing demand to ban monsoon trawling. The enforcement of this ban during the last five years, though for a shorter period, can be considered the most important fishery management action in the state. However, this was also challenged in the court of law in 1993. The boat owners succeeded in getting a verdict in their favour; they were allowed to leave the harbour to "open seas" during the ban period in the name of "deep sea fishing".

### **Adopting New Technologies**

Apart from unionisation, the other major response of the traditional fishermen was their adoption of new technologies to enhance their fishing capabilities, notably the motorization of traditional craft. This process started in 1981 and by 1991 there were 9,914 motorized crafts in Kerala. The share of motorized crafts in the total marine fishing landings of the state increased from 3% in 1981 to 37% in 1985 and touched 63% in 1989. Motorization gave the impetus for enhancing the size of gear; by 1985 more harvest-efficient gear designs were also introduced which initially gave good results. What remained of the non-motorised units - mainly the 15,000 non-motorisable kattumarams - accounted for a mere 5% of the fish landings in 1989.

The motorisation and new gear designs resulted in a large increase in the capital investment in the traditional fishing units. At constant prices, there was a near 10 fold increase in the capital investment during the eight years from 1981 to 1989. With motorisation, the operating costs of traditional fishing has also increased phenomenally. Fuel costs alone account for between 12% and 52% of the value of output depending on the type of craft-gear combination. Motorisation also compelled the fishermen to borrow heavily to remain in fishing, resulting in a high level of indebtedness with middlemen and merchants and the loss by fishermen of effective control over the sale of their fish.

### **Facing Overfishing**

It took the whole of the 1980s to respond to the lopsided development of the 1960s and 1970s. Between 1981 and 1988 there was no respite to the decline in fish landings. Kerala was facing a situation where the trawlers, purse-seiners and now the newly motorised crafts using more efficient gears were all contributing to the overfishing. However, at the level of the individual units the overall decline in the fish catch did not lead to less fishing effort since fish prices tended to increase to such an extent that they offset the cost of excessive levels of fishing effort at least for sometime.

The negative economic, social and ecological consequences of overfishing are very many and it becomes a burden for the society as a whole. Despite this, the commercial sector (trawlers and purse-seiners) and the small-scale sector (motorised crafts) cannot be treated alike for the purpose of effective fisheries management.

In Kerala, where a large contingent of active fishermen exist, the negative social consequences of excessive levels of fishing effort caused by the small-scale sector is comparatively less serious, as it provides additional employment opportunities. As in many other cases, the social relations of production in the small-scale sector are shaped more by non-economic factors. Profit and accumulation are only two goals among many. The ownership patterns; division of labour and sharing systems assure more distributive justice

in income and equal access to the fish resource. These help them to uphold the value of collective good in favour of always maximising personal gain. Such social values are also linked with and strengthened by traditions and customs. Though now under stress and strain, they still provide a good basis for effective fisheries management.

In this context, the karanila system of income spreading and sharing in the traditional thanguvallam fishery in Kerala has special significance.

### 3. The Thanguvallam - Ring Seine Fishery

The karanila system is most prevalent in the canoe and encircling net fishery popular in Alleppy and Ernakulam, the central maritime districts of Kerala state. Before the advent of motors, the encircling net was called the thanguvala and its craft the thanguvallam. Motorisation permitted enhancing the size of the net and the fitting of rings to the top and the bottom thus making it function like a purse-seine and thus become more harvest efficient. This new modified net came to be called a "ring-seine".

#### The Thanguvallam Operations

The thanguvallam fishery has a long tradition and history and has always contributed a major share in Kerala's fish landings.

The thanguvallam is a large wooden plank canoe most suitable for calm weather operations. The thanguvala, an encircling net, is used in this craft as an effective gear to catch fast-moving, pelagic shoaling fish such as oil sardines and mackerel. Prawns are also caught using this net when they move up to the surface layers of the sea during the pre-monsoon months.

The thanguvala is of rectangular shape when spread out. When a moving shoal is spotted, the craft is driven ahead of it and one of the crew on sighting the shoal jumps into the water with one end of the net. The craft is then rowed quickly around the shoal paying out the other end of the net so as to encircle it. The lower portion of the net is then lifted out of the water thus enclosing the shoal in it. The net is then quickly lifted onto the thanguvallam.

This craft and gear combination underwent tremendous changes in the last decade after motorisation. While the overall sizes of both the craft and gear increased considerably, the most important transformation was the attaching of rings to the thanguvala thus creating a sort of mini-purse seine which came to be called ringvala or ring-seine. The fitting of rings made the encircling, enclosing, and the lifting process much easier and quicker. However, all these net related operations continue to be achieved with human hands aided by only a pulley to haul up the bottom of the net.

Prior to motorisation, the technique of using a thanguvallam and the thanguvala existed only in the central maritime districts of Kerala. But after motorisation and the introduction of the ring-seine, its immense success in increasing productivity and efficiency of fish harvesting resulted in this technique spreading quickly all over Kerala. Consequently a wide variety of traditional types of encircling nets and boat seines used for harvesting pelagic species were all replaced by the ubiquitous ring-seine. The change was not smooth. There were clashes between traditional fishermen arguing for and against it. In some districts the traditional "courts of the sea" banned the ring-seine. However, such traditional sanctions did not hold for long. By the end of 1989 ring-seines became the predominant gear all along the

coast of Kerala. A traditional fishery marked by its diversity became a mono-gear fishery in less than five years.

The state played an important role in the diffusion of this technology by providing credit and liberal subsidies to fishermen groups who were keen to acquire a motorised thanguvallam and ring-seine. By 1991 there were a total number of 1,741 ring-seine units in Kerala. It is estimated that they provided employment for about 60,000 fishermen, nearly half the active fishermen in the state.

The present motorised thanguvallam-ringseine units are of varying size both with respect to the craft as well as the length and depth of the ring-seine. The smaller sized craft below 15 meters length use only one motor while those above use two motors and also carry larger ring-seines. In Alleppy district the unit is composed of only one craft whereas in Ernakulam an additional carrier boat is used. In the northern districts as many as four craft can be involved in the fishing operation.

The capital investment required for a large unit is about Rs. 500,000. This equals the capital investment of an average trawler in Kerala. But unlike trawlers, it is the gear (the ringseine) which accounts for about 60 percent of the investment.

### **Ownership Pattern and Crew Organisation**

About 40 to 50 years ago, the thanguvallam units in Alleppy District were owned by a landlord class. Men from the traditional fishing communities were hired for work through a kind of bonded labour system. A peasant uprising in the district in the 1940s resulted in land reforms and dispossession of the landlords and this greatly influenced the ownership pattern of the thanguvallams and the production relations in the fishery sector. Bonded labour in the fishery was abolished and the fishermen formed groups which collectively owned and worked on the thanguvallam units. Group sizes varied from 4 to 25 and kinship was most often the basis of group formation. This pattern of ownership and group formation continued until the advent of motorisation.

With the state coming into the picture with substantial credit, the composition of the groups has also changed. Kinship and clan are no more the main basis for group formation. A common feature in Ernakulam district has been that the number of members in the ownership group reduces over time due to friction between members of such artificially formed groups. However, all members of the ownership group are working fishermen. In the beginning they raise money for initial capital. Very often this forms only a small portion of the capital required and the rest is borrowed from merchants and moneylenders. Borrowings from the organised sector like the nationalised banks has also been on the increase.

Prior to motorisation, when the thanguvallam was comparatively smaller in size, a crew of 15 would be enough to operate the large thanguvallam. Now a minimum of 25 persons is required to operate the larger motorised units. A crew of 35 to 40 can be accommodated on it. For the medium type anchovies net unit a crew of 15 to 20 will still do. In areas where the carrier boats are used, an additional working crew of 5 to 8 is needed. Motorisation has helped the thanguvallams to expand their area of operation into slightly deeper waters. However, the increase in the size of the gear has warranted an increase in the amount of physical labour required in each unit. The hauling of the net is still done physically with bare hands. Consequently, despite the freedom from arduous rowing, and a larger number of crew, the fishing operation has become harder and more strenuous.

Skilled crew are few. They include: an experienced helmsman to guide the craft and with a good eye to spot shoaling fish; one person in charge of the net to release it properly, layer after layer; one person who looks after the rings and ring rope to handle them efficiently; and the engine operators.

### Accounts

Most of the thanguvallam units have an excellent system of account keeping. An accountant/cashier (normally one among the ownership group or from that family) is entrusted with this job. He uses a diary or an account book in which the details of each day's operating cost, quantity and type of fish caught, sales proceeds, names of crew, etc. are noted down. There will also be others among the crew, noting down the accounts continuously, in order to crosscheck because accounts and balance amounts are often carried forward and the system of sharing sometimes becomes very complex and involved.

The leader of the unit, selected from the ownership group, conducts weekly meetings in which all the crew participate. The main function of these meetings is to share the net income for the week; decide on whether or not to grant karanila to semi-permanent crew who availed of leave; settle old balances and discuss other work related issues.

### Sharing Systems

It is important to distinguish two types of sharing: the sharing of fish and the sharing of the net income.

#### (a) Dividing the Fish

The first charge on the fish which is landed by any thanguvallam unit is for the consumption needs of all the working crew and those with the karanila (shore status). Equally important are the legitimate "first right" claims on the fish by widows, handicapped members of the community, and others (for example, the barber) who render services in the community. Their shares in the form of fish are first handed out. Only after settlement of these claims is fish put to auction.

The proceeds from the auction are rarely fully received on the spot. Usually an advance is paid which will be used to pay for the food taken by the crew in the tea stalls and to purchase fuel. At the end of a week, once the payments are received from the merchants, the accounts are settled at the weekly meetings.

#### (b) Dividing the Sales Proceeds

From the total sales proceeds the total operating costs - fuel costs, sales commission, cost of the food expenses of the crew and the customary taxes - are first deducted leaving the divisible income. Forty percent of this divisible income is the claim of the owner group (returns to capital) and the remaining 60 percent is shared among the crew (returns to labour). Prior to motorisation the ratio was 30:70. In instances when the divisible income is small (say below Rs. 2,000), the whole amount is shared among the crew alone. The crew of course always includes the working fishermen of the ownership group. The skilled fishermen get a greater number of shares. The amount apportioned for the crew (i.e. 60 percent of the divisible income) is divided into a number of shares before it is distributed to the claimants. The total number of shares is calculated in the following manner:

Total number of shares = [No. of Working crew x 1.5] plus  
[No. of Non-working crew x 1] plus  
[2 or 3 extra shares for skilled crew]

What distinguishes this system of calculation of shares is that a significant amount of money is paid out to a group of persons who have no productive role in that particular fishing trip.

The system of giving a share of the earnings to the non-working crew who stay back on the shore - i.e. those with the karanila - had its origin more than half a century ago. Old fishermen explained that the origin of this system is closely related to the evolution of the group ownership system in the thanguvallam fishery.

#### 4. The Karanila System

The transition from a feudal to a communitarian system of ownership spear-headed by an ideologically motivated political struggle, thrust a moral responsibility on the new class of owner-workers to create mechanisms of income spreading. Moreover, since the fishery was deemed community property, the wealth from it was intended for all. The rationale of providing fish for consumption to all, and the karanila system are rooted in this context.

To understand the logic of the karanila system, the nature of the crew formation and crew rotation system in the thanguvallam units must first be understood.

The term "crew rotation" as it exists now in the thanguvallam fishery of Alleppy and Ernakulam districts does not really imply that there is always an excess number of fishermen attached to a unit who then take turns to fish.

#### Crew Formation and Karanila

Strictly speaking, the ownership group is the only 'permanent' crew attached with the unit.

There is another set of fishermen, who have no ownership stake in the unit but who in normal circumstances will always be attached with that unit. Generally they work with a particular unit for a minimum period of one year and then they may or may not opt to continue with it. These fishermen can be termed the 'semi-permanent' crew.

There are various influencing factors which help a fisherman to choose the fishing unit with which he will attach himself. These include distinguishing features or specialities like the newness of the craft and gear, size of the unit, efficiency of the ownership group, their history of success in the fishery, and even its celebrity status in the village.

There is yet another category of fishermen normally associated with a thanguvallam unit. They constitute a highly mobile group ( they can even be from outside the fishing community, or migrant fishermen) whose number cannot usually be predetermined. They can be termed as the 'temporary' crew. These persons come and go or change units as and when they like. It is this group of temporary standby crew who are granted the karanila or the "shore-status".



## **Crew Income Sharing and Karanila**

On any fishing day, the total number of fishermen present at the seashore with the unit at the starting time of the fishing trip are considered the crew of the units for that day. From among those present, the required number will get into the craft and go fishing. The remaining karanila fishermen stay back on the shore. The names of the working crew and the non-working crew (karanila) are noted down by the accountant every day. There is no rigid pattern in this crew rotation system. Normally no one is forced to get onto the craft or advised to stay back. However, when a new fisherman offers to work with the unit for the first time he must join the working crew at sea and prove his "seaworthiness". This practice precludes the possibility of persons unwilling or unable to work at sea from exploiting the karanila system.

As indicated earlier the karanila fishermen are merely entitled to one share from the divisible income allotted to the crew. The semi-permanent workers enjoy certain extra benefits and concessions. They are eligible for leave of absence at times of sickness, marriages or deaths in their family, etc. During such leave they are considered as karanila and hence given one share. Nowadays, even if members from the semi-permanent crew go to fishworkers trade union meetings, etc. They are also given the karanila share. However, such leave of absence will have to be ratified or sanctioned by the group at their weekly meetings. The semi-permanent fishermen also get annual festival allowances, bonuses and cash advances from the owner group.

From the money kept apart to pay customary taxes ( about 2% of the net income), after paying the contributions to church/temple trusts, trade union, etc, the balance is assessed and shared among the semi-permanent crew as bonus. The ownership group may also give extra money from their income to these fishermen.

## **Role of Karanila in the Fishery**

The role of karanila fishermen in the fishery takes on extra importance in two specific situations.

When the size of the ownership group is small the permanent and semi-permanent fishermen together are not sufficient to operate a fishing unit. Karanila fishermen are crucial to the working of the unit in such a circumstance.

However, in the pelagic fishery, which is the mainstay of the thanguvallam units during the pre-monsoon season, it becomes necessary, and indeed lucrative to make more than a single trip during the day. In such situations also there is a need for more than just the right number of crew to man a single trip. Having a large karanila fishermen group ensures work rotation so that each trip-team will get sufficient rest before the next trip.

Consequently, just as the group ownership pattern has come to stay in Alleppy and Ernakulam District, the karanila system also became an integral part of the production relations and of the social relations of the fishing communities of the area. The karanila has become an unquestioned social custom and all thanguvallam units continue to remain open to accept any fishermen willing to do work.

The fact that karanila fishermen were not "attached" to any particular unit meant that if the fishing season was bad, they were free to leave the unit and seek better income-

earning opportunities elsewhere. This meant that there was no undue "social pressure" to increase fishing effort during the natural lean fishing season.

The karanila system consequently provided the basis for fuller work opportunities and more importantly for a spreading of income in the community. It ensured a fair degree of distributive justice so long as there was community control on the number of fishing units in the village and a good, stable fishery.

Being a custom bound mechanism, the impact of modernisation on its functioning needs to be examined. The three most important aspects of the modernisation of the thanguvallam fishery has been the introduction of motors, the ring-seine and the intervention of the state in providing these productive assets.

### **Impact of Modernisation on the Karanila System**

The motorisation of thanguvallam units first took place in Alleppy District in 1981. Initially the motorised thanguvallams continued to use thanguvalas. The mere increase in the speed of encircling a shoal resulted in a boost in the catch rates and the total fish landings. In 1985 the first ring-fitted thanguvala was launched and was a resounding success.

It was during this time that the state intervened significantly by extending credit and subsidies for purchasing fishing craft and gear for the artisanal fishing sector. This resulted in a sudden spurt in the number of thanguvallam units in the area. The ownership groups formed to take advantage of the incentives were based on criteria other than kinship and the erstwhile community control on the nature and level of investment in the fishery was substantially eroded.

Between 1985 and 1989 there was an unrestrained growth in the number of motorised thanguvallam units using ringseines. Consequently there was a sharp increase in the number of fishermen required to man the fishery. This demand for labour attracted a larger number of persons from various walks of life into the fishery. Though they came largely from the traditional fishing communities and other communities residing near the fishing villages, there were also persons among them who had other sources of income. Even some lower-level government functionaries availed of the karanila to earn extra money from the initially vibrant and expanding fishery.

While there was resentment to this kind of influx of labour availing of the karanila system, their claims had to be honoured so long as the custom was still valid.

Soon, however, excessive effort in the same fishing area resulted in a drop in the catch rates to below the 1981 pre-motorisation levels but with a near ten-fold increase in the investment.

One response to this situation of lower catch rates of oil sardines and mackerels was the introduction of a net called the choodavala - a small-mesh ring-fitted encircling nets to fish for a hitherto unexploited stock of anchovies. Initially choodavalas were taken on the thanguvallams as subsidiary gear. But when the catch of anchovies was seen to be large and often unprecedented for this area, the gear began to gain prominence.

The fishermen of Alleppy and Ernakulam were thus faced with a problem in 1989. They wanted to get rid of their big motorised thanguvallams and ringseines but retain the choodavala to be used on smaller thanguvallams. An answer was found by introducing their

ringseines to the northern districts of Kerala where the fishermen were also getting large amounts of state finance and eager to switch to using motors. Consequently, there was a large movement of fishery capital from Alleppy and Ernakulam District -- the pioneer regions in motorised thanguvallam-ringseine fishing -- to the northern fishery districts of the state.

Between 1989 and 1991 there was a sharp decline in the number of motorised thanguvallam-ringseine units in these districts and in Ernakulam alone, it dropped from 200 in 1989 to 93 in 1991.

This "boom and bust" process in the fishery had its impact on the karanila system. With half the units suddenly leaving the fishery of the area, a large number of fishermen were left with no employment. Some fishermen switched back to using smaller non-motorised fishing units. Some others regrouped themselves and invested in new motorised choodavala units.

### **Karanila Under Strain**

Both these adjustments took time. In the interim, people took undue advantage of the karanila system and began to attach themselves to the remaining thanguvallam units. During this transition period, the karanila system faced its severest test.

Each of the remaining units were faced with a situation of having more karanila fishermen than those working at sea on the unit. Even when the catches were good, the average income to the individual crew was depressed because of the claims of the karanila fishermen.

Given the nature of the sharing system in the fishery, the main burden of the karanila income spreading is borne by the working crew and not by the owners of the unit. However, to the extent that most owners are also involved as crew, their total income is also reduced, although their share as owners remains unaffected. The larger number of karanila fishermen therefore in effect reduced the income of the working fishermen. This began to cause social strains between the semi-permanent crew and those who availed the karanila.

### **Diluting the Karanila Rights**

The response to this situation was to adopt new rules for the karanila system.

One such rule, now accepted by all the units in Ernakulam, is that if a minimum of 35 fishermen are not on board the craft, no fishermen - even if they are part of the ownership group - who remains on shore can claim the karanila share that day.

Another measure has been to abolish the karanila for the semi-permanent crew who avail of leave of absence. There was only one exception to this: leave taken by such workers when they are indisposed due to an accident at sea while fishing on that particular unit.

A further measure has been the very recent practice of cooking food on the craft. This means that only those who fish will be entitled to food. The practice of treating the food expenses on shore - given to the karanila fishermen as well - as part of the common expenses of the unit was terminated.

Despite these rigid rules it is reported that there continue to be days when the karanila shares number as many as 25.

## 5. The Karanila System: An Assessment

The karanila system was a custom-created mechanism for ensuring an adequate supply of labour to the fluctuating needs of the fishery and also a system for income spreading. If the resources of the coastal waters were the community's heritage, then the earnings from it needed to be spread out for the benefit of the whole community. This was the socio-economic and cultural underpinning of the karanila system.

One strong indicator of the success of the system can be gleaned from the fact that compared to the other maritime districts of Kerala, the prevalence of migration in search of jobs is the lowest in these two districts where the karanila system operates.

Since the first claim to the fish is for consumption of the household of all those associated with the fishing unit, it can be said that the karanila system has ensured that the nutritional status of a larger number of persons has been taken into account.

Another contribution of the karanila system to the fisheries management in Kerala has been its role in supporting the creation of a powerful fishworkers organisation in the state. The two districts of Alleppy and Ernakulam provide the largest trade union of artisanal fishworkers - the KSMTF - with its strongest base. Since fishermen attending trade union activity were given the karanila share they could participate without jeopardising their subsistence incomes. This was a possibility not open to fishermen in any other part of Kerala.

The advent of state sponsored increases in fishing assets, particularly motors and more efficient gear; the consequent gross over investment in the fishery; the "boom and bust" phenomenon of a pelagic fishery; and the breakdown of the community institutions, have all threatened the karanila system. It has degenerated into a means of redistribution of poverty.

A redeeming feature is that the element of community homogeneity and interdependence fostered by the karanila system are deep rooted in the social fabric of these two districts. Consequently, despite this temporary set back, it will indeed be possible to restore to the fishery the principles of this communitarian system of sharing and caring.

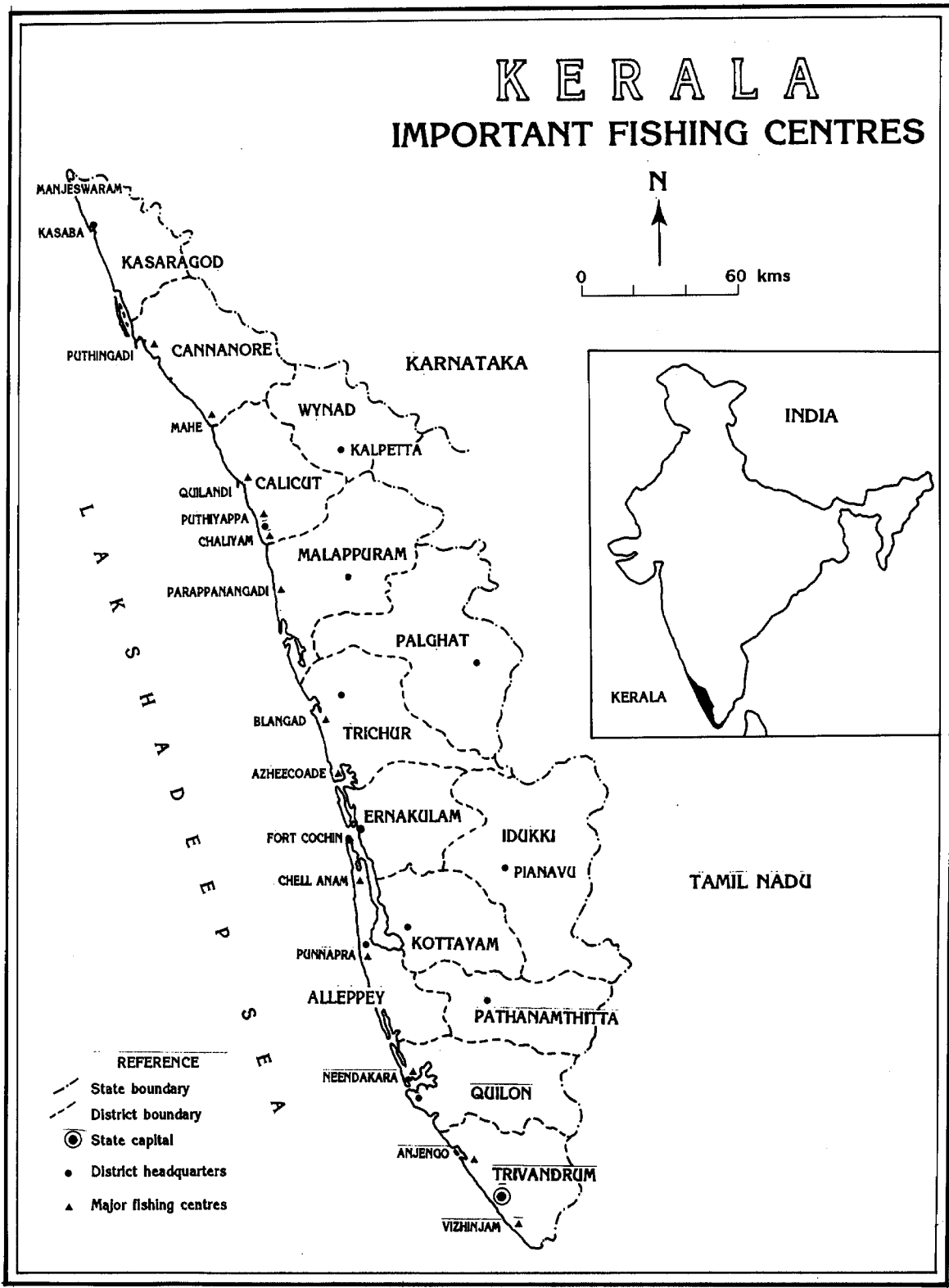
Such efforts cannot be unidimensional and merely attempts to revive the karanila. The decline of the features of the karanila are only a consequence of the larger malaise in the fishery. As a result, the larger question of management of the fishery as a whole must be the focus of attention. A paramount initiative in this effort will be to reassert the common property right to the coastal fisheries as being the unalienable right of the active fishermen alone.

Equally important is the need to recognise that increasing investment in a common property resource - which can also be perceived as a way of spreading work and income between fishing units - will only lead to socially undesirable levels of capital deployment and energy use and most certainly lead to economic and biological overfishing.

Both the above call for the revitalisation and the strengthening of the institutionalised communitarian arrangements which existed in the artisanal fishing communities. This can only be undertaken with the collective will of these communities and appropriate support from a state which is convinced about the economic and social rationality of such institutions in the management of the fishery.

# KERALA

## IMPORTANT FISHING CENTRES



- REFERENCE**
- State boundary
  - - - District boundary
  - ⊙ State capital
  - District headquarters
  - ▲ Major fishing centres