Chapter 7

Socio economic Status of the Fishermen
Two 'Mannan' families with their hut and small farm land in the background
Chapter 7

SOCIO ECONOMIC STATUS OF THE FISHERMEN

The fishermen of Periyar Lake, comprise two tribes, ‘The Mannans’ and ‘The Paliyans’. Of these, the Mannans are traditionally fishermen while the Paliyans collected honey and other minor forest produce. The Forest Department has permitted only the tribes for fishing in the lake. A Cooperative Society for fish marketing was established at Kumily in 1984 and each tribal fisherman is a member. In the beginning, the Forest Department granted permission to only those members of the society who had identity cards. On every Friday, the Wildlife Preservation Officer attested their pass to catch fish. The system had been continuing up to 1986. However the Forest Department gradually lost interest and the process of issuing passes came to a stand still after 1986. This has resulted in the intrusion of non tribals into fishing in the lake.

7.1 The Tribal People

During the early days the reserve was inhabited by the tribals. In early 1930s the Forest Department translocated all of them to two settlements near Kumily (Mannakudy and Paliyakudy) and granted permission for fishing, collecting firewood and other minor forest produce for their livelihood. Mannans continued fishing in the lake. Though the younger generation were given facilities for education, their performance was very
poor and there were many dropouts from the school. Most of them still continue fishing.

Fishing in the lake is done mostly with nets, but ‘Vatty’ and hook and line are also used occasionally.

7.1.1 Fishing Nets

The nets used are (1) Kooral net (mesh size 4 cm x 5 cm), (2) Vaika net (mesh size 11 cm x 11 cm) (3) ½ Number (Mesh size 6 cm x 6 cm), (4) 1 Number (Meshsize 10 cm x 10 cm), (5) 2 Number (Mesh size 14 cm x 14 cm), (6) 3 Number (16 cm x 16 cm), and (7) Cast net (Mesh size 2 cm x 2 cm). (The names used by the fisherman are given here, Table 33) . ½ number net is for catching small sized fishes mostly Oreochromis mossambica. Kooral net and 1 number are for Hypselobarbus kerali and Oreochromis mossambica, 2 number is for Cyprinus carpio and 3 number is for big fishes, mostly Tor khudree. According to the tribals the best tackle for Tor khudree is hook & line. Besides the cast nets, the gill nets are also used. There are many dried woody stumps in the lake, ends of the gill nets are tied to these stumps and the net stays there as a fence in the water on which fishes get entangled and are collected afterwards.
Table 33
Types of nets used by the fishermen

<table>
<thead>
<tr>
<th>SL No</th>
<th>Name of the Net</th>
<th>Mesh size (cm x cm)</th>
<th>No. of persons using the net</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cast net</td>
<td>2 x 2</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Kooral net</td>
<td>4 x 5</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>½ number</td>
<td>6 x 6</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>1 number</td>
<td>10 x 10</td>
<td>30</td>
</tr>
<tr>
<td>5</td>
<td>2 number</td>
<td>14 x 14</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>3 number</td>
<td>16 x 16</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Vaika net</td>
<td>11 x 11</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>Vatty</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Hook &amp; line</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Following are the other ‘gears’ used by the fishermen in the lake.

7.1.2 Vatty Method

This is practised usually by the tribal women. This consists of a plate covered by a cloth, with a hole in the centre. Food materials such as coarsely grounded roasted rice or brood chambers of termites are put inside the plates for attracting fishes. These plates are placed near the shore in shallow water of the lake by the women around 6 or 7 a.m. After an hour, the plates are taken out of water and the fishes are collected and the plates are kept again at different places, if the catch is encouraging. This method was usually done in the morning and in the evening but not at the mid day, as the fishes move away from the baits in the bright sun. During favourable season, up to about 12 kgs. of dried fishes could be collected by this method in a week. During unfavourable season they had to wait at least 3 to 4 weeks for collecting 4 kgs. of dried fishes. The fishes caught through this method include *Parluciosoma daniconius*, *Puntius amphibius*, *Puntius fasciatus*, *Puntius melanostigma*, *Puntius filamentosus*, *Garra sps.*, *Danio aequipimatus*, loaches and fingerlings of...
large fishes. The dried fishes fetch Rs. 40/- per kilogram in the market. The tribal women sell this even for Rs. 30/- Some women are engaged in catching and selling small fishes in the fresh conditions through this method, at the same rate, to the local people. These women were operating along the shore of the lake near boat landing.

7.1.3 Hook and Line

This method of fishing is mostly employed by the Paliyans, though Mannans also practise the method. This was mostly used for collecting fishes such as Oreochromis which fetch Rs. 20/- to 30/- per kg. The Mahseer and Hypselobarbus kurali are also caught with hook and line effectively.

Fishing is done in the interior of the forests, at varying distances from the settlements. The fishermen work all days in a week and seldom take leave. Some of them camp inside the forest while others stay only at night. Some of the campers occasionally bring their families also. They repair their nets mostly at their residence. At the camping site, they prepare food. They go for putting the nets at suitable places mostly in the afternoon. Hawling is mostly done at 3 or 4 O’clock in the early morning and some of the fishermen came to the main land immediately with the catch for selling. The tribals sell their catch to the middlemen. The middlemen often buy fishes at a low price and sell it to the people in the village and to nearby hotels at a higher rate. Naturally a good amount goes
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to them. As the tribals were often given the price in advance, they are forced to sell their catches to these middlemen. However the middlemen have denied getting high profit in this business though they admit that they get some profit “during certain seasons”. The Fisheries Department doesn’t seem to be much helpful to the fishermen in this regard. The fishermen had to take loan from the “financiers” at high interest often, though the Fisheries Department has various schemes to help the fishermen.

Usually there will be good haw1 during the SouthWest monsoon and the tribes gain good “returns”. During this time most of the fishermen get more than 50 kgs. of fish a day. But in the off season (January to May) their catches may come down to half a kilograma. According to the fishermen, unless they get 5 kg. of fish a day their effort would be a ‘waste’. The tribes were mostly interested in Cyprinus and Oreochromis. Much attention has been given to Cyprinus as they are heavier than Oreochromis. When a plan for the reintroduction of Tor in the lake was discussed with the tribes, they showed little interest as the fishing of this sport fish depended on chance. Yet they had sentimental attachment for Tor.

The ‘middlemen’ were of the opinion that Cyprinus and Tor are in great demand today although many people show interest in Oreochromis. The prices of these fishes also vary. During the study period the market price
of *Tor* and *Cyprinus* in season was Rs. 40/- each and for *Oreochromis*, Rs. 25/-. In the off season the prices for *Tor* and *Cyprinus* was Rs. 50/- each and that for *Oreochromis* Rs. 30-35/-.

The fishermen often buy their nets from Kumarakom, in Kottayam district, from *Velans* who are also a fishing community of the area as second hand material since the tribes cannot afford to buying new nets. The Fisheries Department also supply the nets. The tribes get the gear as pieces and they join it together for use. At least 4 to 15 such pieces are necessary for a full net. A small piece cost about Rs. 250/- and 15 such pieces would cost Rs. 3750/-. The fishermen could not afford this and they had to spent a major part of their gain of the season for getting these nets from outside agencies such as the *Velans* at Kumarakom.

The fishermen seem to be satisfied with fishing and they would not usually give up fishing even if they were offered alternative employment. In the off season they meet their livelihood by collecting minor forest produce and doing manual labour in nearby farms. They had no complaint about the forest officials or the Forest Department but were satisfied with them for its attitude towards them. They were never afraid of the wild animals.

### 7.1.4 Survey among the fishermen

During the study only 84 fishermen were contacted and the following
details were collected such as name of fishermen, age, name of tribe, profession, family status, involvement in fishing, method of fishing, type of net used, purpose of the catch, place of fishing, net gain, weight and the rate at which they sell their fishes and their economic status (Table 34).

Except one non tribe Malayalee and a Tamilian all fishermen belonged to the same tribe, viz. Mannan. Both the above outsiders married tribal girls, settled in their colony and do fishing. The age of the fishermen varied from 15-35.

Type of profession
There were permanent and temporary workers. Temporary workers were manual labourers and wives of the fishermen. The wives of the fishermen used Vatty method for fishing during suitable weather. On other occasions they remain in the house or collected fire wood. Two school boys were found fishing with their parents because of their interest in the 'sport'.

Family status and involvement
Both husband and wife in some cases and father and sons in some other cases were involved in fishing.

Purpose of the catch
Fish catch was sold or used for domestic purposes.
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Fishing places and problems

Fishing is carried out at Nellikkampetty and Anchuruli which are the places permitted for fishing. Some fishermen went to both these places. The problems faced by the fishermen were only from the wild animals. Elephants while crossing the lake often destroy nets and Otters often consume a major portion of the catch in the net.

Net gain

Fishing in the lake through nets often is not very profitable according to the fishermen and they could save only little.

Table 34
Details of the Fishermen

<table>
<thead>
<tr>
<th>SL.No</th>
<th>Age groups</th>
<th>Type of profession</th>
<th>No. of persons met</th>
<th>Persons went for fishing from each family</th>
<th>Weight Min.</th>
<th>Weight Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>15-25</td>
<td>Permanent</td>
<td>14</td>
<td>21</td>
<td>½ -3</td>
<td>5-45</td>
</tr>
<tr>
<td>II</td>
<td>26-35</td>
<td>Permanent</td>
<td>28</td>
<td>40</td>
<td>¼ -5</td>
<td>8-50</td>
</tr>
<tr>
<td>III</td>
<td>36-45</td>
<td>Permanent</td>
<td>15</td>
<td>17</td>
<td>¼ -5</td>
<td>10-70</td>
</tr>
<tr>
<td>IV</td>
<td>46-55</td>
<td>Permanent</td>
<td>4</td>
<td>6</td>
<td>½ -2</td>
<td>6-25</td>
</tr>
</tbody>
</table>

7.2 Kumily Girijan Matsya Vyavasaya Co-operative Society

This society registered on 27-11-1984 was aimed for the welfare of tribes, Mannans and Paliyans. The society is under the supervision of Fisheries Department. All the financial assistance to the fishermen are given through the department. The society secretary is a tribal elected by the working group (Committee). The society takes a toll of Rs. 2/- for every one kg. of fish caught by the fishermen.
Picture 13
A fisherman with his catch and hook & line

Picture 14
Fisherman getting ready for a good haul
Picture 15
Sunning 'Mannans'

Picture 16
A happy return
7.3 Fisheries Department

The Fisheries Department, Government of Kerala started an office at Kumily on 14-05-1986. They offer various schemes for the welfare of the fish farmers and for the development of aquaculture. In 1995-1996 the Fisheries Department formulated the Tribal Sub Plan (TSP), a special scheme, which allotted 7.70 lakhs for Idukki district (Table 35). The TSP had taken actions on:

i. The supply of fishing nets and twines worth Rs. 69,500 to 60 members of the Society.

ii. Wiring and plumbing work of Kumily Girijan Matsya Vyavasaya Co-op. Society Office costing Rs. 4,000/-

iii. Supply of cycle, balance, aluminium vessel, plastic buckets, cycle pumps etc to 50 tribal fish farmers at the rate of Rs. 3750/- each costing Rs. 1,87,500/-. 

iv. Building houses for 17 tribal families each costing Rs. 1,58,000/-. There were 10 beneficiaries from Kumily area.

The TSP action plan for 1996-1997 are given below (Table 35):

Allotment was 8 lakhs.
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Schemes:

1. Construction of houses benefitting 17 tribal families @ Rs.35,000/-
   Eleven members were selected from Kumily area. (3 members were in
   the selection list and others were in the waiting list).

2. Construction of 35 latrines, benefitting tribal families @ Rs.3000/- This
   scheme is operated by the Grama Panchayat on the recommendation of
   the Fisheries Department.

3. Issuing fishing nets to 60 tribal fish farmers. (Allotment Rs.1 lakh).
   These nets are of entangling type, made of polyamide fish net twine,
   Code number 1. Mesh size is 6 cm x 6 cm with 100 meter length and
   5 meter depth. The nets were supplied by the Matsyafed, Ernakulam.
   When not available, the Fisheries Department invite tender for supply
   of these nets.

Table 35
Fishermen received help through TSP organised by Fisheries Department

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Form of help</th>
<th>Year</th>
<th>No. of persons received help each year</th>
<th>Approx/Real cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nets</td>
<td>95-96</td>
<td>60</td>
<td>69,500/-</td>
</tr>
<tr>
<td>2.</td>
<td>Nets</td>
<td>96-97</td>
<td>60</td>
<td>1,00,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Wiring and Plumping work</td>
<td>95-96</td>
<td>Kumily Girijan Matsya Vyavasaya Co.</td>
<td>4,000/-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Office</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Cycle, Balance,</td>
<td>95-96</td>
<td>50</td>
<td>1,87,500/-</td>
</tr>
<tr>
<td></td>
<td>Aluminium Vessel, Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Buckets, Cycle Pump Etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Construction of House</td>
<td>95-96</td>
<td>10</td>
<td>1,58,000/-</td>
</tr>
<tr>
<td>6.</td>
<td>Construction of House</td>
<td>96-97</td>
<td>10</td>
<td>3,50,000/-</td>
</tr>
</tbody>
</table>
7.4 Observations of Ponds that Belonged to the Mannans

Fisheries Department provided subsidy for the construction of 6 ponds in the tribal settlement area in 1995 for the Mannans. Of these two were dried out and other 4 ponds were functional. There were four other well functional and well built ponds constructed with the help of Irrigation Department and the Panchayat. Though these ponds were mainly meant for irrigation and water supply some fishes were also cultured here. Of these four ponds two were observed which belonged to the ‘Mannans’.

All the observations were made in March 1997. The details are given below (Tables 36 & 37).

The four functional ponds built by the Fisheries Department had an area of 3 cents each for two ponds and 4 cents and 6 cents for the other two respectively. The fishes cultured here included *Cyprinus, Oreochromis* and *Labeo*. Fish seeds were supplied by the Fisheries Department, two months after the construction of the ponds. These four ponds had no proper retaining wall but its owners maintained the ponds fairly well. Fishing was done only in one pond so far, which consisted of only $\frac{1}{2}$ a kg. Common Carp.

The two other ponds constructed by the Irrigation Department and the Panchayat were situated in an area of 6 cents each and had proper
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supporting wall. According to the owners these ponds were functional with fishes like *Cyprinus, Oreochromis, Labeo, Catla* and *Rohu*.

The pond owners cultured fishes like *Oreochromis mossambica, Cyprinus carpio, Labeo fimbriatus, Catla* and *Rohu*. They got the fish seeds from the Fisheries Department but they cultured some lake fishes also. But the lake fishes had a stunned growth. The fish farmers face the problem of seepage but they neither think it will pose a threat to fish culture nor made any attempts to rectify the seepage. The fish farmers spent about Rs. 5000/- for the construction of the pond and they got a subsidy of the full amount from Fisheries Department for this. They were of the opinion that *Tor khudree* could also be cultured in the pond. The fish farmers did not have any opinion on fish culture or about its economic importance. They have no information about fish culture in the past.

**List of ponds observed**

*Table 36*

**Ponds constructed with the help of Fisheries Department**

<table>
<thead>
<tr>
<th>Pond</th>
<th>Area</th>
<th>Status</th>
<th>Fishes cultured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>3 cents</td>
<td>Functional and without retaining wall</td>
<td>i. <em>Cyprinus carpio</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. <em>Oreochromis mossambica</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. <em>Labeo fimbriatus</em></td>
</tr>
<tr>
<td>2.</td>
<td>3 cents</td>
<td>Functional and without retaining wall</td>
<td>i. <em>Cyprinus carpio</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. <em>Oreochromis mossambica</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. <em>Labeo fimbriatus</em></td>
</tr>
<tr>
<td>3.</td>
<td>6 cents</td>
<td>Functional and without retaining wall</td>
<td>i. <em>Cyprinus carpio</em> only</td>
</tr>
<tr>
<td>4.</td>
<td>4 cents</td>
<td>Functional and without retaining wall</td>
<td>i. <em>Cyprinus carpio</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. <em>Oreochromis mossambica</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. <em>Labeo fimbriatus</em></td>
</tr>
<tr>
<td>5.</td>
<td>-</td>
<td>Dried</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>-</td>
<td>Dried</td>
<td></td>
</tr>
</tbody>
</table>
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Table 37

Ponds constructed with the help of Irrigation Department and the Panchayat

<table>
<thead>
<tr>
<th>Pond</th>
<th>Area</th>
<th>Status</th>
<th>Fishes cultured</th>
</tr>
</thead>
</table>
| 1.   | 6 cents | Functional and with retaining wall | i. Cyprinus carpio  
ii. Oreochromis mossambica  
iii. Labeo fimbriatus  
| 2.   | 6 cents | Functional and with retaining wall | i. Cyprinus carpio  
ii. Oreochromis mossambica  
iii. Labeo fimbriatus  
iv. Catla catla  
v. Labeo rohita |

7.5 Fish Farmers Development Agency (FFDA)

It is an autonomous body for the development of aquaculture registered with respect to “Travancore Cochin Charitable Society Act” for the welfare of fish farmers and development of fish culture. The collector of the district is the Chairperson of this agency. The FFDA meets the basic needs of the fish farmers in respect of (i) technical support (ii) extension and (iii) financial support.

Financial support has been given to the fish farmers by the agency as subsidy for the renovation and reclamation of ponds, towards the cost of inputs (fish seed, fish feed, fertilizers, manures and preventive measures against fish diseases), for the construction of new ponds, for running water fish culture, for integrated fish farming and for cold water fisheries. A

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training in fish farming is given to the fish farmers by the agency for a period of one to two weeks and a daily allowance per day per trainee is paid during the training period. The agency give technical advice to fish farmers and supply fish seed, manure etc., on time.