

# Co-management and Livelihood Enhancement Planning in Coastal Artisanal Fisheries

## Micro-planning Report



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# **Microplanning Report**

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Submitted to the FAO/UNTRS as part of the project entitled  
Co-management and Livelihood Enhancement in Coastal  
Artisanal Fisheries





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## **Introduction**

### ***Background***

Micro-planning, as we use the term in the project, is a consultative process wherein data pertaining to the livelihoods of numerically larger stakeholders was collected and analyzed to arrive at specific action points or *probable* areas of intervention. This report is a compilation of various participatory mapping exercises and surveys conducted in 61 villages, lying in the districts of Villupuram and Cuddalore and the Union Territory of Pondicherry. The information presented here was collected over a period of nearly one and a half years. Given the constant adaptation and changes in the coping strategies adopted by artisanal fishing communities, some of the findings presented here need to be validated prior to any interventions.

This report is targeted at three different groups:

1. Fisheries departments who may benefit from the larger issues raised by the various communities pertaining to access to infrastructure, facilities and resources.
2. Development wings of the government who may be able to address some of the gaps and requirements listed and
3. Non governmental development organizations who may be in a position to implement the specific interventions listed.

### ***Objective***

The primary objective of this report and the entire micro-planning exercise was to build a baseline of information which can be utilized to plan interventions in the artisanal fishing sector.

We believe some of the issues raised by those participating in these surveys are representative of concerns and constraints felt by the various sections or stakeholders in the fishing communities. However this report is not meant to be prescriptive. We hope it serves as a starting point and is updated and re-validated before being utilized.

### ***Methods***

The methods followed for the micro-planning surveys were a mix of structured surveys, participatory GIS techniques and stakeholder analysis using the livelihoods enhancement and diversification framework.

### ***Sample size***

While the total number of settlements covered were 63, the LED framework based stakeholder analysis exercises were carried out in 22 settlements. Other exercises (described below) were carried out in all the settlements.

## Structured Surveys and Street/Social Mapping

The baseline data that was collected was the primary source of information for the micro-plans. This was a household census which involved the filling of structured schedules and mapping of streets and structures in 61 settlements. Data from the household surveys was entered into a relational database and extracted for each settlement during the preparation of the micro-plans.

All the street mapping done was geo-referenced and digitized as a vector GIS map. Social data from the household surveys was attached to this map. A limited resource mapping exercise was also conducted which covered the infrastructural facilities related to fisheries. This too was digitized onto a GIS package and is presented in the introductory section of each micro-plan.

## Historical Analysis

A general group discussion was held with "elders" from the village and a brief history of the settlement was obtained. This included information about the year of the settlement being established, its major constituent castes, important infrastructural development that took place and the major shocks that had impacted lives and livelihoods in the community.

## Stakeholder Analysis/ Microplans

The stakeholder analysis conducted was based on the livelihood enhancement and diversification framework developed by Venkatesh Salagrama and Thaddeus Koriya as part of a study entitled *"Assessing Opportunities for Livelihood Enhancement and Diversification in Coastal Fishing Communities of Southern India"* which was supported by the United Nations team for Tsunami Recovery Support in 2008<sup>1</sup>.

The Integrated Coastal Management institute conducted a four day, hands on training programme at Chidambaram (Cuddalore district) wherein Mr.Salagrama trained field teams from FERAL and partner organisations of this project in conducting such stakeholder analysis. Details of the framework are covered in the workshop report submitted to FAO/UNTRS.

Stakeholder analysis was conducted on a sample wise basis in 22 of the 61 project villages with 7, 6 and 9 settlements covered in Villupuram, Pondicherry and Cuddalore respectively. The steps followed were roughly along the following sequence:

- 1.A discussion with the traditional leaders of the village in which major stakeholders were identified. This was cross checked with the household data that had been collected in the earlier census.
- 2.Focussed group discussions with the three most numerous stake holder groups. This generally comprised of boat owners, fish vendors and crew members.
- 3.Analysis of the data collected and identification of gaps.

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1 You can download this report from this link <<<http://www.un.org.in/untrs/reports/Fisheries%20LH%20enhancement%20study-20%20June%202008-FINAL.pdf>>>

## **Limitations of the methods**

There were a number of limitation in the methods followed. The use of the information presented here is subject to these limitations.

## **Dynamics of the sector**

The artisanal fishing sector is highly dynamic and fishing communities rapidly adapt to changes in the various factors that affect their livelihoods. An example of this is the rapid adoption of ring seines in the project area and the transformation of boat owners to crew members for the ring seine operation. A recent "self imposed"<sup>2</sup> ban on ring seines has reversed this process and the crew have returned to fishing on their own boats again.

## **Time of surveys**

Nearly a year separated the initial household census and the final round of LED based group discussions for the micro-plans. We have reasons to believe that some of the parameters measured during the first survey had changed during the course of time. This included the ownership patterns of boats and a shift from boat owner to crew member in some villages.

The Stakeholder Analysis was conducted from June to October 2008. The focussed group discussions had to remain on a flexible schedule as they were dependant on the availability of the community members representing the various stakeholder groups.

## **Sample Universe**

The exercise was concentrated on the fishing community with the major stakeholder groups identified from within the community. The size of groups was not uniform throughout the study period across the respective study area. The discussions would usually begin with 5-6 people which would increase or decrease rapidly according to the levels of interest in the activity. A maximum of 20-25 people were known to have gathered and participated in the discussion on many instances.

A major limitation of this study was that the source of all the data collected was the community members themselves. Thus the outcomes of the study were biased towards local perceptions of cause and effect. This survey did not include perceptions of groups, fisheries experts for instance, which may have differed from those of the primary stakeholders.

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2 A six month ban was imposed by the traditional leaders of Devanampattinam village in August 2008 which was accepted and implemented across the Coromandel coast within the study area by other traditional leaders.

## Stakeholder Analysis/ Microplans

### **Introduction**

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1. A discussion with the traditional leaders of the village in which major stakeholders were identified. This was cross checked with the household data that had been collected in the earlier census.
2. Focussed group discussions with the three most numerous stake holder groups. This generally comprised of boat owners, fish vendors and crew members.
3. Analysis of the data collected and identification of gaps.

### **Organization of this report**

The report has been organized in the following manner to facilitate easier access to the information presented:

1. Preceding each cluster is a location map which indicates the villages where the surveys were conducted.
2. The annual activity profile for the various stakeholder groups is represented by a calendar which indicates the months in English as well as in Tamil. This was found to be similar to most villages and wherever there has been an exception it has been noted in the microplan itself.
3. The Historical mapping is part of the introductory section on each village. It includes an account of the status of the village in the past when compared to the present providing information regarding developments within and around the village over the years. This has been captured under three main categories as follows:
  - a) Origin of the village
  - b) Major shocks experienced by the village
  - c) Infrastructural developments within and close to the village
4. Introduction to the village includes a demographic profile, ownership of assets and the occupational profile of the village.
5. The stakeholder analysis following the LED Framework.

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3 You can download this report from this link <<<http://www.un.org.in/untrs/reports/Fisheries%20LH%20enhancement%20study-20%20June%202008-FINAL.pdf>>>



### ***Demographic profile***

The population was classified along the following criteria:

1. Adult male and female over 35: justified as the age beyond which diversification in occupation is minimal.
2. Adult male and female below 35: from 18-35, where if at all any diversification were to take place, it would occur in this age group.
3. Children male and female: are considered up to 18 years of age. Boys however start fishing as early as 14.
4. Infants male and female: Still dependent on their mothers.

### ***Asset Ownership***

This indicates the percentage of the population who own craft either individually or on a shared basis.

### ***Occupational Profile***

The occupational profile for men includes age groups from 15 years to approximately 60 years of age irrespective of whether they are crew members, boat owners, fish vendors, etc. The women however begin working after marriage when their children no longer need to be nursed. The age group has been specified in each of the stakeholder groups preceding the analysis.

## **The LED Framework Analysis**

### ***Stakeholder groups***

The major groups identified in the fishing community were

1. Craft owners
2. Crew members
3. Fish vendors

#### **Craft owners**

The various fishing crafts observed in the region were kattumarams, thonis, Fibre Reinforced Plastic boats (FRP) and Trawlers. A considerable proportion of the craft are owned on a shared basis where more than one person is the owner.

#### **Crew members**

Crew members usually do not own fishing craft. Many of the craft owners, however become crew members at times depending on the prevailing circumstances.

The craft owners and the crew members are also referred to as the fish producers.

#### **Fish vendors**

This group mostly comprises of women. They are mostly head loaders. This group includes the women selling fresh fish and dry fish.

### ***COGA Analysis***

This analysis was done for all groups providing insight on the Caste, Origin, Gender and Age (COGA) of the stakeholder group.

### ***Daily Activities Profile***

This gives an account of the daily activities related to fisheries, with respect to each group. Most had a fixed schedule which was recorded in this activity.

### ***Summary of Recommendations***

All the recommendations made by the respective stakeholder group of each village has been summarized under the following sub headings:

1. Resource management and enforcement
2. Welfare schemes
3. Infrastructural requirements

4. Facilitation requirements

***LED Framework Analysis***

The results of the analysis has been presented in a tabular form as per the framework developed by Venkatesh Salagrama and Thaddeus Koriya as part of a study entitled "*Assessing Opportunities for Livelihood Enhancement and Diversification in Coastal Fishing Communities of Southern India*".

The specific recommendations have been derived from the gaps identified in the coping strategies and have been listed before the framework analysis as the summary. The recommendations are indicated in the table and are supported by notes at the end of the table which are also listed within the table wherever relevant. An endnote referring to a particular problem is not repeated more than once should the problem as well as the responses repeat in each of the stakeholder group of a particular village.



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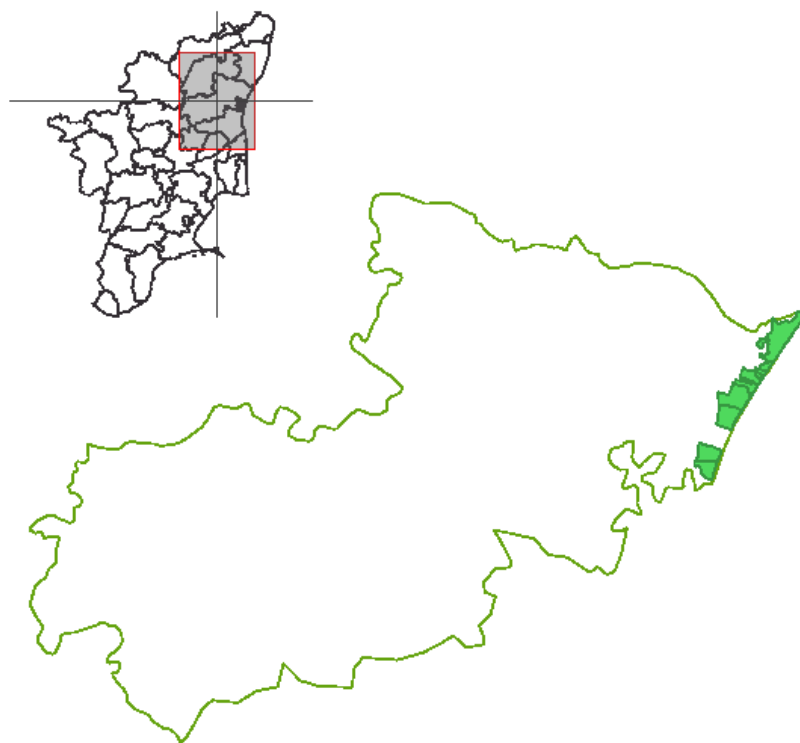


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# Location Map



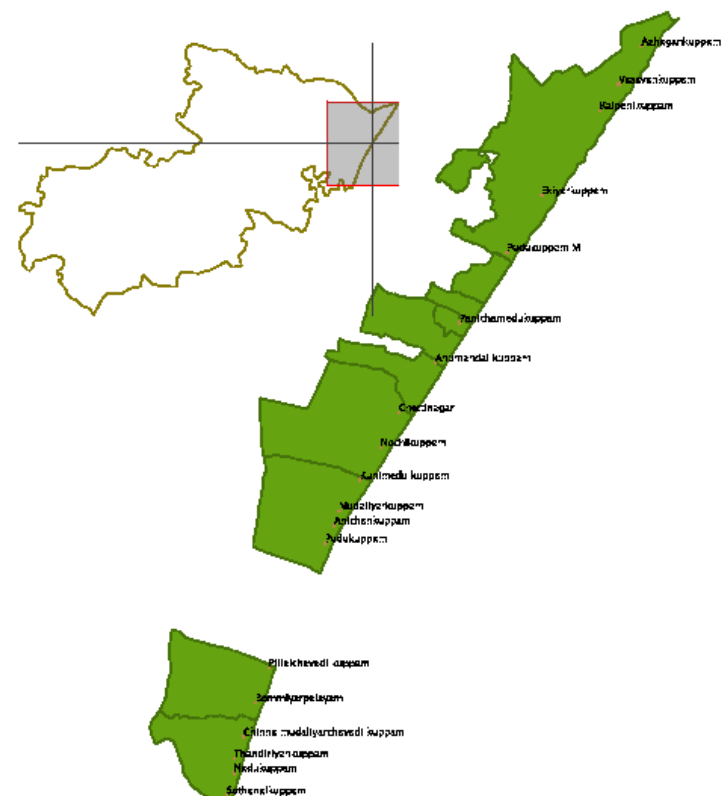
## Villupuram Dt.



20 0 20 40 60

Kilometers

## Project Villages



4 0 4 8 12

Kilometers

## Cluster 1: Villupuram

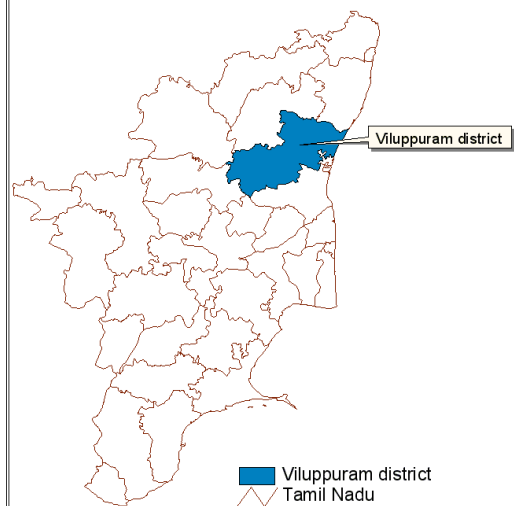
This district lies to the north of Pondicherry and is of a sandy beach ecosystem, predominantly. It has nineteen hamlets of which the historical mapping was completed in eighteen. The microplanning exercise was conducted in seven villages of the eighteen that were surveyed.

### ***Annual Activity Profile***

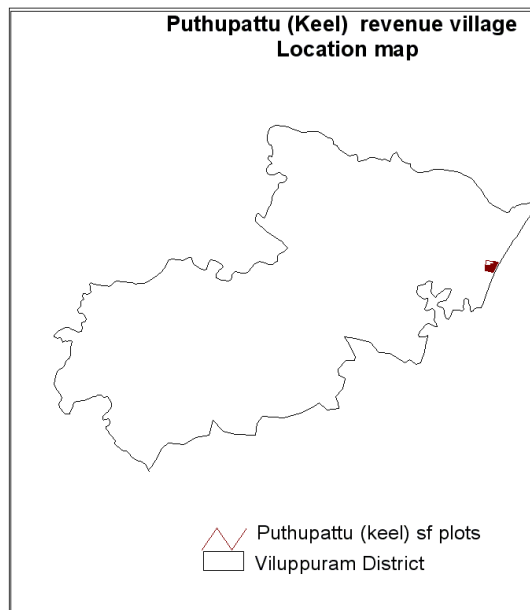
This represents the fishing calendar or fishing months in a year and applies to most fishing villages of the region. An exception to this is mentioned along with the respective village.

English months	Tamil months	Activity
January	Thai	Fishing
February	Maasi	Fishing
March	Panguni	Fishing
April	Chiththirai	Fish for 15 days /Ban period
May	Vaikasi	Ban period
June	Aani	Fishing
July	Aadi	Fishing
August	Aavani	Fishing
September	Purattasi	Rough season
October	Aippasi	Rough season
November	Karthikai	Rough season
December	Markazhi	Fishing

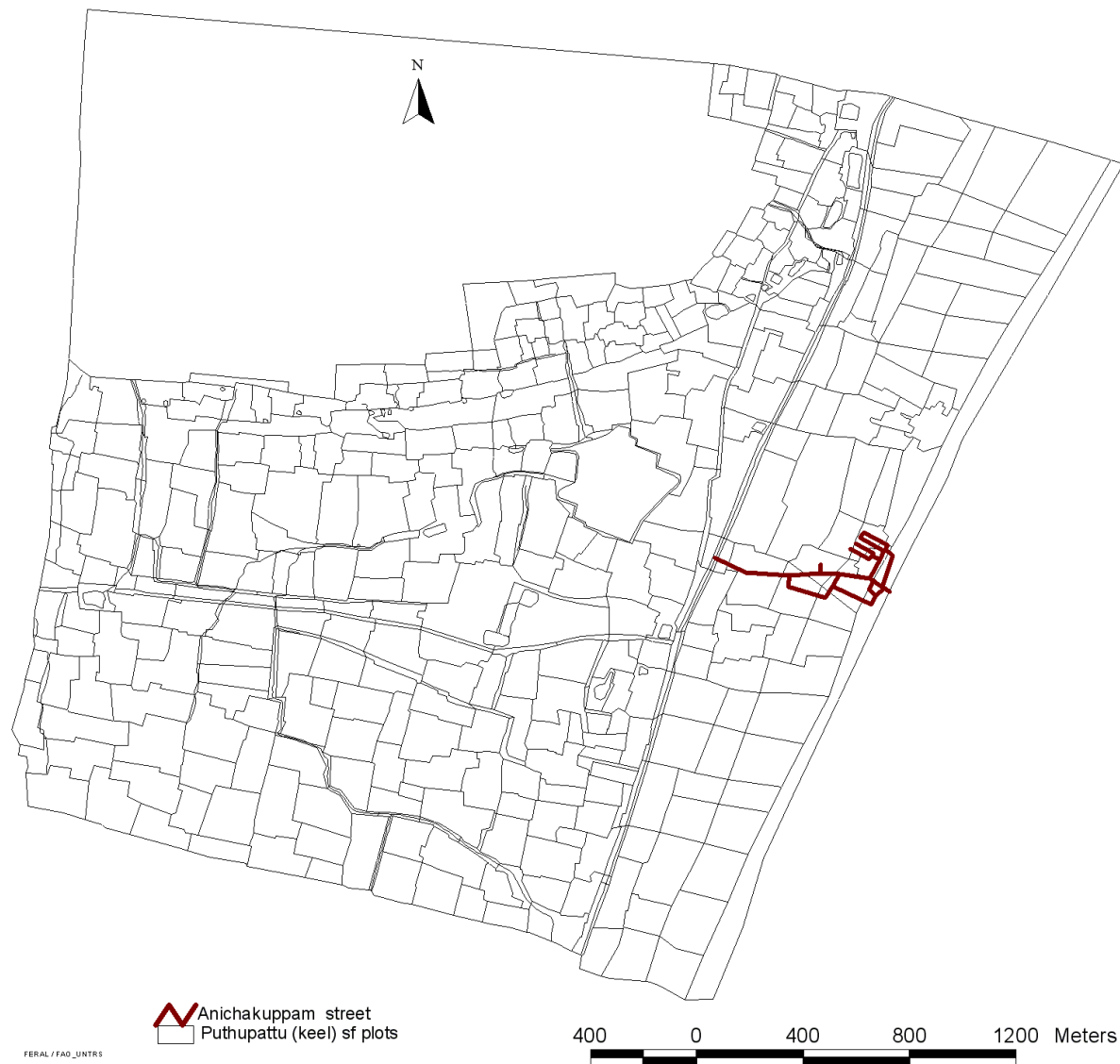
Viluppuram district Location Map



Puthupattu (Keel) revenue village Location map



Anichakuppam Hamlet village



FERAL / FAO\_UNTRS

## Anichankuppam

### Introduction

This village is located 26 kms to the north east of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Chinna Pattinavar caste group and has 175 households with an average family size of 4.27 persons. The demographic profile of the village is provided in Table 1

<b>Population of the village</b>	<b>Total</b>
Male over 35	8
Female over 35	8
Adult male	266
Adult female	249
Children male	101
Children female	90
Infant male	15
Infant female	11
<b>total</b>	<b>748</b>

*Table 1: Demographic profile of Anichankuppam.*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt were a Cholera epidemic in 1952 and the 2004 tsunami. Fifteen people died in the cholera outbreak and five in the tsunami. Damage to fishing craft included the loss of 20 kattumarams and 30 FRPs. A part of this village which had newly built 'tsunami'<sup>ii</sup> houses was renamed as Nambikkainallur by an NGO called Ryan foundation.

From 50 thatched houses in the 1950s, the village now has 280 houses of which most are concrete. Infrastructure in the village includes a primary school which was established after the tsunami by Ryan Foundation in Nambikkainallur. The village obtained electricity supply in 1990. The roads in the villages were sandy paths earlier and were metaled in 1980. These were replaced by concrete roads after the tsunami. Ryan foundation set up a water tank after the tsunami for the people of Nambikkainallur which is their source of water supply. The village still does not have a bus stand, the nearest one on the east coast road and is 2 km away. The village lacks sanitation facilities.

### Asset Ownership

68% of the households own or share ownership of fishing craft. 24% are single owners of craft while 32% do not own any (Figure 1)

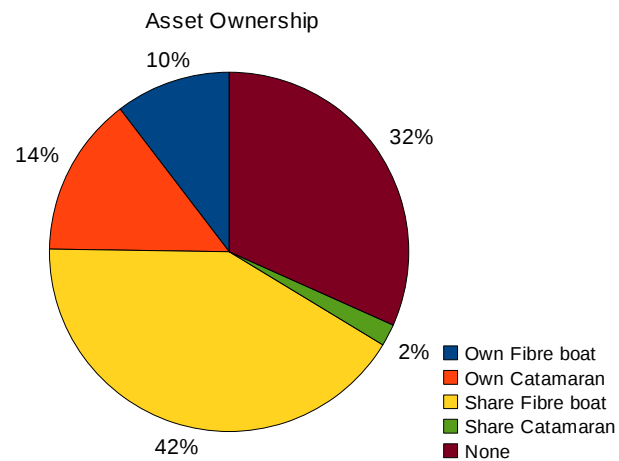


Figure 1: Fishing craft ownership in Anichankuppam.

### Occupational profile

The vast majority of the village men (93%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

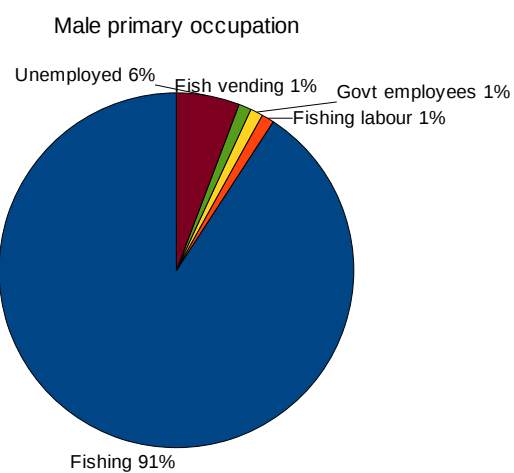
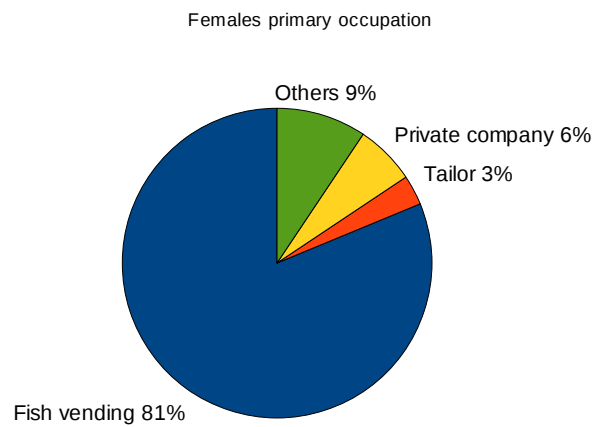


Figure 2: Primary Occupations of Men



### *Anichankuppam*

81% of women are engaged in fish vending as their primary occupation. Other occupations include tailoring, work in private companies with 9% engaged in various other jobs. This is presented in Figure 3.



*Figure 3: Primary occupation of women*

### **Identification of major stakeholders**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 4 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Crew
3. Kattumaram owners
4. Fish vendors

### **Stakeholder Analysis**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Implementation of the '3 nautical mile rule' with reference to trawlers as specified by the Government in the MFRA.

#### **Welfare schemes:**

1. Pension plans should be made available to all old people and not only to childless couples/people.
2. Awareness on the various policies available can be created
3. Government should provide compensation for FRP boats during the ban

#### **Facilitation required:**

1. Credit linkages can be provided by banks for their working capital.
2. Ice boxes are required for storage.
3. 200 people require training on GPS operation and net mending
4. Training for an alternative job. Expected income is a minimum of Rs.100 per day.
5. Rope making training can be provided to 31 people as an alternative occupation. Expected income is a minimum Rs.200 per day.

Anichankuppam

20<sup>th</sup> August, 08

**Stakeholder group: FRP Boat owners**

**COGA Analysis**

**Caste** :Pattinavar

**Origin** :Heredity

**Gender**:Males

**Age** :15-60 years

**Daily Activities Profile:**

<b>Time schedule<sup>1</sup></b>	4.00-5.00am	5.00-6.30am	6.30-7.00am	7.00-8.00am	8.00-9.00am	9.00-10.00 am
Activities	Travel to depths of 18 fathoms.	Cast nets into the sea and wait; idle while waiting.	Haul nets.	Return to shore.	Sort out caught fishes.	Market their catch.

**Annual Activities Profile:**

They go fishing approximately 260 days in a year except during the rough season and ban period.

<b>Components</b>	<b>Problems</b>	<b>Causes</b>	<b>Coping strategy</b>	<b>Gaps to be addressed in coping strategy</b>
<b>Natural resources</b>	Decreased availability of fish. <sup>2</sup>	Ring seine operations. <sup>3</sup>	Participate in daily fishing to make a living.	
<b>Technology</b>				
<b>Infrastructure</b>	Insufficient ice	Closest ice unit is Anumanthai or Kalapet which is 5 km away.	Depend on ice traders <sup>4</sup> ; Buy few ice slabs from Pondicherry ice units.	Ice boxes can be provided to prevent ice from melting. With this provision they may require less ice.

## Anichankuppam

<b>Investments and credits</b>	Insufficient working capital for purchase and maintenance of gear <sup>5</sup> and craft; High interest rates.	No financial support from bank  Dependent on money lenders	Continue dependence on money lenders <sup>6</sup>	Loans can be arranged through the bank and government can ensure this.
<b>Markets</b>				
<b>Capacity building</b>	Lack operational knowledge of GPS  Lack net mending skills		Depend on those boat users who possess the knowledge.  Neighbouring village people are hired and paid for mending	Government or private organizations should facilitate training in GPS operations to all boat owners <sup>7</sup>  Training in net mending can be provided to the boat owners <sup>8</sup>
<b>Social security</b>	No medical/accident/ life insurance No old age pension <sup>9</sup> No compensation during the rough season and ban period.	No response from Government till now for their welfare.	First aid being carried out by boat proprietors; Dependence on their relatives; Borrow from money lenders	Government must focus on these communities and provide some beneficial schemes and pension.
<b>Policy and Institutional support</b>	No insurance	Only source of income is from daily fish catch earnings.	Continue taking risks(occupation is risky in itself)	NGOs should create awareness on existing schemes; Government should provide life insurance schemes.

Anichankuppam

20<sup>th</sup> August, 08

**Stakeholder group: Boat crew**

**COGA Analysis**

Caste :Pattinavar

Origin :Heredity

Gender:Males

Age :15-60 years

**Daily Activities Profile:**

Time schedule	4.00-5.00 am	5.00-6.30 am	6.30-7.00 am	7.00-8.00 am	8.00-9.00 am	9.00-10.00am
Activities	Travel upto depths of 18 fathoms.	Cast nets into the sea and wait; idle while waiting.	Haul nets.	Return to shore.	Sort out catch.	Market their catch.

**Annual Activities Profile:**

They go fishing 8 months in a year except during the rough season and the ban period.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
Natural resources	Decreased availability of fish.	Ring seine operations.	Live within their means as defined by their income.	Ban on ring seine should be enforced.
Technology				
Infrastructure				
Investments and credits	Borrowing at high interests	Rough season, ban period, accidents or illness	Borrow from money lenders <sup>10</sup>	Government should provide compensation during the rough season and ban period. <sup>11</sup>
Markets				
Capacity building	No operational knowledge about GPS	They cannot afford such equipment.	Depend on other fishers who know how to operate GPS.	Government or private organizations should facilitate GPS training. <sup>12</sup>

### *Anichankuppam*

<b>Social security</b>	No medical or life insurance.  No pension	No response from Government till now for their welfare.	First aid carried out by boat owners; Dependent on their relatives.	Government must focus on these communities and provide some beneficial schemes or pension.
<b>Policy and Institutional support</b>	No insurance <sup>13</sup>	Only source of income is from daily fish catch.	Continue taking risks(occupation is risky in itself)	NGOs should create awareness about schemes available; Government should provide life insurance.

## *Anichankuppam*

5<sup>th</sup> August, 08

**Stakeholder group: Kattumaram owners:**

**COGA Analysis:**

**Caste** - Pattinavar (Chettiyar)

**Origin** - Heredity

**Gender-** Males

**Age** - 12 to 45 years

### **Daily Activities Profile**

<b>Time schedule</b>	4:00-5:00am	05:00-5:30 am	5:30-6:30 am	6.30-7.00 am	7.00-7.30 am	7.30- 9.00 am
<b>Activity</b>	Travel about 2 to 5 Km to sea from sea shore.	Cast their net and wait	They are idle	Haul their net from the sea.	Return to shore.	Sort out fishes; sell at local market by auction.

### **Annual Activities Profile**

Karthigai to Margazhi (nearly 60days) is considered as the rough season. They fish for only 25 days during the ban season and at least 5 days in a month they do not fish for various reasons.

### **LED Framework Analysis**

## Anichankuppam

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (Fish)</b>	Decrease in fish species <sup>14</sup>	Ring seining and trawling	Participating as labour for ring seine operations.	Prevent inshore trawling (within 5 Km), ban on inshore trawling should be enforced.
<b>Technology</b>	Seasonal and unhygienic drying of fish	Rainfall and lack of specific drying area	Continue drying on the beach.	Drying unit
<b>Infrastructure</b>	Distress sale	Lack of storage and freezing facilities	Ice obtained from Kalapet.	Ice boxes can be provided <sup>15</sup>
<b>Investment</b>	Repairing nets damaged by trawlers <sup>16</sup>	Insufficient working capital	Dependent on informal lenders with high interests <sup>17</sup> ;Mortgage jewellery <sup>18</sup>	Control inshore trawling; Government should provide loans through bank or cooperative societies
<b>Markets</b>	Fish sold at low rate	Sell to local fish vendors <sup>19</sup> .		
<b>Capacity building</b>	No secondary job	Ban period	Obtain loans from money lenders or neighbours	Training for rope making can be provided <sup>20</sup>
<b>Social security</b>	No social security in their old age.		Dependent on their children	Government should provide pension schemes for old people.
<b>Policy and Institutional support</b>				



## *Anichankuppam*

### **Stakeholder group: Fish vendors**

#### **COGA Analysis:**

**Caste** - Pattinavar (Chettiyar)

**Origin** - Heredity(from different villages; they settled here after marriage)

**Gender** - Female

**Age** - 28 to 50 years

#### **Daily Activities Profile**

<b>Time schedule</b>	8:00-9:30 am	9:30-10:00 am	10:00am-12:00 pm	1.00-4.00 pm	5:00-7:00pm
Activities	Arrive at sea shore; buy fish at auction.	Arrive at the local bus stand	Travel time to targeted village	They sell fish street wise	Return to village by bus

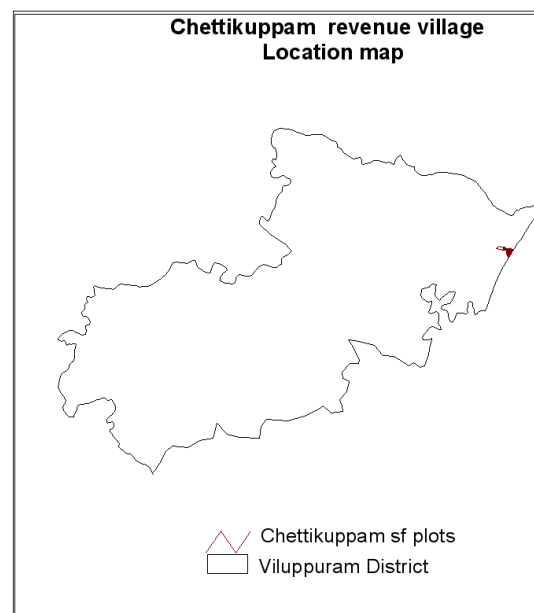
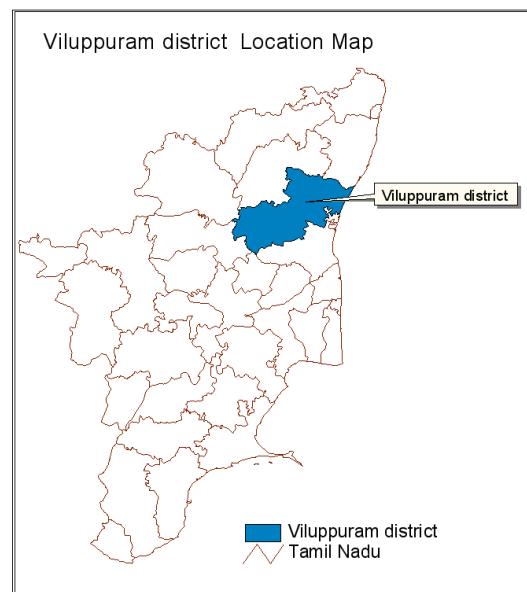
#### **Annual Activities Profile**

Ipasi, Karthigai, and Margazhi (nearly 90days) are considered as the rough season. The ban of 45 days is considered as a lean period . Only few people are involved in fish vending as only kattumaram owners continue fishing then.

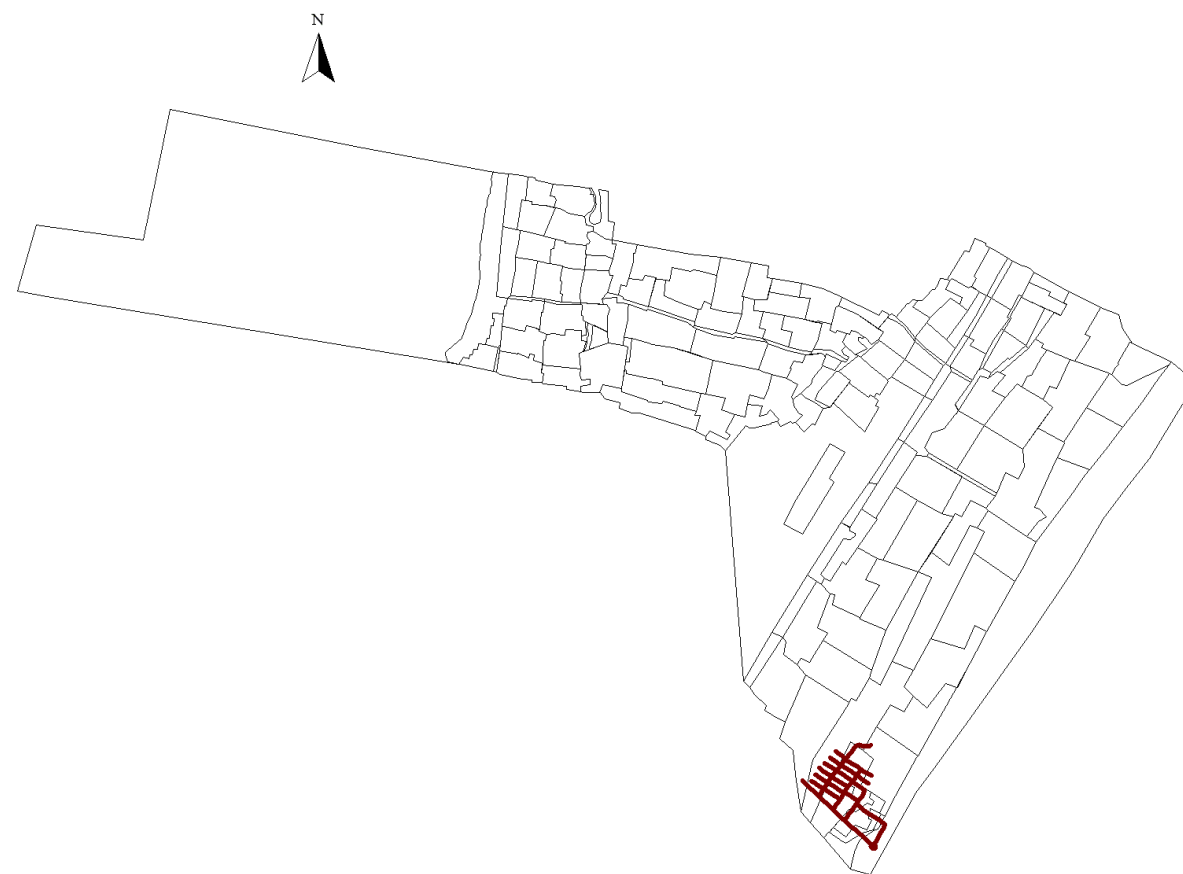
## Anichankuppam

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Depleting fish resources.	Use of ring seine	Buy less fish.	Ban on ring seine should be enforced.
<b>Technology</b>	Not using the solar drying fish unit	Catch weight has reduced significantly	Drying on the shore/ beach	
<b>Infra-structure</b>	Distress sale	No ice unit in the village	Buy ice from the Kalapet(5km away)	Ice boxes can be provided <sup>21</sup>
<b>Investment</b>	Working capital <sup>22</sup>		Borrowing money from the money lender(10% interest); from neighbours (3-5 % interest); Mortgage jewellery	Bank can provide loans for their working capital <sup>23</sup>
<b>Markets</b>	They sell fish door to door, walking through various villages like Senji, Thekanam, Konthamoor.			
<b>Capacity building</b>	No secondary job	They only do fish vending		Ready for a secondary job during the rough season and ban period <sup>24</sup>
<b>Social security</b>	Post retirement	No provision for old age pension.	Dependent on their children.	Government should make the necessary provisions.
<b>Policy</b>				

- i Houses constructed as part of the tsunami relief activities.
- 1 The time for fishing varies according to the gear type as well as fish availability
- 2 5 years ago: They would catch a maximum of 7 boxes of fish and earn approximately Rs.500 daily; now they catch only 2 boxes of fish and earn about Rs.50 per day (From the 50% share).
- 3 3 FRP boats have ring seines in this village
- 4 One slab of ice is Rs.80 which includes auto charges as well
- 5 Rs 1,00,000 may be required for purchase of new nets; nets last for one and half years
- 6 Amounts upto Rs.200000 at interest rates of 10%
- 7 There are 50 boats in this village and each boat is shared by 4 persons
- 8 200 people require net mending training
- 9 70 people are not receiving old age pension. Government providing old age pension to those who are childless.
- 10 Amounts upto Rs.2000 at interest rates of 10%
- 11 Rs.500 given this year, exclusively for rations i.e., those holding ration cards, not given on time as with the onset of the ban season, etc.,
- 12 120 youth are interested in participating in such training.
- 13 Nearly 150 people are involved as labor; and none receiving any insurance.
- 14 After Tsunami, species like ribbon fish, mackerel, snapper, sardine species have decreased significantly.
- 15 31 Kattumarams in this village, 31 ice boxes required.
- 16 Nets last for 1 year. One kattumaram can take 30kg of a variety of nets and the total cost of maintenance is Rs.12000
- 17 10% interest per month
- 18 3% interest per month
- 19 Pay 10% to the village auctioneer
- 20 Income expectation is Rs.200/day from rope making
- 21 90 women are doing fish vending in this village, 90 ice boxes required.
- 22 They require Rs.500 to 1000 per day to buy fish
- 23 SHGs were not functional, as group members did not repay the loan amount on time.
- 24 They expect Rs.100 per day



## Chettinagar Hamlet village



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## Chettinagar

### Introduction

This village is located 36 kms to the north east of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Chinna Pattnavar caste group and has 238 households with an average family size of 4.09 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	143
Female over 35	150
Adult male	213
Adult female	198
Children male	127
Children female	93
Infant male	26
Infant female	23
<b>total</b>	<b>973</b>

*Table 1: Demographic Profile of Chettinagar*

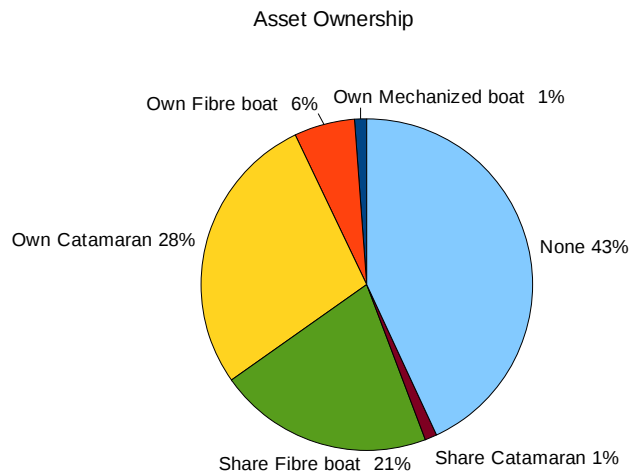
The origin of the village could not be identified during the historical mapping session. The village was known as Chettikuppam 25 years ago and was renamed as Chettinagar by the village panchayat head so that the village would appear developed<sup>4</sup>. The major shock the community felt was the 2004 tsunami during which no lives were lost.

From 100 thatched houses in the 1950's, the village now has 360 houses of which only 10 are huts while the rest are concrete. Infrastructure in the village includes a primary school which was established in 1952 and is still functional. The roads in the village were metaled 30 years ago and was replaced by concrete 7 years ago. The village still does not have a bus stand, the nearest one on the east coast road and is 2 km away. Public toilets were constructed after the tsunami which are functional till date. Medical facilities were earlier available at Kanagachettikulam and Kalapet and is presently available at Anumandhai.

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<sup>4</sup> The names of coastal villages are usually suffixed with 'kuppam' while names of cities are suffixed with 'nagar'.

## Asset Ownership

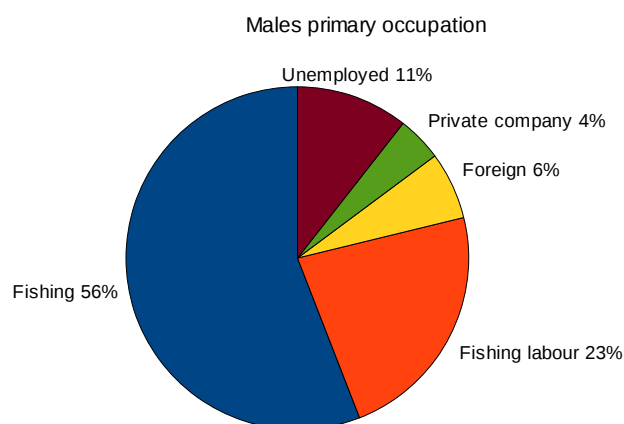


*Figure 1: Fishing craft ownership in Chettinagar*

57% of the households own or share ownership of fishing craft. 35% are single owners of craft while 43% do not own any.(Figure 1)

## Occupational profile

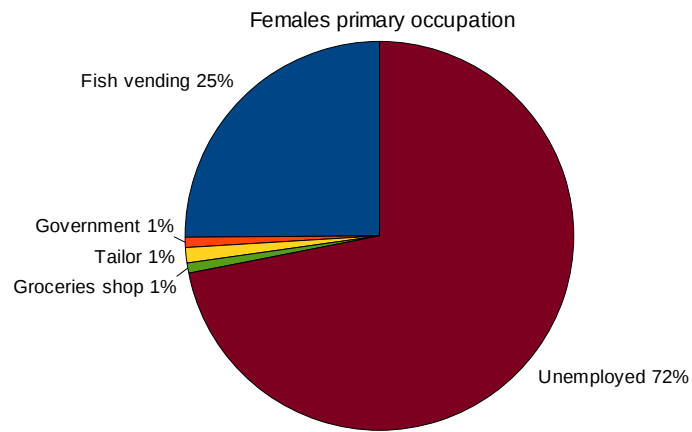
The vast majority of the village men (79%) are engaged in fishing or allied activities while 11% are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

## Chettinagar

72 % of women are unemployed with only 25% engaged in fish vending as their primary occupation. Very few are involved in other occupations with petty shops, government or tailoring . This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 4 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Crew
3. Kattumaram owners
4. Fish vendors

### **Stakeholder Analysis**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Government should cancel the license of factories manufacturing ring seines

#### **Welfare schemes:**

1. Pension plans should be made available to all old people and not only to childless couples/people.

#### **Infrastructural requirements:**

1. Government should construct a building the market at Kottakuppam.
2. Increase transport facilities for fish vending.

#### **Facilitation required:**

1. Credit linkages/loans can be facilitated by banks through SHGs for their working capital.
2. Ice boxes for storage can be provided.
3. Sewing machines can be provided to those who underwent training for tailoring.
4. Training can be provided on GPS operation and engine repair.
5. Government should facilitate the registration of Kattumarams



## Chettinagar

6<sup>th</sup> August, 08

### Stakeholder group: FRP Boat owners

#### COGA Analysis:

Caste - Chinna Pattinavar

Origin - Heredity

Gender- Males

Age - 15 to 55 years

### Daily activity profile

Time schedule <sup>i</sup>	4.00 - 5.00 am	5.00- 6.30 am	6.30-7.00 am	7.00-8.00 am	8.00- 9.00 am	9.00-10.00 am
Activity	Travel to depths of 5-18 fathoms.	Cast nets into the sea and wait; idle while waiting.	Haul nets.	Return to shore.	Sort out catch.	Market their catch.

### Annual activity profile

They go fishing approximately 250 days in a year except during the rough season (last 3 months of the year) and ban period.

### LED Assessment Framework

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased quantity and size of fish <sup>ii</sup>	Use of ring seines <sup>iii</sup> .  Use of trawl gear.	Competing with ring seine users in fishing.  Fish away from trawlers.	Cancellation of license of factories manufacturing ring seines. Regulation of trawling beyond 10 kms.
<b>Technology</b>	Locating fish shoals is time consuming and difficult.  Unable to find the correct way back to shore when they fish	Lack necessary equipment for fishing especially GPS. <sup>iv</sup>	Travel to deeper waters for fishing <sup>v</sup> ; Higher fuel consumption.  Dependent on other fisherman who have GPS.	Government or NGOs can provide necessary equipment and facilitate the required training to all FRP boat users.

## Chettinagar

	in deeper and further waters.			
<b>Infrastructure</b>	Insufficient availability of ice. <sup>vi</sup>	No freezing unit in nearby villages.	Buying ice in small quantities only from Pondicherry with great difficulty.	Ice boxes can be provided <sup>vii</sup>
<b>Investment &amp; credits</b>	Insufficient working capital for purchase and maintenance of gear and craft; High interest rates.	No financial support from bank; Money lenders charge high interest rates <sup>viii</sup>	Continue dependence on money lenders; Mortgage jewellery <sup>ix</sup> Borrow from neighbours.	Banks should facilitate loans and revise the repayment procedure according to the fishing season.
<b>Markets</b>	Markets at considerable distances; Low market prices for their fish catch.	No markets in their village.	Door to door marketing by wife/s or mother/s as head loaders along the streets	Markets should be established in/close to their village <sup>x</sup>
<b>Capacity building</b>	Lack technical knowledge in GPS operations and engine repair		Depend on those boat users who possess the knowledge; depend on other boats to tow back to shore	Training required in GPS operations and engine repair <sup>xi</sup>
<b>Social security</b>	No medical/accident/life insurance; No old age pension <sup>xii</sup>		Dependent on their children; Mortgage jewellery; Borrow from money lenders	Government should provide and implement insurance and pension plans.
<b>Policy and Institutional support</b>	Lack of timely benefits during the ban period and rough season.		Borrow from neighbours	Support to be provided before the monsoons/ban season.

22<sup>nd</sup> August, 08

### Stakeholder group: Crew

#### COGA Analysis:

Caste - Chinna Pattinavar

Origin - Heredity

Gender- Males

Age - 15 to 60 years

### Daily activity profile

Time schedule	4.00 - 5.00 am	5.00- 6.30 am	6.30-7.00 am	7.00-8.00 am	8.00- 9.00 am	9.00-10.00 am
Activity	Travel to depths of about 5-18 fathoms.	Cast nets into the sea and wait; idle while waiting.	Haul nets from the sea.	Return to shore from the sea.	Sort out caught fishes.	Market their catch.

### Annual activity profile

They go fishing 8 months in a year except during the rough season (October-December) as well as during the ban period

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Quantity of fish as well as sizes have reduced. <sup>xiii</sup>	Use of ring seines.  Use of trawl gear <sup>xiv</sup> .	Compete with ring seine users in fishing.  Fishing away from trawlers.	Cancellation of licenses of factories manufacturing ring seines. Regulation of trawling as per the specified nautical limits.
<b>Technology</b>				
<b>Infrastructure</b>	Insufficient availability of ice during season.	No freezing unit in nearby villages.	Buy ice in small quantities only from Pondicherry with great difficulty. <sup>xv</sup>	Icing unit should be opened closer to/in the village.
<b>Investment &amp; credits</b>				
<b>Markets</b>				
<b>Capacity building</b>	Lack of operational	Cannot afford such equipment.	Depend on other fishers who know	Government, private and other

## Chettinagar

	<p>knowledge of GPS.</p> <p>Engine repair (especially at sea)</p>	<p>Lack of institutional, governmental and social support in such training</p>	<p>how to operate GPS</p> <p>Depend on other boats at sea; Mechanics repair their engines after they return to the shore.</p>	<p>organizations should provide the required training and support to all traditional fishermen.</p>
<b>Social security</b>	<p>No social security in their old age.</p> <p>Accidents and during illness.</p>	<p>No schemes made by the government.</p> <p>At their own risk</p>	<p>Dependent on their children in their old age. Also depend on boat owners to some extent.</p>	<p>Government should make provisions for pension plans and medical/accident insurance.</p>
<b>Policy and Institutional support</b>	<p>No insurance policies.</p>	<p>No provisions made by Government.</p>	<p>Continue taking risks(occupation is risky in itself); some get help from boat owners.</p>	<p>Government must provide policies and insurance to all fishermen.</p>

Chettinagar

6<sup>th</sup> August, 08

**Stakeholders: Kattumaram Boat owners**

**COGA Analysis:**

Caste - Chinna Pattinavar

Origin -Heredity

Gender- Males

Age -18 to 60 years

**Daily activity profile**

Time	3.00 - 4.00 am	4.00 - 5.30 am	5.30 - 6.00 am	6.00 - 7.00 am	7.00 – 8.00 am	8.00 - 9.00 am
Activity	Travel to depths of 5 fathoms at sea	Cast nets into the sea and wait; idle while waiting.	Haul nets.	Return to shore.	Sort out catch.	Market their catch.

**Annual activity profile:**

They go fishing nearly 9 months in a year except during the rough season and the ban period; the latter being the period when they are idle.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Catches are less; sometimes not available <sup>xvi</sup> .	Use of ring seine supposedly trapping all fish offshore itself.	Continue fishing inspite of declining catches.	Ban on ring seines to be enforced in all coastal villages.
<b>Technology</b>	Difficulty for one person in rowing/manoeuvring Kattumarams at sea.	Boat size slightly large.	Continue use for fishing.	Boat size should be revised or smaller boats should be provided to the traditional boat users.
<b>Infrastructure</b>				
<b>Investment &amp; Credits</b>	Repair nets damaged by trawlers <sup>xvii</sup>	Insufficient working capital	Dependent on informal lenders for loans at high interest rates; Mortgage jewellery.	Control inshore trawling; Government should provide loans through bank or cooperative societies <sup>xviii</sup>

## Chettinagar

<b>Markets</b>	Fish sold at low prices <sup>xix</sup>	Dependent on head loaders since agents do not buy if catch is low	Sell at prices quoted by head loaders	Standardize the rates.
<b>Capacity building</b>				
<b>Social security</b>	No provision for pension for old people.	No response from Government till now for their welfare.	Dependent on their children.	Government must revise sanction pension for all.
<b>Policy and Institutional support</b>	No insurance and unable to take available insurance policies.	Boats are not registered; Insufficient income to take policies.	Continue taking risks(occupation is risky in itself)	Government can simplify registration procedure for Kattumarams.

## Stakeholders: Fish vendors

### COGA Analysis

Caste - Chinnapattinavar

Origin – from different villages (males are from the same village)

Gender – Female

Age – 30 – 65 years (They start this occupation once the child begins school)

Marital status – Married

### Daily activities profile:

Time schedule	7:00am- 9:00am	09:00-9:30 am	9:30am-11:00 am	11.00am-1.30 pm	1:30-4:30 pm
Activity	Arrive at beach/ landing centre; buy fish at auction.	Reach main road and arrive at local bus stand	Travel time to the targeted village	Sell fish street wise	Return home by bus

### Annual activities profile:

They do not sell fish during Puratasi, Iyypasi, Karthigai, and Margazhi as this is considered as the rough season.

### LED Assessment Framework

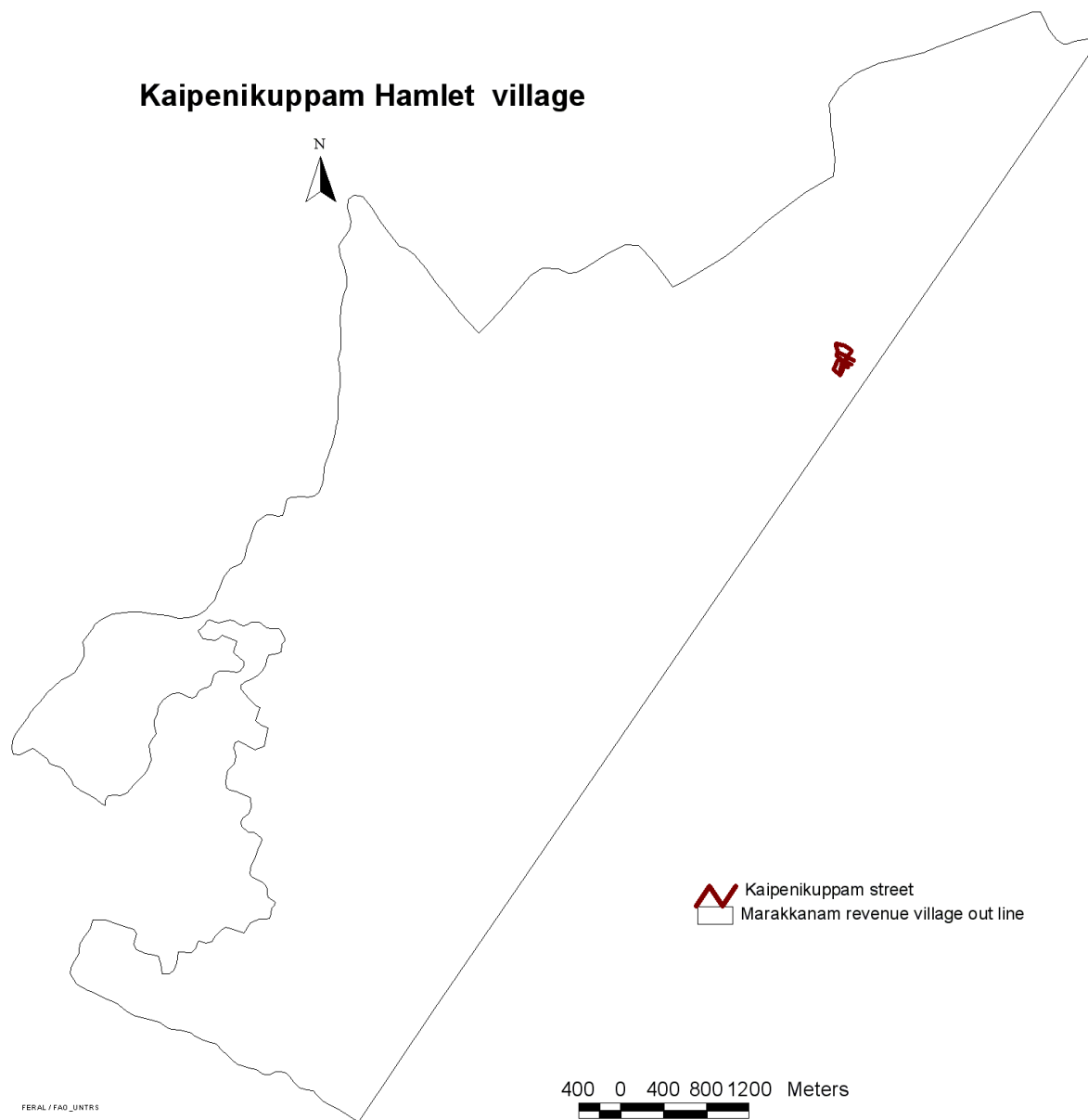
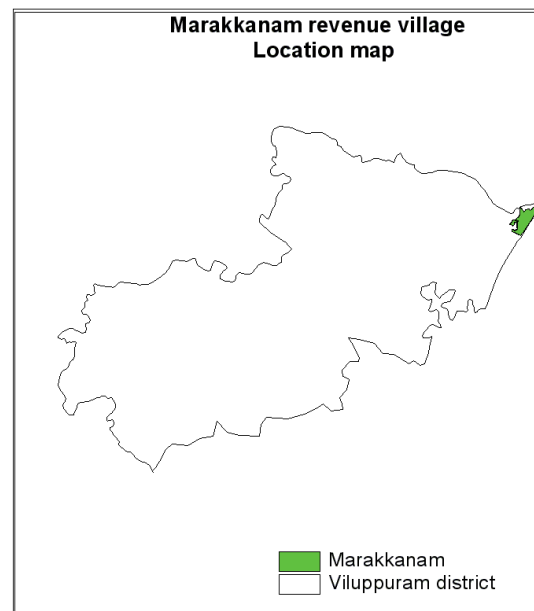
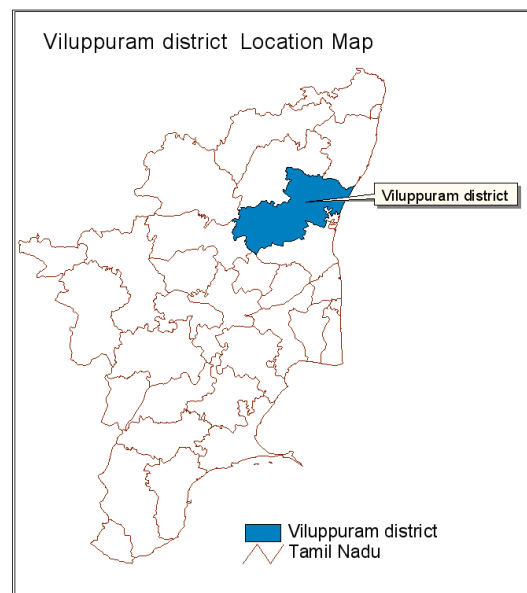
Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Fish available for sale is less.	Trawl and ring seine fishermen (large scale landings) do not sell fish to local small scale vendors; Trawlers damage nets of kattumarams and FRPs.	Buy lesser valuable fish from the Kattumaram and FRP fishermen.  Buy small quantities or sometimes do not go fish vending.	Trawlers and ring seines have to be stopped in inshore waters; small scale fishers restricted to inshore waters.
<b>Technology</b>	Significant amounts are spent on buying ice from outside the village, this affects the total income. <sup>xx</sup>	No freezing unit within the village	They have an agreement with a familiar auto driver who buys and brings the ice from Anumanthai at the same rate. <sup>xxi</sup>	Ice boxes can be provided. <sup>xxii</sup>
<b>Infra structure</b>	Only one bus is available to take	Spend more money to	They transport the fish by private van, which is	One mini-van to transport the

## Chettinagar

	them to their market destinations. <sup>xxiii</sup>	transport the fish if they miss this bus.	more expensive than bus. <sup>xxiv</sup>	fish to neighboring villages.
<b>Investment</b>	Unable to buy more fish from the fishermen	Limited working capital <sup>xxv</sup>	Few take loans from SHGs. Most borrow from money lender at the interest rate of 10% per month <sup>xxvi</sup>	Government or NGOs should provide interest free loans.
<b>Markets</b>	No access to sell fish in the Pondicherry market; cannot sell directly.	They have to hand over the fish to the person authorized to sell at the market who takes Rs.150 as commission for the sale.	Sell fish door to door walking.	Free access to be given in order to sell fish in the grand bazar market.
<b>Capacity building</b>	NGOs, provided training on tailoring, but no sewing machine is provided.	No in come for unmarried women.	Home maker	Sewing machines can be provided to those who attended tailoring programs <sup>xxvii</sup>
<b>Social security</b>	Post retirement	No pension plans for old people	Some of them paying life insurance on their own . Dependent on their family members.	Government can provide welfare schemes for people after they retire.
<b>Policy</b>	Struggle especially during the ban season.	Insufficient compensation of Rs.500; also not given on time.	Borrow loans from neighbours and money lender.	Compensation amount should be increased and should be given on time



- i The time for fishing varies according to the gear type as well as fish availability
- ii Catch quantities have decreased from 5 boxes of fish before the tsunami to only one box at present.
- iii In the last 3 years, 3 ring seines have been operated in this village. Neighboring villages i.e., Kunimedu kuppam and Anumandai kuppam have 6 ring seines and 5 ring seines respectively.
- iv Only one person has a GPS unit.
- v They travel a distance of 12 km, which takes 2.5 hours consuming 3 liters of diesel
- vi During the time of ring seine operations i.e., from April to October
- vii 33 FRP boats in this village
- viii Money lenders provide loans upto Rs.5000 with the condition that it should be repaid weekly at the interest rate of 10%; usually collecting the interest amount before hand.
- ix Pawn brokers provide loans from Rs.20,000 to 50,000 at interest rates of 4%
- x Establishment of a market at Kottakuppam will benefit 18 fishing villages in the Villupuram district.
- xi Nearly 100 people are interested in participating in such training. At least one person per boat should possess the basic knowledge.
- xii 40 women and 30 men are not receiving old age pension. Widow pension however, is made available.
- xiii Depletion of fish resources has been noticed in the last 4 years. Earnings from catch have decreased from Rs.100 per fishing trip during season to an average of Rs.50/day at present, inspite of fish rates being high. Share arrangements are 60% for boat owner, 40% for labor
- xiv Trawl boats are from : Solainagar, Veerampattinam, Keerapalayam, Anumandai.
- xv Anumanthai is 4 km from the village with the cost being Rs.100 inclusive of auto charge while Pondicherry is 30km.
- xvi Catch quantities have decreased from 2 vessels of fish to one vessel/ nothing at all.
- xvii A kattumaram can carry three kinds of nets with total weight around 32kgs (disco net 20kg, Mani net 5kg and No.10 net 7Kg). The cost is Rs.450/kg
- xviii They require about Rs.20000 per year
- xix On Sundays, however they get good prices, 3 times more than the usual rates.
- xx They have to get ice from Anumanthai, which is 4 km away. The cost of one slab of ice is Rs.55
- xxi Door delivery of ice costs about Rs.100 per slab .
- xxii 100 women are doing fish vending in this village
- xxiii They sell fish at Thindivan and Puducherry
- xxiv Private vans charge Rs.400 for 10 people
- xxv They buy fish worth Rs.1000 per day.
- xxvi They borrow Rs.1000 from the money lender and repay Rs.100 on a daily basis. Money lenders provide loans upto Rs.5000
- xxvii 20 women underwent training in tailoring



## Kaipenikuppam

### Introduction

This village is located 38 kms to the north east of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Chinna Pattinavar caste group and has 192 households with an average family size of 3.59 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	0
Female over 35	0
Adult male	198
Adult female	220
Children male	143
Children female	98
Infant male	15
Infant female	15
total	689

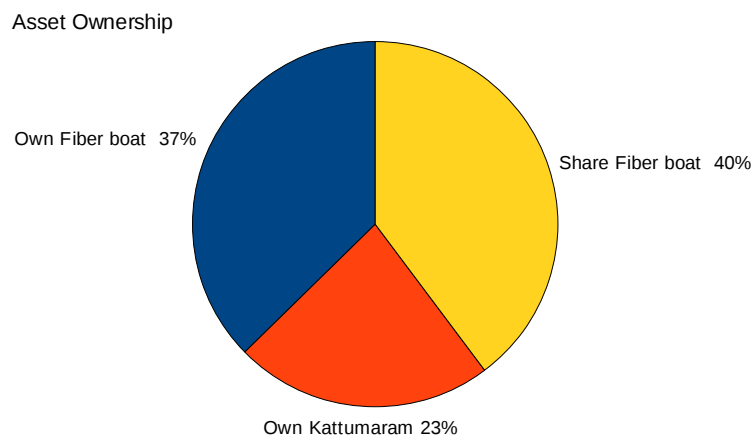
*Table 1: Demographic Profile of Kaipenikuppam*

The origin of the village could not be identified during the historical mapping session. The major shock the community felt was the 2004 tsunami. Fortunately there was no loss of life during this incident. Damage to assets was minimal.

From 4 concrete buildings in the 1960s, the village now has 230 houses of which most are concrete. The village obtained electricity supply in 1980. Infrastructure in the village includes a functional primary school. An overhead tank and two public toilets were established in the last ten years. Individual houses have their own toilet facilities. The roads in the villages were sandy paths earlier and were metaled 1980. These were replaced by concrete roads 2 years ago. Share autos form the mode of transportation which started 2 years ago. These replaced the buses that were introduced in 2000 which were few and infrequent. Medical facilities are available at Marakannam and Pondicherry.

### Asset Ownership

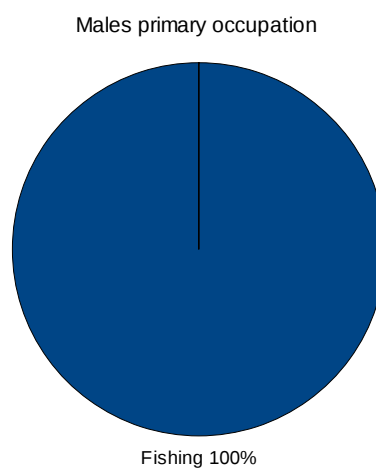
Figure 1 indicates 60% of the households possess single ownership of fishing craft while 40% own FRPs on a shared basis.



*Figure 1: Fishing craft ownership in Kaipenikuppam*

### Occupational Profile

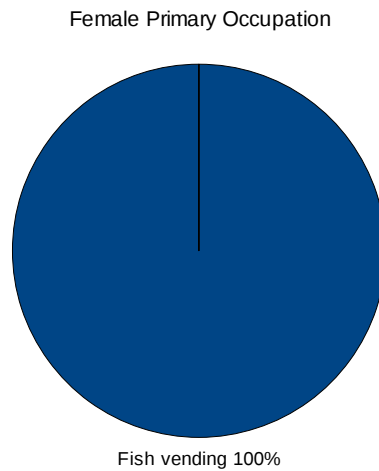
All men appear to be involved in fishing which is their only primary occupation (Figure 2). They do not appear to be involved in any secondary occupations.



*Figure 2: Primary Occupation of Men*

### *Kaipenikuppam*

All women appear to be involved in fish vending as the only primary occupation as shown in Figure 3 . They are not involved in any secondary occupations.



*Figure 3: Primary Occupation of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.

**Welfare schemes:**

1. Pension plans should be made available to all old people.

**Infrastructural requirements:**

1. Government can construct market building at Marakanam.
2. Government should establish primary health centre.

**Facilitation required:**

1. Credit linkages can be provided by banks for their working capital.
2. Ice boxes are required for storage.
3. NGOs can provide GPS units for those who require it.
4. Training required on engine repair and operation of GPS units.
5. Any secondary job which will yield a regular income of Rs.200 should be facilitated.
6. Motivation training can be provided to do secondary job.

## Kaipenikuppam

28<sup>th</sup> July, 08

### Stakeholder group: FRP Boat owners

#### COGA Analysis

Caste - Pattinavar, Chinnapattinavar

Origin – Heredity

Gender– Male

Age – 13 to 55 years (mostly they study upto 8<sup>th</sup> standard and then get involved in fishing)

#### Daily activities profile

Time schedule <sup>i</sup>	3.00-3.45am	3.45-4.00am	4.00-6.00am	6.00-6.30am	7.00/7.30am	8.00 am
Activities	Travel upto depths between 5-10 fathoms at sea.	Cast nets into the sea and wait; idle while waiting.	Idle while waiting.	Haul nets and sort out catch.	Return to shore.	Sell their catch to local fish vendors.

In the month of Adi , Avani, and Purattasi they fish using hook and line gear:

Time	6.00 am-10.00 am	10.00 am-2.00 pm	2.00 pm- 6.00 pm
Activities	Travel nearly 50 km from shore to deeper waters.	Fish using hook and line	Travel back to shore

#### Annual activities profile

The rough season falls in the months of Karthigai, to Margazhi (nearly 60days) and Purattasi. The ban period is considered as the lean season as they do not go fishing for 45 days.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Depletion of fish resource. <sup>ii</sup>	Net varieties have increased; Using Ring seine and trawlers <sup>iii</sup>	Travelling further out to sea in hope of higher catches <sup>iv</sup>	Ban on ring seine should be enforced.
<b>Technology</b>	More time to reach fishing ground.	10 HP Engine speed is not enough	Continue in spite of shortcomings; reaching and returning very late	Increase the engine power to 12 HP

## Kaipenikuppam

	Difficult to locate fishing grounds/ rocky substrate.	Most of them do not have GPS <sup>v</sup>	resulting in lesser fish and low prices.	GPS units required
<b>Infrastructure</b>	Fish have lesser value.	No ice factory in the village	They get ice from Marakkanam (5km away) <sup>vi</sup>	Ice boxes can be provided by Government or NGOs
<b>Investment</b>	Insufficient working capital for purchase and maintenance of gear and craft	No bank loans for working capital <sup>vii</sup>	Those with political support obtain loans from banks; Others borrow from neighbours at high interest rates (3% - 5 %); Mortgage jewellery(3%); Dependent on money lenders at high interest rates (10%)	Bank loans to be provided to all.
<b>Markets</b>	Selling at low value	No big market near the village; lesser number of buyers	Selling at low value  Selling at Pondicherry main market, spending more on transportation	Market for selling fish.
<b>Capacity building</b>	Lack technical knowledge in engine repair, maintenance and GPS operations.		Depend on other boats to tow them back to shore; use old technology, sometimes fishing in the wrong place.	Training on engine repair <sup>viii</sup> and operation of GPS <sup>ix</sup> is required.
<b>Social security</b>	No old age pension <sup>x</sup>  No accident insurance	Only childless elderly fisherfolk get pension. No provision made by Government for minor accidents	Most dependent on their children.  Spend own savings or borrow money from neighbours.	Old age pension should include all elderly people. Government should provide accident insurance even for partial disability.
<b>Policy and Institutional support</b>	Spend more money on diesel	No diesel subsidy	They buy at market rate	Need diesel subsidy



**Stakeholders: Kattumaram boat owners**

**COGA Analysis:**

Caste - Pattinavar & Goundar

Origin - Heredity

Gender - Males

Age - 15 to 60 years

**Daily activity profile**

Time schedule	4.00 – 5.00 am	5.00- 7.00 am	7.00-7.30 am	7.30-8.30 am	8.30- 9.30 am	9.30-10.00 am
Activity <sup>xi</sup>	They travel to depths of about 4 - 8 fathoms at sea.	Cast their nets and wait; idle while waiting	Haul their nets.	Return to shore.	Sort fish catch.	Market their catch.

**Annual activity profile**

They fish for nearly 9 months in a year remaining idle for the rest of the year. The idle period includes the rough season (Iyppasi, Karthigai, Marghazi) as well as the 45 day ban.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish. <sup>xii</sup>	Trawling and use of ring seines.	Continue fishing to make a living.	Ban on ring seine to be enforced all along the coast.  Regulate trawling as per the specified nautical limits.
<b>Technology</b>	Less catch  Inability to fish due to rapid tearing of nets.	Less gear; Poor quality of gear.	Fishing with the same gear for a longer period; Buy new gear or mending damaged gear.	Government should provide higher quantities of good quality gear once in a year, every year.
<b>Infrastructure</b>	Insufficient ice for preserving their catch.	No ice units in their village.	Small quantities of ice obtained from Pondicherry and Marakannam.	Ice boxes can be provided <sup>xiii</sup>
<b>Investment &amp;</b>	Require new boats	Nets damaged by	Dependent on	Banks should

## Kaipenikuppam

<b>credits</b>	and fishing gear. <sup>xiv</sup>	rocks.	money lenders charging high interests <sup>xv</sup> .  Mortgage jewellery <sup>xvi</sup>	facilitate more loans and should relax the pay back arrangements.
<b>Markets</b>	Low market prices for their catch.	Agents do not buy small quantities.	Sell their catch at low prices to agents.	Government should standardize the price for fish as with agricultural products.
<b>Capacity building</b>	Need for secondary job facilities.	Low income	Continue fishing; No other option.	Government should arrange for secondary job options. <sup>xvii</sup>
<b>Social security</b>	No social security in their old age.	No schemes were made by the government.	Dependent on their children in their old age.	Government should provide pension plans to old people.
<b>Policy and Institutional support</b>	No insurance policies.	Their earnings are insufficient to save; hence cannot make policies	At their own risk.	Government should implement proper policies for their livelihood.

### Stakeholder analysis: Fish vendors

#### COGA Analysis:

Caste - Pattinavar, Chinnapattinavar

Origin – From different villages; settled here after marriage.

Gender– Female

Age – 25 to 60 years

#### Daily activities profile

Time schedule	7:00am- 9:00am	9:00-10:00 am	10.00am-12.00 pm	12:00-1:00pm
Activity	Arrive at beach/landing centre; buy fish at auction.	Travel by auto to market destination.	They sell fish street wise	Return to village.

#### Annual activities profile

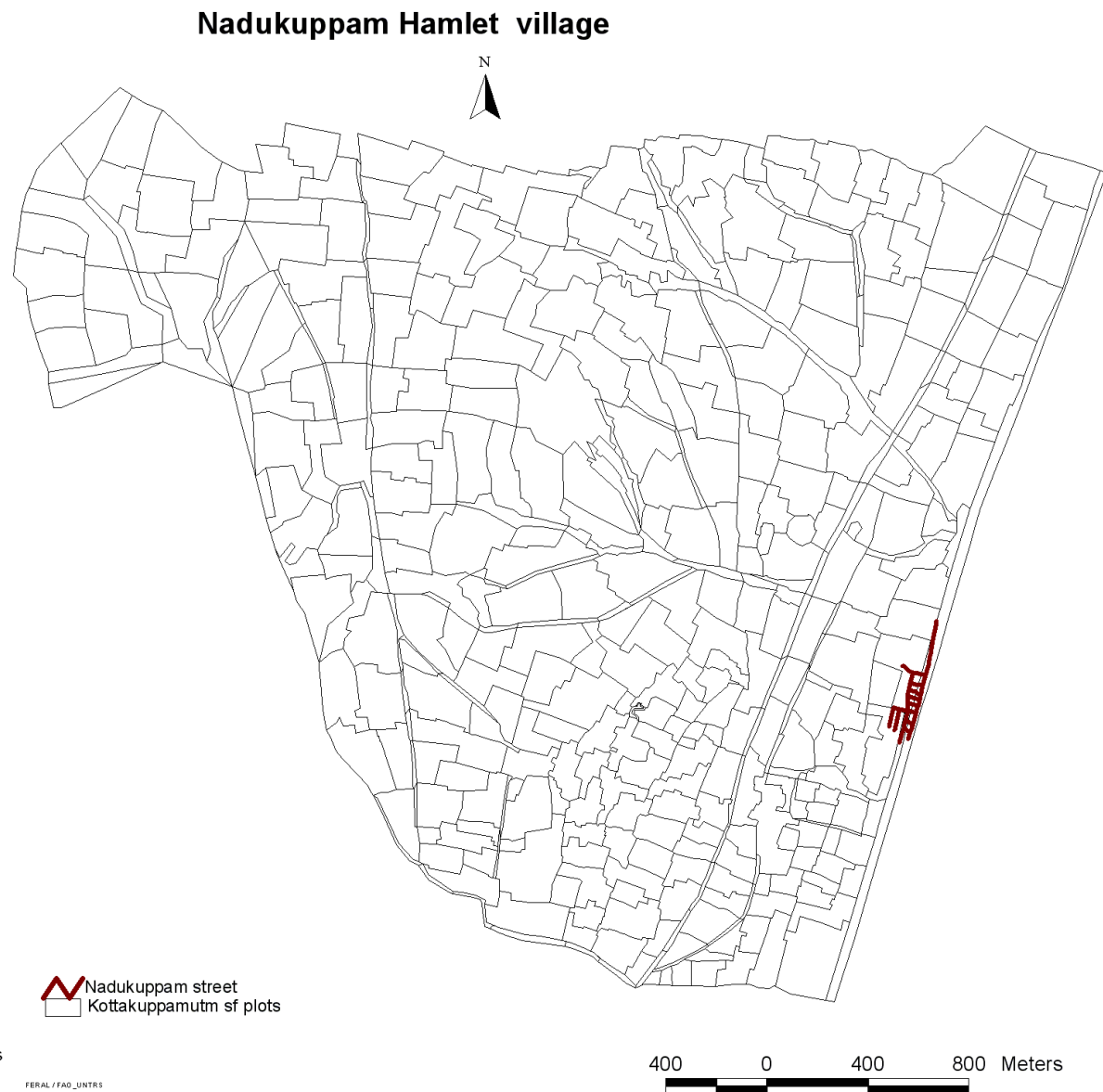
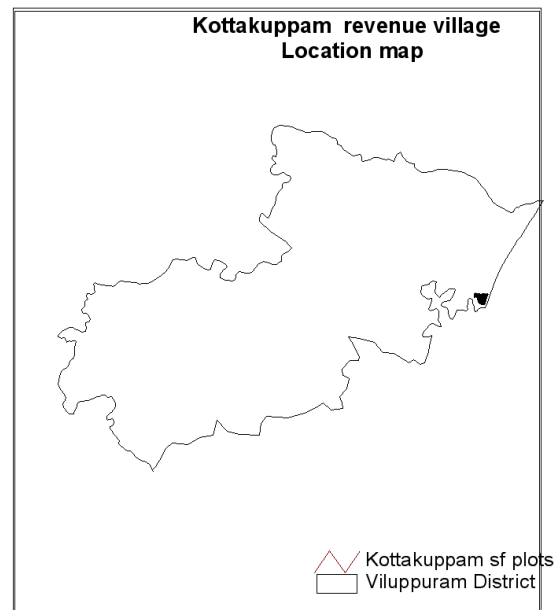
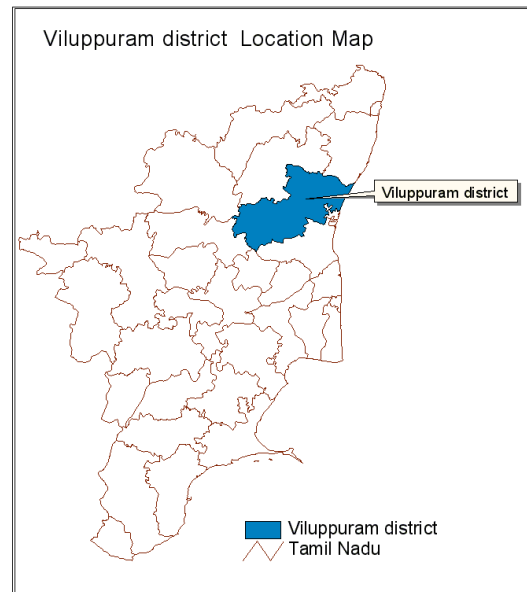
The months of Ipasi, Karthigai, and Margazhi (nearly 90days) are considered as the rough season while the 45 day ban represents the lean period.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreasing catch quantities. <sup>xviii</sup>	Increased number of boats and nets	Paying more money to buy fish	
<b>Technology</b>				
<b>Infrastructure</b>	Distress sale  Sell at Marakkanam market(open area) and pay a fee of 3 Rs/day.	No ice factory in the village  No proper building at Marakkanam market	They buy ice from Marakkanam (7km away from the village) Sitting in the hot sun and selling fish at the market.	Ice boxes can be provided <sup>xix</sup>  Market can be established/set up. <sup>xx</sup>
<b>Investment</b>	Working capital <sup>xxi</sup>		Borrow from the money lender <sup>xxii</sup>	Facilitate credit linkages
<b>Markets</b>	Collection of payment from customer	Sell fish on credit	They delay the payment to the producer	
<b>Capacity building</b>	No confidence in pursuing other activities	Most of them are aged people	Doing only fish vending.	Can be motivated to do more; training required <sup>xxiii</sup>
<b>Social security</b>	Post retirement	No provision	Dependent on children	Governmentsho

### *Kaipenikuppam*

	Health	for pension plan; no widow pension No primary health centre	and family members.  Currently go to GH, Pondicherry	uld make the necessary provisions. Government should establish primary health centre
<b>Policy</b>				

- i The time for fishing varies according to the gear type as well as fish availability
- ii Catch quantities have decreased from 4 boxes of fish before the tsunami to one box at present
- iii This village has one ring seine while the neighboring village Ekkiyarkuppam has 5 ring seines
- iv Before tsunami, they used to fish at a depth of 5 fathoms; now they fish at 10 fathoms depth.
- v Only 25 FRPs have GPS units, of the 70 in the village
- vi One slab of ice including transport costs Rs.100
- vii They require approximately Rs.2,00,000 per year for boat maintenance and purchase of nets.
- viii About 50 people will participate in training on engine repair.
- ix 70 FRPs in the village, shared by 200 families. Therefore 150 people need GPS training
- x 50 people are not receiving old age pension
- xi Sometimes 2 fishing trips will be scheduled if fish availability is more.
- xii They used to catch 3 vessels of fish before the tsunami; now they catch only one vessel of fish.
- xiii 30 people own a Kattumarams each
- xiv They require about Rs.10,000 per year for purchasing nets
- xv 10% interest per month
- xvi 3% interest per month
- xvii They expect Rs.200 per day
- xviii Before Tsunami they would buy 2 vessels of fish; now they can only buy one vessel of fish
- xix 30 women are doing fish vending in this village
- xx Villages such as Kaipenikuppam, Vasavankuppam, Ekiyarkuppam, M.Pudukuppam and Panichamedu will be benefited
- xxi They need about Rs.5000 per week for fish vending
- xxii They borrow at 10% interest per month
- xxiii For 30 women



## Nadukuppam

### Introduction

This village is located 4 kms to the north of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Pattinavar caste group and has 173 households with an average family size of 4.65 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	102
Female over 35	119
Adult male	178
Adult female	146
Children male	116
Children female	71
Infant male	40
Infant female	32
<b>total</b>	<b>804</b>

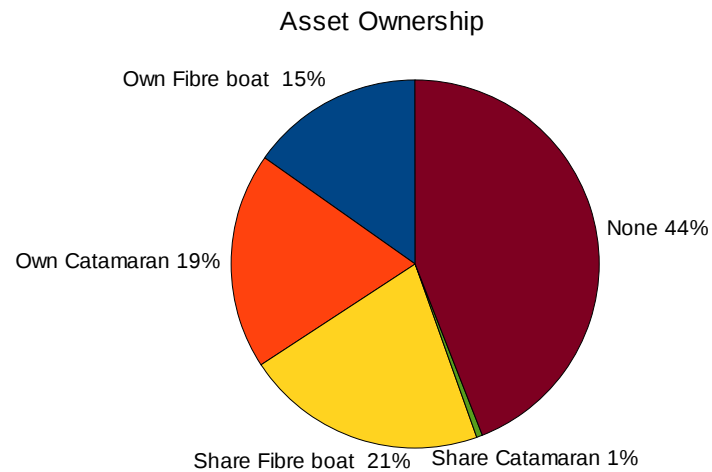
*Table 1: Demographic profile of Nadukuppam*

The origin of the village could not be identified during the historical mapping session. The major shock the community felt was the 2004 tsunami. No lives were lost during this incident as a result of the protective rocky sea walls constructed by the Government in 1998. Damage to fishing craft included the loss of 15 kattumarams and 15 FRPs.

From 120 thatched houses 60 years ago, the village now has 190 concrete houses. Infrastructure in the village includes a primary school established long ago. A net mending hall is also present. Roads in the village were sandy paths 35 years ago which are concrete at present. Road construction is currently underway. An overhead tank was constructed by the Government in 2004 to prevent the crisis of water scarcity. Medical facilities are available at the primary health centre in Muthialpet and the Government hospital in Pondicherry. The village lacks sanitation facilities.

## Assets

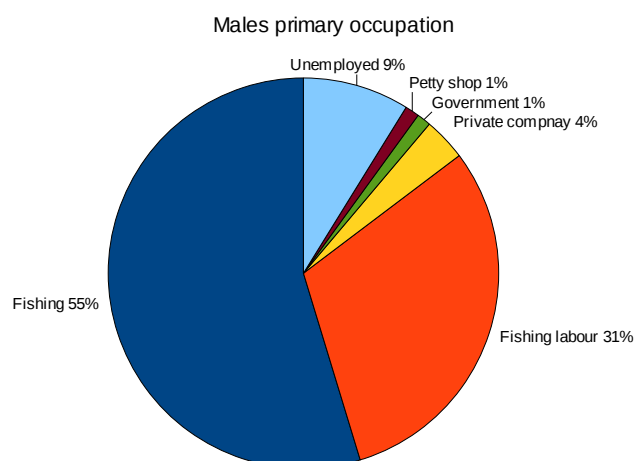
56% of the households own or share ownership of fishing craft. 34% are single owners of craft while 44% do not own any. This is represented in Figure 1.



*Figure 1: Fishing craft ownership in Nadukuppam*

## Occupational Profile

The vast majority of the village men (81%) are engaged in fishing or allied activities (Figure 2). Men do not appear to be engaged in any secondary occupations.

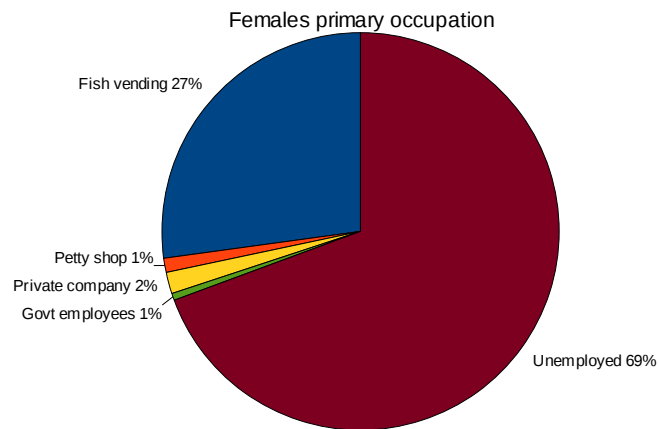


*Figure 2: Primary occupation of men*



## *Nadukuppam*

69% of women are unemployed with only 27% engaged in fish vending as their primary occupation. Very few are involved in other occupations with petty shops, government or private organizations. This is presented in Figure 3.



*Figure 3: Primary occupation of women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Construction of sea wall in the neighboring villages should be stopped

#### **Welfare schemes:**

1. Government should make provisions for pension plans for old people and widows as well.
2. Government should provide diesel subsidy and old age pension schemes

#### **Infrastructural requirements:**

1. Government should arrange for vehicles exclusively to transport fish to the market

#### **Facilitation required:**

1. Micro credit finance can be facilitated for their working capital
2. GPS training can be provided for the boat owners
3. Create secondary job opportunities, which will yield an earning of Rs.200 per day
4. Ice boxes can be provided to women who are involved in the fish vending
5. Need to be motivated to do more, suitable training should be provided

Nadukuppam

28<sup>th</sup> July, 08

### Stakeholder group: FRP Boat owners

#### COGA Analysis:

Caste - Pattinavar

Origin - Heredity

Gender- Males

Age - 15 to 60 years

### Daily activity profile

Time schedule <sup>i</sup>	4.00-5.00 am	5.00-7.00 am	7.00-7.30 am	7.30-8.30 am	8.30-9.30 am	9.30-10.00 am
Activities	Travel to depths of about 16-18 fathoms at sea.	Cast nets into the sea and wait; idle while waiting.	Haul nets from the sea.	Return to shore from the sea.	Sort out caught fishes.	Market their catch.

### Annual activity profile

They go fishing 9 months in a year except during the rough season (October-December) and the ban period during which they are idle.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish. <sup>ii</sup>  Shortage of labour.	Use of ring seines <sup>iii</sup> ; use of trawl nets. Increase in number of ring seines and boats.	Travel further for fishing. <sup>iv</sup>  Hiring boat owners as labour from their village and also from other neighbouring villages on alternative days.	Ban on ring seine and inshore trawling should be enforced throughout the coast.
<b>Technology</b>	Higher fuel and time <sup>v</sup> consumption <sup>vi</sup> ; reduced fish catches.	GPS, Echo sounders, walkie-talkie equipment are not affordable	Depend on those fishermen who possess such equipment as well as the knowledge; travelling greater distances.	Government or Private NGO's should provide the necessary equipment
<b>Infrastructure</b>	Parking of boats in the rough season.	Small beach/landing area in the village, vulnerable during	Park boats close to residing area in the village.	

## Nadukuppam

	Travelling to distant markets.	the rough season. No market in their village; no buses within in the village, only from the main road.	Using share auto	Markets should be opened in/ close to the village.
<b>Investment</b>	Working capital(for Engine repair <sup>vii</sup> / damaged nets <sup>viii</sup> / boat maintenance <sup>ix</sup> )  Cost of fuel	Money lenders fix high rates of interests on loans they provide <sup>x</sup> .  Hike in prices and lack of diesel subsidy	Continue dependence on money lenders with high interests; Mortgage jewellery <sup>xi</sup> ; borrow from neighbours. <sup>xii</sup> Purchasing diesel from agents in the village. <sup>xiii</sup>	Bank can facilitate loans to the FRP owners  Diesel subsidy should be given even in private petrol bunks.
<b>Markets</b>	Low market prices for their catch.	Ring seine catches are in bulk and are high priced.	Sometimes sell their catch at low prices to agents.	
<b>Capacity building</b>	Lack of operational knowledge about GPS and Echo sounders	No proper training given to them.	Dependant on those who possess the operational knowledge.	Training can be facilitated by the Government or various NGO's <sup>xiv</sup>
<b>Social security</b>	Old age <sup>xv</sup> .	No pension plan.	Dependent on their children in their old age.	Government should provide pension schemes to old people.
<b>Policy and Institutional support</b>	No insurance policies.	Earnings insufficient to start savings or take policies		Government should implement proper policies for them.

## *Nadukuppam*

### **Stakeholder group:Kattumaram owners**

#### **COGA Analysis:**

Caste - Pattinavar

Origin - Heredity

Gender- Males

Age - 15 to 60 years

### **Daily activity profile**

Time schedule	3.00 - 3.30 am	3.30- 6.30 am	6.30-7.00 am	7.00-7.30 am	7.30- 9.00 am	9.00-10.00 am
Activity <sup>xvi</sup>	They travel to depths of about 4 - 8 fathoms at sea.	Cast their nets and wait; idle while waiting	Haul their nets from the sea.	Return to shore.	Sort fish catch.	Market their catch.

### **Annual activity profile**

They fish for nearly 9 months in a year remaining idle for the rest of the year. The idle period includes the rough season (Iyppasi, Karthigai, Marghazi) as well as the 45 day ban.

### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Fish availability is low. <sup>xvii</sup>	Use of ring seines; Trawling	No catch or very less catch.	Ban on ring seines should be enforced along the coast.
<b>Technology</b>	Decreased efficiency in capturing fish.	Less gear; Poor quality, tearing in a comparatively short span of time.	Buying new gear /mending damaged gear.	Government should provide substantial amounts of good quality fishing gear to them once in every year.
<b>Infrastructure</b>	Parking of boats in the rough season.  Transportation of fish to distant markets; no bus transportation	Small beach/landing area in the village, vulnerable during the rough season. Pay more money for transportation <sup>xviii</sup>	Park boats close to residing area in the village.  Only autos are available	A vehicle should be arranged for the whole village for transportation of fishes.
<b>Investment</b>	Buying new boats and fishing gear. <sup>xix</sup>	Lack working capital.	Dependent on money lenders charging high interests <sup>xx</sup> . Mortgage jewellery. <sup>xxi</sup>	Banks should facilitate loans and allow flexibility in repayment of loans.
<b>Markets</b>	Low market prices for their catch; Local auction sale; Travel greater distances for marketing.	No markets in their village.  Agents do not buy small quantities.	Direct marketing by their wife or mother; sometimes sell their catch at low prices to the agents. <sup>xxii</sup>	Markets should be opened in or close to their village.
<b>Capacity building</b>	Need for secondary occupation facilities.	Low income	Idle when not going fishing.	Government should arrange for secondary job opportunities. <sup>xxiii</sup>
<b>Social security</b>	Old age	No social security in their old age.	Dependent on their children during their old age.	Government should provide pension plans for old people.
<b>Policy and Institutional support</b>	No insurance policies.	Earnings insufficient to start savings or take policies		Government should implement proper policies for them.

## *Nadukuppam*

### **Stakeholder group: Fish vendors**

#### **COGA Analysis**

Caste - Pattinavar

Origin – From different villages; settled here after marriage.

Gender– Female

Age – 22 to 60 years

Marital status – Married (They start this occupation once the child begins school as they need money)

#### **Daily activities profile**

Time schedule	8:30-9:00 am	9:00-10:00 am	10:00am-10:30p m	10.30-1.00 pm	2.00 pm
Activity	Travel to Grand Bazar market by bus or auto	Purchase fish	Travel time to targeted village	They sell fish street wise	Return to home

#### **Annual activities profile**

They go fish vending throughout the year except during the rough season. They sell the kattumaram catches during the ban.

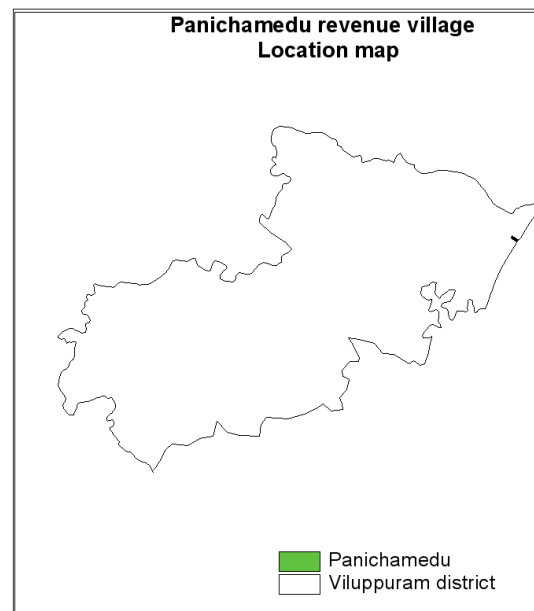
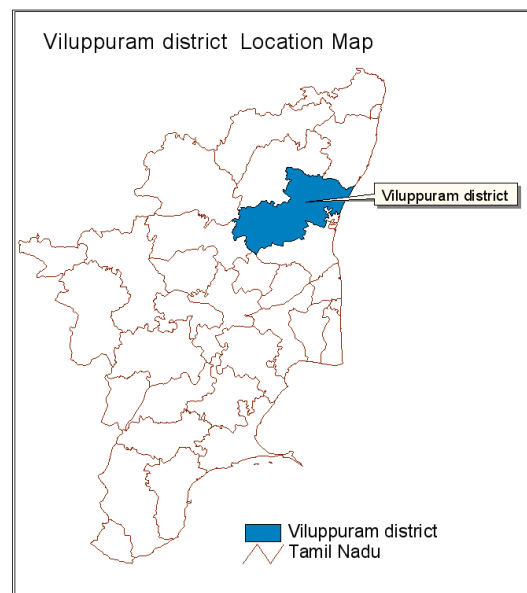
#### **LED Framework Analysis**

## Nadukuppam

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	No sale of fish in the village	Producers sell their catch at Pondicherry Grand Bazar	They buy fish from the Pondicherry main market.	
<b>Technology</b>	Loss incurred	No ice boxes	Selling without ice	Ice boxes can be provided. <sup>xxiv</sup>
<b>Infrastructure</b>				
<b>Investment</b>	Unable to buy more fish from fishermen.	Daily working capital; Expenses on non vending days <sup>xxv</sup>	Few take loans from SHG. Most borrow from money lender at the interest rate of 10% per month	Government or NGO should provide interest free loans.
<b>Markets</b>	Business is affected during rainy season	No market set up/ building	Continue sales wherever shelter is possible in the market area	Market at Kottakuppam can be set up.
<b>Capacity building</b>	No secondary job	Most are elderly women	Idle when not going fish vending.	Need for motivation to do more; training can be provided
<b>Social security</b>	Post retirement Health	Old age pension Widow pension <sup>xxvi</sup>  No Primary health center	Dependent on their children.  Go to GH or Nallam clinic in Pondicherry	  Primary health center required
<b>Policy</b>				



- i The time for fishing varies according to the gear type as well as fish availability
- ii They used to catch 2 boxes of fish before the tsunami; presently catching only one box
- iii 3 Ring seines are used in this village. The income from one ring seine catch can sustain 60 FRPs for 15 days
- iv They used to travel 12 km out to sea, consuming 13 liters of diesel whereas now they travel 40 km, consuming 20 liters of diesel
- v 2 ½ hours is the time consumed
- vi Consuming 20 liters of diesel for one operation
- vii Rs.25,000 per year is required for engine over hauling
- viii Rs.3,00,000 per year is required for purchasing gear
- ix Rs.20,000 per year is required for boat maintenance
- x Loan amounts upto Rs.20000 at the interest rate of 10% per month are provided.
- xi 3% interest per month
- xii 5% interest per month
- xiii Rs.4 more per liter
- xiv 65 FRPs in this village . 65 people will participate in the training
- xv 25 people are not receiving old age pension
- xvi Sometimes 2 fishing trips will be scheduled if fish availability is more.
- xvii 5 years ago, catches consisted of 3 to 4 vessels of fish; now only one vessel of fish
- xviii Spending Rs.150 for carrying 2 boxes of fish to the market
- xix They need about Rs.20,000 per year for purchasing nets
- xx 20% interest per month and the repayment should be made on daily basis.
- xxi 2.5% interest per month
- xxii Difficult to compete with ring seine users
- xxiii Secondary job should provide a minimum earning of Rs.100 to 150 per day to the 50 kattumaram fishers of this village
- xxiv 30 women are fish vendors in this village
- xxv They require Rs.1000 per day for their working capital
- xxvi 57 women are not receiving widow pension



## Panichamedu

### Introduction

This village is located 32 kms to the north east of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Gounder and Padayatchi caste group and has 249 households with an average family size of 3.55 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Adult male	245
Adult female	270
Children male	178
Children female	138
Infant male	32
Infant female	22
<b>total</b>	<b>885</b>

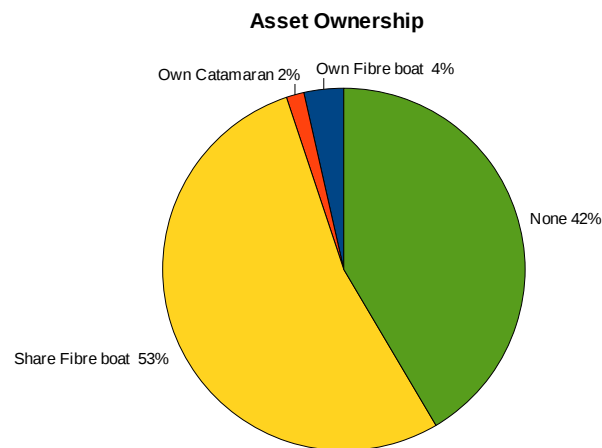
*Table 1: Demographic profile of Panichamedu*

The origin of the village is believed to be from Kanchipuram, whose people migrated from there 200 years ago. The major shock the community felt was the 2004 tsunami. Fortunately there was no loss of life during this incident though there was damage to assets.

From 60 thatched houses 50 years ago, the village now has 200 houses of which most are concrete. Infrastructure in the village includes a primary school which was established by an NGO in 2003. Students have to attend high school at Komuttuchavady. The roads in the village were metaled 20 years ago and was replaced by concrete after the tsunami. An overhead tank was set up 20 years back which is presently damaged. The village still does not have a bus stand, the nearest one on the east coast road and is 2 km away. Medical facilities available at Anumanthai and Marakanam.

### Asset Ownership

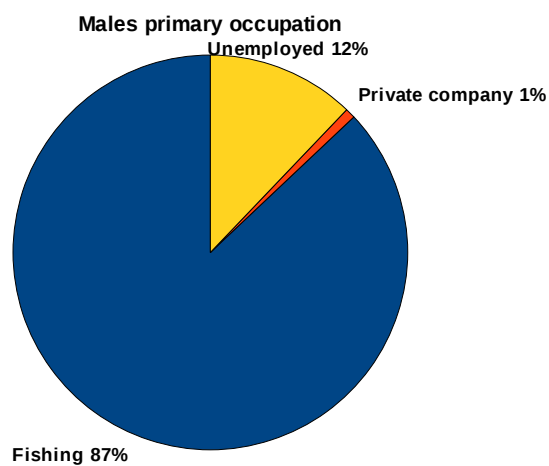
59% of the households own or share ownership of fishing craft. 6% are single owners of craft while 42% do not own any. This is represented in Figure 1.



*Figure 1: Fishing craft ownership in Panichamedu*

### Occupational Profile

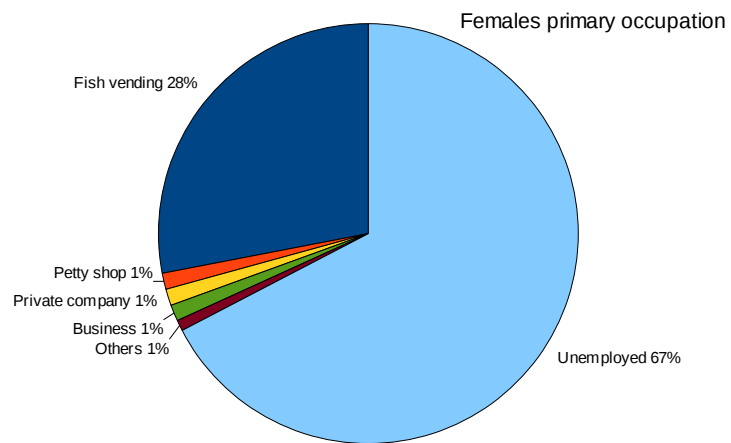
The vast majority of the village men (87%) are engaged in fishing while 12% are unemployed (Figure 2). Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

## *Panichamedu*

67% of women are unemployed with only 28% engaged in fish vending as their primary occupation. Very few are involved in other occupations with petty shops, government or private organizations. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Ban on ring seine should be enforced.
2. Ban on inshore trawling should be enforced.

#### **Welfare schemes:**

1. Government should make provisions for pension plans for old people.
2. Awareness programs on various government policies and schemes can be conducted.
3. Government should provide compensation for FRP boats during the ban

#### **Infrastructural requirements:**

1. Bigger community hall or cyclone shelter is required
2. Government should construct one market building at Marakanam
3. Solar drier required for drying fish

#### **Facilitation required:**

1. Credit linkages can be facilitated by banks
2. GPS can be provided to minimize diesel expenses
3. Government can provide diesel subsidy
4. Training required for secondary occupations required

Panichamedu

14<sup>th</sup> August, 08

### Stakeholder group: FRP Boat owners

#### COGA Analysis:

Caste - Palli or Gounder

Origin - Heredity

Gender- Males

Age - 20 to 55 years

### Daily activity profile

Time schedule	6.00-11.00 am	11.00-2.00 pm
Activity <sup>i</sup>	They travel further out to sea(>60 km) <sup>ii</sup>	Cast the seine soon as fish shoal is sighted. This could take an hour. Once the seine is secured, they begin hauling/loading the fish one boat at a time, which then returns to the village. Depending on quantity of catch, the time to return to shore varies.

### Annual activity profile

They fish for nearly 6 months in a year, remaining idle for the rest of the year. This idle period includes the rough season and the 45 day ban period.

### LED Analysis Framework

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Fish availability is low <sup>iii</sup>	Use of trawl nets.	They switched to ring seining	Restrict trawling to 15 km away from the shore/ban trawling altogether.
<b>Technology</b>	Lack of GPS units.	More time and fuel consumed <sup>iv</sup> for fishing.  Reduced fish catches.	Travel greater distances; sometimes depend on other fishermen who possess such technology and knowledge as well.	Government or NGO's should provide GPS units
<b>Infrastructure</b>	Boat parking during the rough season.  Community Hall	Insufficient space during the rough season. <sup>v</sup>  Present community hall is	During natural disasters like tsunamis and cyclones they stay in neighbouring villages.	Protection for boat during the rough season  Bigger community hall or

## Panichamedu

		very small <sup>vi</sup>		cyclone shelter is required.
<b>Investment</b>	Purchase and maintenance of craft and gear, engine repair <sup>vii</sup>  High cost of fuel	Insufficient working capital  Hike in fuel prices and lack of diesel Subsidy <sup>viii</sup>	Dependant on informal money lenders charging high(4%) interest rates; Mortgage jewellery <sup>ix</sup> ; Borrow from neighbours <sup>x</sup> Buying diesel from the Pondicherry / Marakkanam bunk	Banks should facilitate loans and be flexible during repayment of installments  Subsidy should be given for diesel. <sup>xi</sup>
<b>Markets</b>	Low market value for their catch.	High volume, low value fish	Sometimes sell the catch at low prices to agents.	Storage facility to avoid distress sales
<b>Capacity building</b>	Lack of awareness			Awareness programs can be conducted.
<b>Social security</b>	No pension plans during old age <sup>xii</sup> .		Dependent on their children	Government should provide pension schemes to old people.
<b>Policy and Institutional support</b>	Loans not available  No replacement of boats lost during the tsunami	Government stopped the loans for the fishermen community. <sup>xiii</sup>	Repair their boat on their own	Government or NGO should provide boats to the remaining people.



### Stakeholder group: Kattumaram owners

#### COGA Analysis:

Caste - Palli or Gounder, Pattinavar

Origin - Heredity

Gender- Males

Age - 25 to 55

#### Daily activity profile

Time schedule	3.00 - 3.30 am	3.30- 6.30 am	6.30-7.00 am	7.00-7.30 am	7.30- 9.00 am	9.00-10.00 am
Activity <sup>xiv</sup>	They travel to depths of about 4 - 7 fathoms at sea.	Cast their nets and wait; idle while waiting	Haul their nets.	Return to shore.	Sort fish catch.	Market their catch.

#### Annual activity profile

They fish for nearly 6 months in a year while they participate as labor in ring seine operations for 3 months remaining idle for the rest of the year. The idle period includes the rough season as well as the 45 day ban.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish. <sup>xv</sup>	Seasonal earnings/ income	Participate as labour in ring seine operations	
<b>Technology</b>				They do not feel the need for any improvement in technology as they mostly fish in inshore waters.
<b>Infra structure<sup>xvi</sup></b>	Accommodation during cyclones	No community shelter; present community hall is very small	Stay in neighbouring villages	Need one big community hall It can be used for all purposes.
<b>Investment</b>	Purchase of nets; maintenance of gear and craft	Insufficient working capital <sup>xvii</sup>	Dependent on money lenders charging high interest rates(4%);	Government should provide gear once a year for those fishing

*Panichamedu*

			Mortgage jewellery	from kattumaram
<b>Markets</b>	Sell at low prices	No big market close to the village	Sell to local fish vendors; sell at Pondicherry grand bazaar <sup>xviii</sup>	Government can construct a market building
<b>Capacity building</b>	No Awareness			
<b>Social security</b>	No social security in their old age.  No insurance	No schemes made by the government.  Income is insufficient pay policy	Dependent on children and family members.	Government should provide pension plans to old people. Government should facilitate suitable insurance policies for them
<b>Policy and Institutional support</b>	No access to Government loans	Government stopped providing loans for the fisher folk community		Government should provide loans for fishing activities

*Panichamedu*

21<sup>st</sup> August, 08

**Stakeholder group: Fish vendors**

**COGA Analysis:**

**Caste** - Palli (Vanniyar) and Pattinavar

**Origin** - From different villages; settled here after marriage.

**Gender-** Female

**Age** - 23 to 55 years

**Daily activities profile**

Time	9:00-10:00am	10:00-11:00am	11.00 - 2.30 pm	2.30 to 5:00pm
Activity	Arrive at beach/landing centre; buy fish at auction.	Travel by auto to market destination. (Nearly 10 people selling fish at Thindivanam Market)	They sell fish street wise	Return to village by bus.

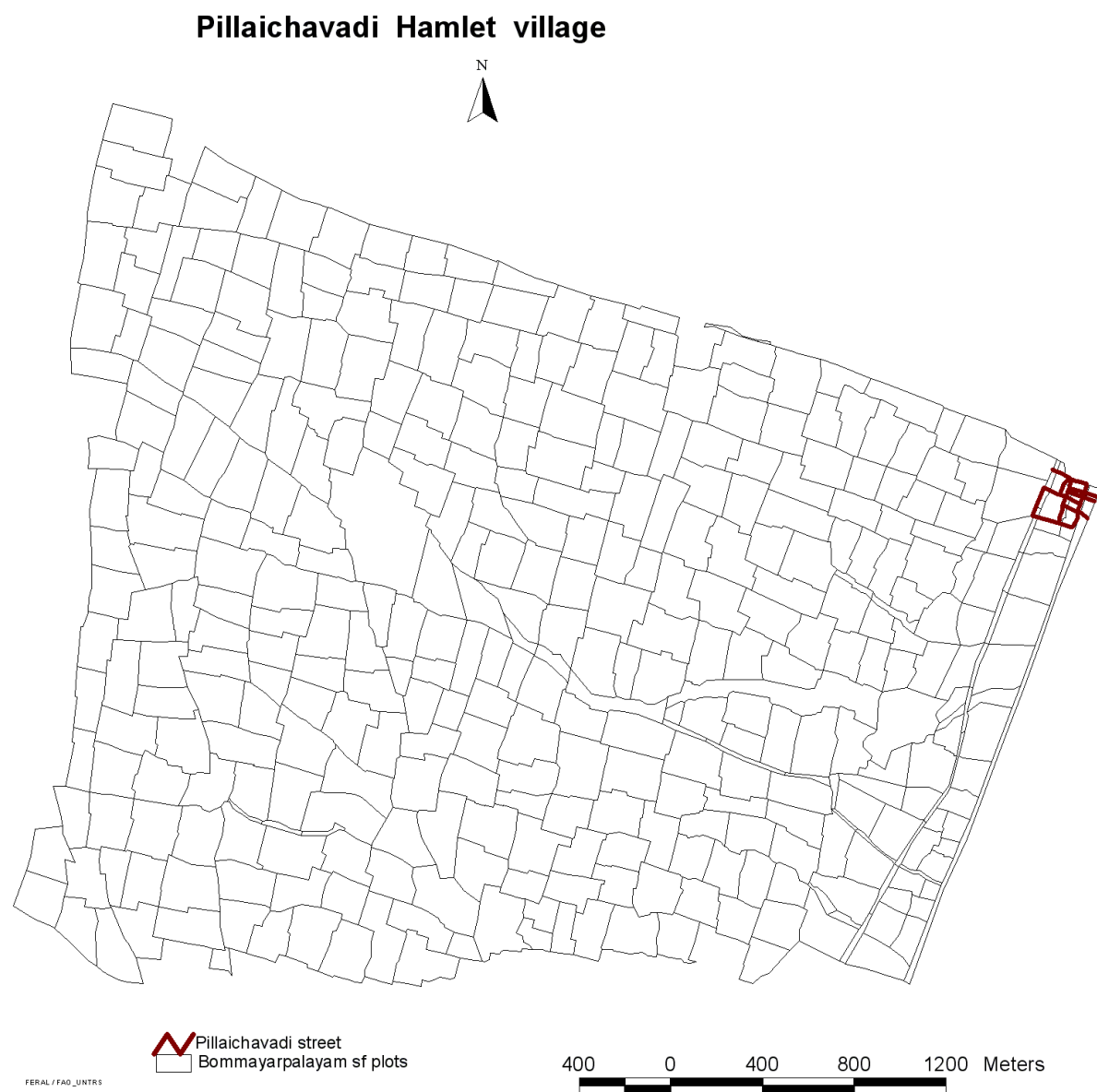
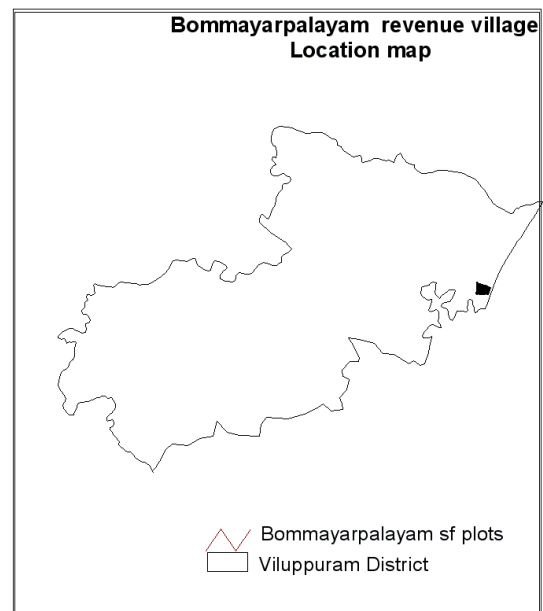
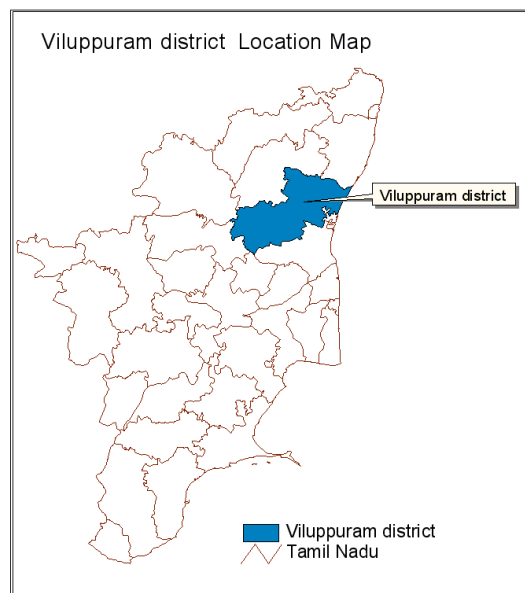
**Annual activities profile**

The months of Ipasi, Karthigai, and Margazhi (nearly 90days) are considered as the rough season while the 45 day ban is also the lean period. Few women sell fish from the kattumaram catches; kattumarams being the only craft fishing during the ban.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Depletion of fish <sup>xix</sup>	Fishermen catching less for the last 4 years due to ring seine operations.	Purchase less fish.	Ban on ring seine should be enforced.
<b>Technology</b>	Seasonal drying of fish.	No provision for drying during rainy season.	Accepting the loss	One drying unit is required.
<b>Infra structure</b>	Community hall  Markets are distant; no main market close to/in the Villupuram district	Present community hall is very small.  No proper building at Marakkanam market	During natural disasters like tsunamis and cyclones they stay in neighbouring villages. Only boat owners' wives sell fish at the Pondicherry main market	Require a bigger community hall or cyclone shelter  Require a market set up at Marakkanam
<b>Investment</b>	Working capital <sup>xx</sup>	Most of the profits are used towards repaying loans with interest.	Borrow from money lender at high interest rates(10%); Borrow from neighbours at interest rates (3% to 5 %); Mortgage jewellery(3%)	<sup>xxi</sup> Bank loan for working capital
<b>Markets</b>	Sell fish street wise or in the Market.			
<b>Capacity building</b>	Don't have any secondary occupation.	They know only fish vending	Idle	Opportunities for secondary occupations during rough season and ban period <sup>xxii</sup>
<b>Social security</b>	Insurance Old age pension	50% of the people not paying individual LIC policy <sup>xxiii</sup>	Dependent on their children	Create awareness about different policies and benefits.
<b>Policy</b>				

- i All boats are involved in ring seining; 5 ring seines in this village, each net shared by 40 people
- ii In search of fish shoals or to well determined fishing grounds
- iii From 6 vessels of fish before the tsunami to only 3 vessels of fish at present.
- iv Diesel consumption for line fishing is 10 liters for 3 hours whereas fishing with other gear requires 4 liters of diesel for 1 hour.
- v October and November
- vi Accommodates only 200 people
- vii They require Rs.60,000 per year
- viii Presently spending Rs.44/liter
- ix Bank charges 75 paise interest per month; pawn brokers charge 2% interest per month
- x Interest rates at 2-3% and loan amounts, 5000 -10000 can be provided.
- xi They have not yet received the diesel subsidy which was started by the Government a year ago.
- xii 40 people are not receiving old age pension.
- xiii During the tsunami 41 boats were damaged but only 5 boats were given so far.
- xiv Sometimes 2 fishing trips will be scheduled if fish availability is more.
- xv December to April is considered as the peak season.
- xvi The village has 1 ice factory and a drying yard.
- xvii Rs.24000 per year is required for purchasing nets
- xviii Transportation is costly as they are charged Rs.50 per box when traveling by bus and from the bus stop to grand bazaar they pay Rs.30 by cycle rickshaw
- xix From buying one vessel and one bag of fish 4 years ago, they now buy only one vessel of fish
- xx Require Rs.3000 per day for fish vending.
- xxi SHGs are not functional as group members did not repay on time.
- xxii 200 women are fish vendors. They are expecting a minimum of Rs.100 per day.
- xxiii 3Years policy. Each person paying 10000 per year. After 25 years they will get a sum of Rs 50,00,000.



## **Pillaichavady TN (Tamil Nadu)**

### **Introduction**

This village is located 4 kms to the north of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Pattinavar caste group and has 111 households with an average family size of 4.21 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	76
Female over 35	92
Adult male	99
Adult female	92
Children male	42
Children female	28
Infant male	15
Infant female	23
total	<b>467</b>

*Table 1: Demographic profile of Pillaichavady TN*

The village is one of the oldest traditional fishing hamlets. Its origin could not be identified during the historical mapping session. Very few people have migrated into and out of this village (about 15%) to neighboring towns/villages. The major shocks the community felt were a cyclone 40 years ago and the 2004 tsunami. No loss of life occurred in both incidents. 1 FRP was damaged during the tsunami.

The village has 100 concrete houses which were thatched 50 years ago. Infrastructure in the village includes a net mending hall, drying yard, ice factory, overhead tank and public toilets which was established in the last 6 years. The roads in the village were sandy and unlevel earlier and was replaced by concrete roads in the last 6 years. Transportation facilities are frequent at present. Medical facilities are available in Kalapet. The cooperative society is dysfunctional.

### Asset Ownership

55% of the households own or share ownership of fishing craft. 54% are single owners of craft while 45% do not own any (Figure 1)

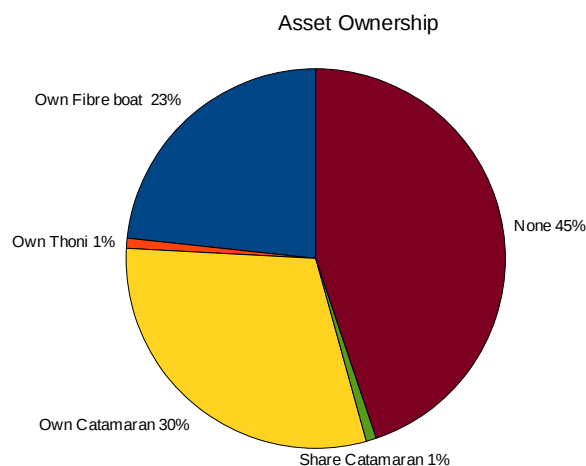


Figure 1: Fishing craft ownership in Pillaichavady TN

### Occupational profile

The vast majority of the village men (68%) are engaged in fishing or allied activities while 15% are unemployed and 17% are involved in various other jobs. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

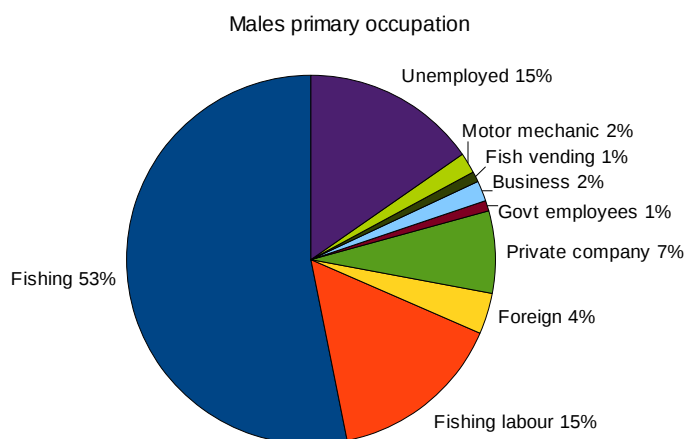
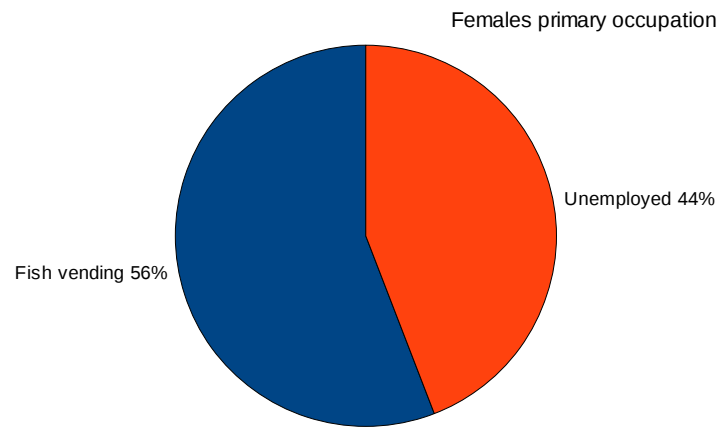


Figure 2: Primary Occupations of Men



*Pillaichavady TN (Tamil Nadu)*

56% of women are engaged in fish vending as their primary occupation while 44% are unemployed. This is represented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Field visit from the fisheries or monthly grievance camps in the village itself can help resolve most of the fishing community problems
3. Prevent/stop construction of artificial sea wall; this will leave the natural space available for parking boats.

#### **Welfare schemes:**

1. Government should make provisions for pension plans for old people.
2. Fisheries cooperative can facilitate the formation of an association to get diesel on subsidy

#### **Infrastructural requirements:**

1. NGOs can provide one community van to transport their fish to market or government can arrange an exclusive bus for the same.
2. Government can construct a building for the market

#### **Facilitation required:**

1. Credit linkages for their working capital can be facilitated by banks
2. Training on rope making and tailoring
3. Training required on operation of GPS unit and engine repair required.

*Pillaichavady TN (Tamil Nadu)*

29<sup>th</sup> July, 08

**Stakeholder group: FRP Boat owners**

**COGA Analysis**

Caste- Pattinavar

Origin –Heredity

Gender – Male

Age – 28 to 55

Marital status – Married

**Daily activities profile**

There are two types of fishing methods which is practiced in this area..

Fishermen using the Nanduvalai, go to sea in the evening, set their net and return to the shore. They set out early next morning, haul their net and return to shore.

Time schedule	3.00-3:30pm	3.30-4.00pm	4.00-5.00 pm	4:00am to 7:00am
Activities	Travel an average distance of 12km/day to sea.	Cast nets into the sea	Return to shore from the sea.	Set out to collect nets; return to shore and sort out caught fishes.

Fishermen using other nets:

Time schedule <sup>i</sup>	3.30-4.00 am	4.00-4.15 am	4.15-6.00 am	6.00-7.30 am	8 am
Activities	Travel to fishing grounds.	Cast nets into the sea	Idle while waiting	Haul net and sort out catch	Arrive at seashore and sell fish in local market.

**Annual Activities profile**

The rough season includes the months of Karthigai and Margazhi. They fish for only 20 days during the ban period. They fish during the rest of the year.

## LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased catch quantities <sup>ii</sup>	Use of ring seine	They travel further out to sea for fishing <sup>iii</sup>	Government should enforce ban on ring seine; Provision for alternate occupations from the Government or Private sector.
<b>Technology</b>	No modern technology	Higher fuel and time consumption in addition to high costs of operation in locating/ searching for suitable fishing grounds.	Dependant on other boats with or without such technology	GPS and navigation equipment will prevent monetary loss as well as loss in time, fuel.
<b>Infrastructure</b>	No transport.	Buses do not allow fisher folk to transport their catch during rush hour <sup>iv</sup>	Van used to transport fish to the market <sup>v</sup>	One common vehicle for transportation.
<b>Investment</b>	No bank loans for working capital <sup>vi</sup>  Non availability of diesel subsidy	Insufficient working capital for purchase and maintenance of craft and gear	Borrow from money lenders at 10% interest; from neighbours at 3%-5% interest; Mortgage jewellery(3% interest);  Purchase diesel from Pondicherry at normal rates.	Banks should restart giving loans to fishermen communities. The government has the authority to ensure this. Open a fuel station in Villupuram district
<b>Markets<sup>vii</sup></b>				
<b>Capacity building</b>	Lack of technical know how in engine repair and maintenance work. Lack of knowledge to operate GPS	Breakdown of engine at sea; navigational errors and fishing in unsuitable areas.	Other passing boats tow them back to shore;continue fishing with decreased efficiency.	Technical training on engine repair <sup>viii</sup> and GPS operation should be provided <sup>ix</sup>
<b>Social security</b>	No pension plan during old age <sup>x</sup>	Only childless couples/people getting pension	Others depend on their children	Pension plan must include all old people

*Pillaichavady TN (Tamil Nadu)*

<b>Policy</b>	Boat insurance; Distant Fisheries Department in Villupuram Compensation provided during the ban period	The department is very far; people cannot go and meet the officers. Compensation amount is insufficient and is provided to ration card holders.	Pay for boat maintenance themselves.	Awareness required on the various schemes available to them; Field visits from the fisheries department/ weekly grievance camps in the village itself. Compensation should be provided to all who are registered with the Society.
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### Stakeholder group: Kattumaram boat owners

#### COGA Analysis:

Caste - Pattinavar

Origin - Heredity

Gender- Males

Age - 15 to 55 years

#### Daily activity profile

Time schedule <sup>xi</sup>	4.00 - 4.30 am	4.30- 6.00 am	6.00-6.30 am	6.30-7.00 am	7.00- 8.00 am	8.00-9.00 am
Activity	They travel to depths of about 4 - 6 fathoms at sea.	Cast their nets and wait; idle while waiting	Haul their nets from the sea.	Return to shore.	Sort fish catch.	Market their catch.

#### Annual activity profile

They go fishing approximately 250 days in a year except during the rough season and ban period (approximately 3 months in a year).

#### LED Analysis Framework

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased fish catch	Use of ring seines. <sup>xii</sup> Physical oceanographic changes in the region (currents and temperature) after tsunami. <sup>xiii</sup>	Continue fishing	Ring seine ban should be enforced <sup>xiv</sup>
<b>Technology</b>				
<b>Infrastructure</b>	Boat parking. <sup>xv</sup>	Sea wall	Parking boats in close proximity within the available parking area	Sea wall construction can be stopped
<b>Investment</b>	Insufficient working capital to buy new Kattumarams and fishing gear. <sup>xvi</sup>	No schemes/ loans for this purpose.	Dependent on informal money lenders charging high interest rates; Mortgage jewellery; borrow from neighbours.	Banks should facilitate credit schemes to fishermen. <sup>xvii</sup>

*Pillaichavady TN (Tamil Nadu)*

<b>Markets</b>	Low market prices for their catch. <sup>xviii</sup>	No markets in their village; sell at local auction sale	Sometimes forced to sell at low prices to agents; Direct marketing by wives or mothers.	Markets should be opened in or near their village.
<b>Capacity building</b>				
<b>Social security</b>	No pension plans in their old age.	No schemes made by the government.	Dependent on their children during their old age.	Pension schemes must be provided.
<b>Policy and Institutional support</b>	No insurance policies were taken by them. <sup>xix</sup>	Insufficient earnings to start savings and take policies.		Government must provide insurance policies to all the fishermen.

### Stakeholder group: Fish vendors

#### COGA Analysis

Caste : Pattinavar

Origin :From different villages; settled here after marriage.

Gender:Females

Age : 22 years

Marital status: Married.

#### Daily Activity Profile:

Time schedule	5.00am-6.30am	6.30-8.00am	8.00-9.00am	9.00am-12.00pm	12.00pm-2.00pm
Activity	Leave home, travel by bus/auto and arrive at the jetty.	Buy fish at auction.	Travel to markets to sell fish	Sell fish at the market	Travel back home.

#### Annual Activity Profile:

They go fish vending approximately 260 days in a year. The rough season includes the months of Puratasi, Karthigai and Marghazi during which no fish vending occurs. They also do not work during the ban of 45 days and on few religious occasions.

#### LED Framework Analysis

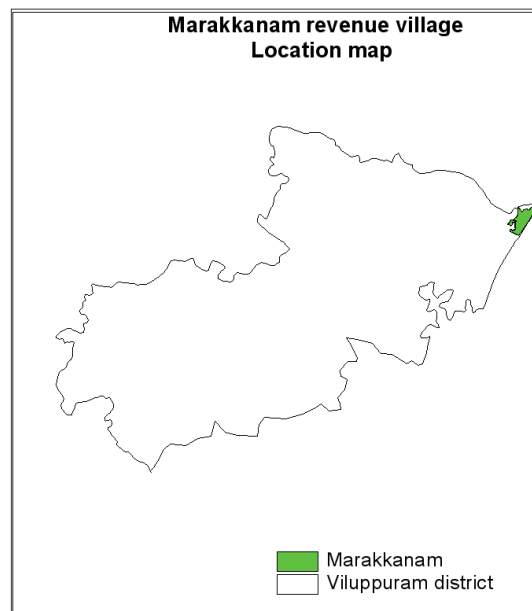
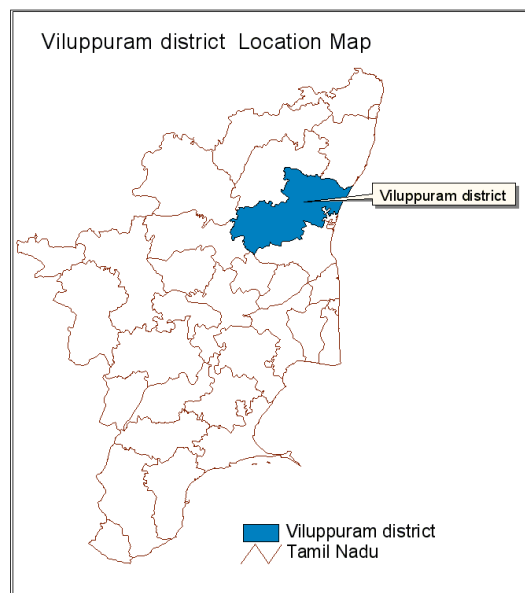
Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources</b>	Declining fish catch <sup>xx</sup>	Increase in fishing effort using modern craft and gear. <sup>xxi</sup>	Continue fish vending	Government should regulate all types of fishing.
<b>Technology</b>				
<b>Infrastructure</b>				
<b>Investments and credits</b>	Insufficient working capital	Competition between vendors to buy fish	Borrow from money lenders <sup>xxii</sup> at high interest rates. <sup>xxiii</sup>	
<b>Markets</b>	Buy fish at high rates.	Most participating in ring seine operations.	Compete with others to buy fish paying higher rates.	
<b>Capacity building</b>	Opportunities for secondary jobs. <sup>xxiv</sup>		Spend more time selling fish in the markets	Government/NGOs should facilitate such



*Pillaichavady TN (Tamil Nadu)*

				opportunities. <sup>xxv</sup>
<b>Social security</b>	No old age pension		Dependent on their family.	Government must provide pension to all of them.
<b>Policy and Institutional support</b>	Insurance taken by few individually.	Insufficient daily earnings to start savings.	At their own risk.	Government can make provisions for policies which can be followed easily.

- i If they want to fish for a longer time then they leave earlier.
- ii Catch quantities have decreased from 3 boxes of fish to only 1 box of fish at present.
- iii Before the tsunami, they would fish at 12 fathoms taking half an hour to reach, consuming 5 liters of diesel. At present they travel upto 35 fathoms for 3 hours consuming 10 liters of diesel.
- iv Bus fare to Pondicherry is Rs.4
- v Van charges 3 people a sum Rs.150 per box
- vi They require about Rs.8,75,000 as working capital per year. Each FRP carries two types of nets i.e., No.10 net(50 kg) and Disco net (50kg)
- vii No problems in marketing; they call agents when catch is good , sell at auction when catch is poor.
- viii 20 FRPs in this village with single ownership. Owners require training in engine repair.
- ix 20 FRP boat owners require GPS training.
- x 40 people are not receiving old age pension
- xi The time for fishing varies according to the gear type as well as fish availability
- xii 1 ring seine catch comprises shoals of 10000-20000 fish which can sustain the livelihoods of kattumaram operators of 19 villages for 6 months.
- xiii The water would become cold and turbid for 2 months/year (Aadi,Aavani) which has not occurred in the last two years.
- xiv The Kattuvallai which was earlier used is now converted into the ring seine
- xv The seawall of Palmyra for about 200 metres occupies the shore. Kattumarams are damaged at high tide(2 kattumarams were damaged two months ago) ; village currently has 40 kattumarams.
- xvi Life of a kattumaram is 5 years. Life of nets reduced within the last two years to 3-5 months from 1 year. Large number of bivalves were caught in the Nakkuvallai net with mesh size being 30-32 mm, used only 3 months/year. Net costs Rs.5000, the principal amount is acquired from money lenders in 3 days at 5% interest which is repaid in daily instalments. They require a working capital of Rs.20000/year
- xvii Banks can provide loans at 1% interest rate and installments can be repaid weekly. There is a bank at Kalapet at a distance of 2.5 kms; bus fares is Rs.3.50
- xviii Government or other organizations can standardize the rates for fish.
- xix Insurance policies are not imposed seriously; also meager income prevents taking policies.
- xx Catch quantities have decreased from 4-5 vessels of fish(before the tsunami) to 1 to 2 vessels at present.
- xxi Neighboring village Chinnamudaliarchavady has 8 ring seines
- xxii At 10% interest; repayment of loan in daily installments.
- xxiii Those selling fish in the market require Rs.1000 – 2000/day; Head loaders require about Rs.500/day
- xxiv Tailoring and rope making training should be provided to 90 women who are fish vendors.
- xxv Expect a minimum of Rs.100-150 per day



## Vasavankuppam

### Introduction

This village is located 40 kms to the north of Pondicherry and lies in the Villupuram District. The fishing hamlet is comprised of the Pattinavar and Gounder caste group and has 146 households with an average family size of 4.42 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	1
Female over 35	2
Adult male	161
Adult female	186
Children male	145
Children female	96
Infant male	28
Infant female	26
<b>total</b>	<b>645</b>

*Table 1: Demographic profile of Vasavankuppam*

The village was known as Vasavamkuppam 50 years ago and its origin could not be identified during the historical mapping session. The major shock the community felt was the 2004 tsunami. No loss of life occurred during this incident. Damage to fishing craft included the loss of 15 kattumarams and 15 FRPs. A storm in July 2008 did not cause any damage to the village.

The village now has 250 concrete houses. Infrastructure in the village includes a functional primary school. The roads in the villages were sandy paths earlier and were metaled 20 years back. These were replaced by concrete roads 2 years ago. Transportation was made available from 2002 with buses making only 2 trips per day. Medical facilities are available at Marakannam and Pondicherry.

Asset Ownership

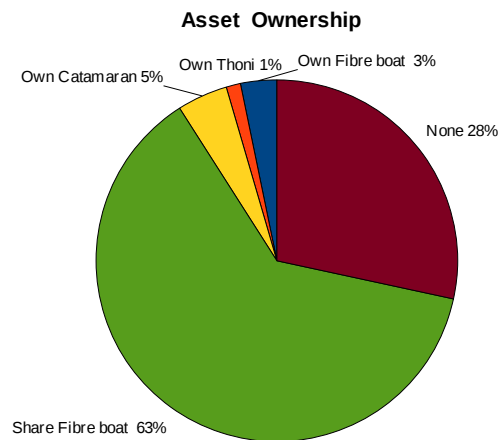


Figure 1: Fishing Craft ownership of Vasavankuppam

72% of the households own or share ownership of fishing craft. 9% are single owners of craft while 28% do not own any. This is represented in Figure 1.

Occupational Profile

The vast majority of the village men (88%) are engaged in fishing or allied activities while 11% are unemployed (Figure 2). Men do not appear to be engaged in any secondary occupations.

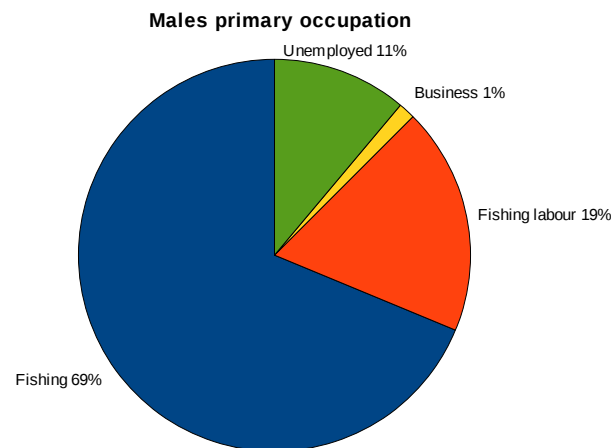
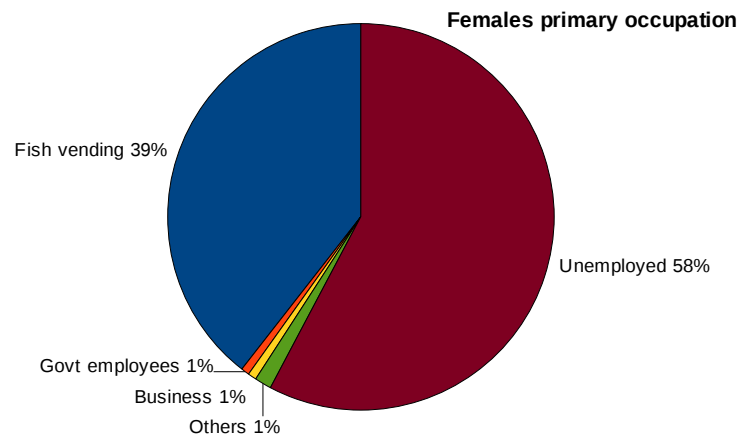


Figure 2: Primary Occupations of Men

58% of women are unemployed with only 39% engaged in fish vending as their primary occupation. Very few are involved in other occupations with government, private organizations, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Crew
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.
3. Government should ban bull trawling and the respective gear.
4. Government should encourage kattumaram fishing.

#### **Welfare schemes:**

1. Government should make provisions for pension plans for old people.
2. Government should provide a diesel subsidy.

#### **Infrastructural requirements:**

1. Require a cyclone shelter during the natural disaster.
2. Government should increase the frequency of buses.

#### **Facilitation required:**

1. Bank should facilitate credit linkages for their working capital; Micro credit finances can be arranged by NGOs or Bank.
2. Ice boxes can be provided by NGOs or Government.
3. Training should be provided on engine repair and GPS operations.
4. Training required for skilled employment for their secondary occupations.
5. Require drying unit to overcome difficulties in drying during the rainy season.

**Stakeholder group: FRP Boat owners**

**COGA Analysis**

Caste- Pattinavar, Goundar

Origin –Heredity

Gender – Male

Age – 14 to 50 years

**Daily activities profile:**

Two types of fishing practices seen in this area.

Fishermen using the Nanduvalai, go to sea in the evening, set their net and return to the shore. They set out early next morning, haul their net and return to shore.

Time	4.00-4:30pm	4.30- 5:00pm	5:00- 5:30pm	5:00 am - 5:30 am	5.30 - 6:30 am	7:00 am
Activities	Travel an average distance of 12km/day to sea.	Cast nets into the sea	Return to shore	Set out to collect nets	Sort catch	Reach shore

Fishermen using other nets:

Time <sup>i</sup>	3.30-4.00 am	4.00-4.15 am	4.15-6.00 am	6.00-7.30 am	8 am
Activities <sup>ii</sup>	Travel to fishing grounds.	Cast nets into the sea	Idle while waiting	Haul net and sort out catch	Arrive at seashore and sell fish in local market.

**Annual activities profile:**

They do not go fishing during the 45 day ban and in the months of Karthigai and Ipasi which is considered as the rough season.

**LED Analysis Framework**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased catch quantities <sup>iii</sup>	Trawling	Travelling further out to sea <sup>iv</sup>	Government should ban bull trawling; use of Izhouvalai
<b>Technology</b>	More time spent	10 HP engine	Make do with present	Increase engine



## Vasavankuppam

	travelling	speed insufficient	situation, reaching late catching less fish resulting in low prices.	power to 12 HP
<b>Infrastructure</b>	Natural disasters	No cyclone shelter for the village	Use school building. <sup>v</sup>	Require cyclone shelter
	Low earnings	No ice factory in the village	Ice obtained from Marakkanam (7km away) <sup>vi</sup>	Ice boxes should be provided <sup>vii</sup>
<b>Investment</b>	Insufficient working capital for purchase and maintenance of gear and craft.	No bank loans for working capital <sup>viii</sup>	Dependent on informal lenders charging high interest rates (10%); Borrow from neighbours at an interest rates 3%-5 %; Mortgage jewellery (3% interest rate)	Bank stopped loans to fishing communities; government has authority to revoke this.
<b>Markets<sup>ix</sup></b>				
<b>Capacity building</b>	Higher time and fuel consumption resulting in higher expenditure.	Lack of technical knowledge in GPS operations and in maintenance as well as engine repair	Make do with old technology and are dependent on other boats to tow them back to shore in case of engine breakdown at sea; risk losing their way at sea.	Training in engine repair <sup>x</sup> and in operation of GPS <sup>xi</sup>
<b>Investment</b>	Not availing loans from government.	Lack awareness on the bank loan system	Dependant on money lenders charging high interests.	Awareness regarding available schemes and loans needs to be created.
<b>Social security</b>	No old age pension	Only childless couples/people are eligible <sup>xii</sup>	Others dependant on their children	Pension plans must include all old people
<b>Policy and Institutional support</b>	Diesel subsidy <sup>xiii</sup> ;	No diesel subsidy;	Buy at market rates	Need diesel subsidy
	No alternative jobs during the ban period <sup>xiv</sup>	Not receiving compensation amount	Provide only 150 families <sup>xv</sup>	Compensation should be given to all families.

**Stakeholder group: Crew**

**COGA Analysis**

Caste- Pattinavar, Goundar

Origin –Heredity

Gender – Male

Age – 14 to 50

**Daily activities profile:**

Two types of fishing practices seen in this area.

Fishermen using the Nanduvalai, go to sea in the evening, set their net and return to the shore. They set out early next morning, haul their net and return to shore.

Time	4.00-4:30pm	4.30- 5:00pm	5:00- 5:30pm	5:00 am - 5:30 am	5.30 - 6:30 am	7:00 am
Activities	Travel an average distance of 12km/day to sea.	Cast nets into the sea	Return to shore	Set out to collect nets	Sort catch	Reach shore

**Ring seine crew:**

Time	6.00-10.30 am	10.30-2.00 pm
Activity	They travel further out to sea(approximately 100 km) <sup>5</sup>	Cast the seine soon as fish shoal is sighted. This could take an hour. Once the seine is secured, they begin hauling/loading the fish one boat at a time, which then returns to the village. Depending on quantity of catch, the time to return to shore varies.

**Annual activities profile:**

They do not go fishing during the 45 day ban and in the months of Karthigai and Ipasi which is considered as the rough season.

**LED Analysis Framework**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased catch quantities.	Trawling	Travelling further out to sea; participating as crew in ring seine operations	Government should ban bull trawling; use of Izhouvalai
<b>Technology</b>	More time spent	10 HP Engine	Catching less fish	Increase engine

5 In search of fish shoals or to well determined fishing grounds

## Vasavankuppam

	travelling.  Domination by big villages (power play)	speed insufficient Clash with smaller fisher folk, setting their nets in the same place.	earning less as well.  Smaller fisher folk return without fishing.	power
<b>Infrastructure</b>	Natural disaster	No cyclone shelter for the village	Use school building.	Require cyclone shelter
<b>Investment<sup>xvi</sup></b>				
<b>Markets</b>	Earning less.	No storage facility; High value species like prawn and cuttlefish are sold at low prices by the boat owner on account of a loan received from them.	Sell at low prices to brokers/ drying the fish	Require storage facility
<b>Capacity building</b>	Lack of technical knowledge in GPS operation.	More time and diesel spent resulting in higher expenditure	Risk getting lost at sea or travelling in the wrong direction with continued use of old technology	Training in operation of GPS
<b>Social security</b>	No old age pension  No accident insurance	Only childless couples/people are eligible; Accidents occur often at sea; Government only provides compensation in case of death.	Dependent on their children  Boat owners contribute 50% to expenditure, remaining amount is their own; Borrow money from neighbours; mortgage jewellery	Pension plans must include all people.
<b>Policy</b>	No supporting government policies.	Lack awareness		

## Stakeholders group: Fish vendors

### COGA Analysis

Caste - Pattinavar, Goundar

Origin –From different villages; settled here after marriage.

Gender– Female

Age – 24 to 50 years

### Daily activities profile:

Time	8.00-9.00am	9.00-10.00am	10.00am-1.30 pm	1.30 to 2:00pm	2:00 to 3:30pm	3:30 to 4:00 pm	4:00:to 6:30pm
Activity	Purchase fish at local village	Travel by bus/auto to market destination.	They sell fish street wise	Return to village by bus.	Rest at home	Travel by bus/auto to market destination.	Sell remaining fish

### Annual activities profile:

They do not sell fish during the ban period and in the months of Karthigai to Margazhi (nearly 60days) which is considered as the rough season.

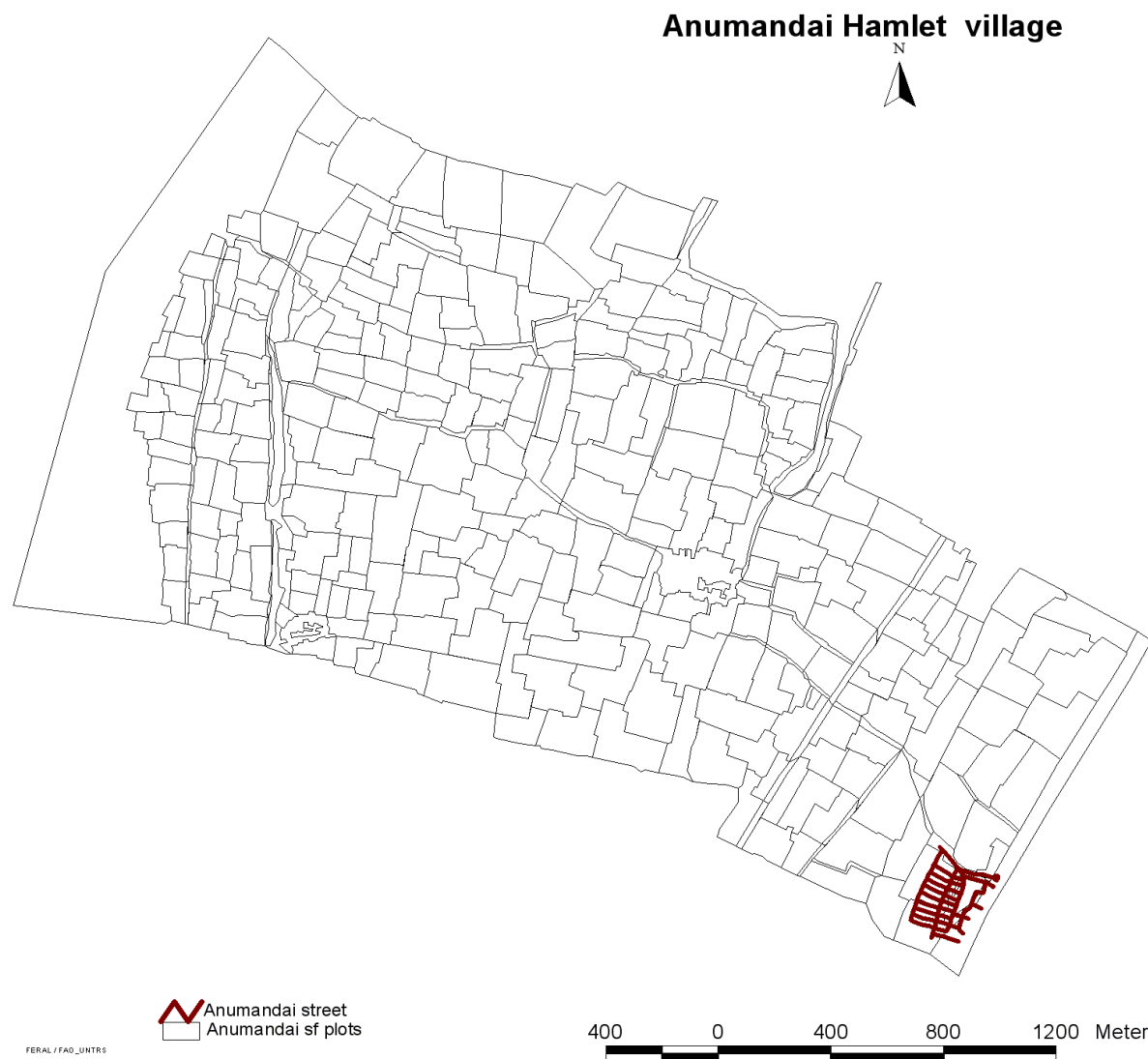
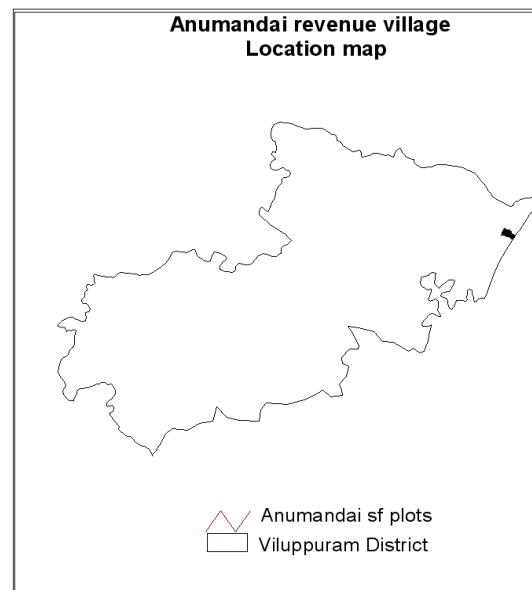
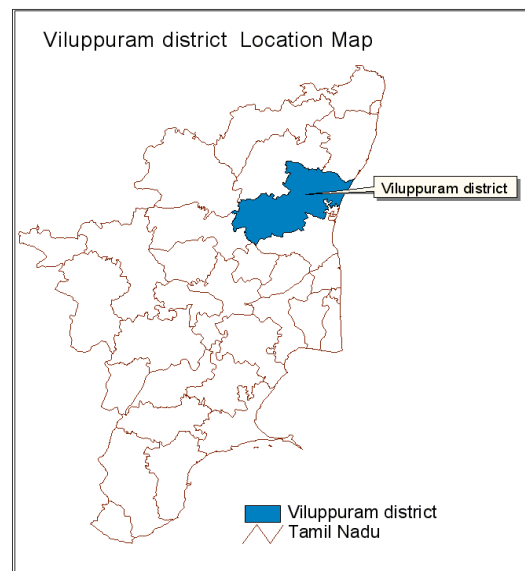
### LED Analysis Framework

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Declining fish catches. <sup>xvii</sup>	Ring seines and trawlers	Buy lesser valued fish from small scale producers <sup>xviii</sup>	Government has to support small scale fishermen
<b>Technology</b>	Drying unsold fish; seasonal drying	Unhygienic drying methods & rain	Drying the fish on the beach	Drying unit may solve the problem <sup>xix</sup>
<b>Infrastructure</b>	Transportation of fish to the market on time without too much delay. Distress sale	No frequent buses.  No ice factory in/close to the village	Travel by autos <sup>xx</sup>  Ice obtained from Marakkanam(7km away)	Bus required.  Ice boxes can be provided
<b>Investment</b>	Working capital <sup>xxi</sup>  Survival during the ban period.	Buy lesser quantities of fish Insufficient compensation	Borrow from money lenders <sup>xxii</sup>  Mortgage jewellery <sup>xxiii</sup>	
<b>Markets</b>				
<b>Capacity</b>	Manually making	No rope making		Require rope

### *Vasavankuppam*

<b>building</b>	rope	machine		making machine <sup>xxiv</sup>
<b>Social security</b>	No old age pension	Only childless couples/people are receiving pension	Dependant on their children	Government should provide pension plans for all old people.
<b>Policy and Institutional support</b>				

- i They start earlier if they want to fish for a longer period
- ii On rare occasions when fish availability is high, they may go fishing twice
- iii Catch quantities have decreased from 5 vessels of fish(3 years ago) to only one vessel of fish at present.
- iv Travel distance 3 years ago was 10 km whereas now has increased to 18 km
- v School is 1.5 km away from the shelter area.
- vi Spending Rs.100/slab which includes auto fare
- vii There are 107 FRPs in this village, thus requiring 107 ice boxes.
- viii They require Rs.2,00,000 per year to purchase nets.
- ix No problems in marketing; call agents when good catch, sell at auction when catch is poor.
- x 107 people require training on engine repair
- xi 107 people require training on GPS operation.
- xii 40 people are not receiving old age pension
- xiii Rs.46/liter
- xiv They need training on skilled employment;they feel it will help them earn reasonably well.
- xv Government made necessary arrangements to provide compensation to 58 families which were left out earlier. 18 families have been neglected however.
- xvi As labor they do not require any working capital.
- xvii Catch quantities have decreased from 2 vessels of fish before the tsunami to half a vessel at present.
- xviii Rates from Rs.300 per vessel before the tsunami have increased to Rs.900 at present.
- xix 50 women doing fish vending
- xx Auto fare-Rs.20 per basket & Rs.10 per person
- xxi They require about Rs.1000 per day for fish vending
- xxii Loans at 5% interest rate and should be repaid on a weekly basis.
- xxiii Loans from pawn brokers are at 3% interest rate.
- xxiv Currently 50 women are involved in manual rope making. A rope making machine will reduce the time and effort spent



## Anumandaikuppam

### Introduction

This village is located 27 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Pattinavar (Chinnapattinavar/Periyapattinavar) caste group and has 232 households with an average family size of 4.63 persons. The demographic profile of the village is provided in Table1.

Population of the village	Total
Male over 35	151
Female over 35	182
Adult male	233
Adult female	184
Children male	135
Children female	112
Infant male	36
Infant female	40
total	1073

*Table 1: Demographic Profile of Anumandaikuppam*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which considerable damage to assets occurred. No lives were lost.

From 150 houses of which 60 were thatched in the 1950s, the village now has about 300 houses of which most are concrete. Infrastructure in the village includes a primary school which is active till date. A primary health centre was established 50 years ago and in 1990 a government hospital was constructed in the village to provide medication for the people. Roads were metaled 30 years ago which were then concreted in 2006. Buses are available on the east coast road. Public toilets which were constructed after the tsunami are not functional now.



### Asset ownership:

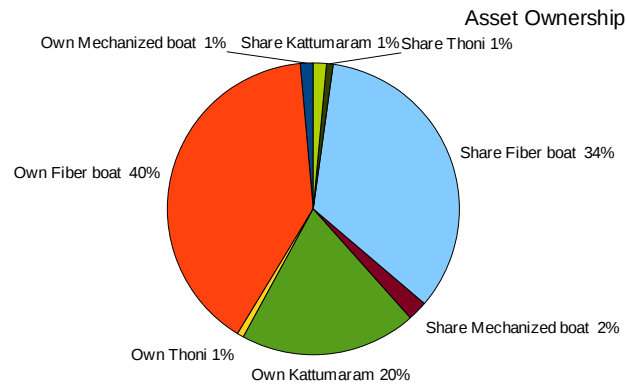


Figure 1: Asset Ownership in Anumandaikuppam

All the households own or share ownership of fishing craft. 62% are single owners of craft. This is presented in Figure 1.

### Occupational Profile

98% of the village men are involved in fishing and fishing allied activities. This is presented in Figure 2.

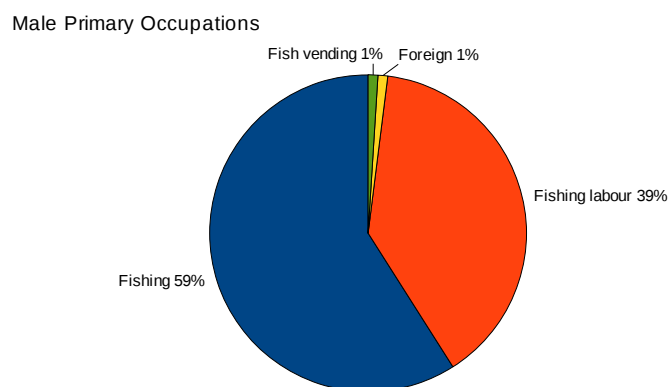
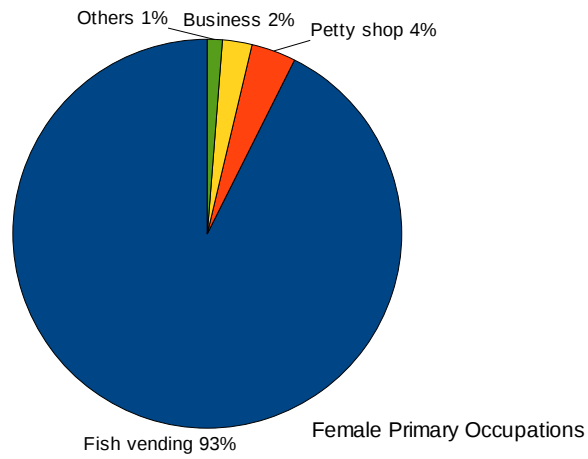


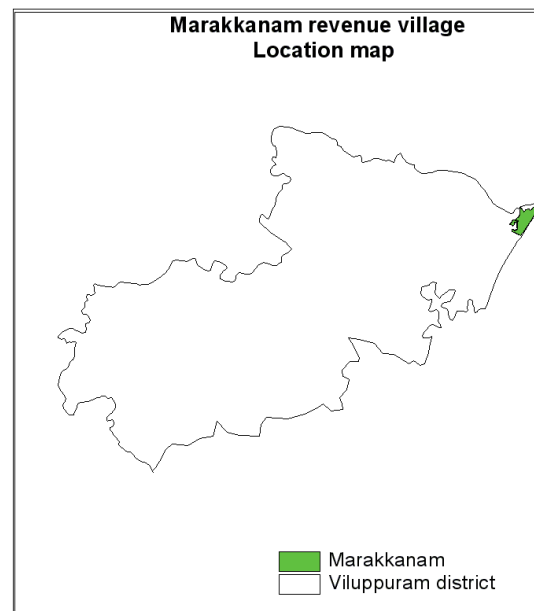
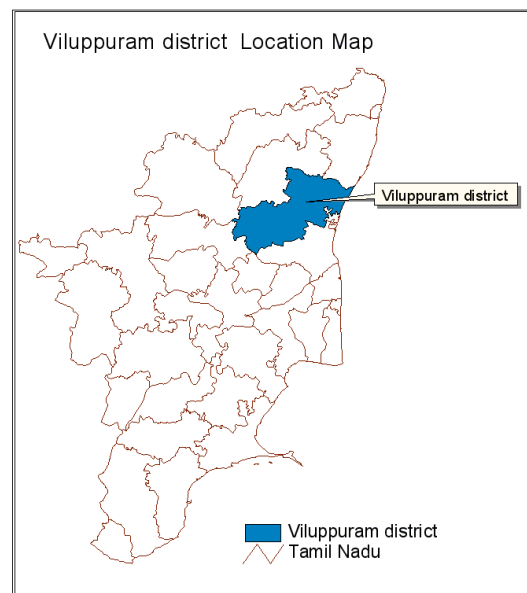
Figure 2: Primary Occupations of Men

### *Anumandaikuppam*

93% of the women are involved in fish vending as their primary occupation. Other occupations include business, petty shops, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Azhagankuppam**

### **Introduction**

This village is located 42 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Periyapattinavar caste group and has 108 households with an average family size of 3.19 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	46
Female over 35	36
Adult male	70
Adult female	72
Children male	24
Children female	28
Infant male	34
Infant female	35
total	345

*Table 1: Demographic Profile of Azhagankuppam*

The village was earlier called Muttukadukuppam and is believed to have originated 250 years ago. Two other villages shared a similar name and so this village was renamed Azhagankuppam. The major shocks the community felt was the 2004 tsunami during which minimal damage occurred.

Almost all the houses(120) are concrete in the village. Infrastructure in the village includes a primary school established in 2000 by the Government which is active till date. Roads in the village were metaled 20 years ago by the village people which were re-metaled by the Government in 2000. These were later concreted in 2005. Buses were introduced in 2002 which are still active on a fixed schedule. Medical facilities are available at Marakannam.

### Asset Ownership

All the households own or share ownership of fishing craft. 6% are single owners of fishing craft. This is presented in Figure 1.

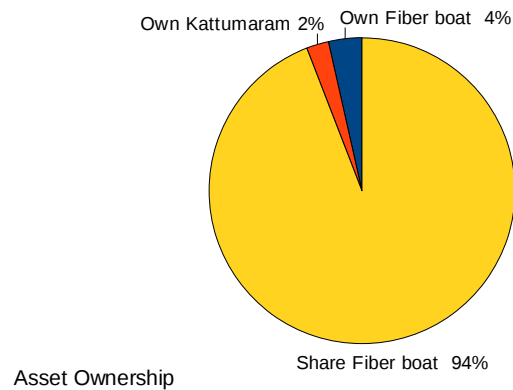


Figure 1: Asset Ownership in Azhagankuppam

### Occupational Profile

All the men of the village are engaged in fishing as their primary occupation. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

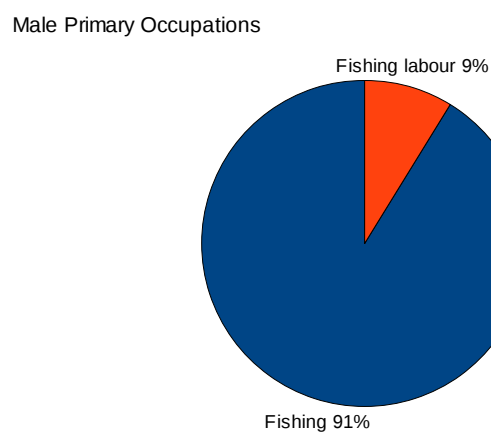
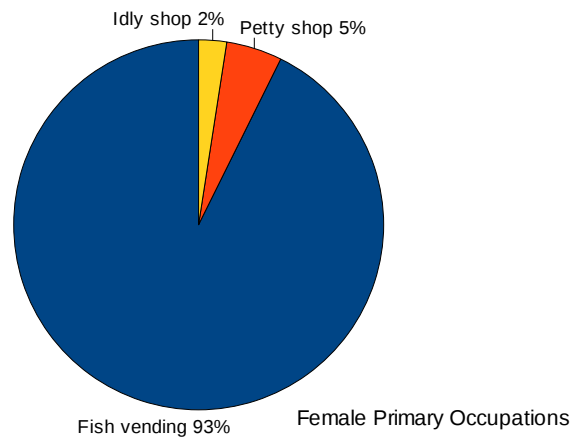


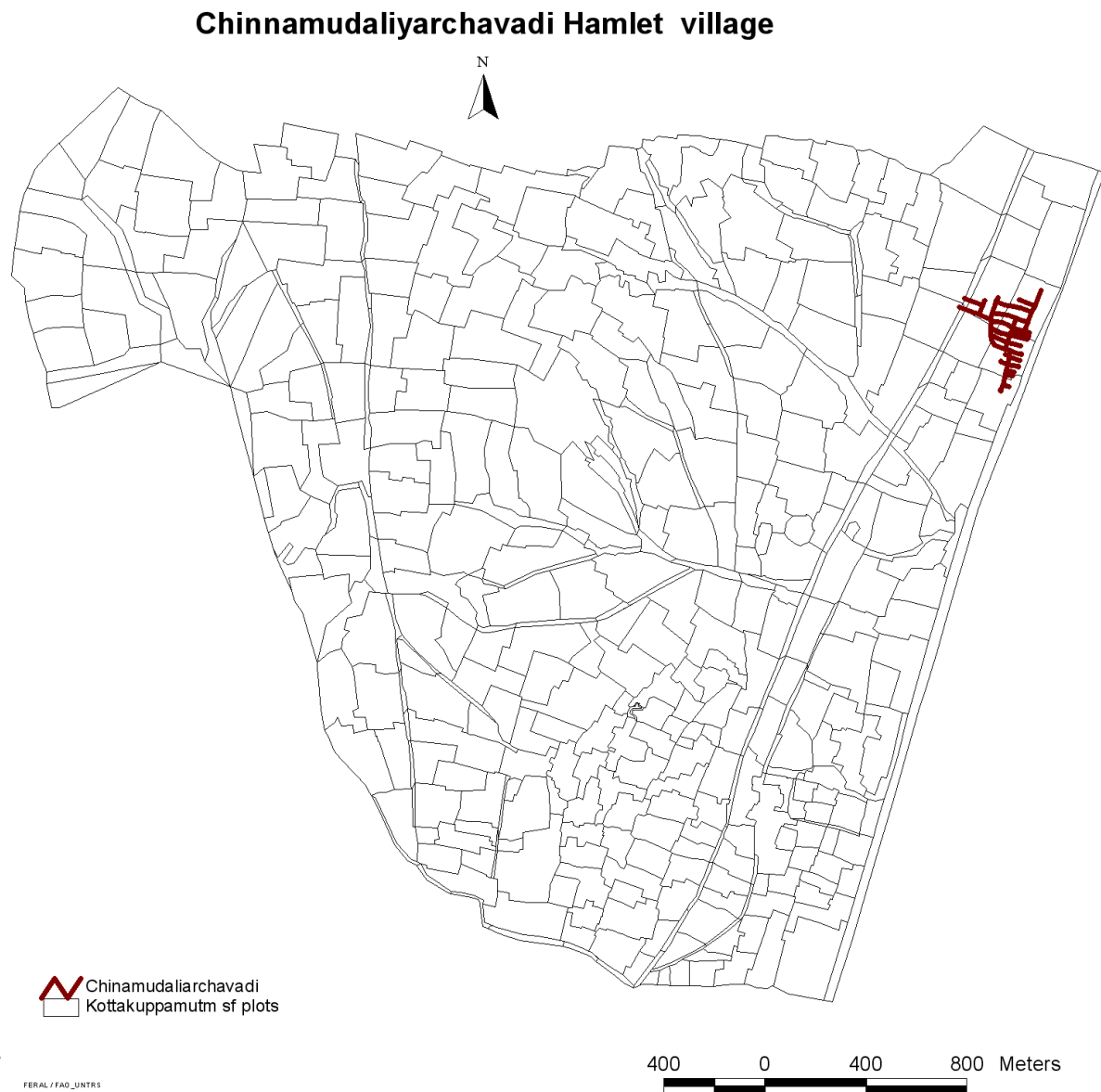
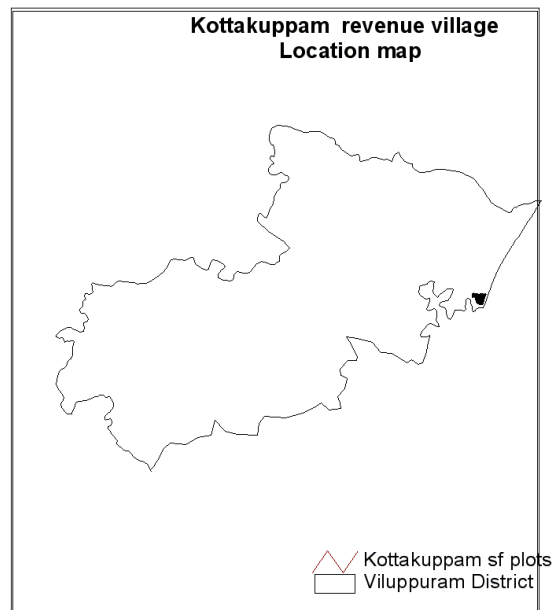
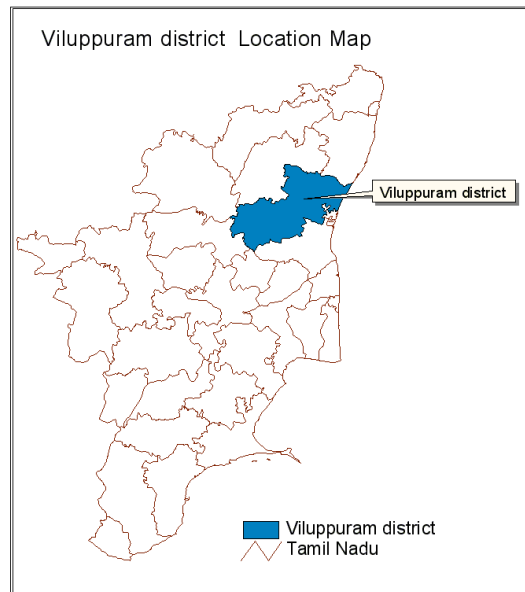
Figure 2: Primary Occupations of Men

### *Azhagankuppam*

93% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Chinnamuthaliyarchavady

### Introduction

This village is located 4 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Pattinavar and other Scheduled caste groups and has 286 households with an average family size of 4.18 persons. The demographic profile of the village is provided in Table1.

Population of the village	Total
Male over 35	6
Female over 35	12
Adult male	300
Adult female	323
Children male	237
Children female	150
Infant male	95
Infant female	73
total	1196

*Table 1: Demographic profile of Chinnamuthaliyarchavady.*

The origin of the village could not be identified during the historical mapping session. It is reported to have been named so after the younger brother of Dhivan Candhappa Muthaliyar who was considered a powerful land lord in those days. The major shocks the community felt was the 2004 tsunami during which all craft were lost and an electric post was damaged which resulted in no electricity supply in the nearby coastal areas. No lives were lost.

From 100 thatched houses 50 years ago, the village now has 300 houses of which most are concrete. Infrastructure in the village includes a primary school established long ago which is active till date. Students have to attend high school in Kotakuppam and for further studies they have to go to Anumanthai. 50 thatched houses and one child activity centre were constructed by an NGO after the tsunami. Palmyra groynes were set up to protect the village from future disasters but does not seem to be effective. Roads in the village were sandy paths 25 years ago which are metaled at present. Medical facilities are available in the primary health centre in Kalapet, for emergencies however, the people have to go the Government hospital in Pondicherry. The village lacks sanitation facilities.



Asset Ownership

All of the households own or share ownership of fishing craft. 60% are single owners of craft. This is represented in Figure 1.

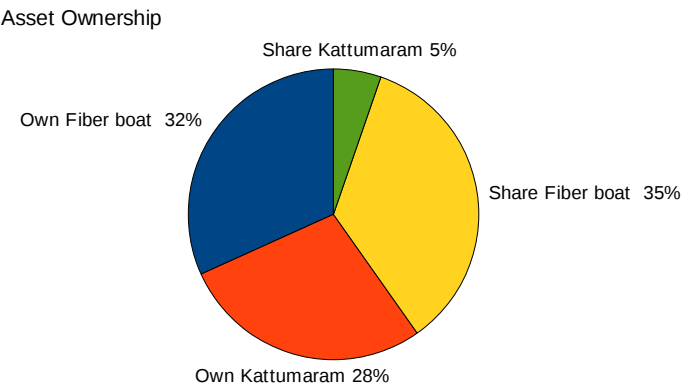


Figure 1: Asset ownership in Chinnamuthaliyarchavadi

Occupational profile

The vast majority of the village men (98%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

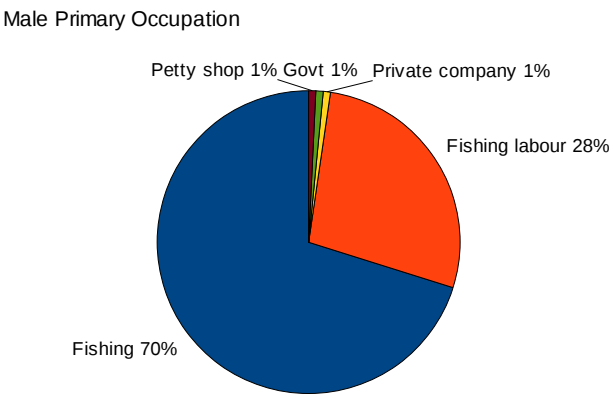
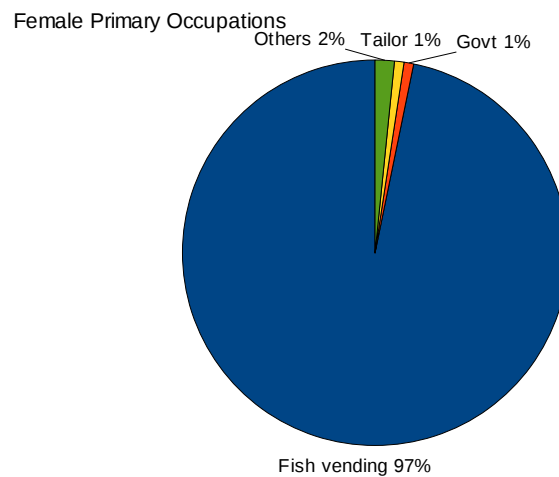
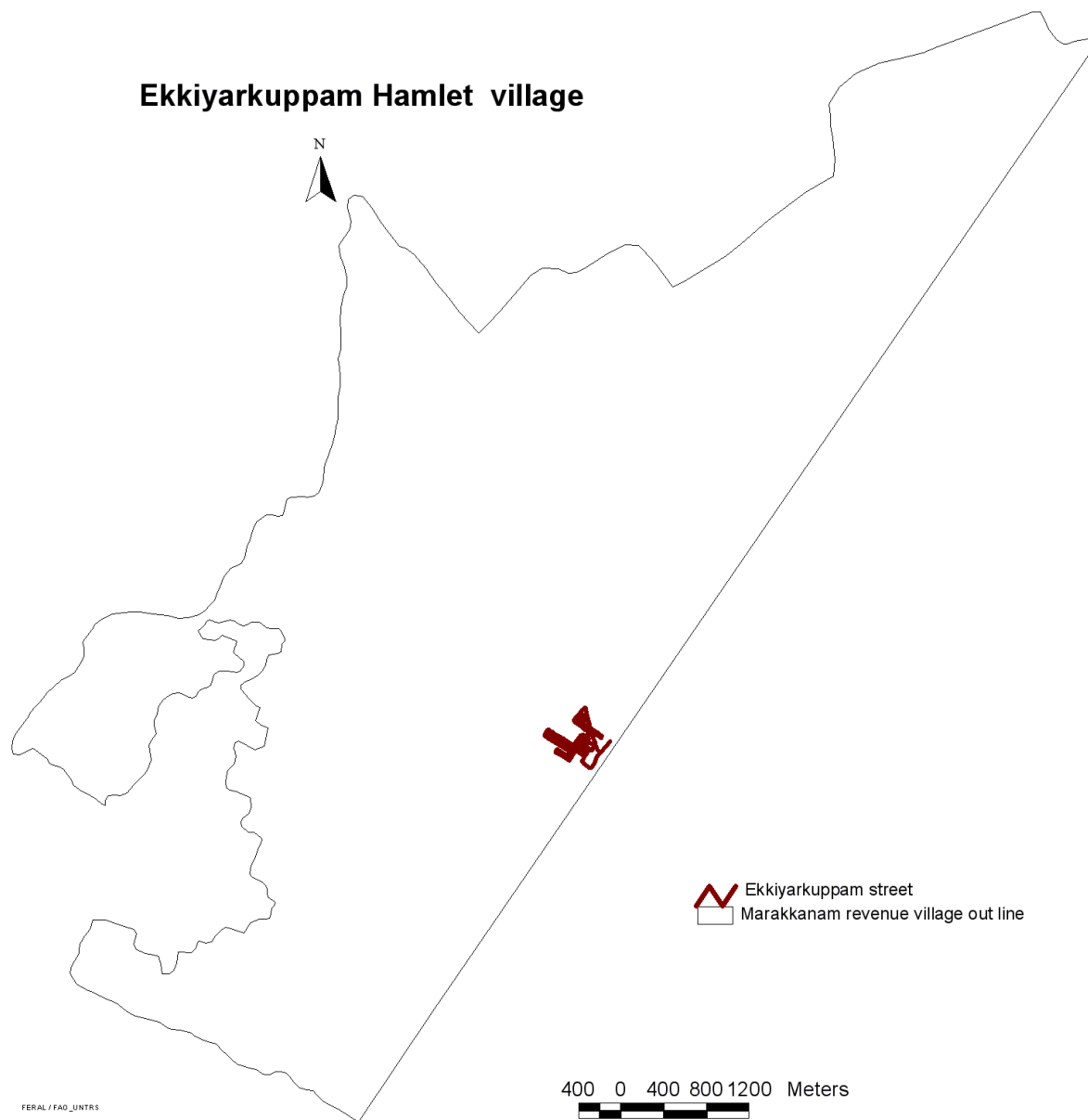
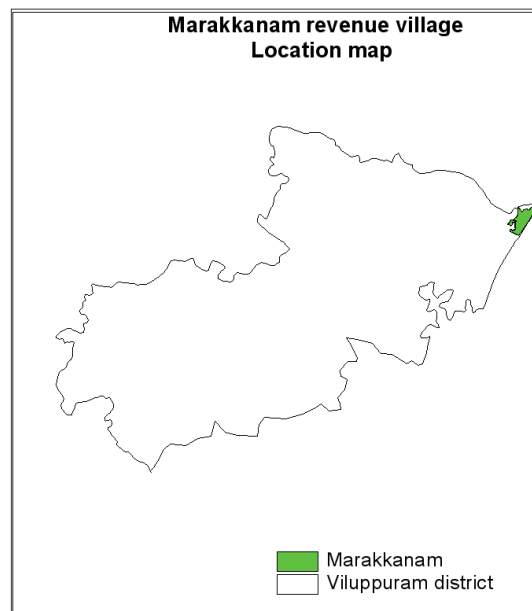
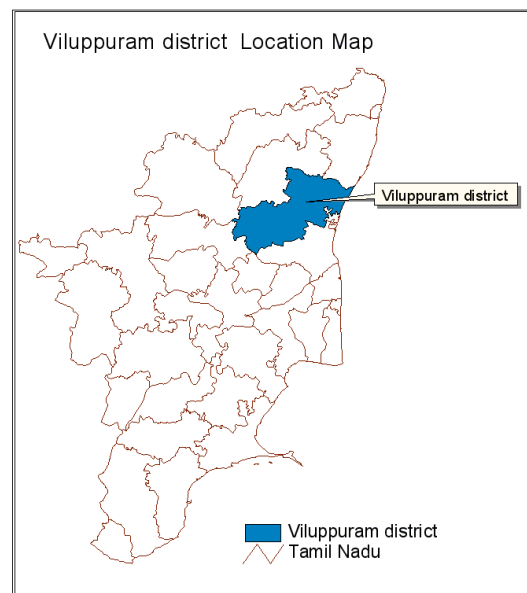


Figure 2: Primary Occupations of Men

97% of women are engaged in fish vending as their primary occupation. Other occupations 4% are involved in include tailoring, government jobs, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Ekkiyarkuppam**

### **Introduction**

This village is located 34kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Periyapattinavar caste group and has 351 households with an average family size of 4.6 persons. The demographic profile of the village is provided in Table 1.

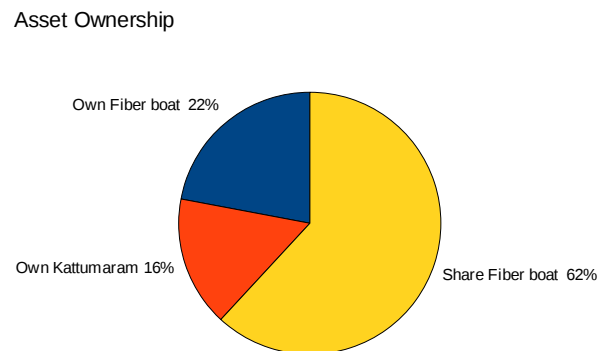
<b>Population of the village</b>	<b>Total</b>
Male over 35	152
Female over 35	195
Adult male	376
Adult female	332
Children male	199
Children female	180
Infant male	94
Infant female	86
total	1614

*Table 1: Demographic profile of Ekkiyarkuppam*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which two lives were lost and considerable damage to assets occurred. Another shock the village experienced was a fire accident which damaged many of their assets.

From 200 thatched houses 50 years ago, the village now has 700 houses of which most are concrete. The village obtained electricity 25 years ago. Infrastructure in the village includes a primary school established long ago and is active till date. An overhead tank was constructed by the Government in 2005 and is the main supply of water for the village. Roads in the village were metaled 10 years ago which was concreted in 2007. Buses were introduced in 2003 which were stopped as its scheduled timings were inconvenient for the villagers. A share auto service was started 2 years later. Medical facilities are available at Marakannam.

## Asset Ownership

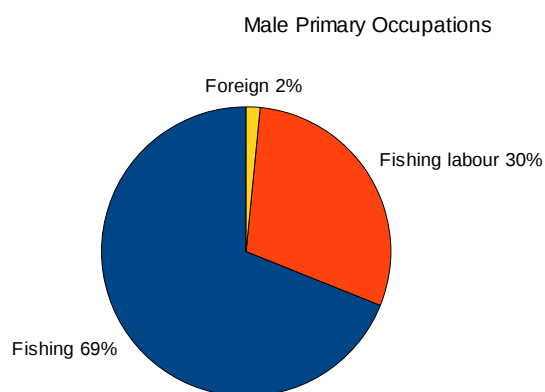


*Figure 1: Asset Ownership in Ekkiyarkuppam*

All of the households own or share ownership of fishing craft. 38% are single owners of craft. This is presented in Figure 1.

## Occupational profile

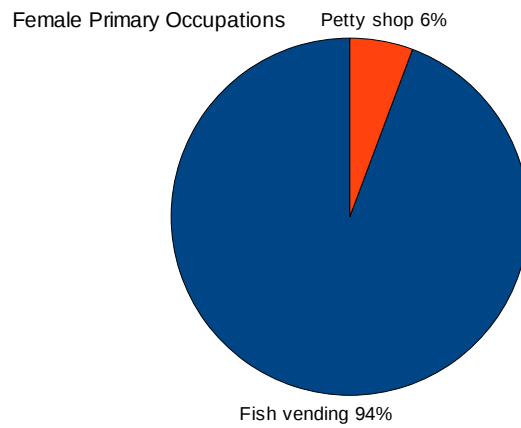
The vast majority of the village men (99%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



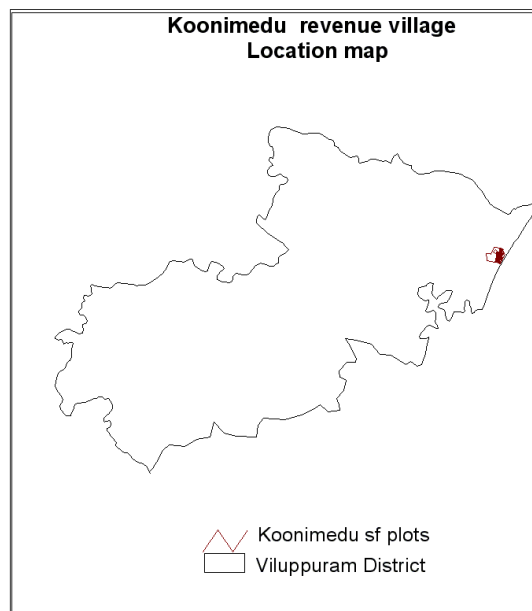
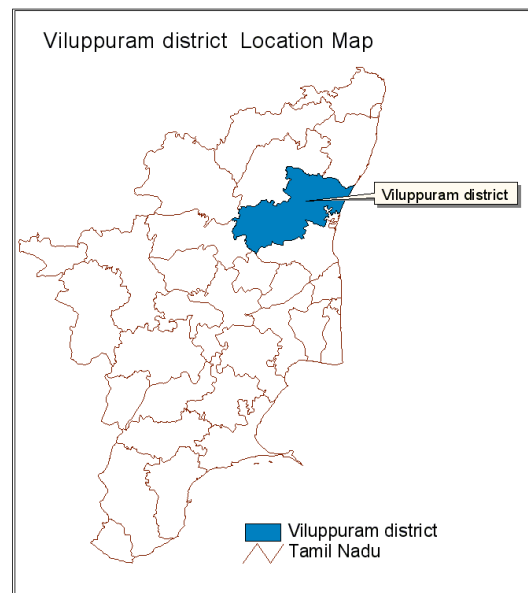
*Figure 2: Primary Occupations of Men*

## *Ekkiyarkuppam*

94% of women are engaged in fish vending as their primary occupation while 6% are involved in running petty shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Koonimudukuppam Hamlet village



## Koonimedukuppam

### Introduction

This village is located 30 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Chinnapattinavar caste group and has 432 households with an average family size of 3.39 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	209
Female over 35	222
Adult male	298
Adult female	275
Children male	193
Children female	187
Infant male	34
Infant female	48
total	1466

*Table 1: Demographic profile of Koonimedukuppam*

The origin of the village could not be determined during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 21 lives were lost. Almost all the houses, gear and craft i.e., 500 kattumarams, 30 FRPs and 6 plank built boats were damaged.

From 300 thatched houses of which 15 were concrete in the 1950's the village now has 850 houses of which most are concrete. Infrastructure in the village includes a primary school established in 1950 which is active till date. Roads in the village were sandy paths in the 1940s after which they were metaled. These roads were later concreted in 2001. Buses are only available from the east coast road. Medical facilities are available at Pondicherry and only recently from Anumanthai. The village lacks sanitation facilities.



Asset Ownership

All of the households own or share ownership of fishing craft. 63% are single owners of craft. This is presented in Figure 1.

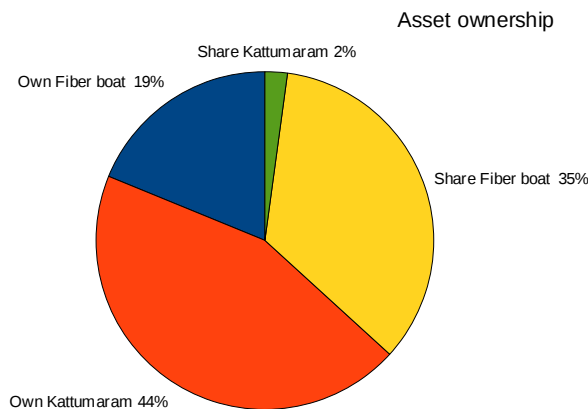


Figure 1: Asset ownership in Koonimedukuppam

Occupational profile

The vast majority of the village men (93%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

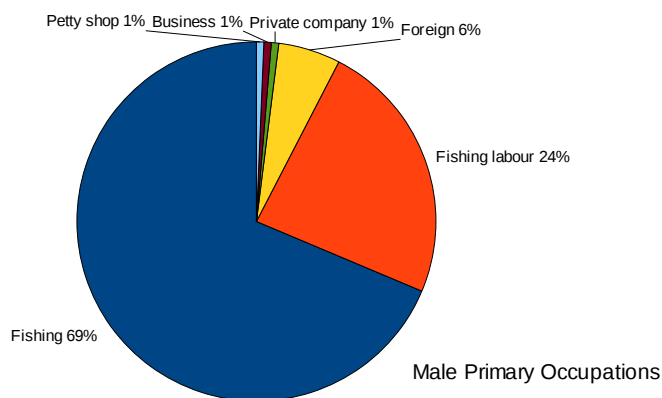
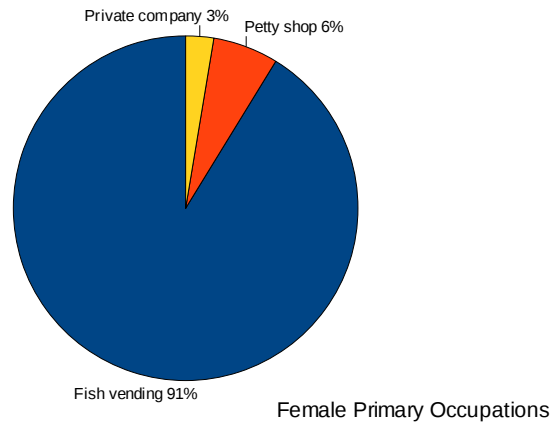


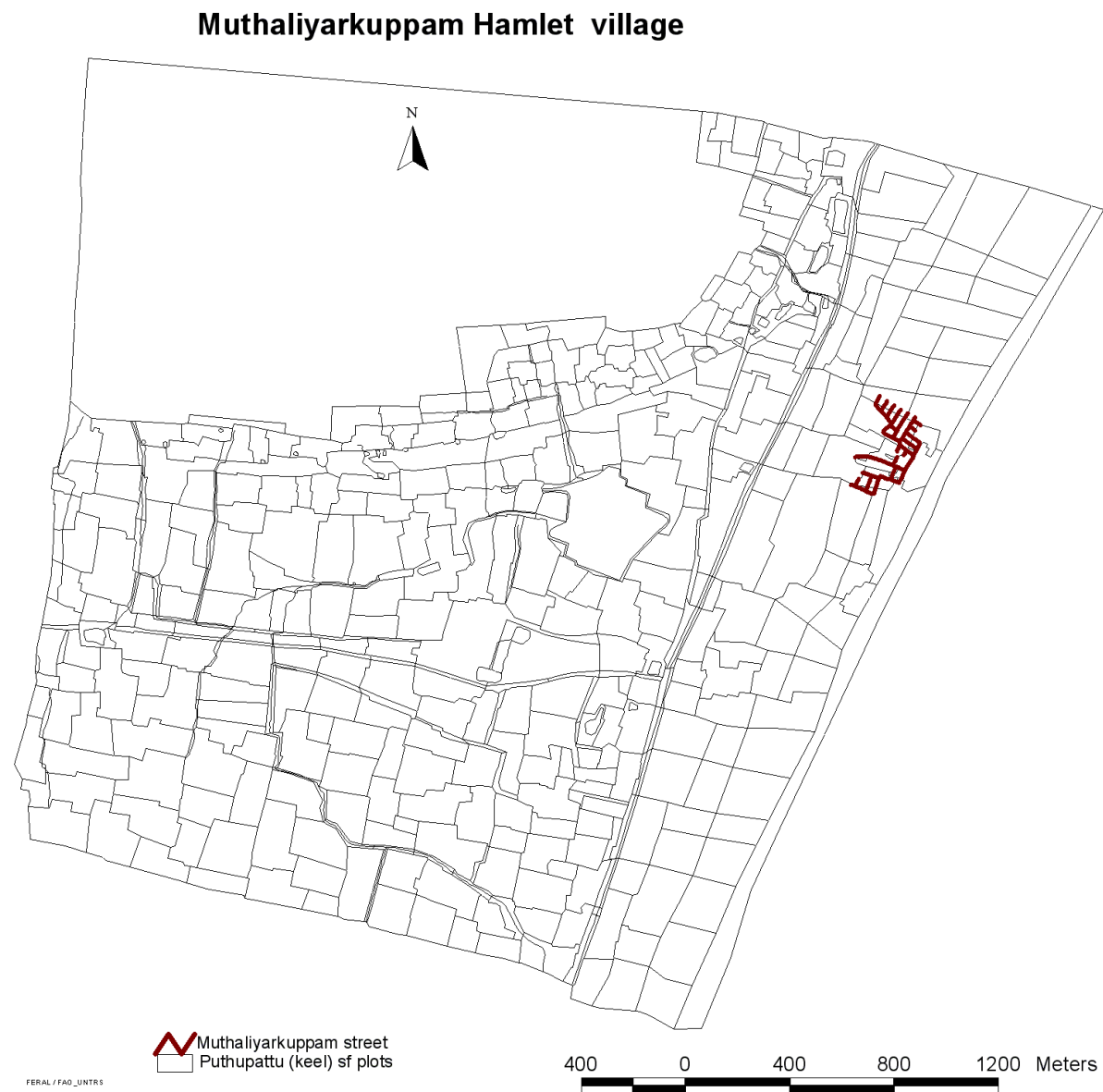
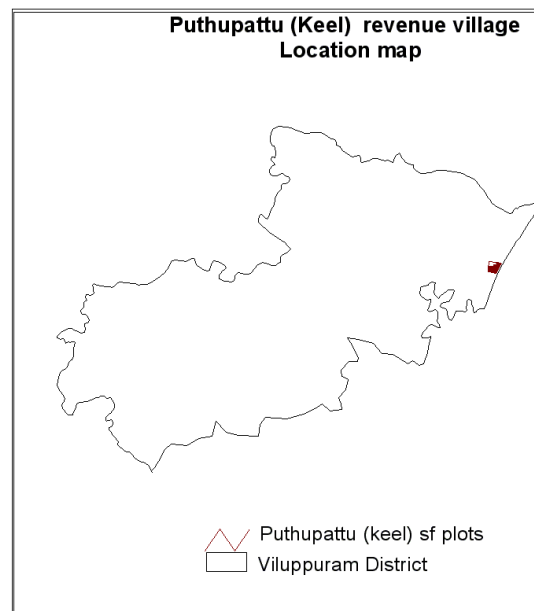
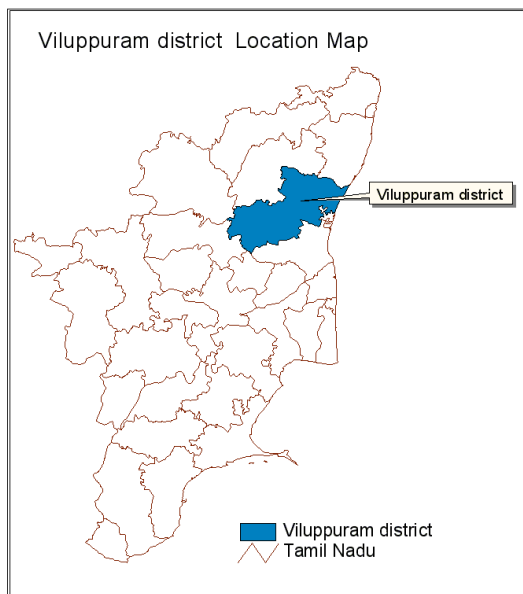
Figure 2: Primary Occupations of Men

### *Koonimedukuppam*

91% of women are engaged in fish vending as their primary occupation. 9% are engaged in other occupations including work in private companies or petty shops. This is presented in Figure 3.



*Figure 3 : Primary Occupations of Women*



## **MuthaliyarKuppam**

### **Introduction**

This village is located 27 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Chinnapattinavar caste and the Chettiyar subcaste group and has 204 households with an average family size of 3.2 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	90
Female over 35	115
Adult male	156
Adult female	124
Children male	71
Children female	65
Infant male	15
Infant female	17
total	653

*Table 1: Demographic profile of Muthaliyarkuppam*

The origin of the village could not be determined during the historical mapping sessions. The major shocks the community felt was the 2004 tsunami during which 18 lives were lost. 200 houses, 35 FRPs, 50 kattumarams as well as gear were damaged. 30 years ago another shock cost the village 15 houses.

From 60 thatched houses in 1960, the village now has 233 houses of which most are concrete. The village obtained electricity supply 35 years ago. Infrastructure includes a primary school established in 1952 which is active till date. The Government built 3 overhead tanks which are the main source of water for the village. Roads in the village were metaled 25 years ago and were concreted in 2000. Buses are available only on the East Coast Road. Medical facilities are available at Kanagachettikulam, Kalapet and Pondicherry.

### Asset Ownership

All of the households own or share ownership of fishing craft. 25% are single owners of craft. This is presented in Figure 1.

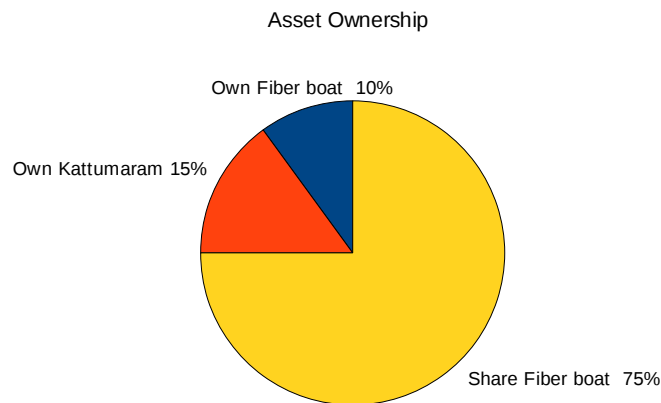


Figure 1: Asset Ownership in Muthaliyarkuppam

### Occupational profile

The vast majority of the village men (93%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

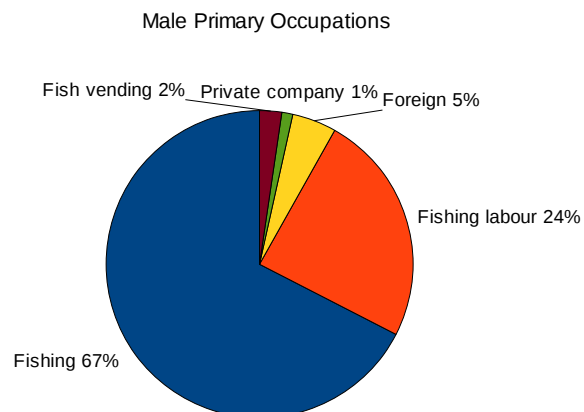
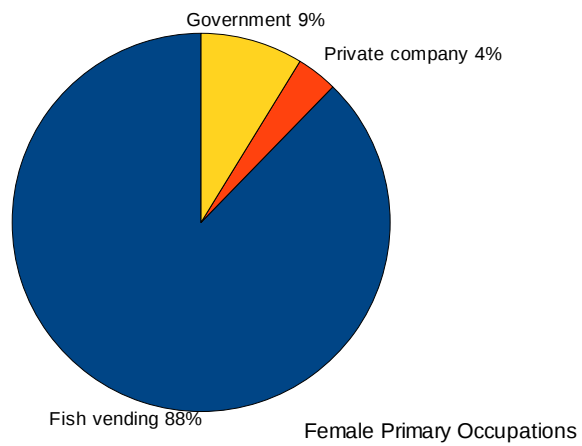


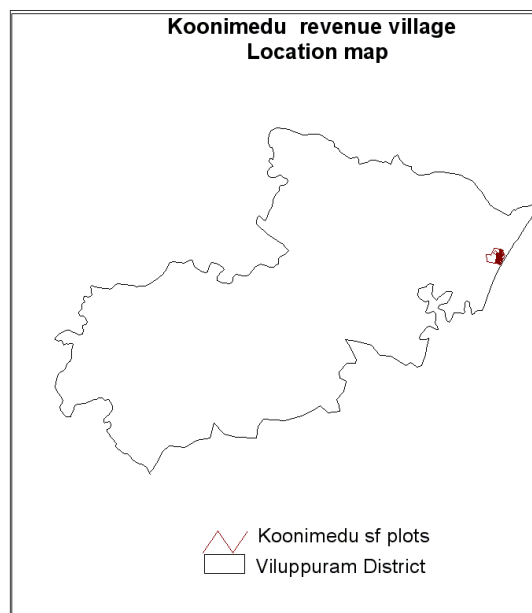
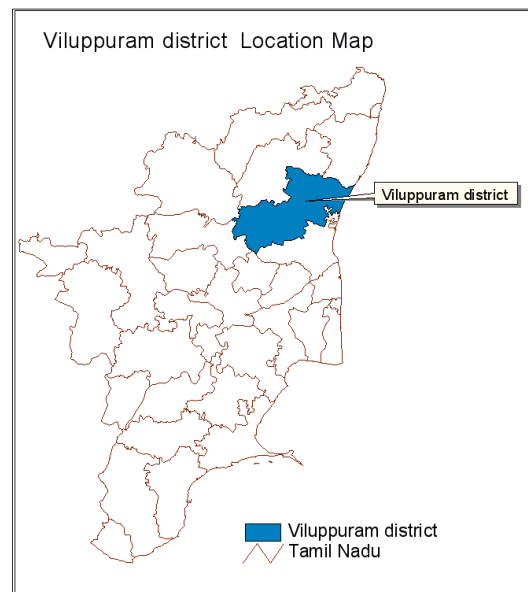
Figure 2: Primary Occupations of Men

### *MuthaliyarKuppam*

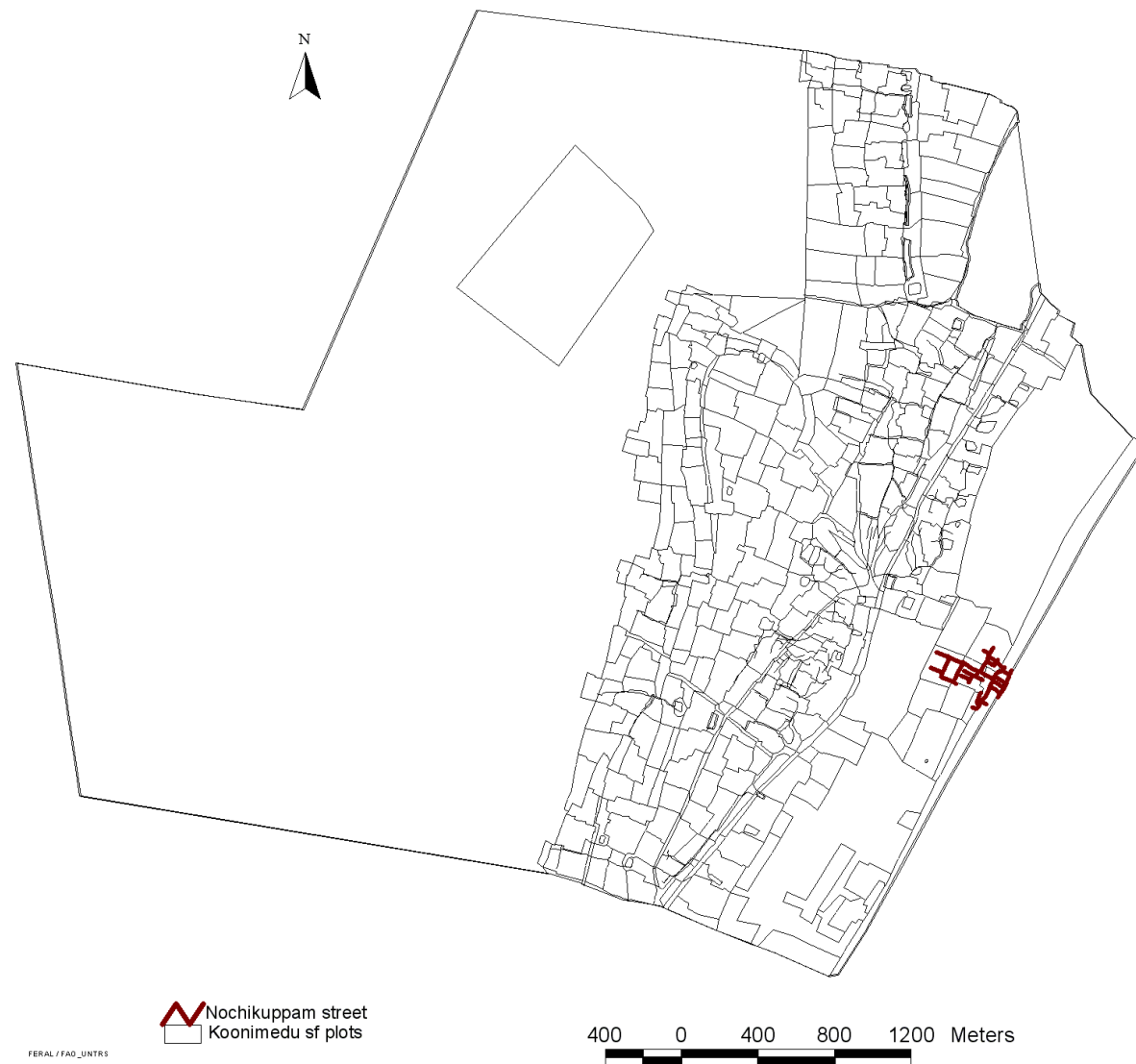
88% of women are engaged in fish vending as their primary occupation. 13 % are involved in other occupations such as work in private companies or Government jobs. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Nochikuppam Hamlet village



## Nochikuppam

### Introduction

This village is located 26 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Chinnapattinavar caste group and has 169 households with an average family size of 3.37 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	161
Female over 35	163
Adult male	111
Adult female	101
Children male	20
Children female	13
Infant male	0
Infant female	0
total	569

*Table 1: Demographic profile of Nochikuppam*

The origin of the village could not be identified during the historical mapping sessions. The village is said to have obtained its name due to the abundance of Nochi<sup>6</sup> species in that region and so was called Nochikuppam. The major shocks the community felt was the 2004 tsunami during which many gear, 25 kattumarams, 23 FRPs and few houses closer to the beach were destroyed. No lives were lost.

From 50 thatched houses 25 years ago the village now has 170 houses of which most are concrete. The village obtained power supply in 1968. Infrastructure in the village includes an overhead tank provided by the Government after the tsunami which is the only source of water for this village. Roads in the village were sandy paths 25 years ago and were later metaled. These were concreted in 2005. Buses are available only from the East Coast Road. Medical facilities are available at Pondicherry and Anumanthai. The village lacks a school and children have to go to Kunimedu for this purpose.

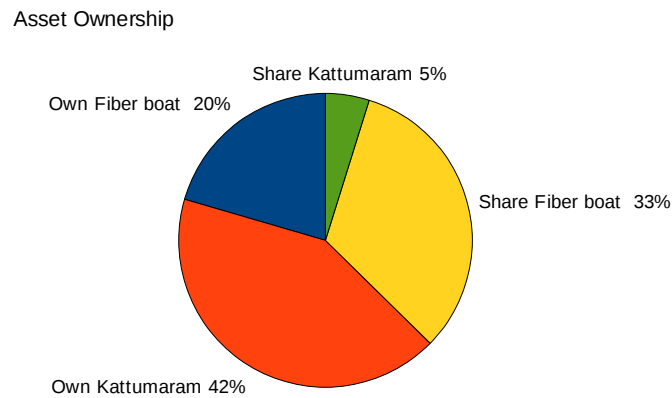
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6 Local name for a medicinal plant species i.e., *Vitex negundo*



### Asset Ownership

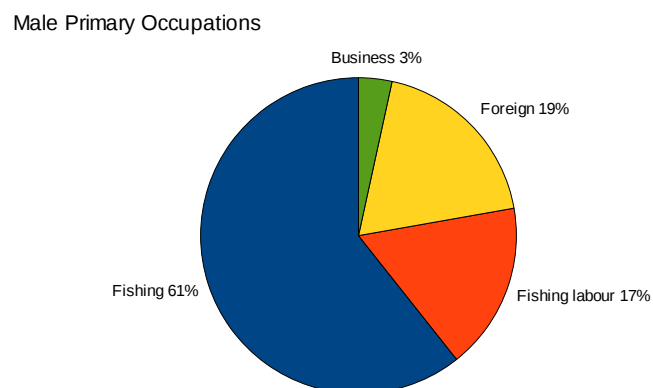
All of the households own or share ownership of fishing craft. 62% are single owners of craft. This is represented in Figure 1.



*Figure 1: Asset Ownership in Nochikuppam*

### Occupational profile

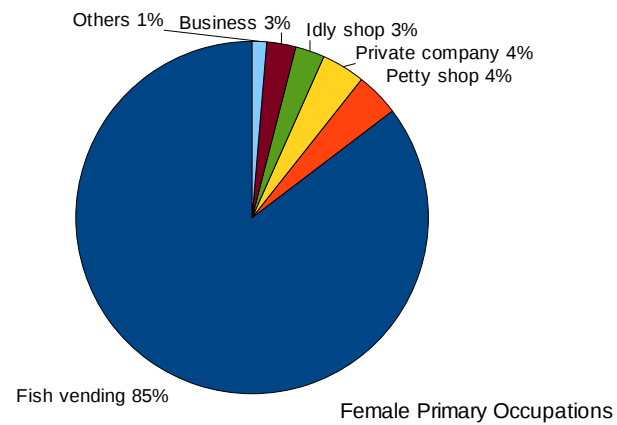
The vast majority of the village men (78%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



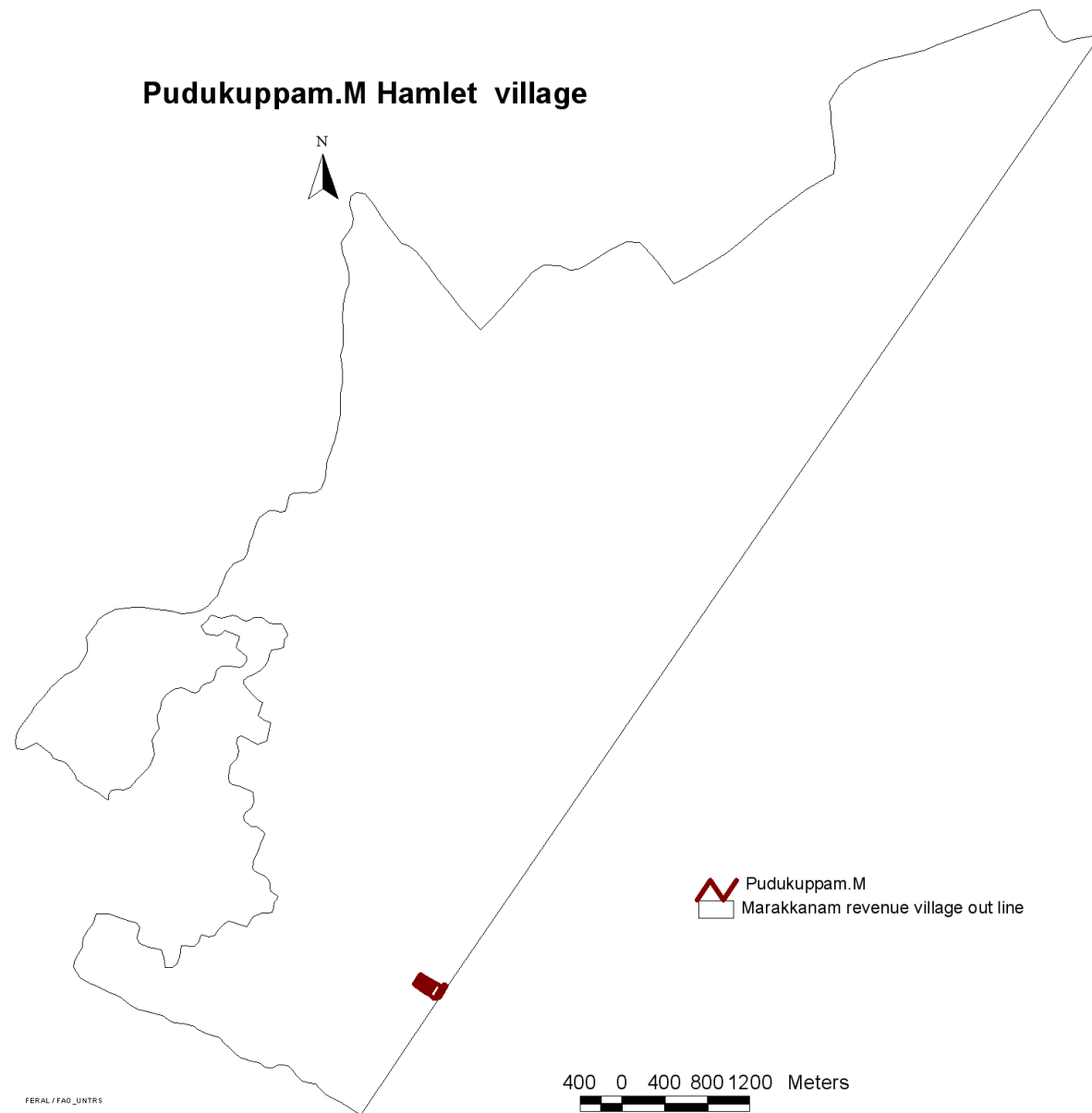
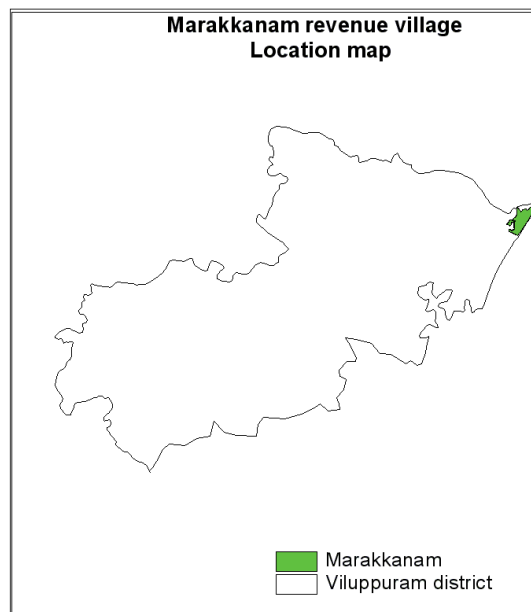
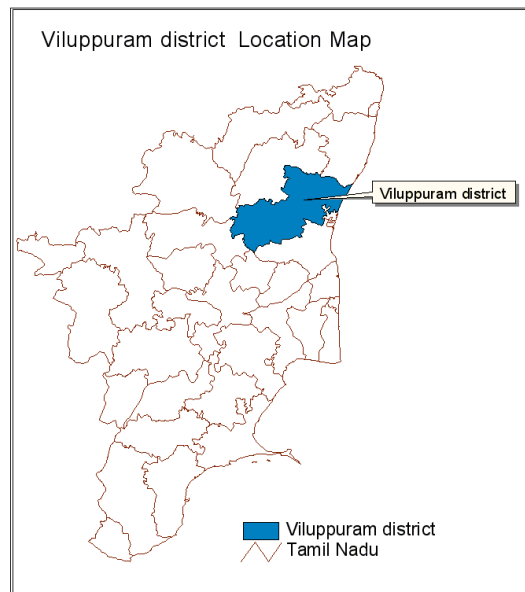
*Figure 2: Primary Occupations of Men*

### *Nochikuppam*

85% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies, petty shops, idly shops, business, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Pudukuppam M**

### **Introduction**

This village is located 36 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Pattinavar Gounder caste group and has 126 households with an average family size of 4.21 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	0
Female over 35	0
Adult male	147
Adult female	147
Children male	106
Children female	103
Infant male	16
Infant female	12
total	531

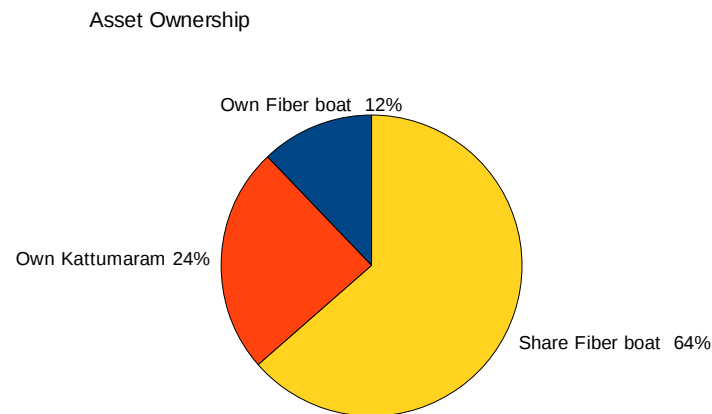
*Table 1: Demographic profile of Pudukuppam M*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 70 kattumarams, 15 FRPs and 60 nets were damaged.

The village has 110 concrete houses. The village has an active traditional Panchayat and Fish Co-operative society and village panchayat elections are conducted annually. Infrastructure in the village includes a primary school established long ago. Students have to go to Marakannam for higher studies. An overhead tank was constructed by the Government in 2002 and is the main supply of water for the village. The Government provided a community hall in 2006 where Government or Panchayat meetings are held. Roads in the village were sandy in the 1950s and were metaled 15 years ago. These were recently concreted in June 2008. Buses are available only from the East Coast Road. Medical facilities are available at Pondicherry and Marakannam.

### **Asset Ownership**

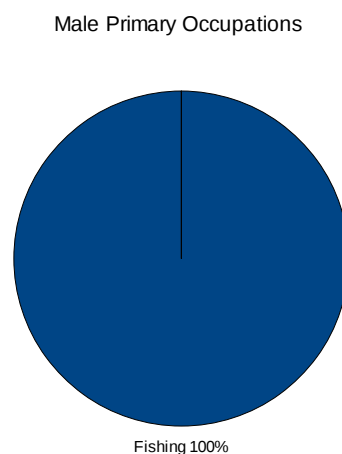
All of the households own or share ownership of fishing craft. 36% are single owners of craft. This is represented in Figure1.



*Figure 1: Asset Ownership in Pudukuppam M*

### **Occupational Profile**

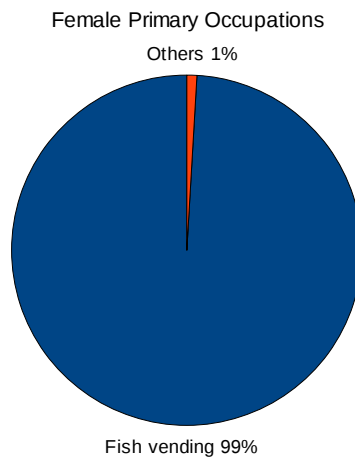
All the men of the village are engaged in fishing as their primary occupation. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



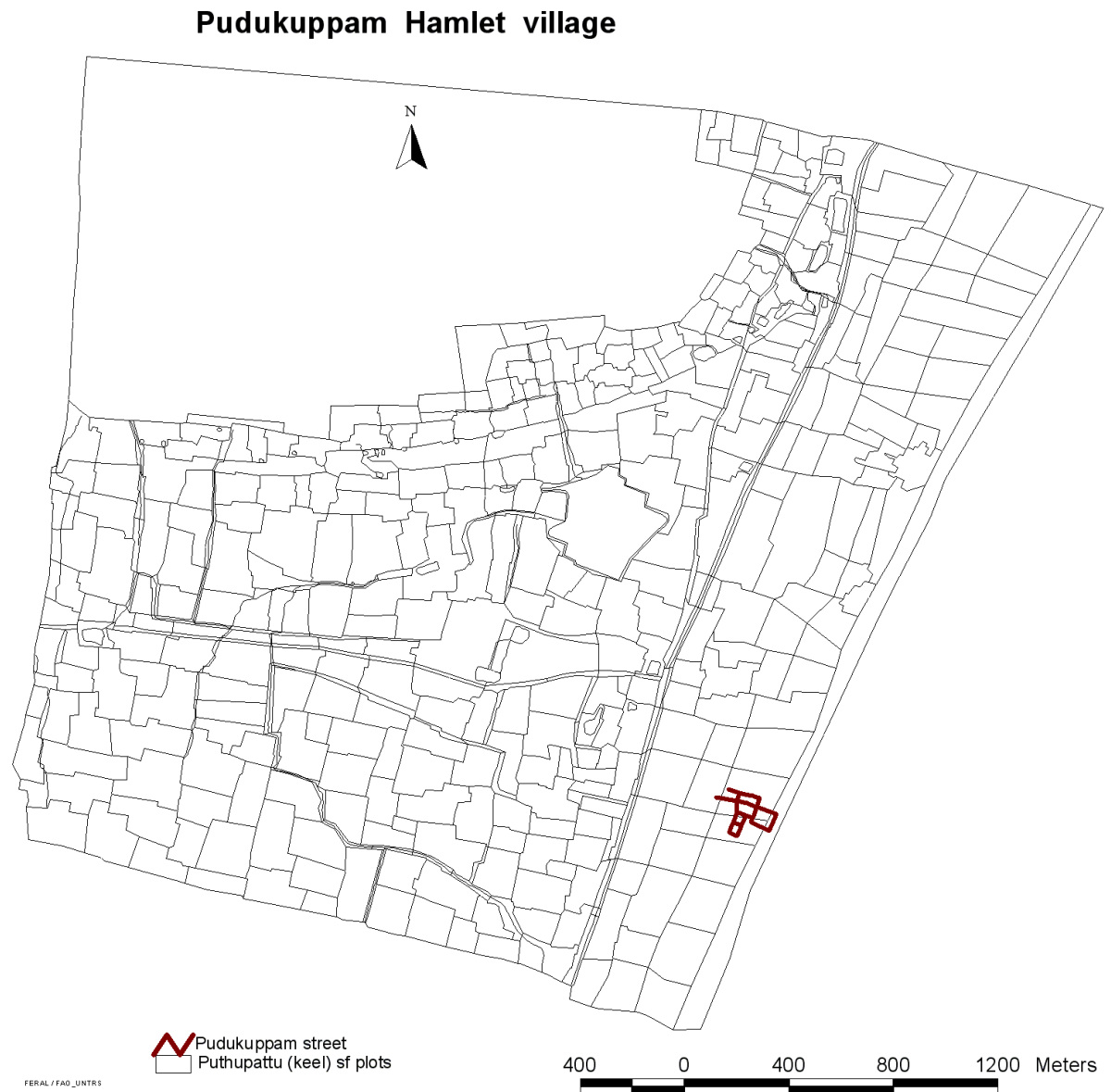
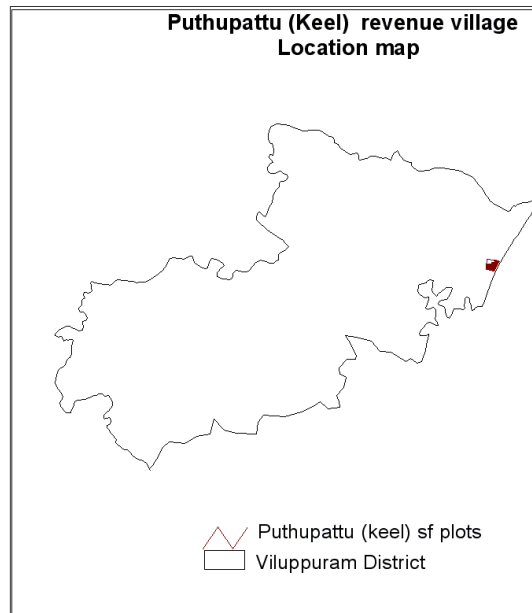
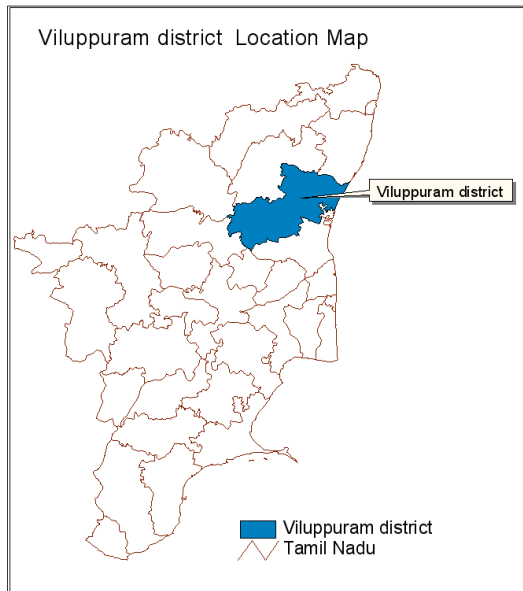
*Figure 2: Primary Occupations of Men*

### *Pudukuppam M*

99% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Puthupattu Pudukuppam**

### **Introduction**

This village is located 16 kms to the north east of Pondicherry and lies in the Villupuram district. The fishing hamlet is comprised of the Chinnapattinavar caste group and has 68 households with an average family size of 3.28 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	0
Female over 35	0
Adult male	63
Adult female	71
Children male	36
Children female	48
Infant male	3
Infant female	2
total	223

*Table 1: Demographic Profile of Puthupattu Pudukuppam*

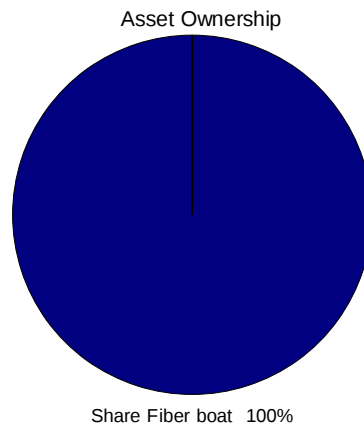
The origin of the village could not be identified during the historical mapping sessions. The major shocks the community felt was the 2004 tsunami during which only assets were damaged.

From 25 thatched houses 30 years ago, the village now has 68 concrete houses. Infrastructure in the village includes an overhead tank established by the Government after the tsunami which is the main source of water for the village. Roads in were metaled in 1990 and were later concreted in 2005. Buses are available from the East coast road. Medical facilities are available at Kalapet and Pondicherry. The village lacks a school and children have to go to Kalapet and Anichankuppam for schooling.



### **Asset Ownership**

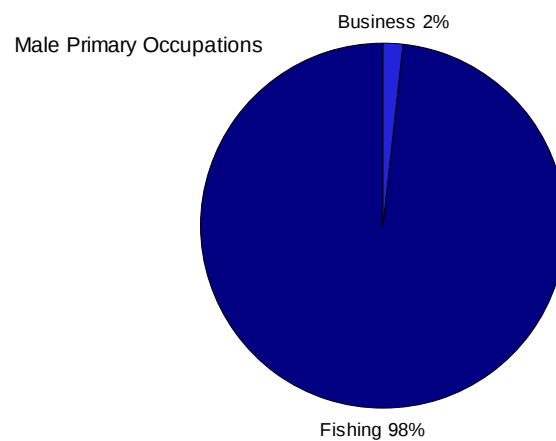
All the households appear to share ownership of FRPs. This is represented in Figure 1.



*Figure 1: Asset Ownership in Puthupattu Pudukuppam*

### **Occupational Profile**

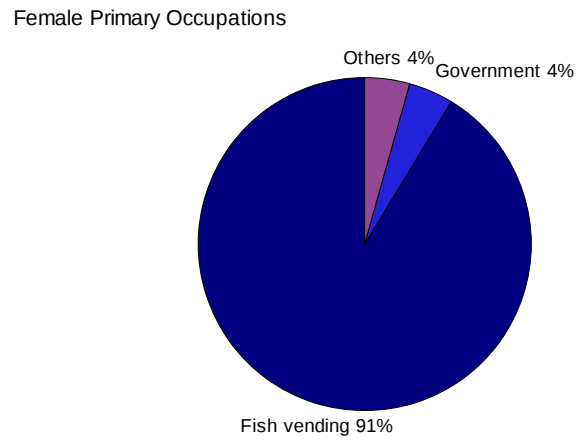
The vast majority of the village men (98%) are engaged in fishing as their primary occupation. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

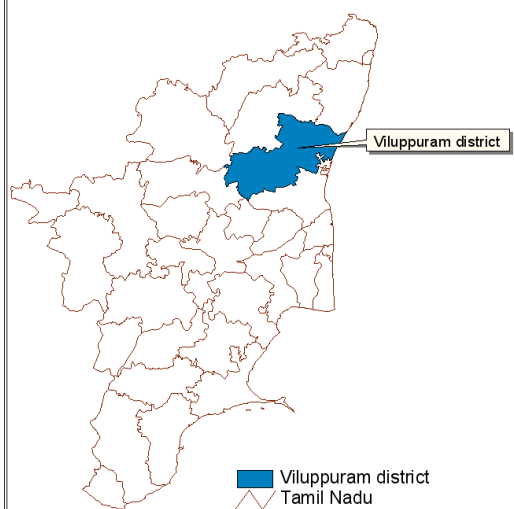
### *Puthupattu Pudukuppam*

91% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.

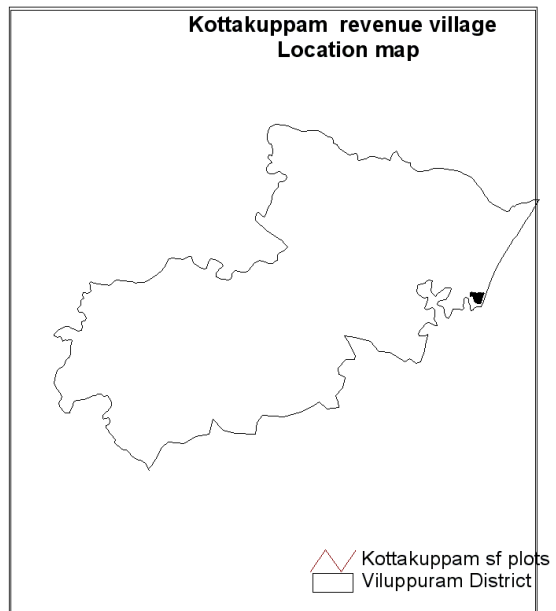


*Figure 3: Primary Occupations of Women*

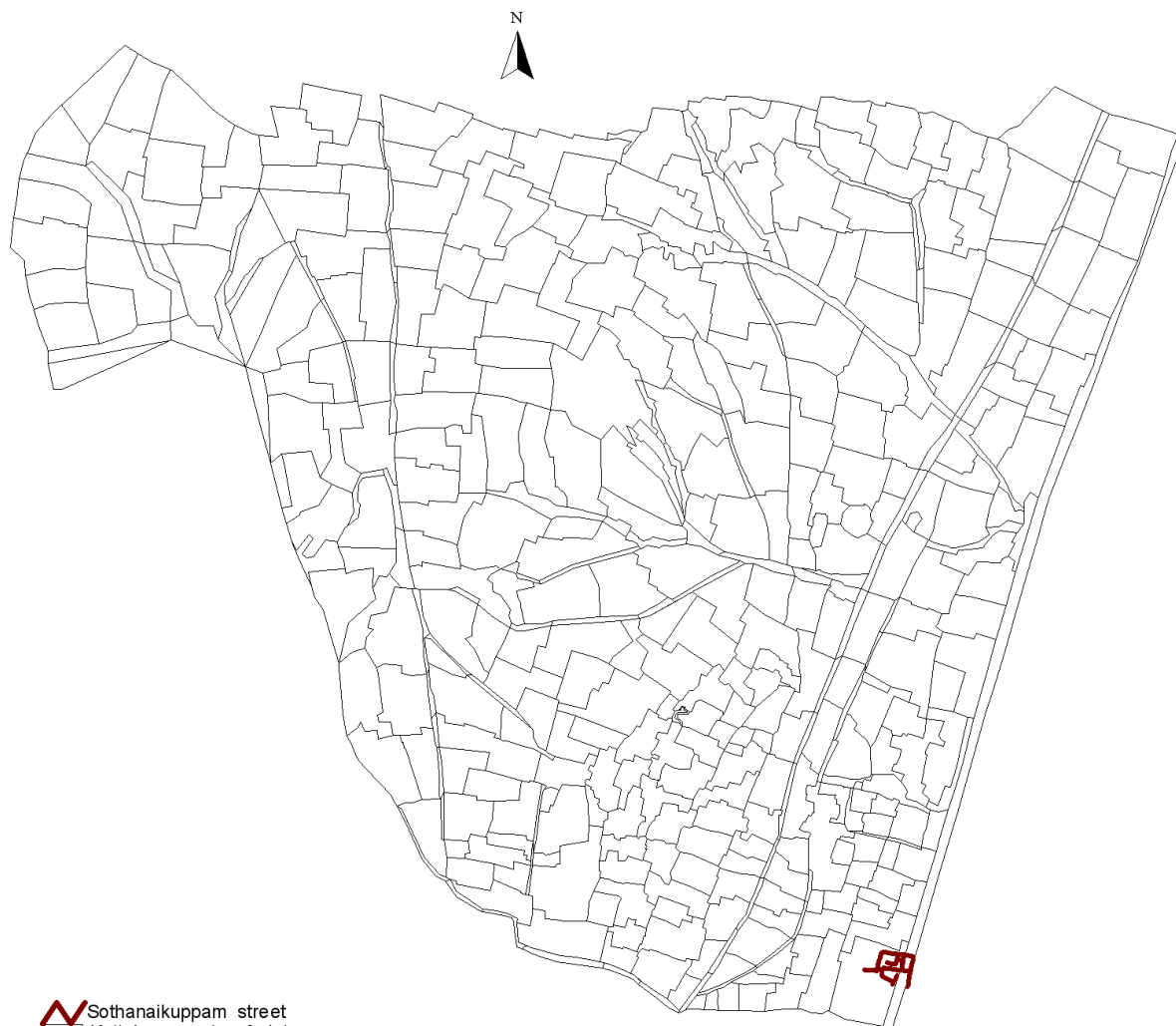
Viluppuram district Location Map



Kottakuppam revenue village Location map



Sothanaikuppam Hamlet village



400 0 400 800 Meters

FERAL / FAO\_UNTRS

## Sothanaikuppam

### Introduction

This village is located 2 kms away from Muthiyalpet and lies in the Villupuram district. The fishing hamlet is comprised of the Pattinavar caste group and has 71 households with an average family size of 4.69 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	43
Female over 35	39
Adult male	67
Adult female	71
Children male	41
Children female	42
Infant male	12
Infant female	18
total	333

*Table 1: Demographic profile of Sothanaikuppam*

The origin of the village could not be determined during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 60 kattumarams and 7 FRPs were seriously damaged. No lives were lost and is believed to be because of the rock sea walls constructed by the Government in 1998 to minimize the force of the water.

From 60 thatched houses 50 years ago, the village now has 150 houses of which almost all are concrete. Infrastructure in the village includes a water tank provided by the Government but due to the poor quality of water, the people obtain drinking water from nearby villages. Roads in the village were sandy 25 years ago and were concreted in 2004. 62 concrete houses were constructed by the Government and private organizations for those who has lost their houses in the tsunami. Medical facilities are available at a primary health center in Muthialpet and the General Hospital in Pondicherry.

### Asset Ownership

All of the households own or share ownership of fishing craft. 31% are single owners of craft. This is presented in Figure 1.

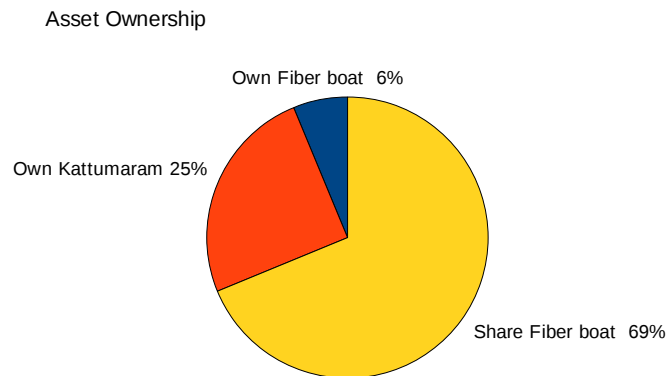


Figure 1: Asset Ownership in Sothanaikuppam

### Occupational profile

The vast majority of the village men (97%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

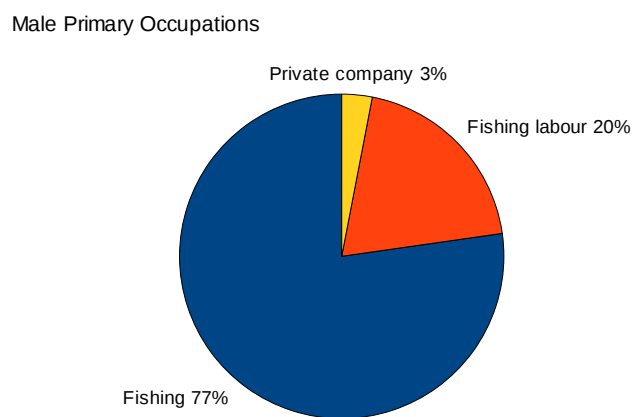
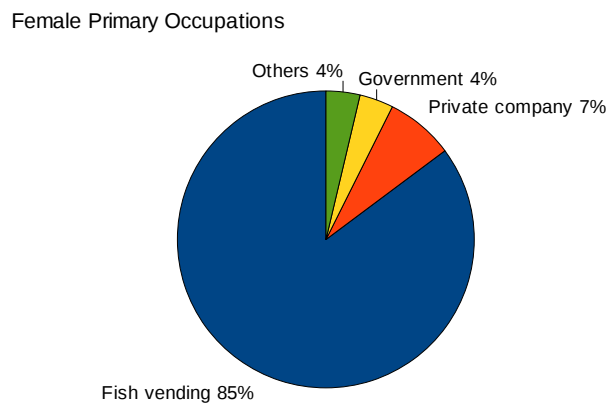


Figure 2: Primary Occupations of Men

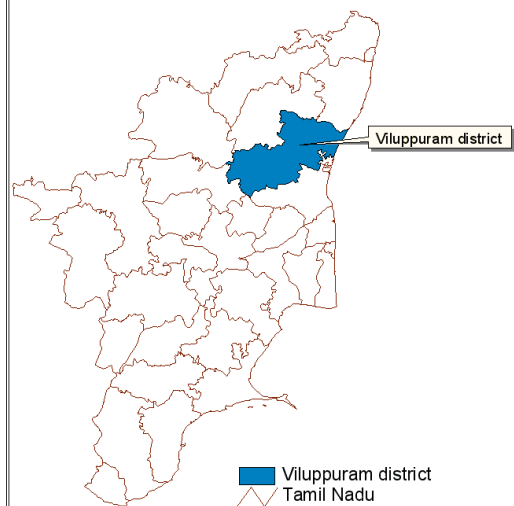
### *Sothanaikuppam*

85% of women are engaged in fish vending as their primary occupation. Other occupations include government jobs, work in private companies, etc. This is presented in Figure 3.

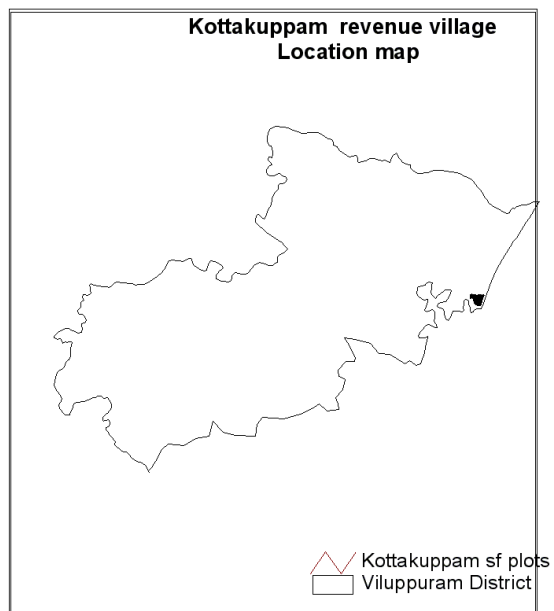


*Figure 3: Primary Occupations of Women*

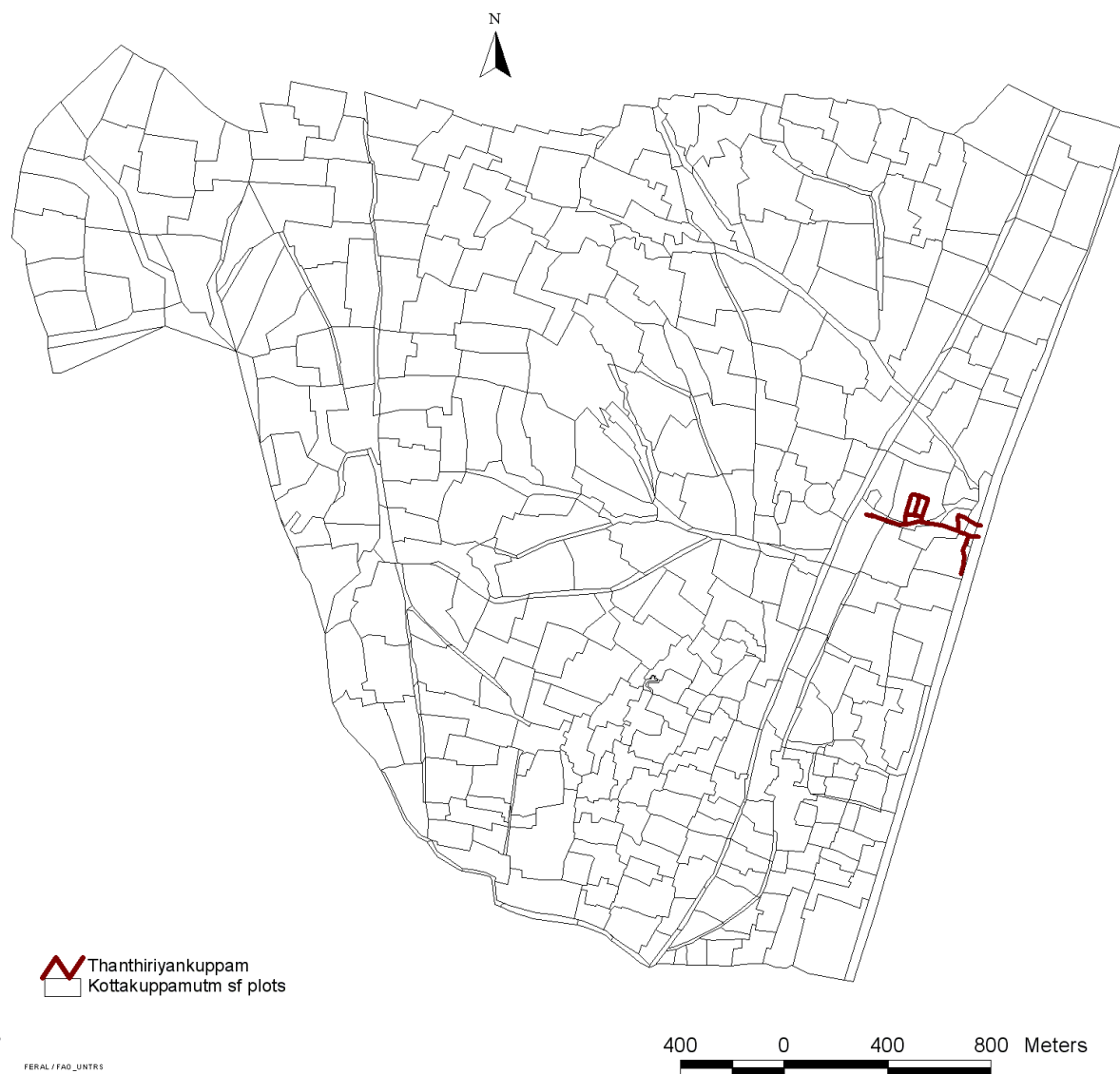
Viluppuram district Location Map



Kottakuppam revenue village Location map



Thanthiriyankuppam Hamlet village



## Thanthirayankuppam

### Introduction

This village is located 3.5 kms to the north east of Muthiyalpet and lies in the Villupuram district. The fishing hamlet is comprised of the Pattinavar caste group and has 59 households with an average family size of 4.97 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	52
Female over 35	48
Adult male	53
Adult female	47
Children male	38
Children female	32
Infant male	10
Infant female	13
total	293

*Table 1: Demographic profile of Thanthirayankuppam*

The origin of the village could not be identified during the historical mapping session though few people from adjacent villages migrated for the purpose of fishing. The major shocks the community felt was the 2004 tsunami during which 30 kattumarams and 5 FRPs were destroyed. No lives were lost.

From 40 thatched houses 40 years ago the village now has 80 concrete houses. Infrastructure in the village includes a school, newly constructed by the Government which remains unopened. A water tank in the village prevents people from experiencing a shortage of water. Roads in the village were sandy paths 35 years ago and efforts to concrete it are presently underway having begun in January 2008. Roads closer to the sea were eroded by wave action and to prevent this, a wall of Palmyra trees was built for protection. The Government built another new protective wall in 2006. Life jackets were provided by the Government in 2007. A net mending hall was constructed 2 years ago. Medical facilities are available at the primary health centre in Muthialpet and at the General Hospital in Pondicherry.



### Asset Ownership

All of the households own or share ownership of fishing craft. 48% are single owners of craft. This is presented in Figure 1.

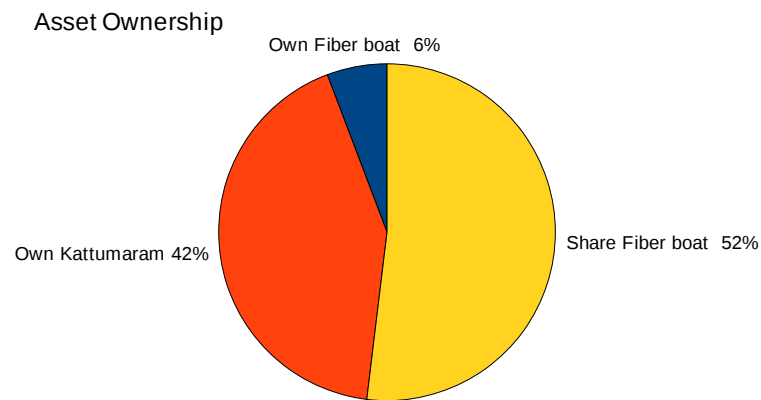


Figure 1 : Asset Ownership in Thanthirayankuppam

### Occupational profile

The vast majority of the village men (97%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

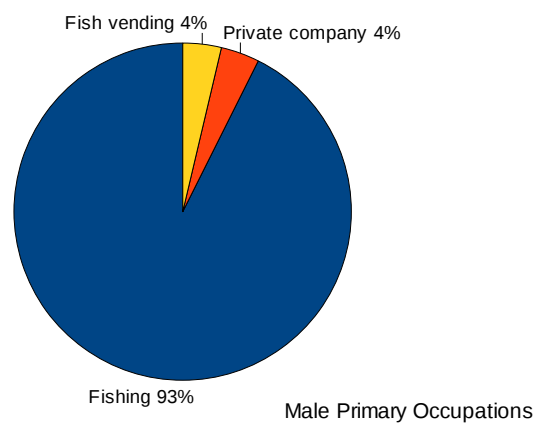
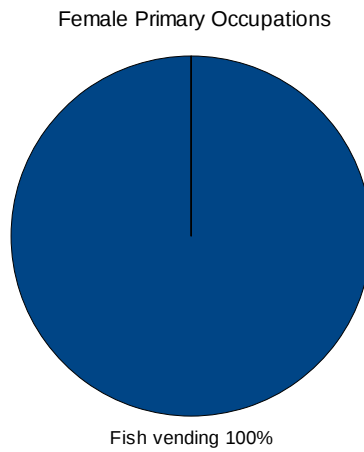


Figure 2: Primary Occupations of Men

### *Thanthirayankuppam*

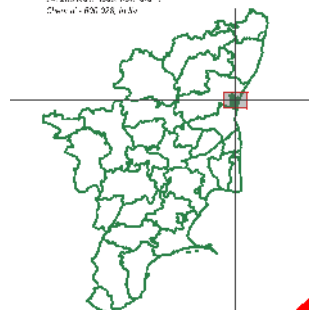
All the women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



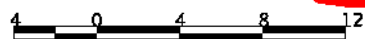
*Figure 3: Primary Occupations of Women*



# Location Map Pondicherry

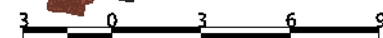
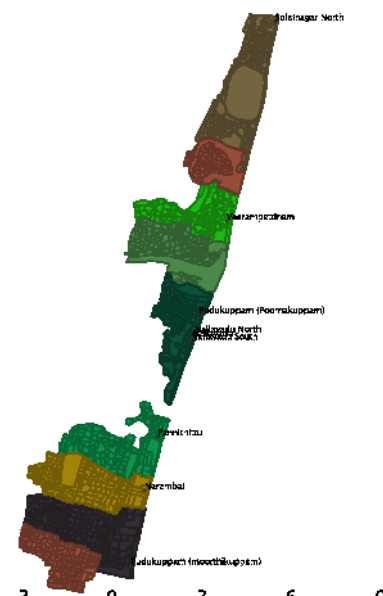


Pondicherry



Scale in Kilometers

Project Villages



Kilometers

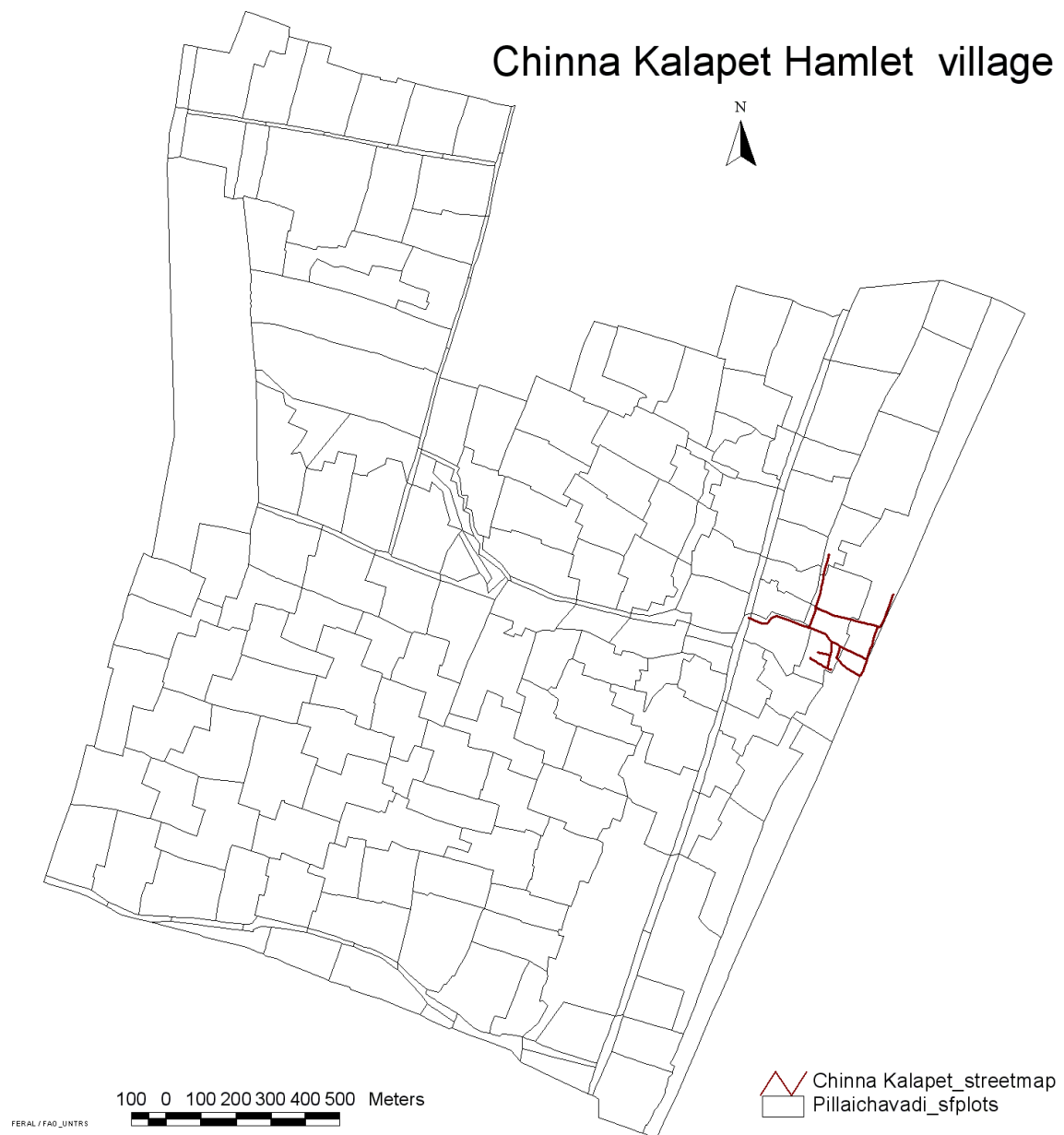
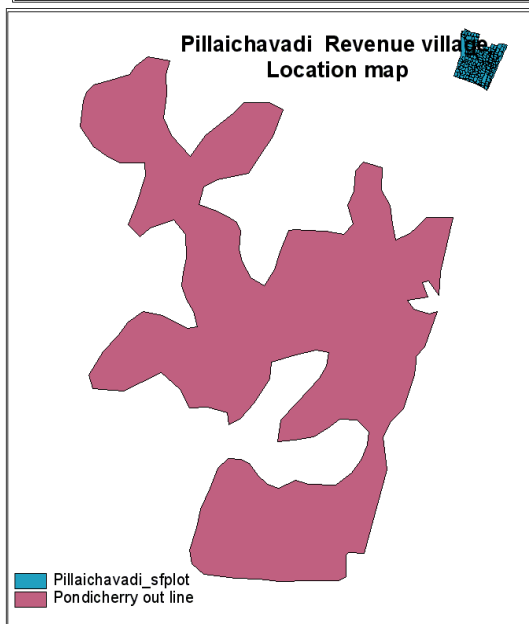
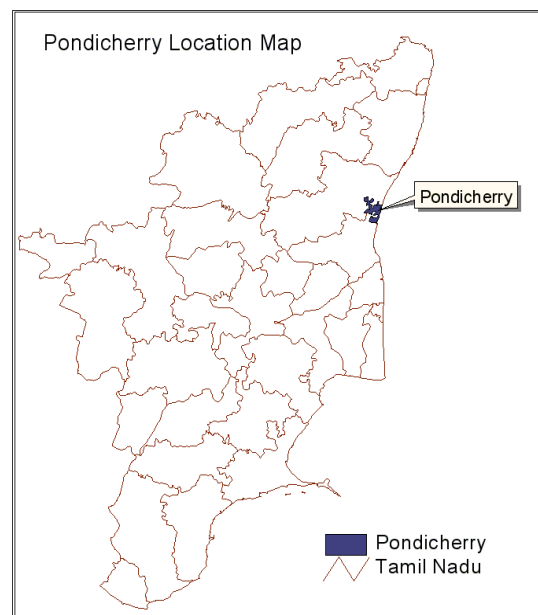
## Cluster 2: Pondicherry

This state comprises a sandy beach ecosystem and has 15 hamlets. The historical mapping was completed in eleven villages and the microplanning exercise was conducted in six villages of these eleven.

### ***Annual Activity Profile***

This represents the fishing calendar or fishing months in a year and applies to most fishing villages of the region. An exception to this is mentioned along with the respective village.

English months	Tamil months	Activity
January	Thai	Fishing
February	Maasi	Fishing
March	Panguni	Fishing
April	Chiththirai	Fish for 15 days /Ban period
May	Vaikasi	Ban period
June	Aani	Fishing
July	Aadi	Fishing
August	Aavani	Fishing
September	Purattasi	Rough season
October	Aippasi	Rough season
November	Karthikai	Rough season
December	Markazhi	Fishing



## Chinna Kalapet

### Introduction

This village is located 9.5 kms to the north east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 175 households with an average family size of 4.23 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	99
Female over 35	106
Adult male	143
Adult female	155
Children male	96
Children female	87
Infant male	34
Infant female	20
total	740

*Table 1: Demographic profile of Chinna Kalapet*

The origin of the village could not be determined during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 16 people died. 50 kattumarams and 16 FRPs were also destroyed.

Infrastructure in the village includes a primary school established long ago. Children have to attend high school in Kalapet and for higher studies they have to go to Pondicherry. Roads in the village were sandy paths 25 years ago which were concreted in 2007. 13 years ago the Government provided one net mending hall and after the tsunami PMSSS<sup>7</sup> constructed another for this village. Medical facilities are available at the primary health centre in Periyakalapet and for medical emergencies people go to the Government hospital in Pondicherry. The government set up a water filter for the village which is dysfunctional. Additionally the toilet constructed too is dysfunctional. The village lacks proper drainage and toilet facilities.

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7 Pondicherry Multipurpose Social Service Society

Asset Ownership

All of the households own or share ownership of fishing craft. 54% are single owners of craft Figure 1.

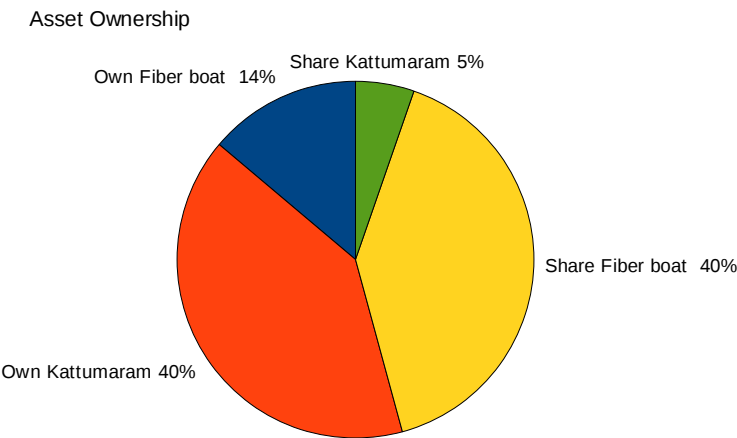


Figure 1: Asset Ownership in Chinna Kalapet

Occupational profile

The vast majority of the village men (92%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

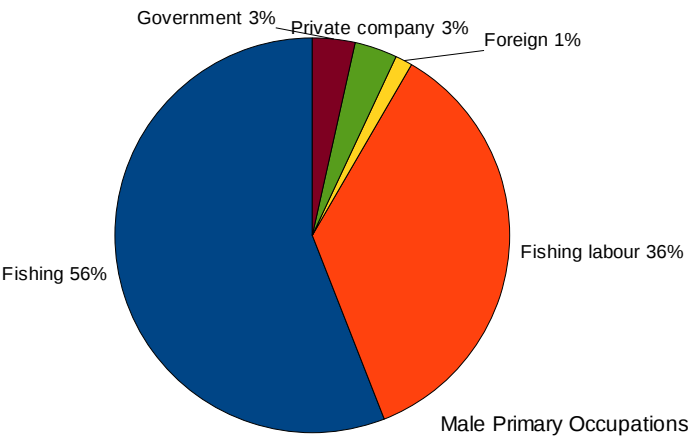
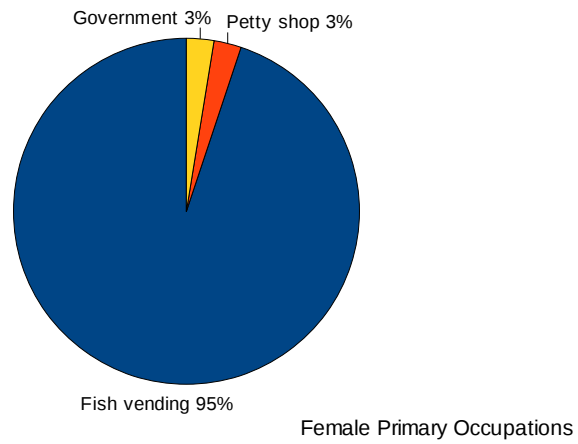


Figure 2: Primary Occupations of Men

### *Chinna Kalapet*

95% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies or petty shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.
3. Construction of artificial sea wall in the neighboring villages should be stopped.

**Welfare schemes:**

1. Credit linkages can be provided for their working capital
2. Government should make provisions for widow pension
3. Government should provide the timely relief during the rainy season to the fishing community.
4. Old age pension must be provided to all old people.

**Infrastructural requirements:**

1. Government can construct market building at Kalapet

**Facilitation required:**

1. Training on operation of GPS units can be provided
2. Government should simplify the registration of FRPs
3. Require training for their secondary job

Chinna Kalapet

13<sup>th</sup> August, 08

### Stakeholder group: FRP Boat Owners

#### COGA Analysis

Caste -Pattinavar

Origin -Heredity

Gender-Males

Age -30 to 60 years

#### Daily Activities Profile

Time schedule	6.00-7.00 am	7.00-8.00 am	8.00-11.00 am	11.00am-12.00 pm	12.00-5.00 pm	6.00 pm
Activities	Travel to sea	Cast nets into the sea	Idle while waiting	Haul net and sort catch	Repeat the activity once more(maximum 3 cycles in a day)	Reach the shore <sup>i</sup> .

#### Annual Activities Profile

They fish for 8 months in a year remaining idle during the 45 day ban period and the rough season (3 months).

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decline in fish catch <sup>ii</sup>	Near shore trawling of mechanized affecting the sea bed; Use of ring seine <sup>iii</sup>	Fishing for long hours; Most now do destructive fishing like ring seining to make a living.	Government should restrict trawling to 5km away from the shore;Enforce the ban on the ring seine specifically those with small mesh sizes. <sup>iv</sup>
<b>Technology</b>	Higher fuel expenditure	No GPS units	Spend more money on diesel and maintenance of craft and gear	GPS units can be provided
<b>Infrastructure</b>	Insufficient parking space for boats on the beach	Beach erosion due to the sea wall built in Kottakuppam, Pillaichavady (TN) and Chinnamudaliyar chavadi	Boats are parked in private coconut field	Construction of artificial sea wall should be stopped

<b>Investment</b>	Maintenance of craft and gear (nets damaged by rocks and other big fish) <sup>v</sup>  Non availability of diesel subsidy	Insufficient working capital <sup>vi</sup>  Government diesel bunk is present only at the Pondicherry jetty where they are provided with only 5litres/day	Dependent on informal money lenders charging high interest rates; Mortgage jewellery(3%); Borrow from neighbours (amounts upto Rs 2000 interest free which should be repaid in one/two days) Transport costs exceeds the subsidy <sup>vii</sup>	Banks should facilitate loans;  Government can provide subsidy through private fuel stations already established
<b>Markets</b>	Marketing at central market;  Low prices; No ready money	Ring seine catches are prohibited and market is dominated by bigger fishing villages <sup>viii</sup> Dependent on traders	Sell to distant urban traders  Sell at the price quoted by traders; Paid on a weekly basis	Access to an open market, free from dominance to be facilitated Standardizing/ regulating the price for all species to avoid fluctuations Prices to be standardized by the Government
<b>Capacity building</b>	GPS training required;  No secondary job opportunities	To reduce expenditures;  Lack of education as well as technical training <sup>ix</sup>	Use the old traditional methods learned from their fore fathers; Fish for long hours	Provide suitable training on operation of GPS units <sup>x</sup> ; Technical training such as electrician, driving etc to be provided
<b>Social security</b>	No life/ boat insurance	Boats are unregistered <sup>xi</sup>	At their own risk	Government can simplify the registering procedure
<b>Policy and Institutional support</b>	Unavailability of old age pension for some people  No compensation during ban period and rough season <sup>xii</sup>	Those who have applied are yet to receive their pension <sup>xiii</sup>  Small scale fishers are ignored and neglected	Dependent on their sons  Mortgage jewellery; Borrow from money lenders	Government should do the needful; records should be updated on a regular basis Government should provide compensation to FRPs during this time; the ban period is meant for

*Chinna Kalapet*

	No compensation to labour in case of accidents during employment	Lack of awareness on various policies	At their own risk and expense (first aid)	trawlers. Awareness on the various policies can be created
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## Stakeholder Analysis: Kattumaram Owners

### COGA Analysis

Caste – Pattinavar

Origin – Heredity

Gender- Male

Age – 20 to 40 years

### Daily Activities Profile

Time	4.00-4.30 am	4.30-6.30 am	6.30-7.00 am	7.00-7.30 am	7.30-8.30 am
Activity	Travel to sea	Cast their nets and wait; idle while waiting	Haul their nets	Return back to the shore	Sort out the fishes and auction

### Annual Activities Profile

They go fishing approximately 9 months a year. During the rough season they go fishing on occasions of calm weather.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Reduction in shore catches	Use of ring seine <sup>xiv</sup>	Earning according to their catch	Ban on ring seine should be enforced.
<b>Technology<sup>xv</sup></b>				
<b>Infrastructure<sup>xvi</sup></b>				
<b>Investment</b>	Capital for maintenance/ repair for damaged nets	Inshore trawling	Borrow from their money lender; Mortgage jewellery <sup>xvii</sup>	Inshore trawling should be stopped
<b>Markets<sup>xviii</sup></b>	Low prices <sup>xix</sup>	Bulk catch by ring seine	Sell at auction	Ban on ring seine should be stopped.
<b>Capacity building</b>	Secondary jobs	Insufficient income	Employed as labourers in ring seine <sup>xx</sup>	Need alternative jobs
<b>Social security</b>	No insurance	Kattumarams are unregistered; Insufficient income	At their own risk	Registration can be facilitated by the government
<b>Policy and Institutional support</b>	Rough season	Compensation not provided at the specific time <sup>xxi</sup>	Borrow from money lenders	Should be provided on time

## *Chinna Kalapet*

### **Stakeholder group: Fish vendors**

#### **COGA Analysis**

Caste - Pattinavar

Origin -Neighbouring fishing villages<sup>xxii</sup>

Gender-Females(Married)

Age - 25 to 65 years

### **Daily Activities Profile**

Time	7.00-8.00 am	8.00 am-1.00 pm	2.00 pm
Activity	Arrive at sea shore; buy fish from fishermen and at auction	Arrive at the market in Kalapet and start selling fish	Return to their houses

### **Annual Activities Profile:**

Sell fish for 7 months and 15 days before the 45 day ban begins. They are idle during the ban.

### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
Natural resources (FISH)	Decreased availability of fish at present when compared to the last ten years <sup>xxiii</sup>	Ring seine fishing more than the regular fishing; Chemical discharges from factories; Traders buy fish from bulk catches which results in decreased availability to fish vendors	Purchase from grand bazaar (trawl catches) and market at Kalapet	Government should take necessary action against the use of ring seine; Effluent should be treated for toxic substances before being discharged into the sea
Technology <sup>xxiv</sup>				
Infrastructure	No market;  Insufficient transport	Lack of space  Buses are crowded	They sell on the side of the main road (ECR road through Kalapet) Hiring share	New market should be constructed at Kalapet village <sup>xxvi</sup>

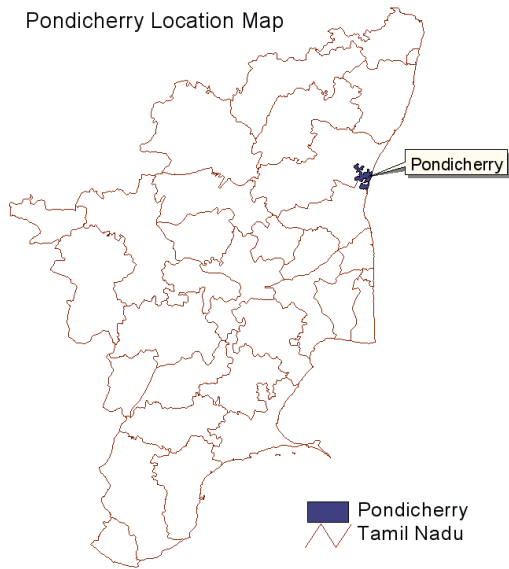
## Chinna Kalapet

			autos <sup>xxv</sup>	
Investment	Rates unstable  Profit low	Landings low  Price of fish are higher at central market than at their own village	Borrow from neighbours <sup>xxvii</sup>  Buy the fishes at high price <sup>xxviii</sup>	Various credit linkages can be arranged by banks; Regulated rates to be set up
Markets	Marketing at central market	Market dominated by neighbouring village fish vendors	sell on the side of the main road (ECR road through Kalapet) which forms an intersection for some agricultural villages	Establish a separate market for this cluster of villages to reduce conflicts and competition
Capacity building	Alternate jobs or trade	Fishing does not seem viable to small traders (Head loaders)	They are idle	Government or other NGOs should provide training for secondary jobs
Social security	Inability to do marketing;  Widow pension <sup>xxix</sup>	Sickness, ban period <sup>xxx</sup> and rough season	Use savings <sup>xxxi</sup> or borrow from neighbours Dependent on their children or relatives	Government should provide old age pension to all
Policy	Rations unavailable at specific time	During rough season <sup>xxxii</sup>	Borrow from money lenders	Render support at the specific time

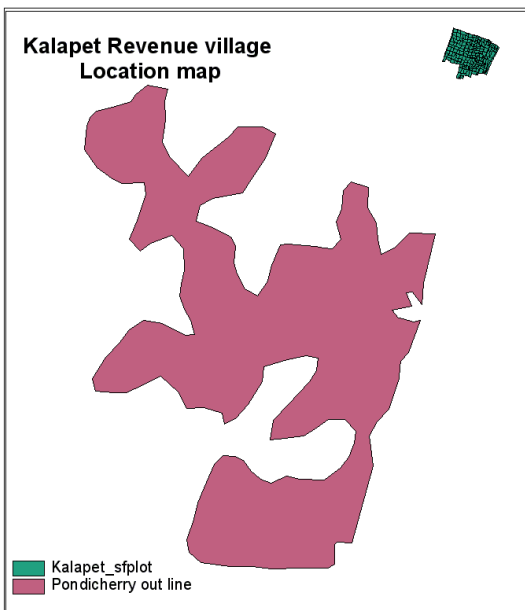
- i Traders are contacted using cellular phones. They wait for the fishermen to arrive prepared to collect the fish catch. They reach the shore before 6 pm.
- ii Decline in fish resource has been noticed after the tsunami, harvesting 5 to 10 baskets of fish in a day. Now it has reduced to 2 to 3 baskets (Annakudai) a day. Distance has increased from 15 m to 37.5m; and fuel prices have been hiked considerably.
- iii 2 ring seines in this village in the last 7 years, each one owned by 50 people
- iv Small size (Adanthavalai) mesh ring seine which catches all sizes of fish should be banned.
- v 2 sets of nets cost Rs 40000
- vi Money lenders provide loans upto Rs.50,000 with 10% interest and fishermen have to repay daily. The entire amount should be repaid within 100 days. Boat maintenance: one boat costs Rs 90000 (last year's rate) with a lasting period of 10 years, minimum maintenance cost is 20000 per year.
- vii Government provides 5 liters of diesel per boat on subsidy at Thengathittu fuel station on a daily basis. Thengathittu is 17 Km away from this village and the subsidy amount is Rs2/liter. More expenses to reach the station exceeding the fuel subsidy amount
- viii They cannot sell directly in the Pondicherry Grand bazar market. They sell it through the people of Vaithikuppam, Solainagar, Kuruchikuppam and Keerapalayam.
- ix They need alternative jobs during the lean period viz., November to January and expect a regular minimum income of Rs.200
- x All the FRP partners require training on operation of GPS units (150 people)
- xi Government stopped the boat registration after the tsunami. Nearly 30-40 boats are not registered yet which were provided after the tsunami
- xii Relief during the ban is not provided on time i.e., 3-6 months later
- xiii 55 people
- xiv The resource has declined when compared to the past five years. For instance fish like Kanakathai, Varikavalai, Thenga paarai have reduced significantly. Five years ago they would earn a maximum of Rs.2000 per day which has now decreased to Rs.300-500( maximum) per kattumaram
- xv An old traditional method in addition to being completely familiar with their surroundings.
- xvi They do not require ice as their catch is sold daily within a short span of time.
- xvii They take a maximum of 20kg of nets on their kattumarams costing Rs.20,000. The nets last longer for about 6 to 9 months. The main source of investment for gear is from the money lender and pawn brokers. The rate of interest per month is 10 % and 3% respectively.
- xviii Small catches are marketed on the seashore/beach
- xix Ring seine owners sell the catch(good quality) at a reasonable price Kattumarams catch less fish and while sorting from nets, this gets damaged, forcing them to sell their catch at the rate quoted by the ring seine owners.
- xx Four months as labor in ring seine operations (April to July)
- xxi Supply of clothing material, towel and Rs 750, stopped after the tsunami
- xxii Vaithikuppam, Thevanampatinam, Marakanam, Sothikuppam, Allangkuppam, Cuddalore, Keerapalayam and Thaikal
- xxiii 2 baskets to only one basket now
- xxiv They feel the traditional methods are efficient hence they do not feel the need for technology
- xxv Rs.50 as autofare from Chinnakalapet to Puducherry
- xxvi Government should prevent Kalapet from dominating the new market
- xxvii 2% interest per month on mortgage of jewellery, otherwise it is 5% interest per month
- xxviii They require Rs.2000/day for buying fish
- xxix 10 women are not receiving the widow pension, but the application process is underway
- xxx 100 kgs of rice has been provided by the government as part of the relief; however Rs.750 per ration card is still pending; Sources report that the Government will provide the money in another 15 days
- xxxi Save money in the bank for future use
- xxxii No relief has been provided to this village in the last 3 years.



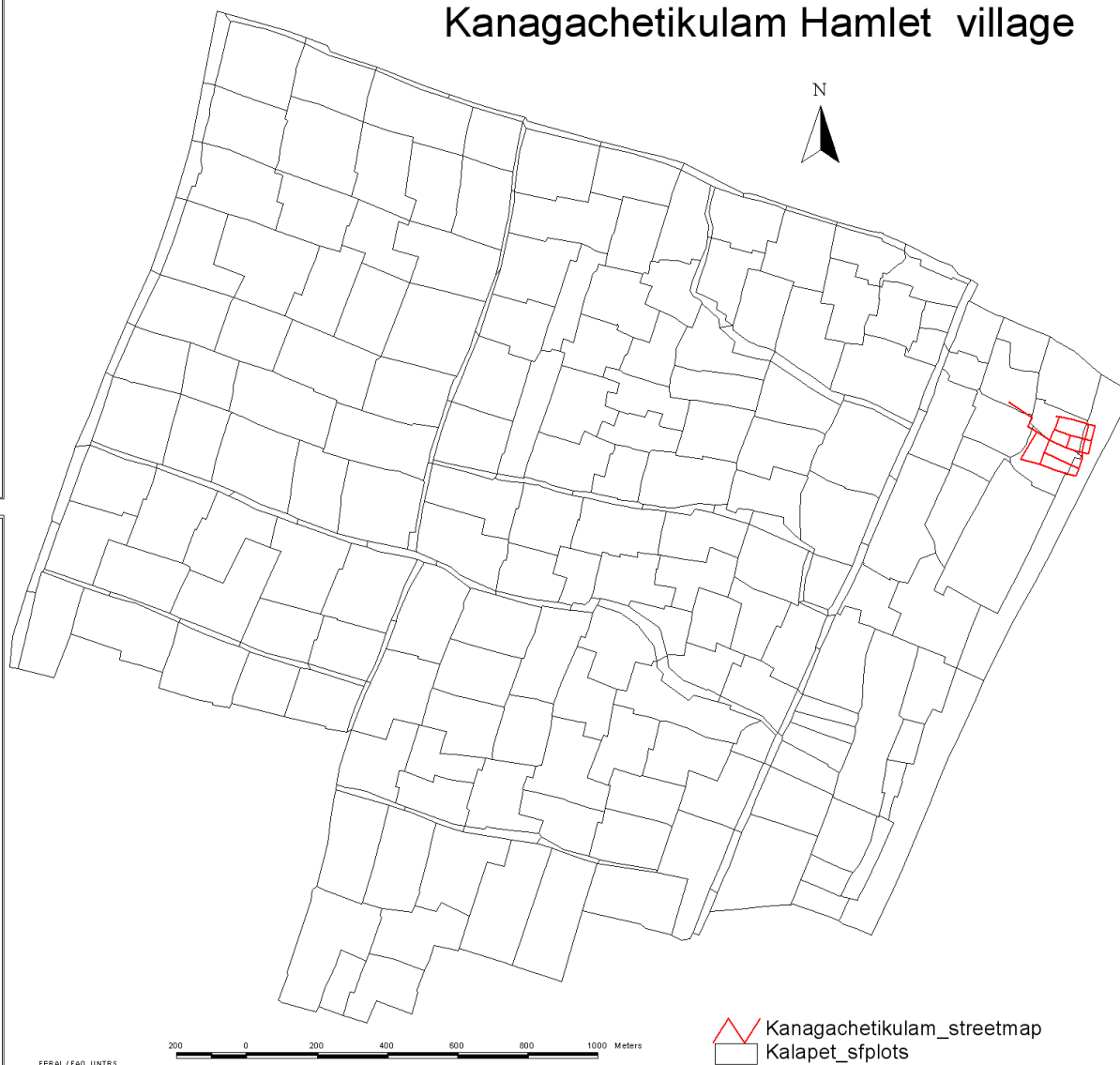
Pondicherry Location Map



Kalapet Revenue village  
Location map



Kanagachetikulam Hamlet village



## **Kanagachettikulam**

### **Introduction**

This village is located 15 kms to the north east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 123 households with an average family size of 4.81 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Males over 35	110
Females over 35	121
Adult males	161
Adult females	131
Children males	38
Children females	27
Infant males	4
Infant females	0
Total	592

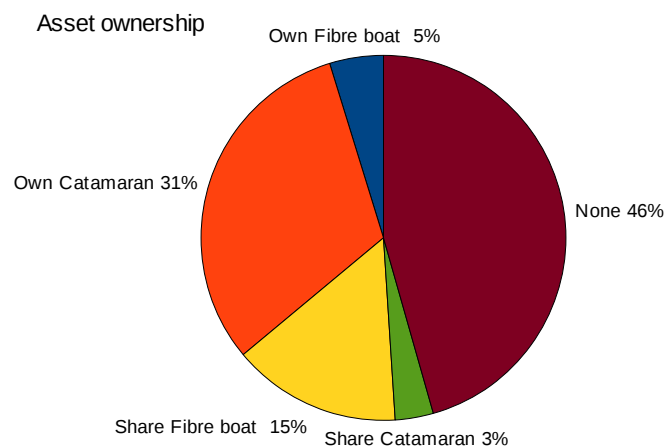
*Table 1: Demographic Profile of Kanagachettikulam*

The origin of the village could not be identified during the historical mapping session. Approximately 20 families are migrated to this village from Marakanam, Kunimedukuppam, Kalapet and Kaipennikuppam. The major shocks the community felt was the 2004 tsunami during which eighteen people died, 10 houses, 20 FRPs and all kattumarams were lost.

From 40 thatched houses 50 years ago, the village now has 220 houses. Infrastructure in the village includes a primary school upto class three which was established long ago. The roads within the village were sandy paths earlier which were cemented a year ago; roads connecting the hamlets were metaled 25 years ago. Medical facilities are available at Kalapet and Pondicherry.

### **Asset ownership**

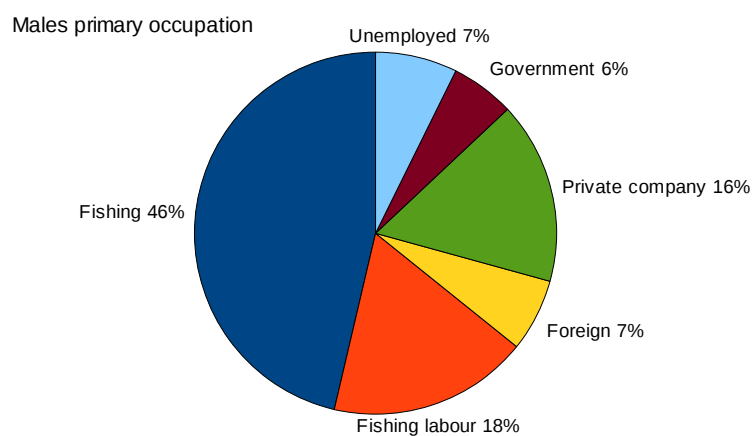
54% of the households own or share ownership of fishing craft. 36% are single owners of craft while 46% do not own any. This is presented in Figure 1.



*Figure 1: Asset ownership of Kanagachettikulam*

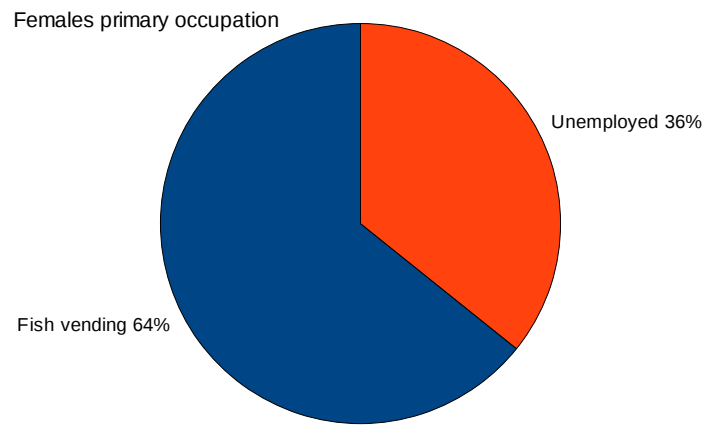
### **Occupational Profile**

The vast majority of the village men (64%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

64% of women are engaged in fish vending as their primary occupation while 36% are unemployed. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 2 major groups were identified from this village and are as follows:

1. Kattumaram owners
2. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.

**Welfare schemes:**

1. Bank should facilitate the micro credit finance/ credit linkages
2. Government should take necessary measures to provide relief on time

**Facilitation required:**

1. Ice boxes can be provided
2. Create opportunities for their secondary job during lean period.

6<sup>th</sup> August, 08

**Stakeholder group:Kattumaram owners**

**COGA Analysis**

Caste – Pattinavar

Origin- Heredity

Gender - Male

Age - 20 to 40

**Daily Activities Profile**

Time	3.00-3.30 am	3.30-6.30 am	6.30-7.00 am	7.00-7.30 am	7.30-8.00 am	8.00-9.00 am
Activity	Travel to depths of 4-8 fathoms at sea	Cast their nets and wait; idle while waiting	Haul nets	Return to shore	Sort catch	Market catch

**Annual Activities Profile**

They go fishing for a minimum of 9 months in a year, fishing on occasions of calm weather during the rough season.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Decreased availability of fish <sup>i</sup>	Inshore trawling; Use of ring seine <sup>ii</sup> and discharge of effluents from the Shasun factories	Earning according to their catch	Government should enforce ban on inshore trawling and the ring seine; Effluents should be treated before discharge into the sea.
<b>Technology</b>				
<b>Infrastructure<sup>iii</sup></b>				
<b>Investment</b>	Capital for purchase and maintenance of gear damaged by inshore trawlers <sup>iv</sup>	Prices increasing day by day	Borrow from pawn broker <sup>v</sup> ; Borrow from money lenders charging high interest. <sup>vi</sup>	Inshore trawling should be stopped; Government should give small scale fishers concessions in purchasing gear
<b>Markets<sup>vii</sup></b>	Do not make good prices	Market price reduces because of ring seine	Sell at the price of the day	Ban on ring seines should be enforced

### Kanagachettikulam

		catches		
<b>Capacity building</b>	Lack knowledge or training in alternative jobs	No available opportunities	Forced to do fishing	Government or NGOs can provide training in secondary jobs such as welding, plumbing, driving, electrician etc.
<b>Social security</b>	No insurance	No surplus income; Kattumarams are unregistered	At their own risk	Government should implement the respective policies; Registration of kattumarams can be facilitated
<b>Policy and Institutional support</b>	Rations not available at the specified time I.e., during the rough season <sup>viii</sup>		Borrow from money lenders	Rations should be provided at the beginning of the rough season

7<sup>th</sup> August, 08

**Stakeholder group: Fish vendors**

**COGA Analysis**

Caste : Pattinavar

Origin : From neighbouring fishing villages<sup>ix</sup>

Gender: Females (Married)

Age : 25 to 65 years

**Daily Activities Profile**

Time	6.00am	6.00-7.30am	7.30-9.00am	9.00-10.30am	10.30-1.00pm	1.00-2.30pm	2.30-4.00pm
Activities	Arrive at the shore	Purchase fish from fishermen and at the auction	Travel to central bus stand	Travel to target villages <sup>x</sup>	Sell fish	Travel back to central bus stand	Return to their village

**Annual Activities Profile**

They sell fish throughout the year except during the rough season.

**LED Framework Analysis**

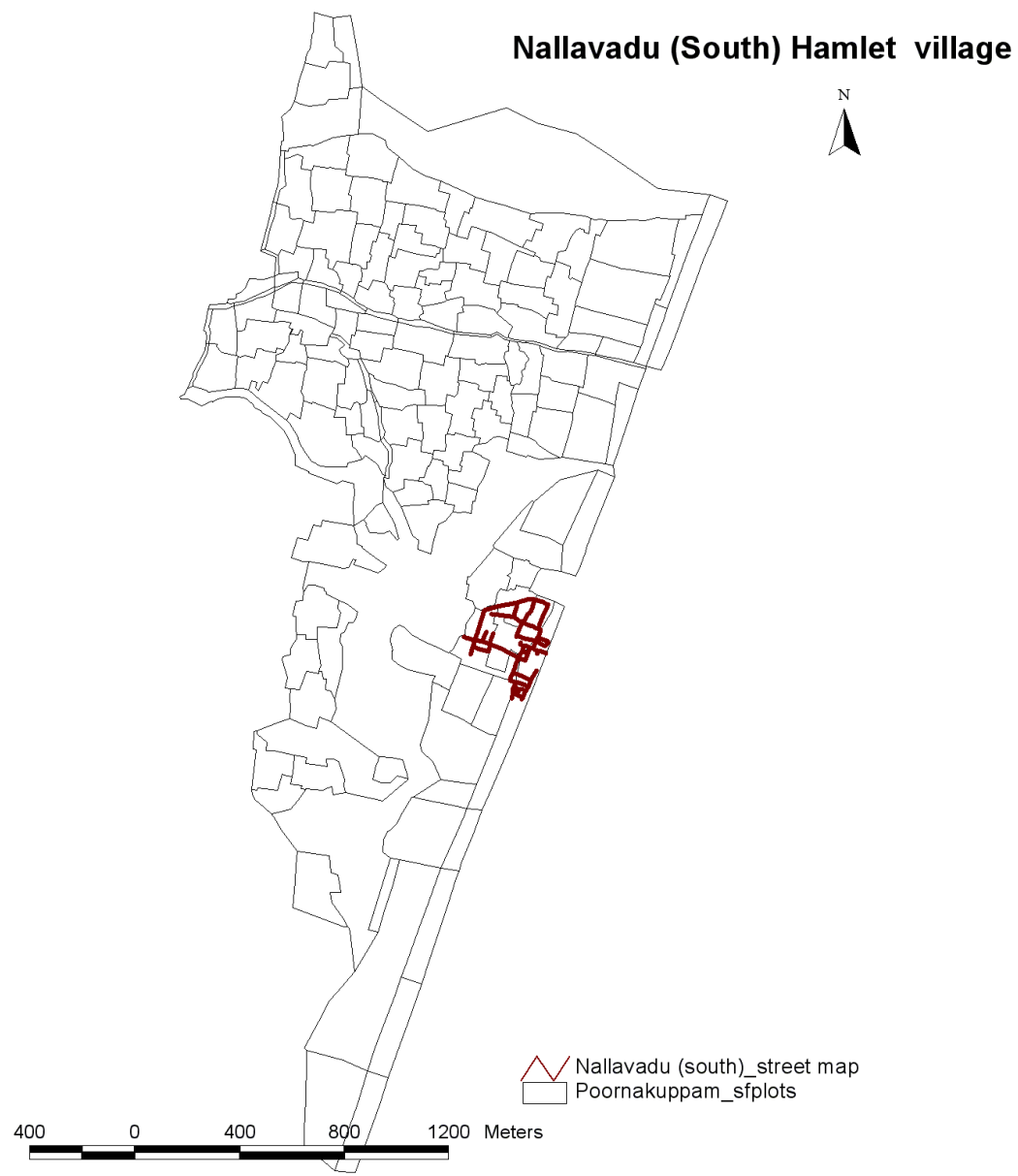
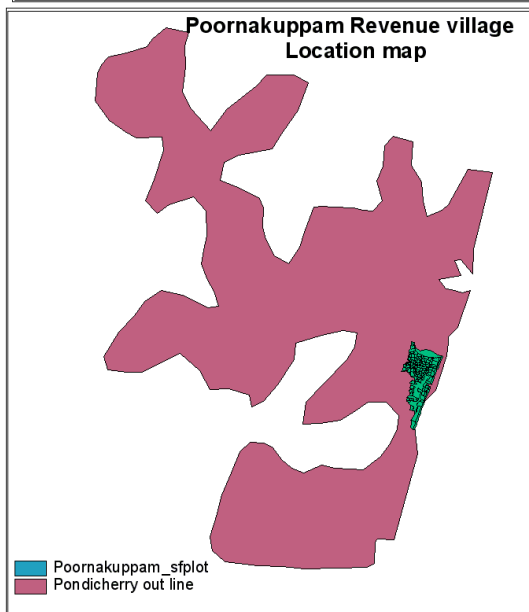
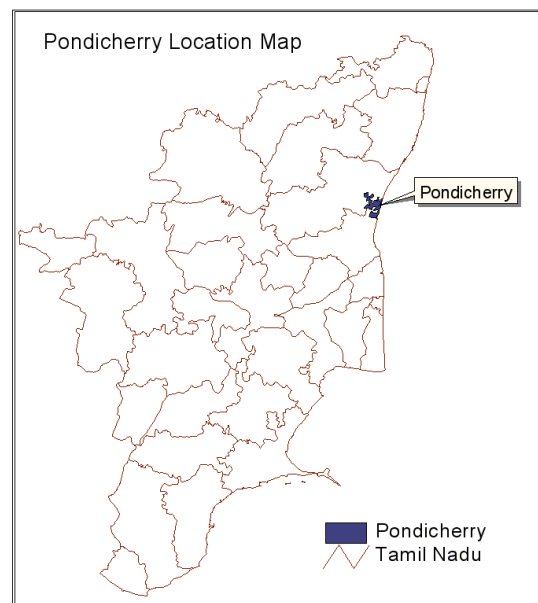
Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Decreasing trend in fish catch when compared to the past <sup>xi</sup>	Tsunami; Use of ring seines; Chemical discharges from factories	Buy fish from the artisanal fishermen at high rates and sell with low profits	Ban on ring seine should be enforced; Effluent should be treated before discharge into the sea.
<b>Technology</b>				
<b>Infrastructure</b>	Ice not available	No ice plant	Purchase ice from those who possess refrigerators within the village <sup>xii</sup> or purchase at Kalapet	Ice boxes can be provided
<b>Investment</b>	Capital <sup>xiii</sup> ; Price of fish increases when	Borrow at high interests; Low catches	Borrow from neighbours at interest rates of 3 - 10 % per month	Various credit linkages at low interests can be arranged



### *Kanagachettikulam*

	purchased at central market		Higher capital spent	
<b>Markets</b>	Most of the vendors are not allowed to market at the grand bazar market in Pondicherry	Market is dominated by the vendors from nearby villages	Street vending in the outskirts of Pondicherry	Separate market for this cluster of villages to be established so as to reduce conflicts and competition
<b>Capacity<sup>xiv</sup> building</b>	No secondary job	Idle during the lean period <sup>xv</sup>		
<b>Social security</b>	Unable to go marketing	Sickness, ban period and rough season; Old age	Borrow money from neighbours; Dependent on their children or relatives.	Government should provide old age pension
<b>Policy</b>	During rough season <sup>xvi</sup>	Rations are unavailable at specific time	Borrow from money lenders and mortgage jewellery	Render support at the specific time

- i They feel all species have depleted due to the ring seine
- ii This village had 2 ring seines after the tsunami which were used only for 3 months. After tsunami this village had 32 FRPs with 3 people as share holders per boat. Due to lack of mutual trust and coordination among the partners led to the sale of their boats. The ring seines were intensively operated in neighboring villages such as Kalapet(10 seines) and Chinna Kalapet (4 seines). Ring seines came into existence along this coast 3 months after the tsunami
- iii Their daily catch is sold in a short span of time, so ice not required
- iv Usually the nets last for a period of 6 months; A kattumaram can carry 20kg of nets which costs around Rs.8000
- v Pawn broker charges 3% interest per month.
- vi Money lender charges 10% interest on loans of Rs.10,000 which should be repaid in 100 days time
- vii Marketing is done on the beach as the catches are small
- viii Government stated insufficient funds as the reason for not extending relief at the required time
- ix Neighbouring fishing villages Vaithikuppam, Thevanampatinam, Kalapet and Chidambaram
- x Gorimedu, Thatanchavady, and Rediyarpalaiyam
- xi Buying 15kgs of fish 5 years ago,currently buying 10kgs of fish
- xii They sell 2 kgs at Rs.15
- xiii They require Rs.2000 per day for their business
- xiv They are not interested in any secondary jobs
- xv 15 women in the village underwent training on tailoring; however they too are idle, without any opportunities
- xvi Relief during the rains has not been provided in the last two years



## Nallavadu South (Pondicherry)

### Introduction

This village is located 15 kms to the south east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 254 households with an average family size of 4.11 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	177
Female over 35	216
Adult male	140
Adult Female	115
Children Male	226
Children Female	134
Infant Male	20
Infant Female	16
total	1044

*Table 1: Demographic Profile of Nallavadu South*

The origin of the village could not be identified during the historical mapping session though it is believed that people from Nallavadu migrated into Nallavadu (north).The village is divided into the North and South Nallavadu by Tamil Nadu which is referred to as Nallavadu Tamil Nadu. The major shock the community felt was the 2004 tsunami during which no lives were lost.

From 600 thatched houses 40 years ago the village now has 800 houses of which 300 are concrete. Infrastructure in the village includes a primary school which was established 20 years ago which is now a middle school. The roads in the villages were sandy paths earlier and were metaled in the last 20 years. An overhead tank set up ten years back is the present source of drinking water. Hand pumps were used to obtain drinking water. Later, a net mending hall, drying hall and a public toilet were constructed. Medical facilities are available in Nallavadu till date. The Panchayat though elected are inactive.

### Asset ownership

All of the households own or share ownership of fishing craft. 42% are single owners of craft. This is presented in Figure 1.

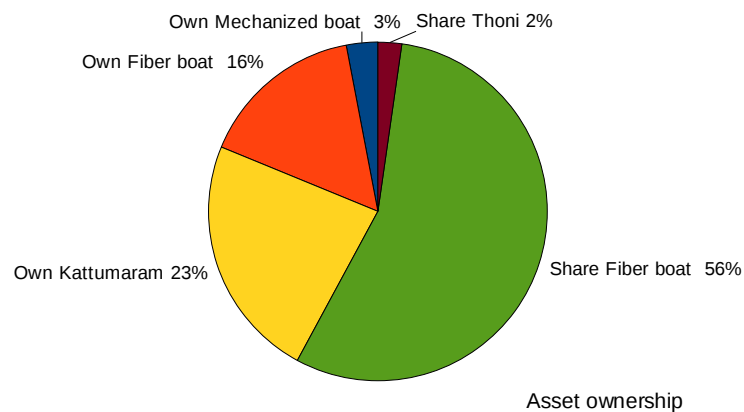


Figure 1: Asset Ownership in Nallavadu South

### Occupational Profile

The vast majority of the village men (90%) are engaged in fishing or allied activities as their primary occupation<sup>i</sup>. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

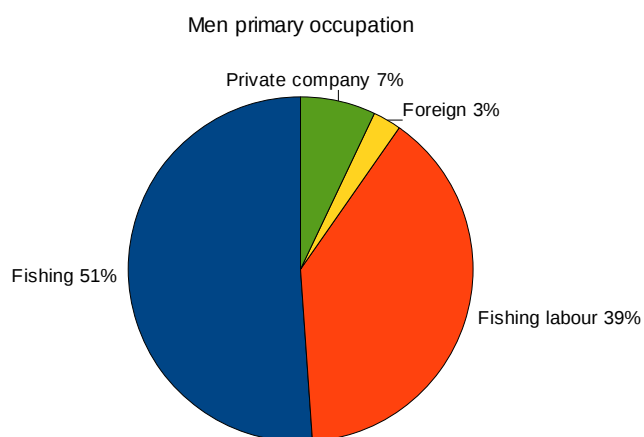
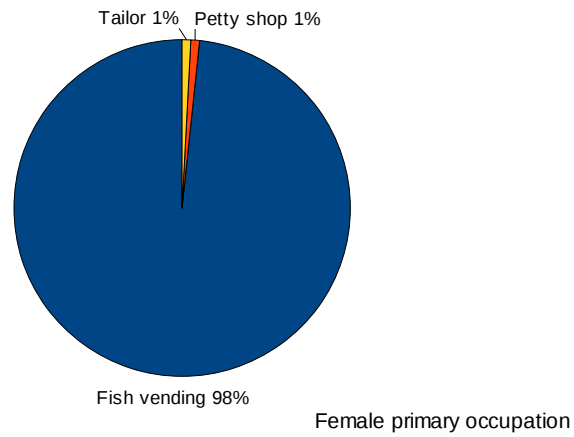


Figure 2: Primary Occupations of Men

*Nallavadu South (Pondicherry)*

98% of women are engaged in fish vending as their primary occupation. Only 2% are involved in other occupations such as petty shops and tailoring. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Ring seine crew
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.

**Welfare schemes:**

1. Bank or Government should facilitate credit linkages for their working capital
2. Government should provide the various relief measures on time

**Infrastructural requirements:**

1. The respective government department can arrange more buses for this village
2. Establishing a separate market for this cluster

**Facilitation required:**

1. FRP boats should have provisions to fix GPS units properly.
2. Ice boxes can be provided.
3. Training on skilled employment required for secondary jobs.
4. Training on operation of GPS units required.
5. Platform to express grievances and negotiate solutions required.

Nallavadu South (Pondicherry)

29<sup>th</sup> July, 08

**Stakeholder group: FRP boat owners**

**COGA Analysis**

Caste - Pattinavar

Origin -Heredity

Gender-Males.

Age -20 to 55 years

### Daily Activities Profile

Time	4.00-4.30 am	4.30-6.00 am	6.00-7.30 am	7.30-8.00 am	8.00-8.30 am	8.30-9.00 am
Activity	Travel to depths of about 6-10 fathoms at sea	Cast their net and wait; idle while waiting	Haul nets from the sea	Return to the shore	Sort catch	Auction their catch to fish vendor

### Annual Activities Profile

They fish throughout the year except during the 45 day ban period and in the rough season.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (Fish)</b>	Declining catches <sup>ii</sup>	Selective gear like the ring seine	Work as labour in ring seine operations	Ban on ring seine to be enforced.
<b>Technology</b>	No provision to fix GPS units on FRP boats			Such provisions to be made in FRPs
<b>Infrastructure</b>	Lack of ice	Ice plant situated in Abizhegapakkam does not produce sufficient ice	Get ice from Arriyankuppam and Pondicherry <sup>iii</sup>	Ice boxes can be provided
<b>Investment and credits</b>	Boat maintenance and purchase of new gears	Working capital <sup>iv</sup>	Borrow from money lenders, pawn brokers and banks <sup>v</sup>	
<b>Markets<sup>vi</sup></b>				
<b>Capacity building</b>	No secondary jobs	Lack of education as well as technical training <sup>vii</sup>	Forced to be crew in ring seine	Technical training to be provided for jobs like electricians, driving etc .



*Nallavadu South (Pondicherry)*

<b>Social security</b>	About 40 people are not receiving pension		Dependent on their family	Government should fasten the paperwork process for those who are not receiving pension
<b>Policy and Institutional support</b>	Relief during the ban period unavailable <sup>viii</sup>	Not distributed on time	Borrow from money lenders to purchase groceries during the lean period	Should be provided on time.

## *Nallavadu South (Pondicherry)*

### **Stakeholder group: Ring seine crew**

#### **COGA Analysis**

Caste – Pattinavar

Origin -Heredity

Gender-Males

Age -20 to 55 years

#### **Daily Activities Profile**

Time schedule	7.00-7.30 am	7.30-8.30 am	8.30-9.30 am	11.00 am-1.00 pm	1.00-2.00 pm	7.00 pm
Activities <sup>ix</sup>	Start from shore travelling to depths of 10-15 fathoms	Cast the nets into the sea and wait; idle while waiting	Haul net and sort catch	Load boats <sup>x</sup> and head to Cuddalore jetty/ return to their village where it is sold to traders in the former and at the auction in the latter	Reset nets for each cycle(3 cycles in a day)	Carrier boats take catch to market

#### **Annual Activities Profile**

They fish for 7 months and 15 days(before the 45 day ban begins) remaining idle during the ban and the rough season.

#### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (Fish)</b>	Reduction in catch	Inshore trawling		Ban on near shore trawling by mechanized boats to be enforced
<b>Technology</b>	Unable to purchase diesel in bulk, Government provides only 5 ltrs/day	When bought in cans, fuel it is suspected to be for illegal use	Purchase small amounts of fuel from several fuel stations	Government can provide identity cards proving they are artisanal fishers
<b>Infrastructure</b>	Lack of ice	Ice plant situated in	Get ice from Ariyankuppam and	Ice boxes can be provided to

*Nallavadu South (Pondicherry)*

		Abizhegapakkam does not produce sufficient ice	Pondicherry	the boat owners
<b>Investment and credits</b>	Sufficient earnings to match expenses	To compensate for the loss incurred	Repaid from the next catch	
<b>Markets<sup>xi</sup></b>	Not able to market at Puducherry	Dominated by mechanized boat owners	Market at Cuddalore OT	Government should resolve conflicts between MB and FRP fishers so both can be benefited
<b>Capacity building</b>	No GPS Alternative jobs	Unaware of its operation	Use old traditional methods	Training on operation of GPS units <sup>xii</sup>
<b>Social security</b>	Insufficient savings	Very low surplus amounts; If rough season is prolonged; Hospitalization	Borrow from neighbours Dependent on boat owners and mortgage their jewellery	
<b>Policy and Institutional support</b>	No relief available	Not provided on time	Have to borrow from money lenders to purchase groceries during the lean period	Should be provided on time

## *Nallavadu South (Pondicherry)*

30<sup>th</sup> July, 08

### **Stakeholder group: Fish vendors**

#### **COGA Analysis**

Caste - Pattinavar

Origin -Neighbouring fishing villages<sup>xiii</sup>

Gender-Females

Age - 25 to 60 years

#### **Daily Activities Profile**

Time	Activity
08.00am	Arrive at the shore
08.00-09.30am	Purchase fish at auction and from various fishermen
09.30-09.45am	Walk to the village entrance
09.45-10.10am	Hire an auto to reach Thavalakuppam bus stop
10.15-11.00am	Reach Puducherry bus stand
11.00-11.15am	Travel time to Chinnakadai market (situated in Bussy street, Pondicherry)
11.15-1.00pm	Sell fish
01.00-01.15pm	Return to Puducherry bus stand
01.20-02.00pm	Reach Thavalakuppam bus stand.
02.05-02.30pm	Reach their R Reach their village

#### **Annual Activities Profile**

They sell fish for 7 months and 15 days( before the ban) and remain idle during the ban and the rough season.

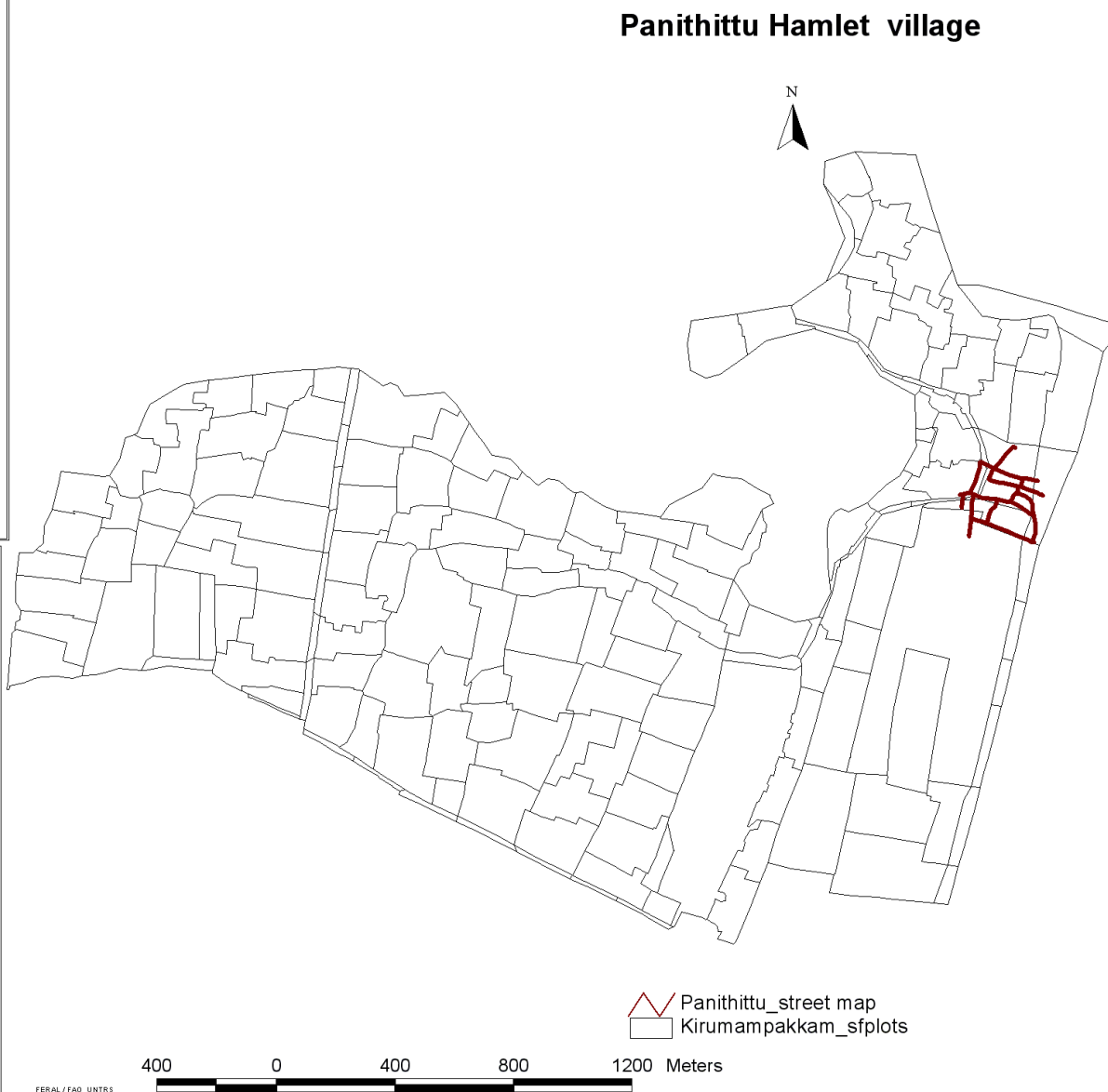
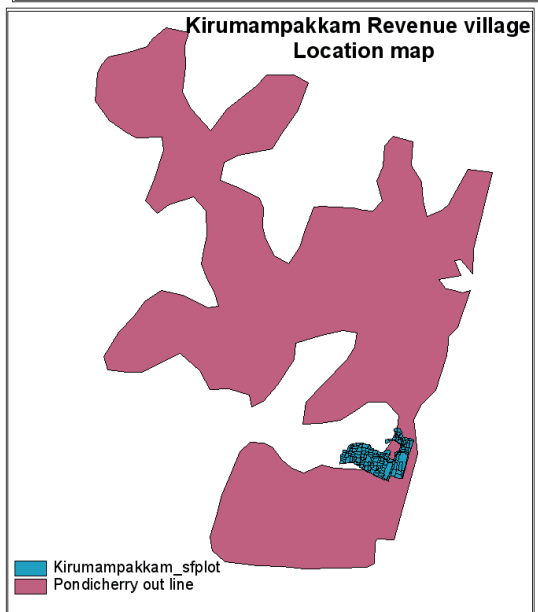
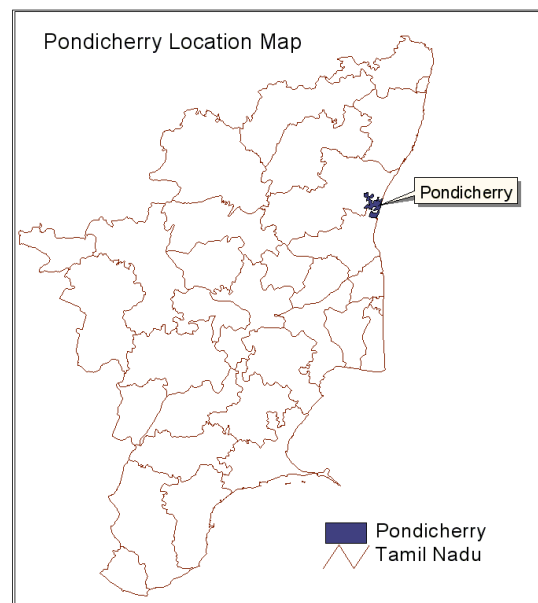
#### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Fish landings very low <sup>xiv</sup> ; Prices unstable	Most are involved in ring seining; Bicycle vendors from agricultural villages	Forced to spend more  Pay high prices	Ban on ring seine to be enforced; Require a platform to express their grievances and

*Nallavadu South (Pondicherry)*

				negotiate solutions.
<b>Technology<sup>xv</sup></b>				
<b>Infrastructure</b>	Low quantities of ice;  Transport	Ice plant situated in Abizhekappakam <sup>xvi</sup> ; Buses are few	Purchase from those owning refrigerators within the village; Hire a share auto <sup>xvii</sup>	Ice boxes to be provided to fish vendors <sup>xviii</sup> ; The respective department can arrange more buses
<b>Investment</b>	Working capital <sup>xix</sup> ;	Loans are obtained on high interest	Borrow from neighbours, interest rate is 3 to 4 % per month; or take loans from the SHG at an interest of 2% per month.	Various credit linkages can be arranged by the bank
<b>Markets</b>	Unable to market at the central market	Dominated by vendors from nearby villages <sup>xx</sup>	Marketing in Chinnakadai and Nellithope markets	Separate market to be established for this cluster of villages to reduce conflicts and competition
<b>Capacity building</b>	Alternate jobs or trade <sup>xxi</sup>	Fishing does not seem viable to small traders (Head loaders)	They are idle	Such programmes can help people in jobs such as sweeping etc
<b>Social security</b>	Inability to do marketing	Sickness; Old age	Borrow from neighbours; Dependent on their children or relatives	Government should provide pension for the aged
<b>Policy</b>	Relief unavailable at specific/required time	During ban season	Borrow from money lenders	Render support at the required time

- i Those occupations with lesser than 1% have not been represented
- ii Catch earnings have decreased from Rs.2000 5 years ago to Rs.1000 at present(according to catch weight)
- iii Ice melts considerably before reaching the village
- iv They require Rs.1,75,000 per year for boat maintenance and purchasing new gears
- v They need to mortgage their jewels, in case of pawn broker and bank charging interest rates of 2% and 1% per month respectively, whereas money lenders charge 10% interest per month.
- vi Fish sold at auction within the village and the highest bidder gets the produce who sometimes pays a day later
- vii Alternative jobs required during the lean period which would provide a minimum income of Rs. 150 to 200 per day.
- viii No relief for the last two years, during the ban period and rough season
- ix A single operation of this net takes nearly 3 to 4 hours and is operated on a maximum of 3 times a day.
- x All boats do not land at the same time
- xi Landing occurs at Cuddalore jetty which is well equipped for landing
- xii About 40 people in this village are crew members
- xiii Narambai,Pannithittu,Kalapet,Moorthikuppam and Devanampattinam
- xiv Ring seine operations started five years ago in this village;Ring seine owners sell their catch to small scale vendors only when it is low
- xv They do not feel the need for technology as they feel they are sufficiently efficient
- xvi Abizhekapakkam is 5 km away from this village
- xvii Spending about Rs.30 to 40 per head
- xviii 200 women are involved in fish vending.
- xix Those who sell door to door require about Rs.1000 per day;People selling in Chinnakadai and Nellithope require about Rs.5000 per day.
- xx Vaithikuppam,Keerapalayam and Veerampattinam
- xxi The government recently announced a 100 days work programme to sustain their livelihoods during ban season but is yet to be fulfilled



## **Pannithittu**

### **Introduction**

This village is located 14 kms to the south east of Pondicherry. The fishing hamlet is comprised of the Chinna Pattinavar caste group and has 312 households with an average family size of 4.56 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	198
Female over 35	250
Adult male	238
Adult female	210
Children male	226
Children female	188
Infant male	61
Infant female	52
total	1423

*Table 1: Demographic Profile of Panithittu*

The origin of the village could not be identified during the historical mapping session though it is believed that about 30 families migrated from Chennai and Moorthykuppam. The major shock the community felt was the 2004 tsunami during which only assets were damaged.

From 300 thatched houses 50 years ago, the village now has 450 houses of which 350 are concrete and tiled houses. Infrastructure in the village includes a primary school established long ago which was transformed into a middle school in 1998. The roads within the village were metaled 15 years back and were concreted in 2005. Buses were available since the roads were metaled. An overhead tank set up 20 years ago is the source of drinking water for the village. Medical facilities are available at Kirumampakkam and Pondicherry till date. The traditional panchayat is presently dysfunctional due to administration problems.



### Asset ownership

31% of the households own or share ownership of fishing craft. 22% are single owners of craft while 70% do not own any. (Figure 1)

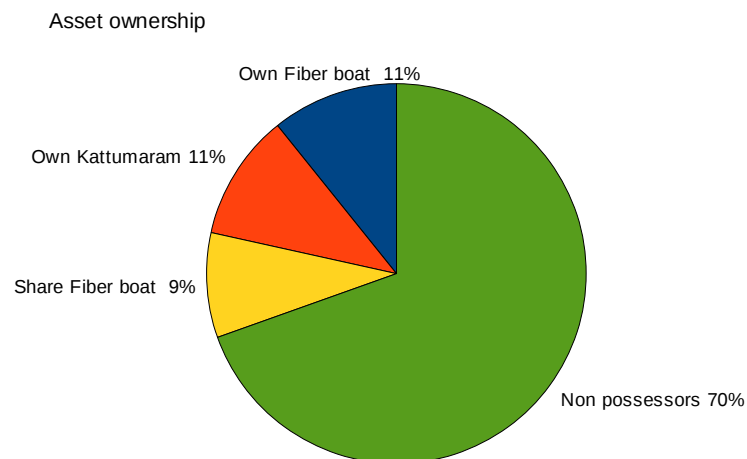


Figure 1: Asset Ownership in Panithittu

### Occupational Profile

The vast majority of the village men (83%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

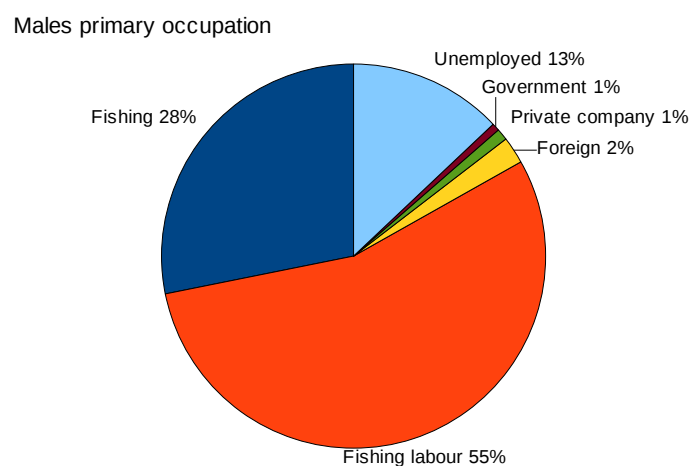
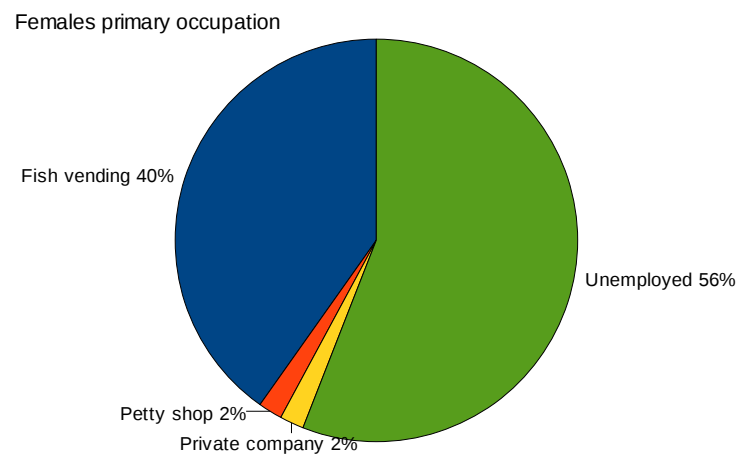


Figure 2: Primary Occupations of Men

### *Pannithittu*

40% of women are engaged in fish vending as their primary occupation while 56% are unemployed. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 4 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Ring seine crew
4. Fish vendors

### **Stakeholder Analysis**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Ban on inshore trawling should be enforced.

#### **Welfare schemes:**

1. Compensation for the rough season and ban period can be provided at the required time.
2. Awareness on the various policies can be created
3. Loans can be facilitated by the banks who should allow slight flexibility in the loan repayment procedures
4. Government should make provisions for pension plans for all old people

#### **Infrastructural requirements:**

1. An ice plant can be constructed for the village
2. A separate market can be established for this cluster of villages to reduce conflicts and competition

#### **Facilitation required:**

1. Government should establish a specific shop for gear and allow concessions for small scale fishers
2. Registration of kattumarams can be facilitated
3. Opportunities for a secondary job can be created during the lean period.

Pannithittu

30<sup>th</sup> July, 08

**Stakeholder group: FRP boat owners**

### COGA Analysis

Caste -Pattinavar

Origin -Heredity

Gender-Males

Age -30 to60 years

### Daily Activities Profile

Time	7.00-7.30 am	7.30-9.30 am	9.30-10.30 am	11.00 am	7.00-9.00 pm
Activity	Travel to average depths of 8-10 fathoms at sea	Set their net and wait	Haul catch into boats	Reset nets <sup>i</sup> and repeat activity	Market catch at Cuddalore jetty and return to village

### Annual Activities Profile

They fish for 8 months a year remaining idle during the ban and the rough season.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decline in fish resources	Climatic changes after tsunami <sup>ii</sup> ; inshore trawling affecting the sea bed.	Use ring seine	Ban on inshore trawling should be enforced
<b>Technology</b>				
<b>Infrastructure</b>	Unsuitable place to land their catch;  No ice plants;  No diesel subsidy	Bulk catches require sufficient ice and traders for marketing; head loaders cannot afford to buy this sort of catch; Available only at Abizhegapakkam and there is high competition A Government	Land and market at Cuddalore jetty  Purchase from Ariyankuppam or Pondicherry  Their transport	Government should construct a jetty for this cluster;  Government should construct one ice plant in their village Government can open a diesel bunk for this cluster of

## Pannithittu

	available	diesel bunk is present only at the Pondicherry jetty where they are provided with only 5litres/day	costs exceed the cost of diesel as they go to Pondicherry only to purchase diesel and market exclusively in Cuddalore	village
<b>Investment and credits</b>	Maintenance and repair of craft and damaged gear	Insufficient/no bank loans for working capital	Dependent on informal lenders charging high interests; Mortgage jewellery; Borrow from neighbours	Banks should facilitate loans and make the loan repayment procedures flexible
<b>Markets</b>	No ready money;  Marketing fish	Trader usually pays them a week later;  Trading of ring seine catches is not allowed at the Pondicherry jetty	Traders give advances required for investments; Sell ring seine catch at Cuddalore jetty	Government can resolve conflicts between trawl and ring seine fishermen, enabling the latter to trade at Pondicherry jetty
<b>Capacity building</b>				
<b>Social security</b>	Lack of savings to tide over rough season and ban period; Lack of awareness on various policies	Insufficient earnings;  Compensation to labour in case of accidents during employment	Borrow money from money lenders at high interest rates; At their own risk	Provide relief/ compensation at the required time;  Creating awareness about various policies.
<b>Policy and Institutional support</b>	No insurance	Boats are unregistered	Manage on their own in case of accidents	Government can simplify the registration procedure

### Stakeholder group: Kattumaram owners

#### COGA Analysis

Caste – Chinna pattinavar

Origin- Heredity

Gender - Male

Age - 40 to 65 years

#### Daily Activities Profile

Time	11.00-11.30 am	11.30am-12.30 pm	12.30-1.00 pm	5.00-5.30 am	5.30-7.00 am	7.00-8.00 am
Activity	Travel to depths of 6 fathoms at sea	Set their nets	Return to shore <sup>iii</sup>	Travel to where nets were set	Haul nets and return to shore	Sort catch and sell to either vendors or traders

#### Annual Activities Profile

They fish throughout the year except during the rough season.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Fish catch not appropriate	Near shore trawling by mechanized boats	Making their living according to the price of their catch.	Government should enforce the ban on inshore trawling
<b>Technology<sup>iv</sup></b>				
<b>Infrastructure<sup>v</sup></b>				
<b>Investment</b>	Damage of nets	Inshore trawling of Mechanized boats	Getting the nets mended by borrowing from their neighbours.	Ban on inshore trawling should be enforced
	Purchase of new nets	Price of gear increasing by the day	They borrow money from money lenders	Government should establish a net shop and provide concession for small scale fishers
<b>Markets<sup>vi</sup></b>				
<b>Capacity building</b>				
<b>Social security</b>	No craft	Kattumarams	At their own risk	Registration of

*Pannithittu*

	insurance	are not registered		kattumarams can be facilitated
<b>Policy and Institutional support</b>	Rough season	Relief/compensation is not provided on time	Borrow from neighbours for purchase of groceries	Compensation to be provided at the required time

**Stakeholder group: Ring seine crew**

**COGA Analysis**

Caste :Chinnapattinavar

Origin :Heredity

Gender:Males

Age :15-60

**Daily Activities Profile**

Time	7.00-7.30 am	7.30-8.30 am	8.30-9.30 am	11.00 am	7.00-9.00 pm
Activity	Travel to average depths of 10-15 fathoms at sea	Set their net <sup>vii</sup> and wait; idle while waiting	Haul catch into boats	Reset nets and repeat activity	Market catch at Cuddalore jetty and return to village

**Annual Activities Profile**

They fish for 7 months and 15 days before the ban. They do not fish during the ban period and the rough season

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources</b>	Decreased availability of fish	Inshore trawling	Opted for this destructive fishing method(ring seine ) to sustain themselves	Ban on inshore trawling should be enforced
<b>Technology</b>				
<b>Infrastructure</b>	Supply of ice	Ice factory only at Kannikoil	Purchase ice from Cuddalore	Establish an ice plant near their village so as to reduce transportation costs <sup>viii</sup>
<b>Investments and credits</b>				
Markets	Trading of ring seine catches is not allowed at the Pondicherry jetty	Market dominated by trawl owners	Market at Cuddalore OT	Government should resolve conflicts between trawl and ring seine fishermen, enabling the latter to trade at Pondicherry jetty



### *Pannithittu*

Capacity building	No insurance	Lack of awareness	Dependent on their employers	Government should create awareness about the various policies; Life insurance should be provided
Social security	Rough season, ban period, accidents, illness	Lack of savings	Borrow from neighbours or money lenders; Mortgage jewellery	Alternate occupations to increase their income can be provided/made available
Policy and Institutional support	Supply of rations	Unable to find employment during Rough season	Borrow from neighbours or money lenders	Compensation to be made available at the specified time

## Stakeholder group: Fish vendors

### COGA Analysis

Caste -Chinna Pattinavar

Origin -Neighbouring fishing villages<sup>ix</sup>

Gender-Females

Age -25-65 years

### Daily Activities Profile

Time	6.00-7.30am	7.30-8.30 am	8.30-10.00am	10.00- 12.00pm	12.00- 1.30pm
Activities	Arrive at the shore	Purchase fish at auction	Travel by bus to agricultural villages	Street wise fish vending	Return to their village by bus

### Annual Activities Profile

They sell fish 9 months in a year except during the rainy season.

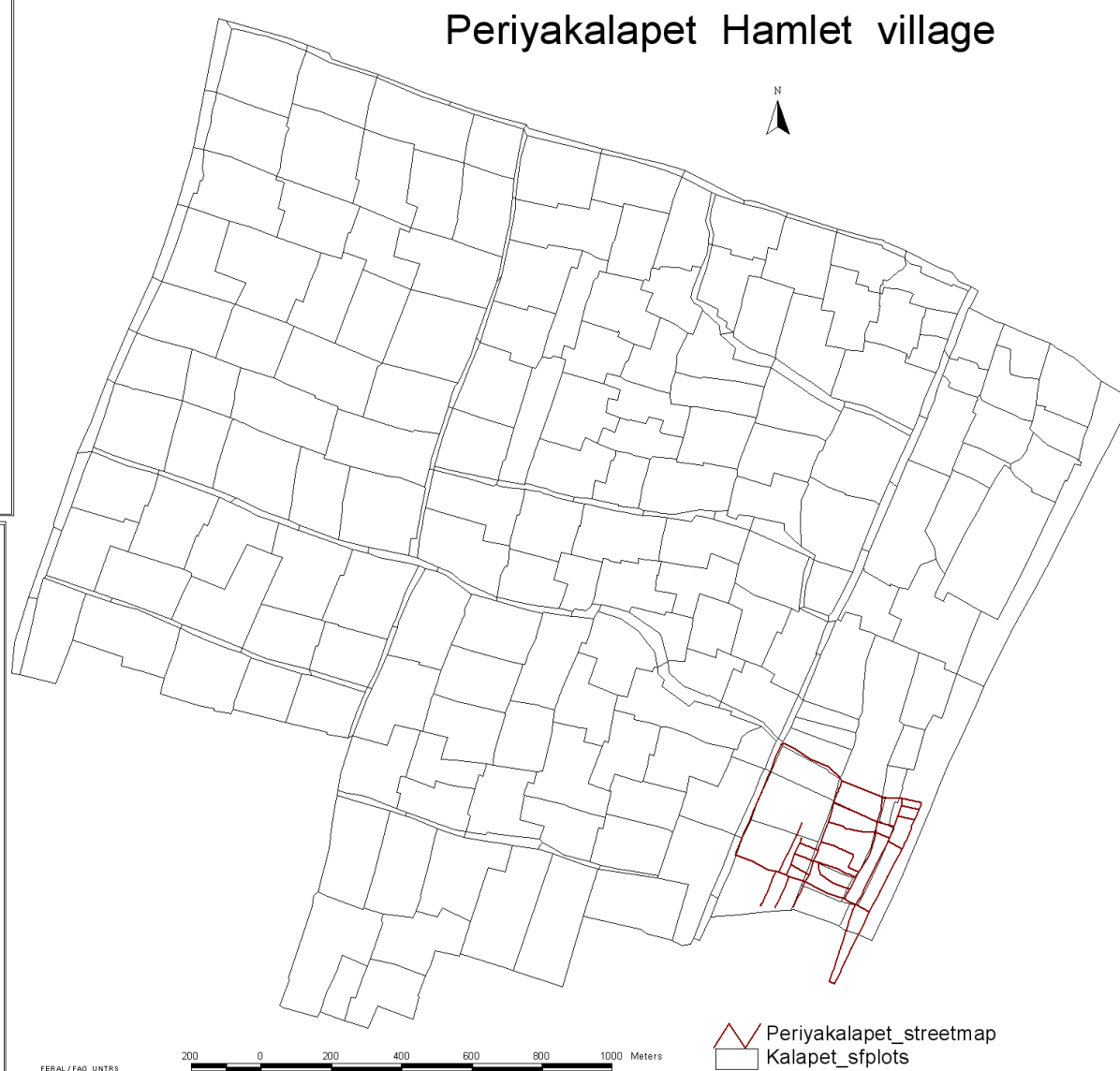
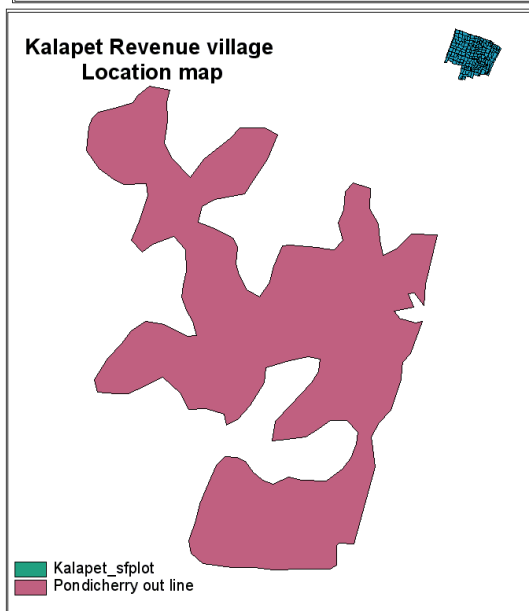
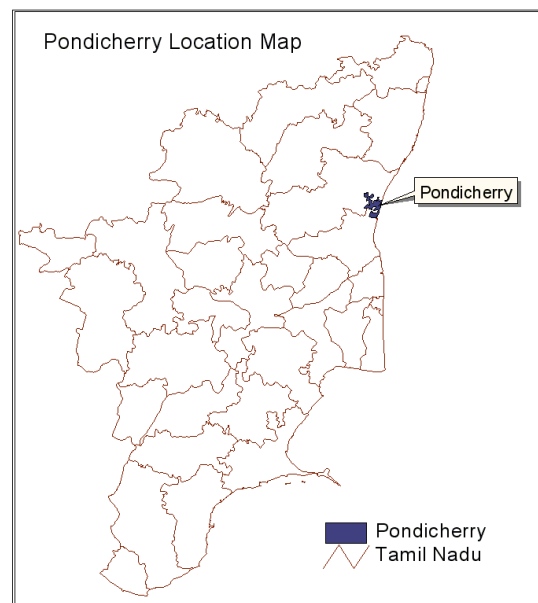
### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
Natural resources (FISH)	Fish landings are very low	Tsunami	Investing more	
Technology				
Infrastructure	Supply of ice;  Transport	No ice plant;  Buses are few	Purchase ice from ice plants in Thavalakuppam and Kannikoil; Hire a share auto	Establish an ice plant close to the village
Investment	Unstable prices	Landings are low; Many fishermen have diversified to ring seine operations	Pay the producer the next day	
Markets	Marketing at central market	Market dominated by vendors from nearby fishing villages.	Sell in agricultural villages	Establish a separate market for this cluster of villages to reduce conflicts and competition
Capacity building	Alternate jobs or trade <sup>x</sup>	Fishing does not seem viable to small traders	They are idle	Such programmes can help people in

*Pannithittu*

		(Head loaders)		jobs such as sweeping etc.
<b>Social security</b>	Inability to do marketing	Sickness; Old age	Borrow from neighbours; Dependent on their children or relatives	Government should provide pension for the aged
<b>Policy</b>	Relief unavailable at specific/required time	During ban season and rough season	Borrow from money lenders	Render support at the required time

- i This activity is repeated atleast 3 times a day depending on the size of the shoal
- ii Their belief that the tsunami has caused climatic changes in the region
- iii Carry out their usual day day activities
- iv Since it is an old traditional method and moreover they are aware of the place because they are old citizens of that village ,so there is no need for technology and capacity building
- v Since their catch is done daily and in a short span there exists no need for ice.
- vi Since the catch is small they do the marketing on the seashore.
- vii A single operation of this net takes nearly 3 to 4 hours
- viii The villages that will be benefitted are Panithittu, Nallavadu, Narambai, Bahoor Pudhukuppam and Thavalakuppam Pudhukuppam
- ix Narambai, Kirumampakkam, Palayam, Rettichavadi, Moorthikuppam and Devanampattinam
- x The government recently announced a 100 days work programme to sustain their livelihoods during ban season but is yet to be fulfilled



## Periya Kalapet

### Introduction

This village is located 10 kms to the north east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 422 households with an average family size of 4.51 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	229
Female over 35	289
Adult male	334
Adult female	315
Children male	346
Children female	296
Infant male	52
Infant female	42
<b>total</b>	<b>1903</b>

*Table 1: Demographic Profile of Periya Kalapet*

The origin of the village could not be identified during the historical mapping session. About 20 families have migrated from Nallavadu, Koonimedukuppam and Chennai. The major shock the community felt was the 2004 tsunami during which seventeen people died. 60 houses, 20 FRPs and 30 kattumarams were lost.

From 350 thatched houses 40 years ago, the village now has 1500 houses of which most are concrete. Infrastructure in the village includes a primary school upto 5<sup>th</sup> standard which was established 20 years ago. The hamlets are connected by a metal road also established in the same time. The roads within the village were sandy paths earlier which were concreted 2 years back. Buses were available from the ECR since 1988. A primary health centre was also established around the same time i.e., 20 years back and has improved in terms of facilities at present.

### Asset Ownership

59% of the households own or share ownership of fishing craft. 25% are single owners of craft while 42% do not own any Figure 1.

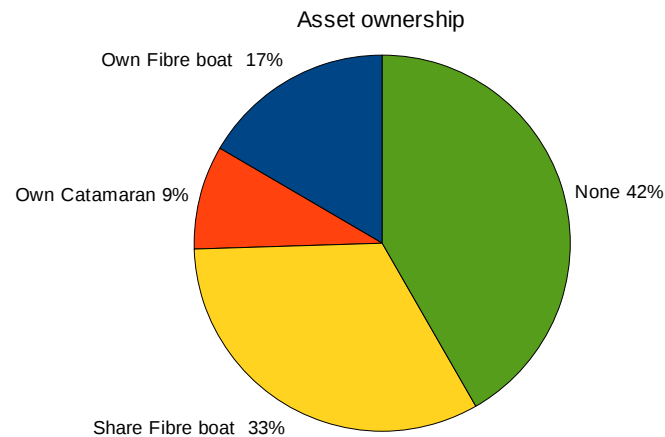


Figure 1: Asset Ownership of Periya Kalapet

### Occupational Profile

The vast majority of the village men (75%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

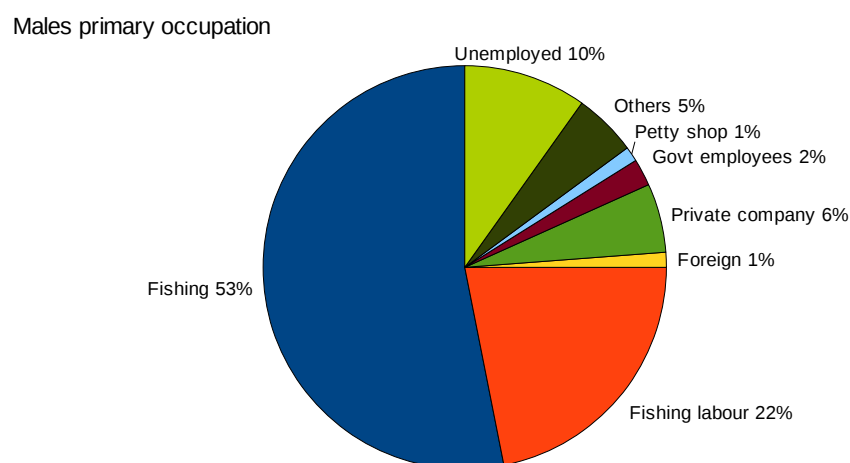
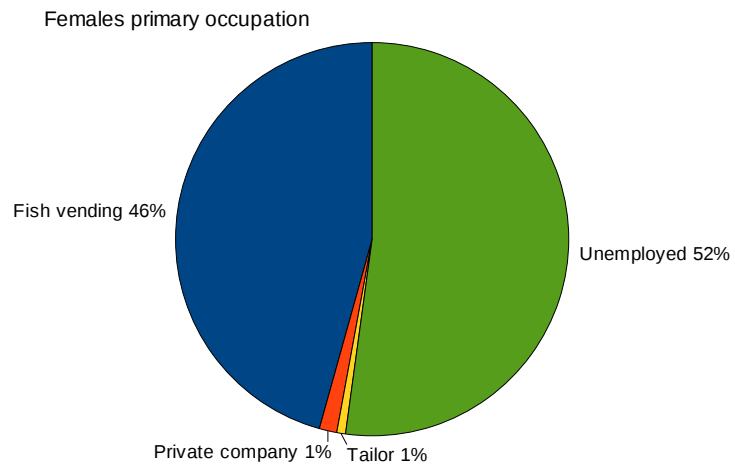


Figure 2: Primary Occupations of Men

### *Periya Kalapet*

46% of women are engaged in fish vending as their primary occupation while 52% are unemployed. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 2 major groups were identified from this village and are as follows:

1. FRP owners
2. Kattumaram owners
3. Fish vendors

### **Stakeholder Analysis**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Ban on inshore trawling should be enforced.
3. Government should ensure that effluents are treated before being discharged into the sea

#### **Welfare schemes:**

1. Fisheries cooperative can facilitate the formation of an association to get diesel on subsidy
2. Awareness on the various policies available can be created
3. Government should provide compensation for FRP boats during the ban

#### **Infrastructural requirements:**

1. Government should construct a market building at Kalapet

#### **Facilitation required:**

1. Credit linkages can be facilitated by banks
2. Training required for secondary occupations such as welding, plumbing or electrician work with certification.
3. Training required on operation of GPS unit
4. Government or NGOs should provide suitable training for secondary jobs and promote trade links for the women
5. Government should facilitate the registration of Kattumarams

14<sup>th</sup> August, 08

**Stakeholder group: FRP owners**

### COGA Analysis

Caste -Pattinavar

Origin -Heredity

Gender-Males

Age -30 to 60

### Daily Activities Profile

Time	4 am to 4.30 am	4.30 to 5.00 am	5.00 to 6.00 am	6.00 to 6.30 am	6.30 to 7.30 am
Activity	Travel time from shore to sea	Cast their nets	Idle while waiting	Collect their nets and return to shore	Sort catch and sell at auction

### Annual activity profile

They fish for 8 months a year remaining idle during the ban and the rough season.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Decline in fish resources <sup>i</sup>	Inshore trawling; Ring seine usage <sup>ii</sup> ;  Chemical discharges from factories <sup>iii</sup>	Invest more in destructive methods like ring seine operation to cope with competition	Government should enforce the ban on inshore trawling and the small mesh sizes used in ring seines; Effluent should be treated before discharge at sea
<b>Technology</b>	Higher fuel and gear maintenance expenses	No GPS Units	Use large amounts of diesel	Provide GPS units for small scale fishers
<b>Infrastructure</b>				
<b>Investment</b>	Maintenance of craft and gear;  No availability of	No bank loans for working capital <sup>iv</sup> ;  No association	Dependent on money lenders charging high interests <sup>vi</sup> ; Mortgage jewellery <sup>vii</sup> Purchase diesel	Banks should facilitate loans and allow flexibility in the repayment of installments;  Fisheries

*Periya Kalapet*

	subsidy for diesel	formed <sup>v</sup>	from private fuel stations <sup>viii</sup>	cooperatives can facilitate the formation of an association
<b>Markets</b>	Prices are unstable	Fish priced with preference to ring seine landings	Sell according to the rate of the day	Government can regulate the prices so that specific species will have a fixed rate <sup>ix</sup>
<b>Capacity Building</b>	GPS training ;  Technical training for alternative jobs	Lack operational knowledge;  Fishing does not seem viable	Use traditional methods learned from their ancestors;	Provide training on operation of GPS <sup>x</sup> ;  Electrician, welding, driving and basic English language training required
<b>Social security</b>	Unable to save money for rough season <sup>xi</sup> ; Few people not receiving old age pension; Compensation to labourers in case of accidents during employment	Fluctuating prices according to catch;  No supporting documents <sup>xii</sup> ;  Lack of awareness on various policies	Borrow from money lenders;  Dependent on their children;  Sorting out on their own risk by providing first aid help	Government should reduce the formalities to receive old age pension; Creating awareness about various policies.
<b>Policy and Institutional support</b>	No life insurance; No craft insurance;  No compensation for FRPs during Ban season	Boats are unregistered  Government provides compensation for trawlers but not to small scale fishermen	Manage on their own in case of accidents; Mortgage jewellery; Borrow from money lenders at high interest	Government can simplify the registration procedure;  Government should provide compensation to FRPs during the ban season <sup>xiii</sup>

### Stakeholder group: Kattumaram owners

#### COGA Analysis

Caste -Pattinavar

Origin -Heredity

Gender-Male

Age -20 to 40 years

#### Daily Activities Profile

Time	11.00-11.30 am	11.30am-12.30 pm	12.30-1.00 pm	5.00-5.30 am	5.30-7.00 am	7.00-8.00 am
Activity	Travel to depths of 6 fathoms at sea	Set their nets	Return to shore <sup>xiv</sup>	Travel to where nets were set	Haul nets and return to shore	Sort catch and sell to either vendors or traders

#### Annual Activities Profile

They fish for 9 months a year and fish on occasions of calm weather during the rough season.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Reduction in fish availability	Inshore trawling; Use of ring seine; Effluent discharges from factories	Earning according to their catch	Government should enforce the ban on inshore trawling and the ring seine; Effluents should be treated before discharge into sea
<b>Technology</b>				
<b>Infrastructure</b>				
<b>Investment</b>	Purchase and maintenance of gear damaged by trawlers	Price of raw materials are increasing by the day	Borrow from neighbours to mend nets; Borrow money from money lenders	Inshore trawling should be stopped; Government should provide concessions in the cost of gear maintenance
<b>Markets</b>	Prices are unstable	Fish priced with preference to ring seine	Sell according to the rate of the day	Government can regulate the prices so that

*Periya Kalapet*

		landings		specific species will have a fixed rate
<b>Capacity building</b>	No secondary jobs	Lack skill/ technical training	Spend more time fishing	Training in specific field such as welding, plumbing, driving and electrician work can be provided
<b>Social security</b>	Rough season, sickness	Insufficient earnings	Borrow from neighbours	
<b>Policy and Institutional support</b>	No craft insurance	Kattumarams are not registered	At their own risk	Facilitate registration of kattumarams

## *Periya Kalapet*

### **Stakeholder group: Fish vendors**

#### **COGA Analysis**

Caste : Pattinavar

Origin :Neighbouring fishing villages<sup>xv</sup>

Gender:Females(Married)

Age : 25 to 65 years

### **Daily Activities Profile:Vendors purchasing fish from seashore**

Time	7.00 am	7.00-8.30am	8.30-9.15am	9.15-12.30pm	12.30-1.00pm
Activity	Arrive at the shore	Purchase fish at auction	Walk to Kalapet market (on the side of the road)	Sell fish	Return home

### **Daily Activities Profile:Vendors purchasing fish from traders at central market**

Time	5.00-5.15am	5.15-6.15am	6.15-7.00am	7.00-8.30am	8.30-1.00pm	1.00-1.15pm
Activities	Walk to bus stand	Travel to central market	Purchase fish at auction held by traders	Return to Kalapet market in share autos	Sell fish	Return home

### **Annual Activities Profile**

They fish for 7 months and 15 days before the ban. They do not fish during the ban and the rough season.

### **LED Framework Analysis**

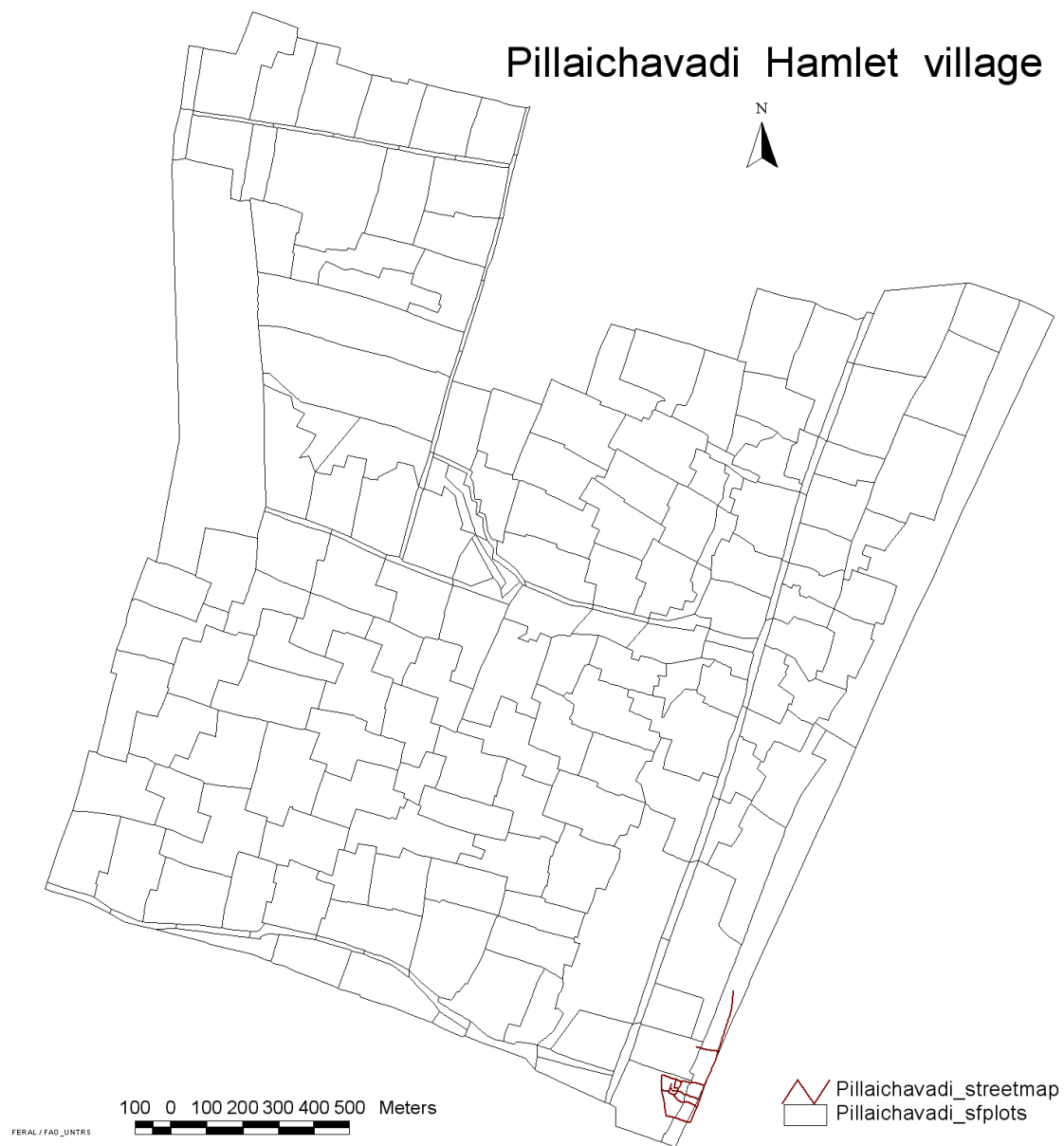
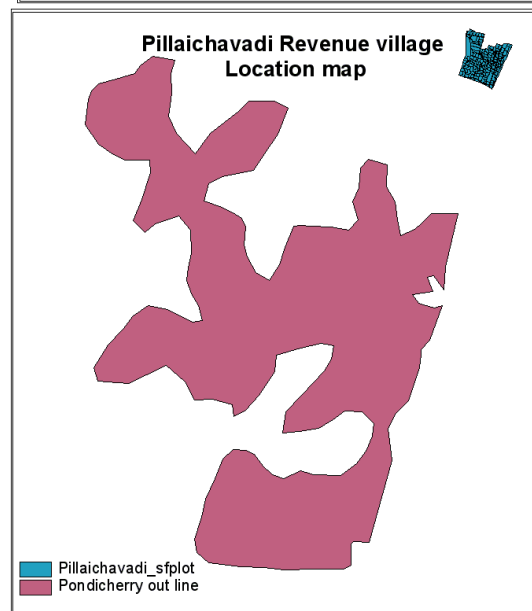
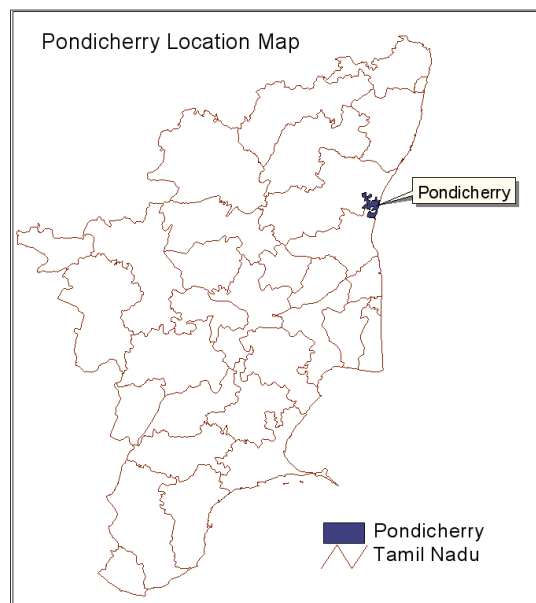
Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
Natural resources (FISH)	Decreased availability of fish in the last ten years	Artisanal fishers are few; Most are involved in ring seine operations; Chemical contamination by factories along the coast	Purchase fish from traders at the Pondicherry central market	Government should enforce the ban ring seines  Effluents should be treated before discharge into the sea

## Periya Kalapet

Technology				
Infrastructure	No proper market <sup>xvi</sup> ; Transport	Buses are busy during peak hours	They sell on the side of the road at Kalapet; Hire share autos	Government should construct new market in Kalapet village
Investment	Getting loans at high interest;  Insufficient capital	High price of fish when purchased at central market	Borrow from neighbours at an interest rate of 3-10 % per month; Sell at low profit	Various credit linkages can be facilitated
Markets	Marketing at central market	Market dominated by fish vendors from nearby villages	Forced to sell at Kalapet market	Establish a separate market for this cluster of villages to reduce conflicts and competition
Capacity building	Alternate job or trade	Fishing does not seem viable for head loaders	They are idle	Government or NGOs should provide suitable training for secondary jobs and promote trade links
Social security	Unable to do marketing	Sickness ,ban and rough season; Old age	Borrow from neighbours;  Dependent on their children or relatives	Government should provide pension plans for the aged
Policy	Rations unavailable at the required time	During ban season	Borrow from money lenders	Render support at the specified time

- i Catch quantities before the tsunami were a maximum of 10 boxes which has now reduced to 2-3 boxes (one box=40kg).
- ii 7 ring seines operated in this village and each ring seine is owned by 40 people
- iii Chemicals discharged from the Shasun and Comfaf for the last 25 years is believed to have drastically affected the fish resource.
- iv They require about Rs.78,000 per year as their working capital;one FRP uses four varieties of net each one costing Rs.18000; Rs.1,000 to 2000 is required for their boat maintenance
- v Fishermen were requested by the government to form an association so as to obtain the diesel subsidy
- vi 10% interest
- vii 3% interest
- viii Travel time and fuel required for fishing 10 years back were half an hour -1 hour and 5 liters per day which has now increased to 4 hours a day consuming 10 liters of diesel
- ix Similar to farmers
- x 8 FRP boats have a GPS and each FRP is owned by 3 people; GPS training required by 24 people
- xi Compensation of clothing material, towels and 5 kg rice has not been provided for the last 5 years
- xii About 50 people are not receiving the old age pension though their application process is still underway, they believe they will receive it soon.
- xiii Those who are eligible for compensation receive it 3-6 months late; Government should provide the promised 100 kgs and amount of Rs 700 on time.
- xiv Carry out their usual day day activities
- xv Vaithikuppam, Thevanampatinam, Marakanam, Sothikuppam, Allangkuppam, Cuddalore, Keerapalayam and Thaikal
- xvi Market developed gradually as it forms an intersection for several agricultural villages





## Pillaichavady

### Introduction

This village is located 8 kms to the north east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 194 households with an average family size of 4.63 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Males over 35	111
Females over 35	135
Adult male	182
Adult female	171
Children male	119
Children female	96
Infant male	39
Infant female	45
<b>total</b>	<b>898</b>

*Table 1: Demographic Profile of Pillaichavady*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 2 FRPs and 50 kattumarams were lost.

From 90 thatched houses 50 years ago, the village now has 250 houses of which 50 are concrete, as a result of the gradual migration in the recent past. Infrastructure in the village includes a middle school established 20 years ago. Students have to attend high school in Kalapet and higher studies in Pondicherry. 25 years ago an over head tank was constructed prior to which the village obtained drinking water from wells. The roads within the village were sandy paths 25 years ago and were concreted in 2006. A net mending hall was built in 1998. Medical facilities are available at the primary health centre in Kalapet and for medical emergencies people have to go to the Government hospital in Pondicherry. The village lacks sanitation facilities.

### Asset Ownership

43% of the households own or share ownership of fishing craft. 27% are single owners of craft while 57% do not own any (Figure 1).

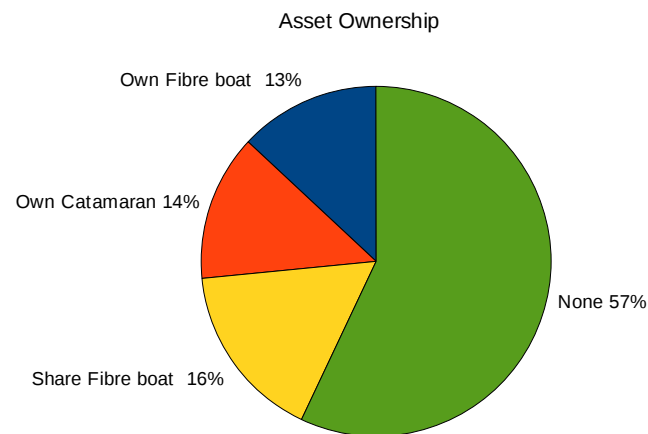


Figure 1: Asset ownership in Pillaichavady

### Occupational Profile

The vast majority of the village men (82%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

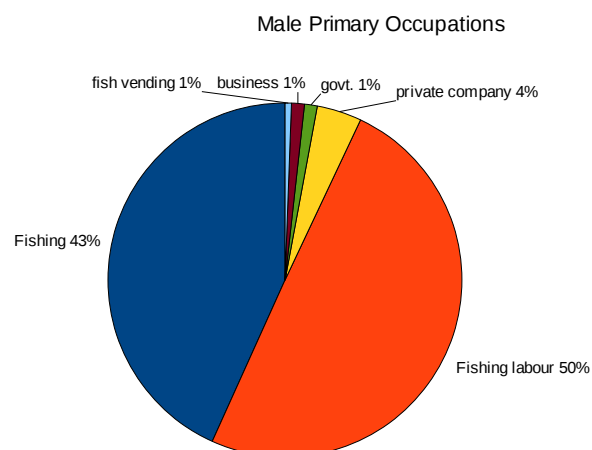
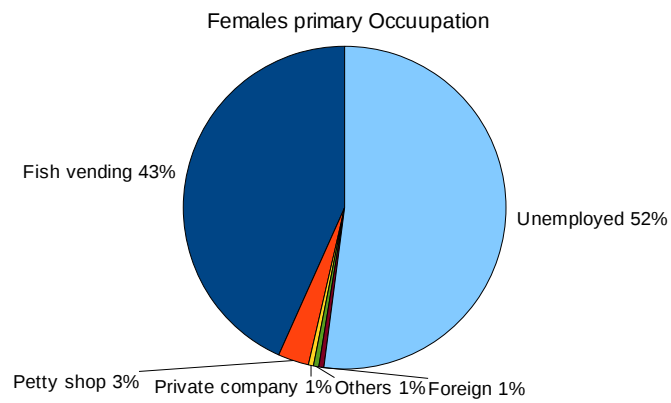


Figure 2: Primary Occupations of Men

43% of women are engaged in fish vending as their primary occupation while 52% are unemployed. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 2 major groups were identified from this village and are as follows:

1. FRP owners
2. Kattumaram owners
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. The MFRA should be enforced and implemented strictly.
2. Government should enforce the ban on ring seines.
3. Government should enforce the ban on inshore trawling or restrict trawling to depths greater than 30 fathoms
4. Construction of artificial sea wall in neighboring village should be stopped
5. Government should ensure that effluents are treated before being discharged into the sea

#### **Welfare schemes:**

1. Credit linkages can be made available through banks
2. Government should provide relief/compensation at the required time
3. Old age pension must be provided to all old people.

#### **Infrastructural requirements:**

1. Government fuel station can be opened at Chinna Kalapet
2. Government should construct a market building at Kalapet

#### **Facilitation required:**

1. Training required on operation of GPS units
2. Government should simplify the procedure for boat registration
3. Training required on welding, plumbing or electrician work with certification as secondary occupations
4. Government should provide more transport facilities exclusively for fish vendors.
5. Ice boxes can be provided by government or NGOs

*Pillaichavady*

6<sup>th</sup> August,08

**Stakeholder group: FRP boat owners**

**COGA Analysis**

Caste - Pattinavar

Origin - Heredity

Gender- Males

Age - 25 to 60 years

**Daily Activities Profile**

Time	4.00-4.30 am	4.30-6.00 am	6.00-7.30 am	7.30-8.00 am	8.00-8.30 am	8.30-9.00 am
Activity	Travel to depths of about 6-10 fathoms at sea	Cast their net and wait; idle while waiting	Haul nets from the sea	Return to the shore	Sort catch	Market their catch

**Annual Activities Profile**

They fish for nearly 9 months a year including the ban period. They are idle during the rough season.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Depleting fish resources;  Few labourers	Use of ring seines <sup>i</sup> ; Inshore trawling  Due to increase in the number of boats and ring seines <sup>ii</sup>	Need to travel long distances for fishing. <sup>iii</sup>  Boat owners take turns to participate as labourers on alternate days on the respective boats	Ban on ring seines to be enforced throughout the coast; Trawlers should be restricted to depths greater than 30 fathoms
<b>Technology</b>	No GPS	Cost is high <sup>iv</sup>	Spend more time and fuel <sup>v</sup>	Provide GPS units to small scale fishermen <sup>vi</sup>
<b>Infrastructure</b>	Diesel subsidy  Boat parking	No government fuel station near their village <sup>vii</sup>  Sea wall constructed in neighbouring	Purchase from private fuel stations  This problem occurs during the rough season	Can purchase on subsidy from these fuel stations <sup>viii</sup>

		village		
<b>Investment</b>	Working capital for unexpected maintenance of gear and craft <sup>ix</sup>		Dependent on money lenders charging high interest <sup>x</sup> ; Mortgage of jewellery <sup>xi</sup>	Banks can provide loans and allow flexibility in the repayment of instalments
<b>Markets</b>	Low prices for their catch	Ring seine catches are in bulk which drastically affects the prices	Forced to sell fish at low prices	Markets should be opened in or nearer to their village
<b>Capacity building</b>	Lack of operational knowledge of GPS units	Specific training has not been provided to all fishermen	Dependent on those fishermen who possess the knowledge	Proper training on operation of GPS units <sup>xii</sup>
<b>Social security</b>	No boat insurance; No personal insurance	Boats are unregistered Earnings insufficient to have savings and take policies	At their own risk; Medication obtained from Government hospitals, mortgage jewellery	Government should allow flexibility in the specified rules and regulations for boat insurance; Government should implement suitable policies for them
<b>Policy and Institutional support</b>	Free rations not available at the required time <sup>xiii</sup>		Borrow from money lenders	Can be provided at the beginning of the rough season

*Pillaichavady*

14<sup>th</sup> August, 08

### **Stakeholder group: Kattumaram Owners**

#### **COGA Analysis**

Caste -Pattinavar

Origin - Heredity

Gender- Male

Age -20 – 40 years

#### **Daily Activities Profile**

Time	11.00-11.30 am	11.30am-12.30 pm	12.30-1.00 pm	5.00-5.30 am	5.30-7.00 am	7.00-8.00 am
Activity	Travel to depths of 6 fathoms at sea	Set their nets	Return to shore <sup>xiv</sup>	Travel to where nets were set	Haul nets and return to shore	Sort catch and sell to either vendors or traders

#### **Annual Activities Profile**

They fish for 9 months a year and fish on occasions of calm weather during the rough season.

#### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Reduction in shore catches	Use of ring seine; Chemical discharges from factories <sup>xv</sup>	Earning according to the price of their catch	Ban on ring seines should be enforced. Effluents should be treated before discharge into sea
<b>Technology</b>				
<b>Infrastructure</b>				
<b>Investment</b>	Purchase of new nets/ repair of nets damaged by inshore trawlers <sup>xvi</sup>	No surplus income and also hikes in prices of raw materials	Borrow from their neighbours; money lenders <sup>xvii</sup>	Inshore trawling should be stopped; Government can provide subsidies for nets to small scale fishers
<b>Markets</b>	Low prices	Bulk catches by ring seine <sup>xviii</sup>	Sell at auctions	Regulated rate required to



				reduce/ prevent price fluctuations
<b>Capacity building</b>	Training in other technical jobs to seek employment in the nearby factories	Fishing does not seem viable	Continue fishing	Suitable training for jobs in welding, plumbing or as electricians with certification <sup>xix</sup>
<b>Social security</b>	No insurance	Kattumarams are unregistered and no surplus income	At their own risk	Make registration of kattumarams possible
<b>Policy and Institutional support</b>	Rough season	Free rations are not provided at the specified time	Borrow from money lenders	Should be provided at the required time

*Pillaichavady*

7<sup>th</sup> August, 08

### **Stakeholder group: Fish vendors**

#### **COGA Analysis**

Caste : Pattinavar

Origin :Neighbouring fishing villages<sup>xx</sup>

Gender:Females(Married)

Age : 30 to 60 years

#### **Daily Activities Profile**

Time	6.30 am	7.00-9.00 am	9.00-9.15 am	9.15-9.45 am	9.45-10.45a m	10.45-1.30p m	1.30-4.00 pm
Activities	Arrive at the shore	Purchase fish at auction and from fishermen	Reach bus stop on the ECR	Travel by bus/auto to Central bus stand	Travel to villages like Villianur, Coutroad and Moratandi	Sell fish streetwise	Return to central bus stand and then return to their village

#### **Annual Activities Profile**

They sell fish throughout the year(including the ban period) except during the rough season

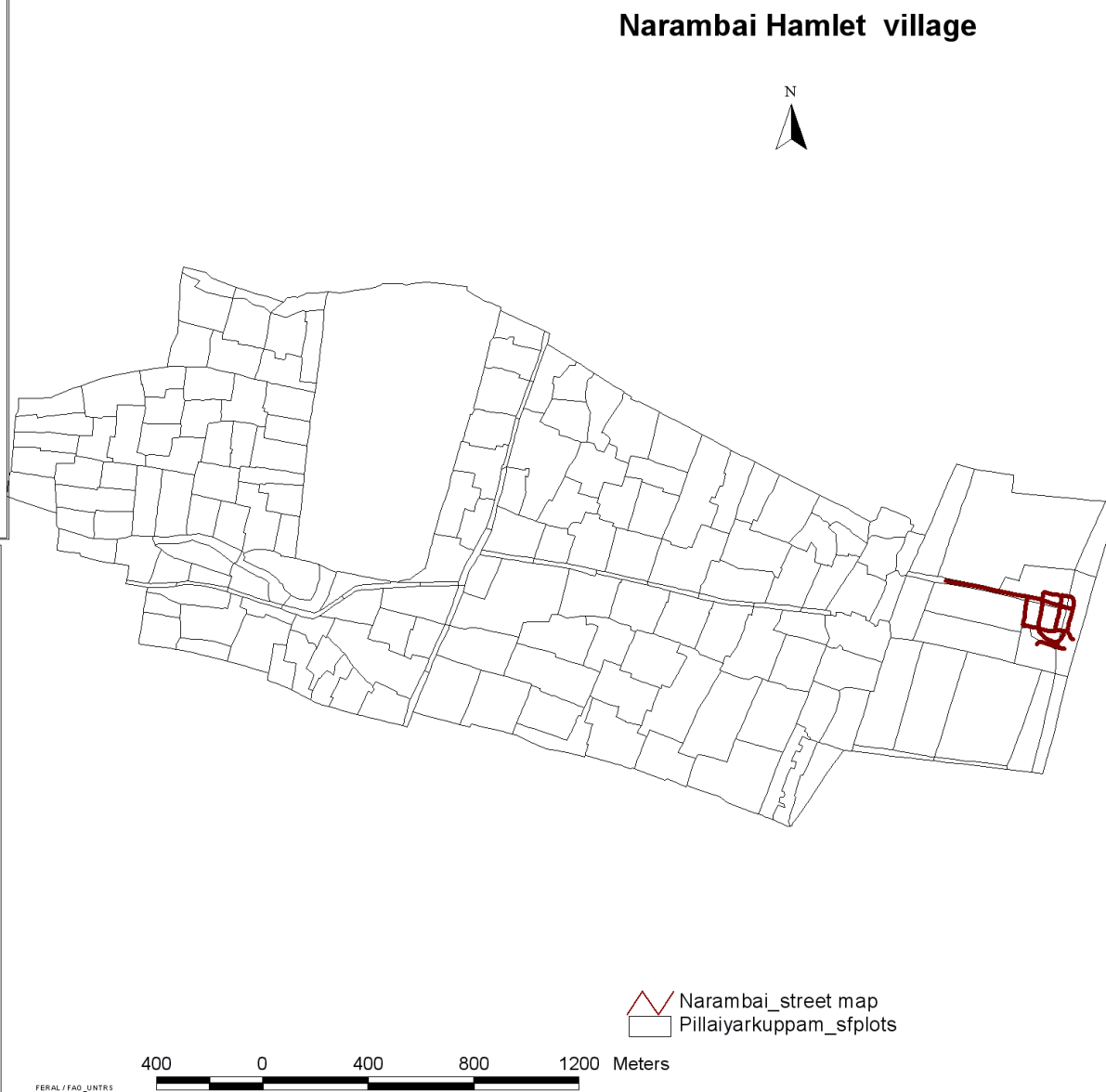
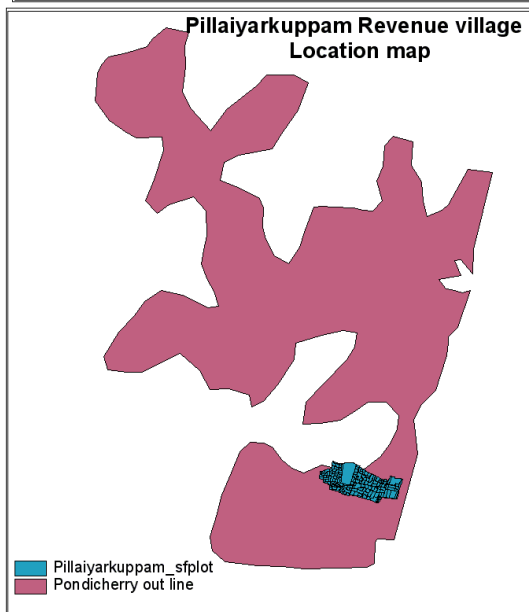
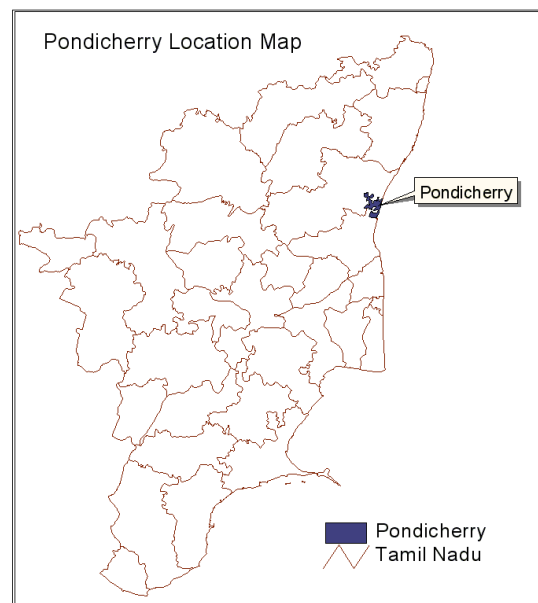
#### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
Natural resources (FISH)	Insufficient catch <sup>xxi</sup>	Use of ring seine and inshore trawling; Effluent discharges from the chemical factories		Ban on ring seines to be enforced; Government should enforce laws restricting trawlers to depths greater than 15 fathoms; Effluent should be treated before discharge into the sea
Technology				

## Pillaichavady

Infrastructure	Transport;  Available ice is insufficient	Buses are crowded; No ice factory close to the village	Hire share autos <sup>xxii</sup>  Buy ice packets from those who possess refrigerators within the village <sup>xxiii</sup>	Government should provide transport exclusively for fish vendor; Ice boxes can be provided <sup>xxiv</sup>
Investment	Working Capital <sup>xxv</sup>	Increasing prices due to trends in demand	Get loans from money lenders <sup>xxvi</sup>	Various credit linkages can be arranged through banks
Markets	Marketing at Central market	Market dominated by vendors from nearby fishing villages <sup>xxvii</sup>	Street vending in the outskirts of Pondicherry	Establish a separate market at Kalapet to reduce conflicts and competition
Capacity building				
Social security	Unable to do marketing	Sickness, rough season	Borrow money from neighbours and money lenders	Awareness about SHGs and microcredit finance activities can be carried out by NGOs or the Government
Policy & Institutional Support	During lean period	Free rations unavailable at specified time	Borrow from money lenders and mortgage jewellery	Render support at the specified time

- i 4 ring seines operated in this village.
- ii Five years ago, there were only 32 boats, now there are 70 FRP boats in this village; Ring seine operations are also a cause for shortage in labour
- iii Travel distance has increased from 15 km to 25km at present
- iv They feel that the cost of a single GPS unit is Rs.10,000-12,000
- v Fuel expenses have increased from Rs.150 per day to Rs.300 per day at present
- vi Good quality GPS is available at Rs.5000
- vii Diesel subsidy card is not provided yet; Government fuel station is at Thengathittu
- viii Government fuel station can be opened at Chinna kalapet; Government can also tie up with private bunks and provide the diesel subsidy
- ix They require about Rs.65,000 per year as working capital
- x For a loan of Rs.1000, Rs.240 is deducted as interest and the loan should be repaid within 100 days. Loans upto Rs.10,000 can be provided
- xi 50% of the FRP boat owners mortgage their jewellery in the bank at an interest rate of 18% per annum. Some mortgage their jewellery with Pawn brokers at an interest rate of 3% per month
- xii 200 people require training on operation of GPS units.
- xiii No relief has been received in the last 3 years; Relief consists of clothing material, towel and 5 kg rice per ration card
- xiv Carry out their usual day to day activities
- xv Shasun factory has been discharging the effluents into the sea for more than two decades
- xvi Rs.10,000 required per year for purchase of nets.
- xvii 10% interest for loans upto Rs.2000; if loan amount is Rs.1,00,000, the interest rate is 3% per month.
- xviii Ring seine catches are not damaged while sorting
- xix Training in welding was provided to 20 people which was in vain as they are not interested in pursuing this as a secondary occupation
- xx Devanampatinam, Kalapet, Marakanam, Cuddalore and Chidambaram
- xxi Before the tsunami they used to buy 3- 4 vessels of fish and now they buy 2 vessels of fish
- xxii Auto fare is Rs.30
- xxiii Rs.10 for 1.5kg
- xxiv About 100 women are doing fish vending
- xxv Those who sell fish streetwise door to door require Rs.500/per day and women who sell in the market require about Rs.2000-5000
- xxvi 10% interest and repayment on a daily basis
- xxvii Vaithikuppam, Keerapalayam, Kurusukuppam



## Narambai

### Introduction

This village is located 16 kms south east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 282 households with an average family size of 3.82 persons. The demographic profile of the village is provided in Table1

<b>Population of the village</b>	<b>Total</b>
Male over 35	135
Female over 35	191
Adult male	242
Adult female	199
Children male	130
Children female	100
Infant male	43
Infant female	37
total	1077

*Table 1: Demographic profile of Narambai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which only assets were damaged and no lives were lost. The village had an active traditional Panchayat and Fish Co-operative society but since the tsunami the former has become dysfunctional due to administration problems while the latter remains active.

From 300 thatched houses 50 years ago the village now has only 50 thatched houses while 300 are concrete. Infrastructure in the village includes one primary school established 35 years ago. An overhead tank was set up by the Government in the same time and is the main source of water for the village. Roads in the village were metaled 30 years ago which were concreted in 2005. Buses were introduced in 2002 which are still active on a fixed schedule. Medical facilities are available at Kirumambakkam and Pondicherry.

Asset Ownership

All of the households own or share ownership of fishing craft. 48% are single owners of craft (Figure 1).

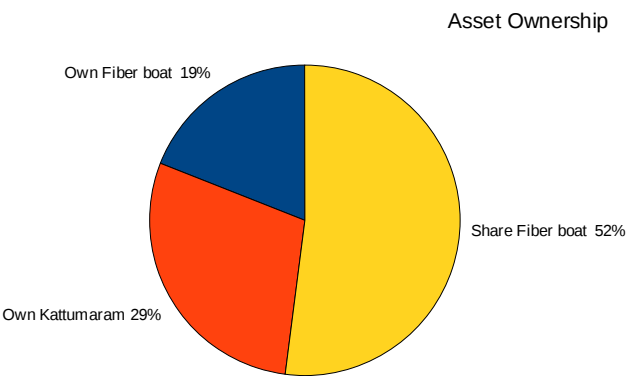


Figure 1: Asset Ownership in Narambai

Occupational profile

The vast majority of the village men (87%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

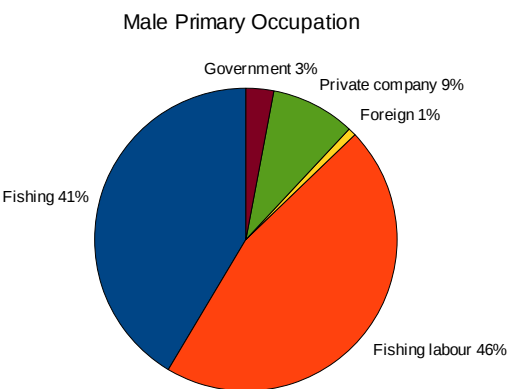
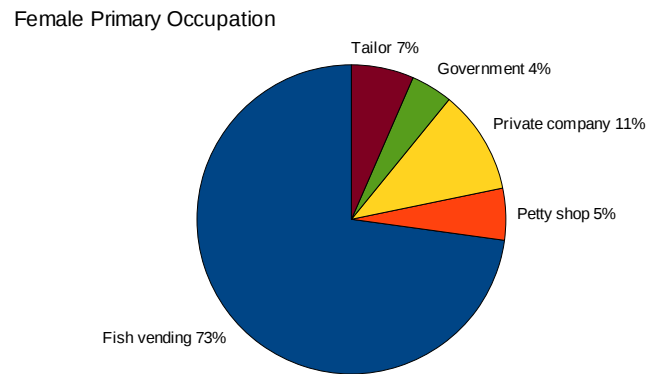


Figure 2: Primary Occupations of Men

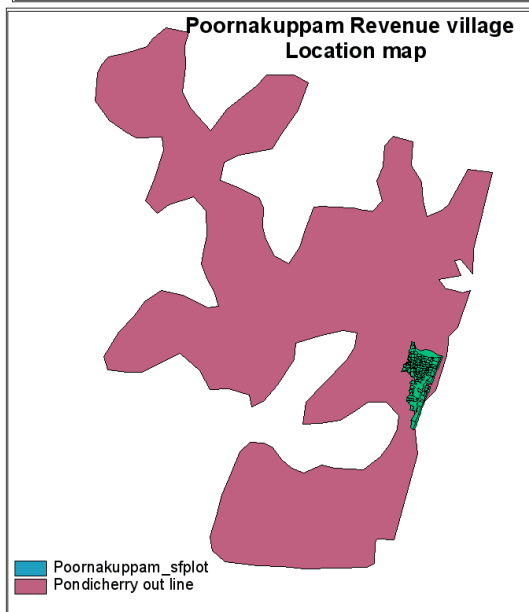
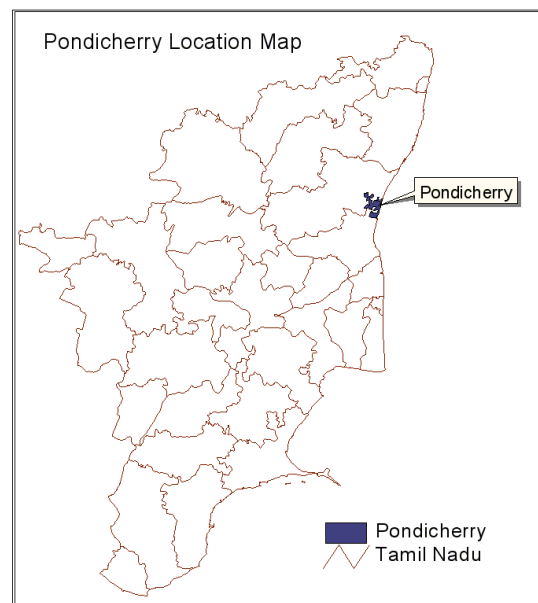
## *Narambai*

73% of women are engaged in fish vending as their primary occupation. 27% are involved in other occupations such as tailoring, work in private companies, government and petty shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



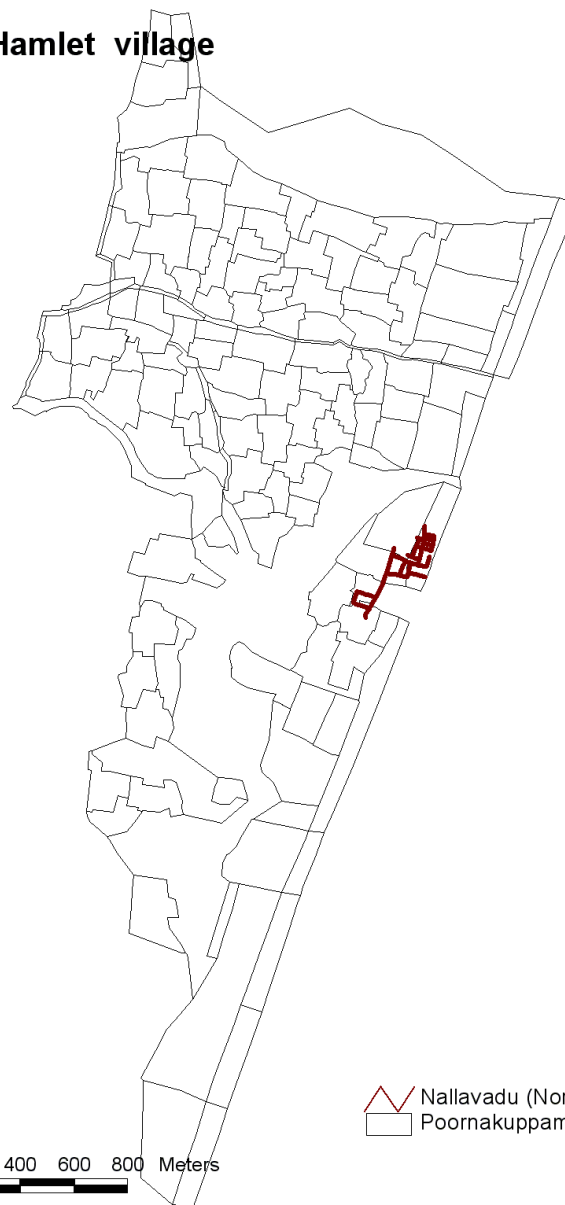


## Nallavadu (North) Hamlet village



200 0 200 400 600 800 Meters

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## Nallavadu North

### Introduction

This village is located 15 kms to the south east of Pondicherry. It is divided by Tamil Nadu into north and south Nallavadu of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 169 households with an average family size of 3.57 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	103
Female over 35	143
Adult male	79
Adult female	76
Children male	116
Children female	66
Infant male	11
Infant female	13
total	607

*Table 1: Demographic profile of North Nallavadu*

The origin of the village could not be identified during the historical mapping session though it is believed that people from Nallavadu migrated into Nallavadu (north).The village is divided into the North and South Nallavadu by Tamil Nadu which is referred to as Nallavadu Tamil Nadu. The major shock the community felt was the 2004 tsunami during which no lives were lost.

From 600 thatched houses 40 years ago the village now has 800 houses of which 300 are concrete. Infrastructure in the village includes a primary school which was established 20 years ago which is now a middle school. The roads in the villages were sandy paths earlier and were metaled in the last 20 years. An overhead tank set up ten years back is the present source of drinking water. Hand pumps were used to obtain drinking water. Later, a net mending hall, drying hall and a public toilet were constructed. Medical facilities are available in Nallavadu till date. The Panchayat though elected are inactive.

Asset Ownership

All of the households own or share ownership of fishing craft. 11% are single owners of craft (Figure 1).

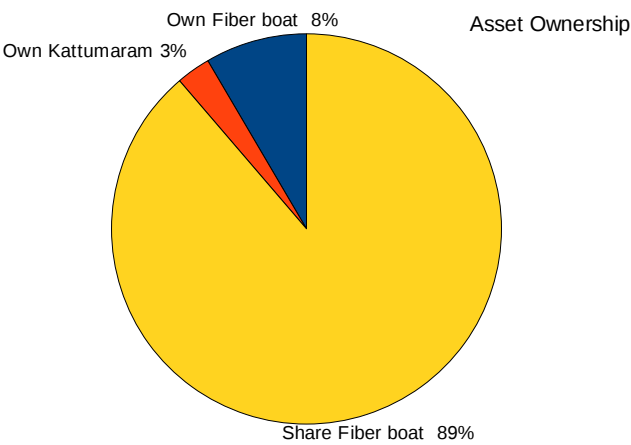


Figure 1: Asset Ownership in North Nallavadu

Occupational profile

The vast majority of the village men (76%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

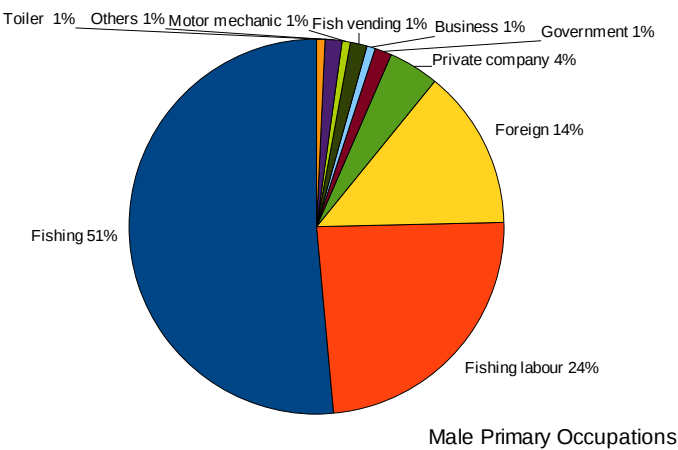
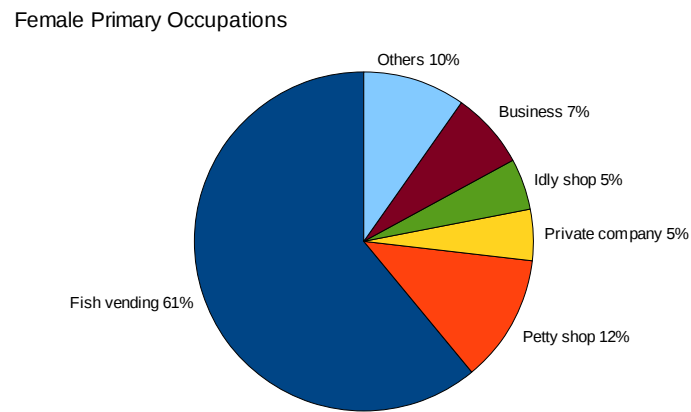


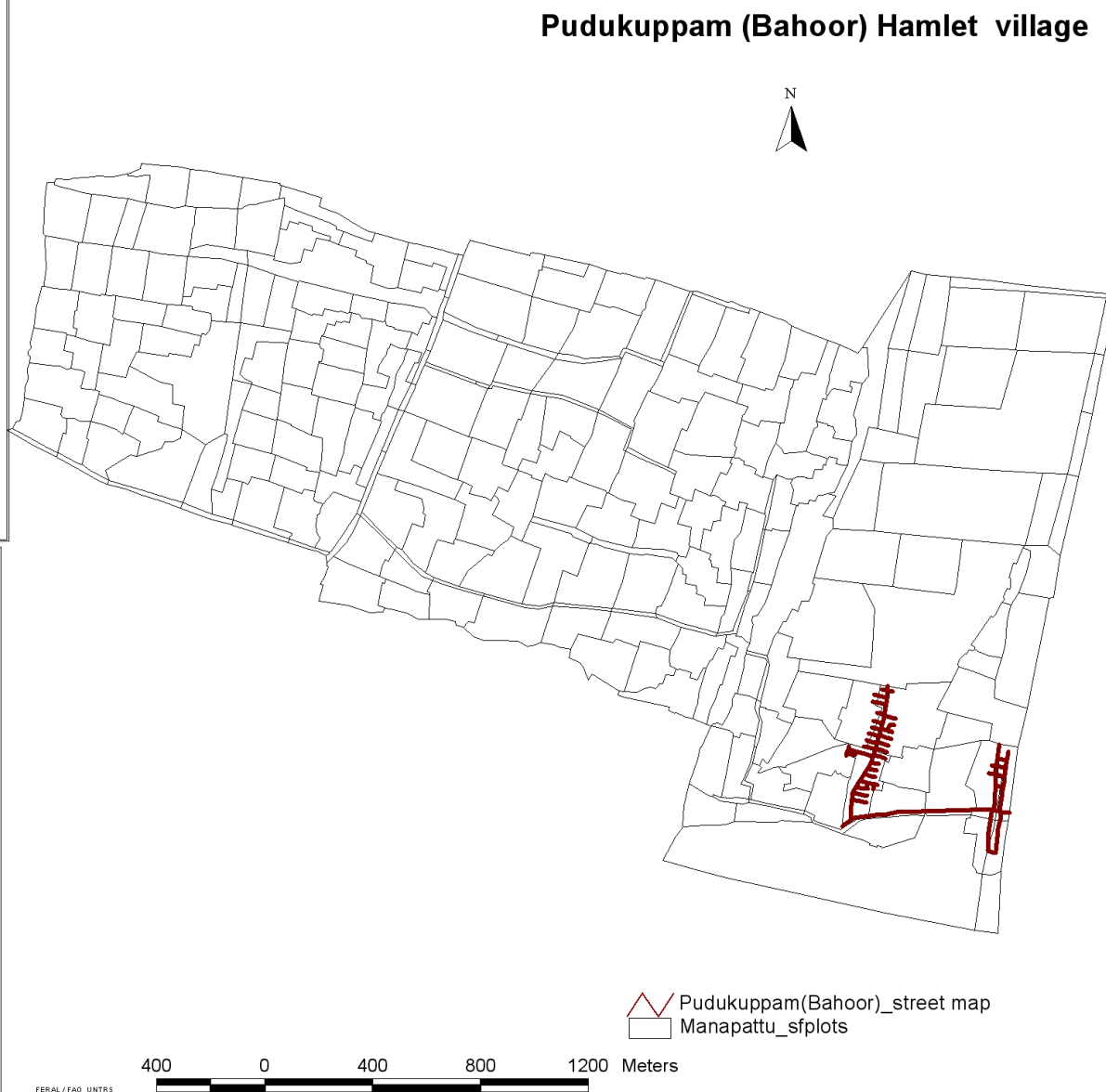
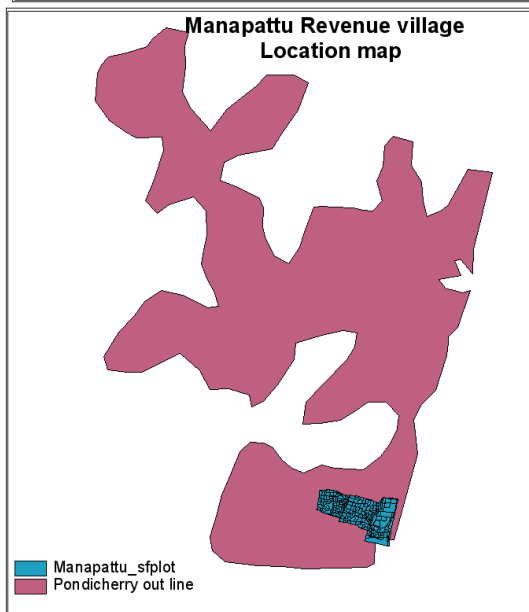
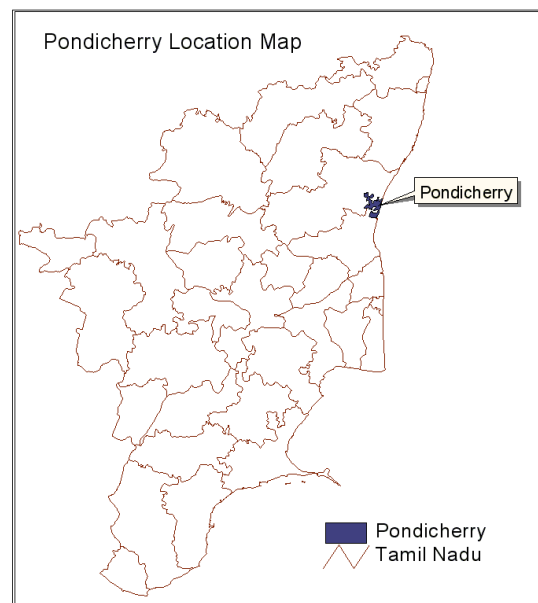
Figure 2: Primary Occupations of Men

### *Nallavadu North*

61% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies, petty shops, idly shops, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Pudukuppam Bahoor**

### **Introduction**

This village is located 18 kms south east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 237 households with an average family size of 4.25 persons. The demographic profile of the village is provided in Table1

<b>Population of the village</b>	<b>Total</b>
Male over 35	140
Female over 35	167
Adult male	189
Adult female	166
Children male	159
Children female	119
Infant male	36
Infant female	32
total	1008

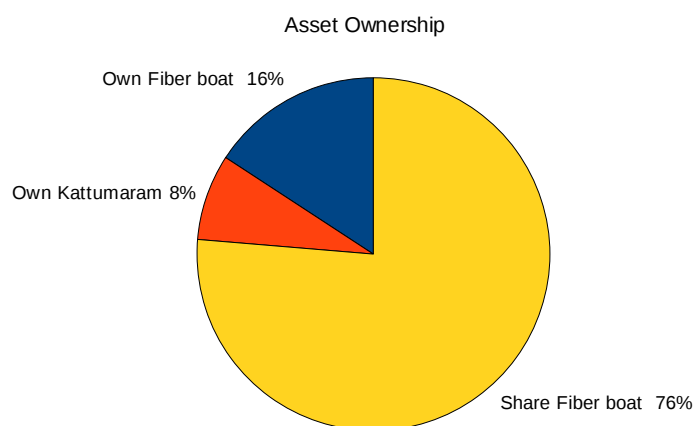
*Table 1: Demographic profile of Pudukuppam Bahoor*

The origin of the village could not be identified during the historical mapping sessions. The village was earlier called Moorthykuppam which was later changed to Pudhukuppam 30 years ago. The major shock the community felt was the 2004 tsunami during which the village assets were damaged considerably. No lives were lost. The village had an active traditional Panchayat and Fish Co-operative society but since the tsunami the former has become dysfunctional due to administration problems while the latter remains active

From 150 thatched houses 50 years ago, the village now has 350 houses of which almost all are concrete. Infrastructure in the village includes a primary school established 50 years ago by the Government. Electricity supply to this village began 30 years ago. The villages Moorthykuppam, Vanankullam and Kannikovil supplied water for the past 20 years till date. Roads within the village connecting the hamlet were metaled 35 years ago and buses were available 15 years later. The roads were concreted in 2006. Medical facilities are available at Kirumambakkam and Pondicherry.

### **Asset Ownership**

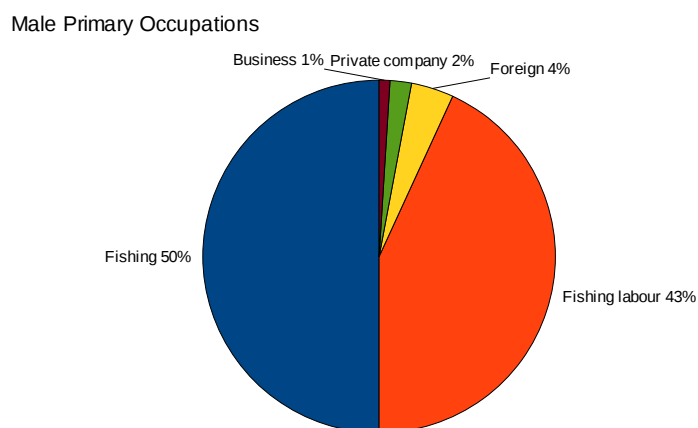
All of the households own or share ownership of fishing craft. 24% are single owners of craft (Figure 1).



*Figure 1: Asset Ownership in Pudukuppam Bahoar*

### **Occupational profile**

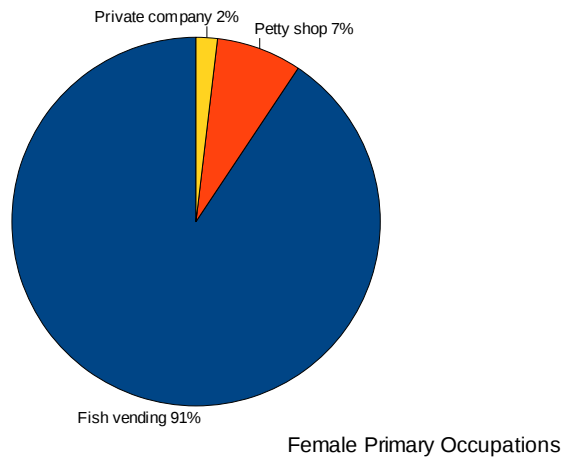
The vast majority of the village men (93%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

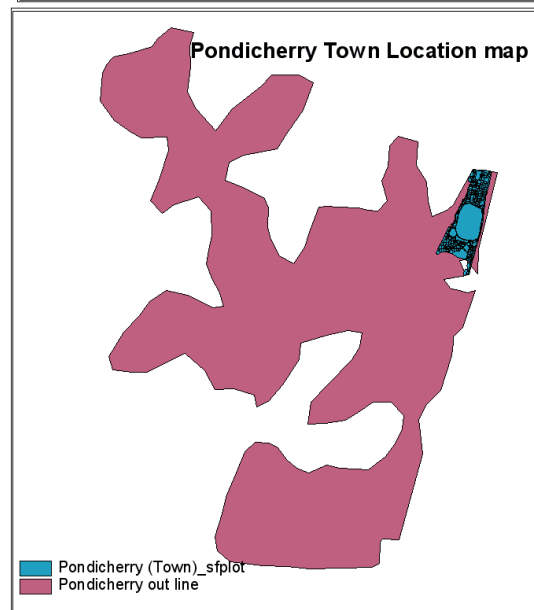
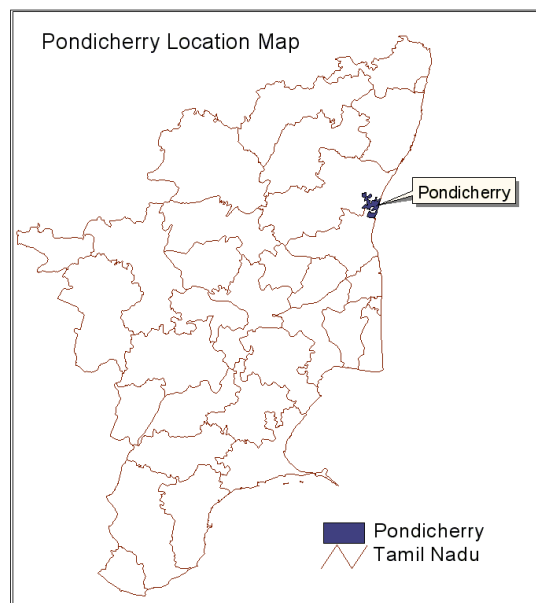
### *Pudukuppam Bahoor*

91% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies and petty shops. This is presented in Figure 3.

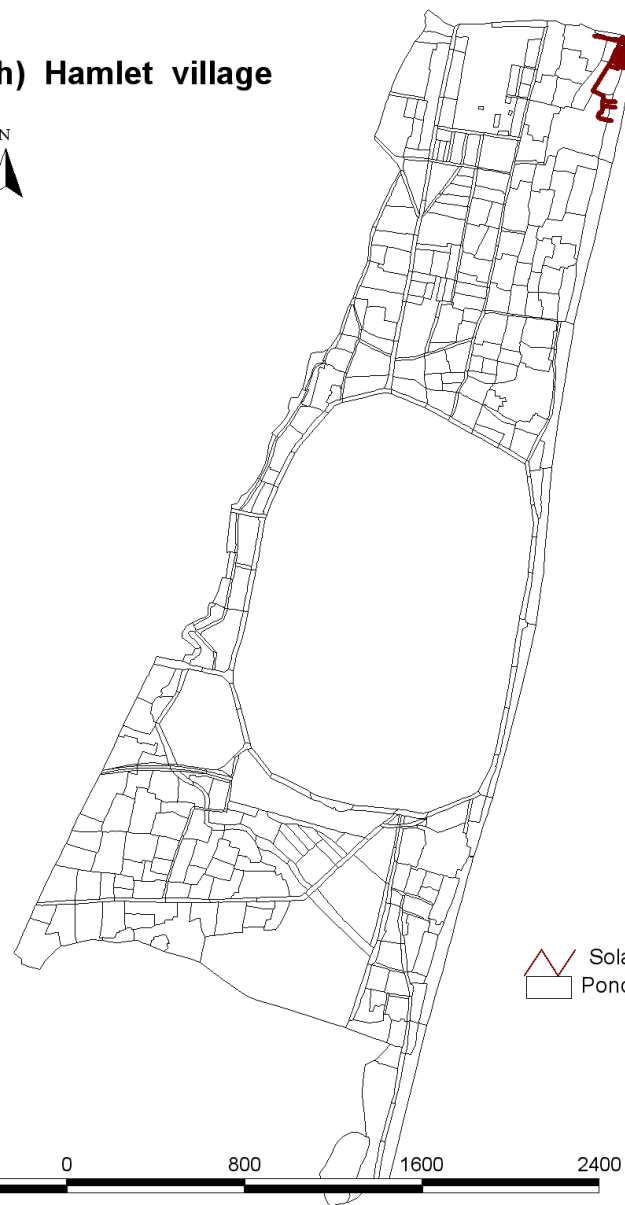


*Figure 3: Primary Occupations of Women*





## Solainagar (North) Hamlet village



800 0 800 1600 2400 Meters

FERAL / FAO\_UNTRS

## **Solai Nagar North**

### **Introduction**

This village is located 2 kms away from Muthiyalpet and lies in the State of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 187 households with an average family size of 4.54 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	116
Female over 35	129
Adult male	191
Adult female	163
Children male	78
Children female	86
Infant male	44
Infant female	42
total	849

*Table 1: Demographic Profile of Solai Nagar North*

The origin of the village could not be identified during the historical mapping sessions. The major shocks the community felt was the 2004 tsunami during which 20 kattumarams and 10 FRPs were damaged. No lives were lost.

From 150 thatched houses 50 years ago, the village now has 500 houses of which most are concrete.

Infrastructure in the village includes a primary school established long ago which is active till date. Roads in the village were sandy paths 25 years ago and were concreted by the Government in 2003. These were later concreted in 2005. Medical facilities are available at a primary health center in Thepesanpet which is 1.5 km away from the village. The village has a water tank preventing situations of water shortage. A water purifier unit was set up by the Government in 2005 which is not functional at present.

Asset Ownership

All the households own or share ownership of fishing craft. 57% are single owners of craft. This is presented in Figure 1.

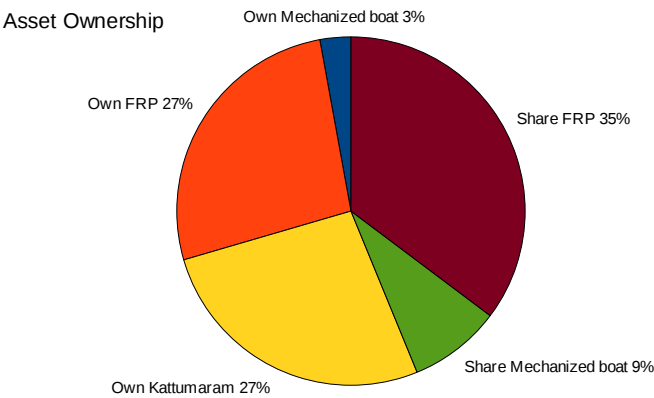
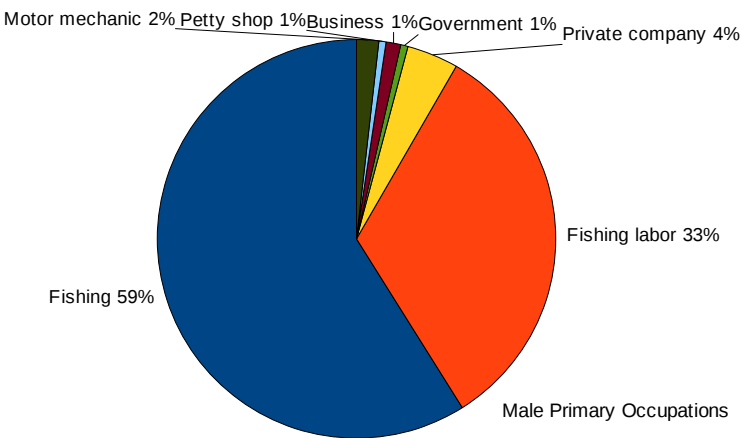


Figure 1: Asset Ownership in Solai Nagar North

Occupational Profile

The vast majority of the village men (92%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

Figure 2: Primary Occupations of Men

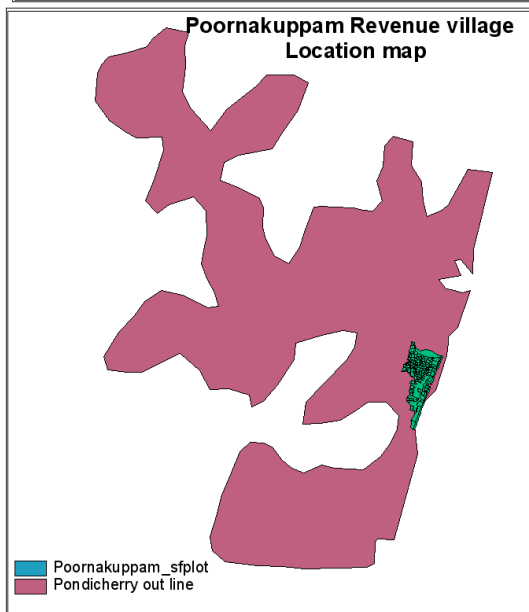
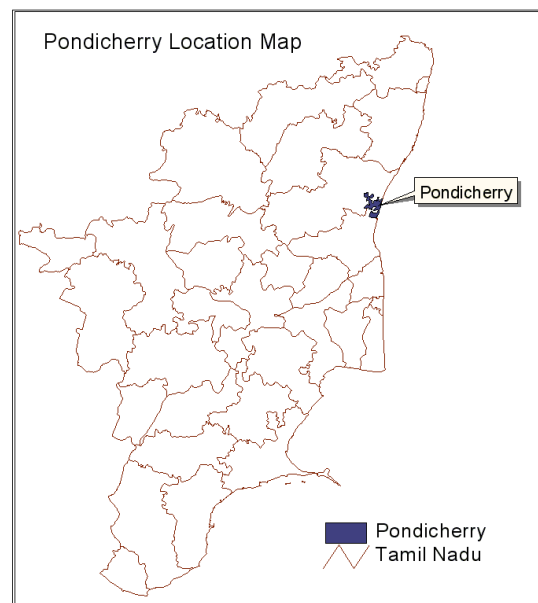


### *Solai Nagar North*

98% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.

*Figure 3: Primary Occupations of Women*



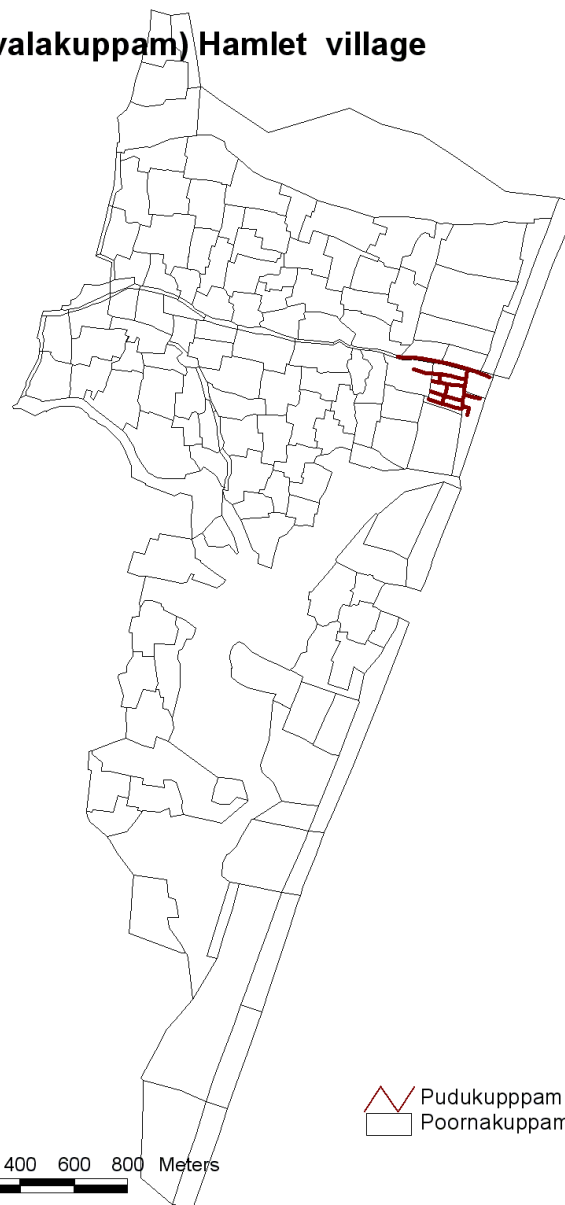


## Pudukuppam (Thavalakuppam) Hamlet village



200 0 200 400 600 800 Meters

FERAL / FAO\_UNTRS



## **Pudukuppam Thavalakuppam**

### **Introduction**

This village is located 12 kms south east of Pondicherry. The fishing hamlet is comprised of the Pattinavar caste group and has 195 households with an average family size of 4.31 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	147
Female over 35	167
Adult male	183
Adult female	139
Children male	120
Children female	66
Infant male	11
Infant female	8
total	841

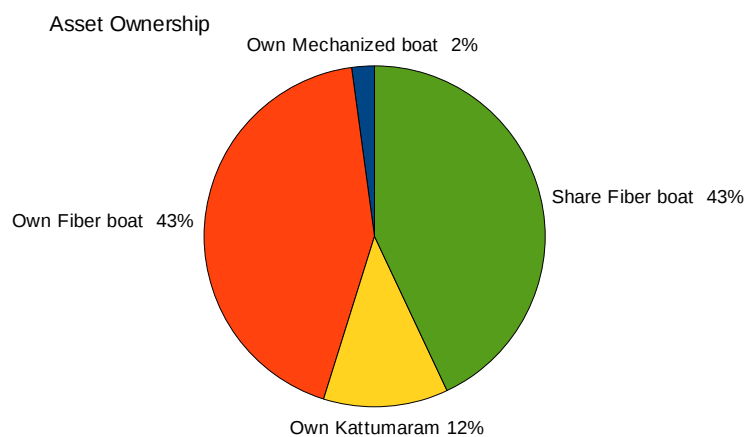
*Table 1: Demographic profile of Pudukuppam Thavalakuppam*

The village was earlier called Pudhupettai but was recorded as Pudhukuppam by the Government and so came to be known as Pudhukuppam (Thavalakuppam). The origin of the village could not be identified during the historical mapping sessions. The major shocks the community felt was the 2004 tsunami during which 120 kattumarams and 3 houses were damaged. No lives were lost.

The old traditional panchayat was active for the past 30 years but has been dysfunctional since the tsunami due to administration problems. From 45 thatched houses 50 years, the village now has 230 houses of which most are concrete. Infrastructure in the village includes a primary school established 50 years ago by the Government which is active till date. Electricity supply began 10 years later. Roads connecting the hamlet were metaled around the same time and were concreted in 2006. An overhead tank was established by the Government in 2004 prior to which water could be drawn using hand pumps. Medical facilities are available at Thavalakuppam and Pondicherry.

### **Asset Ownership**

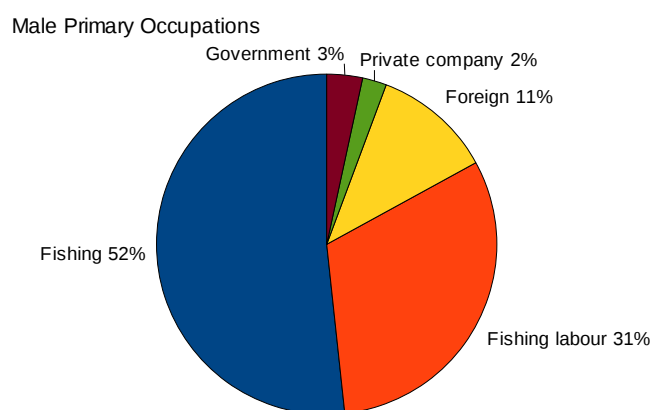
All of the households own or share ownership of fishing craft. 57% are single owners of craft. This is presented in Figure 1.



*Figure 1: Asset Ownership in Thavalakuppam*

### **Occupational profile**

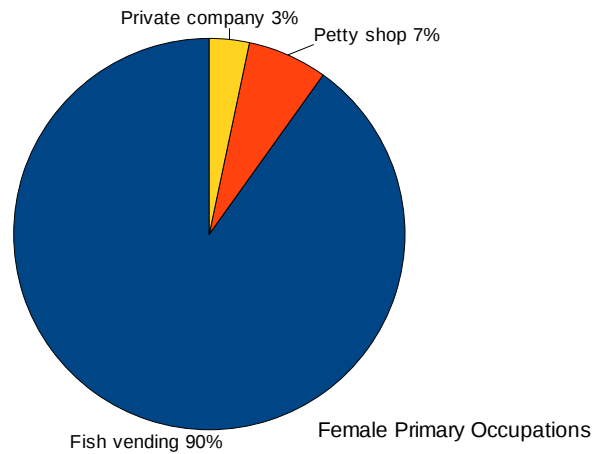
The vast majority of the village men (83%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

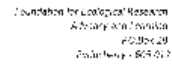
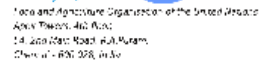
### *Pudukuppam Thavalakuppam*

90% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies or petty shops. This is presented in Figure 3.

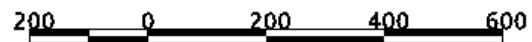


*Figure 3: Primary Occupations of Women*

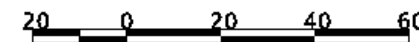
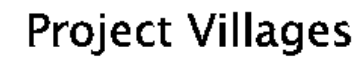




## Cuddalore



Kilometers



Kilometers

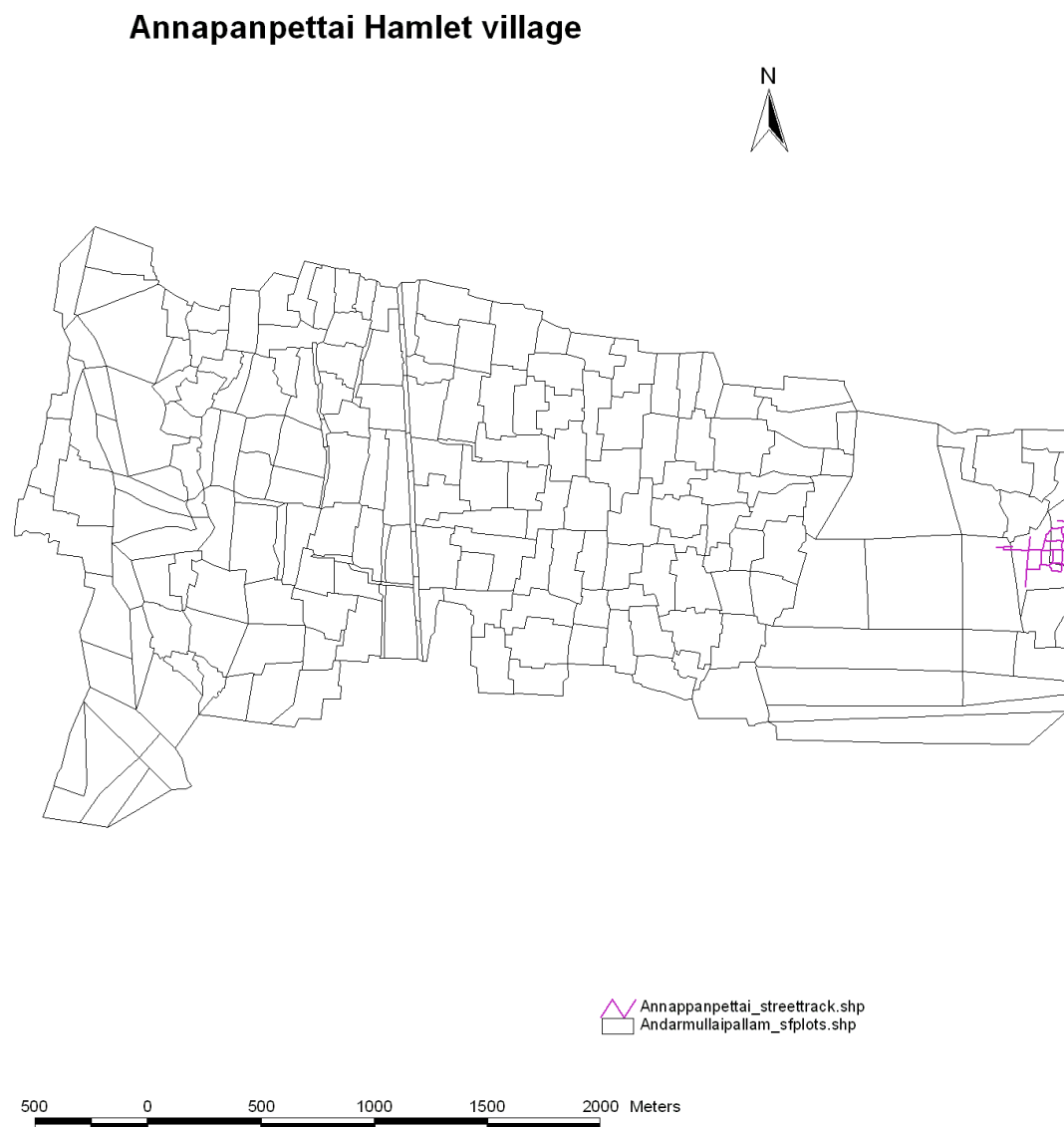
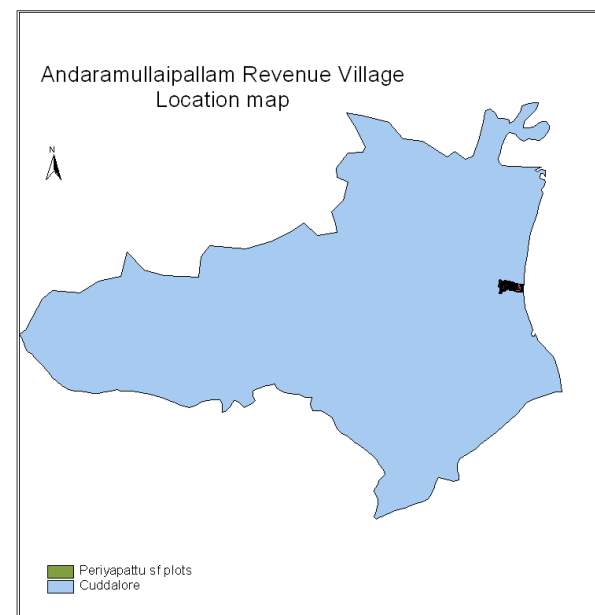
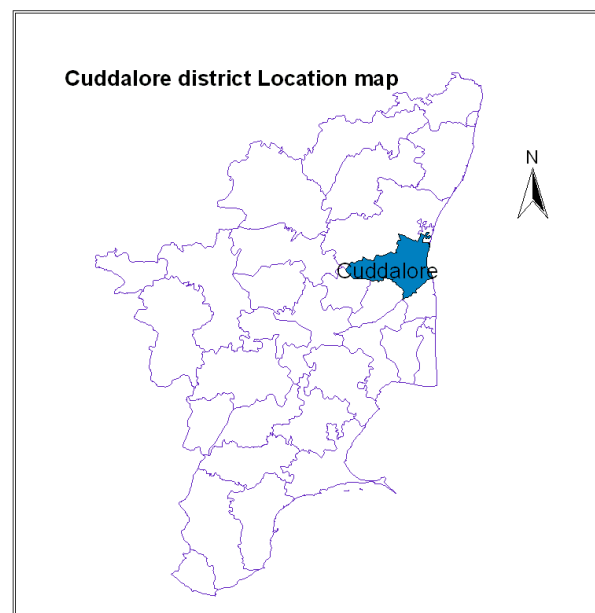
## Cluster 3: Cuddalore

This district lies to the south of Pondicherry and comprises of a sandy beach ecosystem as well as a backwater or estuarine ecosystem. It has a total of 50 hamlets of which 32 were surveyed. The historical mapping was done for all these villages and the microplanning exercise was conducted in nine villages.

### ***Annual Activity Profile***

This represents the fishing calendar or fishing months in a year and applies to most fishing villages of the region. An exception to this is mentioned along with the respective village.

English months	Tamil months	Activity
January	Thai	Fishing
February	Maasi	Fishing
March	Panguni	Fishing
April	Chiththirai	Fish for 15 days /Ban period
May	Vaikasi	Ban period
June	Aani	Fishing
July	Aadi	Fishing
August	Aavani	Fishing
September	Purattasi	Rough season
October	Aippasi	Rough season
November	Karthikai	Rough season
December	Markazhi	Fishing



## Annapanpettai

### Introduction

This village is located 21 kms to the south east of Cuddalore and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 140 households with an average family size of 4.4 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	92
Female over 35	108
Adult male below 35	163
Adult female below 35	104
Children male	71
Children female	43
Infant male	18
Infant female	17
total	616

*Table 1: Demographic profile of Annapanpettai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt were a cyclone 70 years ago during which the people moved out of the village for 3 days, and the 2004 tsunami during which 2 lives were lost. Approximately 100 kattumarams and 12 houses were damaged.

From 137 thatched houses 50 years ago, the village now have 190 houses of which most are concrete. Infrastructure in the village includes a community hall and a net mending hall. A primary school was established in 1980 which is now closed due to poor attendance. Children had to attend high school at Periyapettu earlier but are now educated at Cuddalore. Roads in the village were sandy paths which were metaled 20 years ago. After the tsunami they were concreted. Bus transportation was made available 15 years ago. Before this the fisherfolk had to walk to Puduchathiram to catch the train. The Government constructed an overhead tank after the tsunami prior to which water was obtained from wells and by using hand pumps. Medical facilities are available at Cuddalore and Parangipettai.

### Asset Ownership

33% of the households own or share ownership of fishing craft. 30% are single owners of craft while 67% do not own any ( Figure 1)

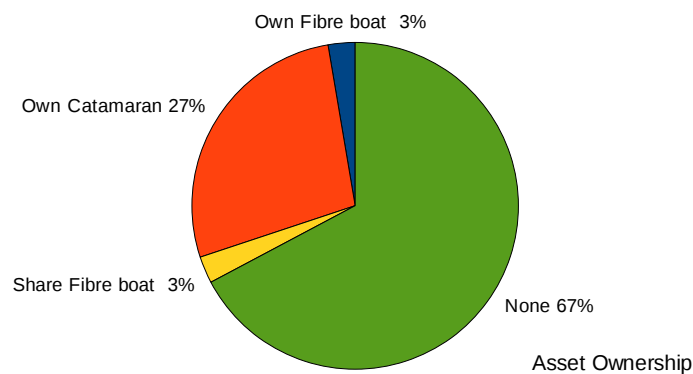


Figure 1: Fishing craft ownership in Annapanpettai

### Occupational Profile

The vast majority of the village men (84%) are engaged in fishing or allied activities while 10% of the men are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

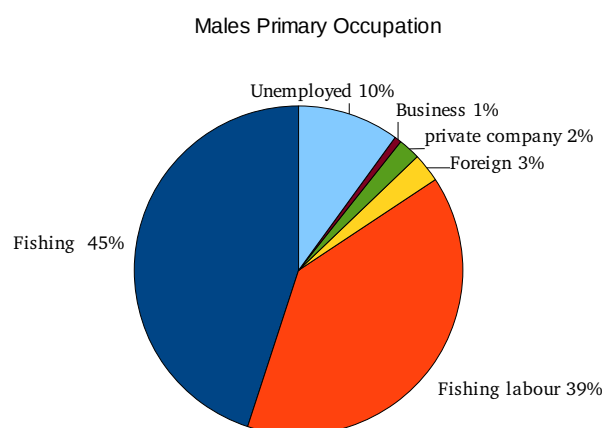
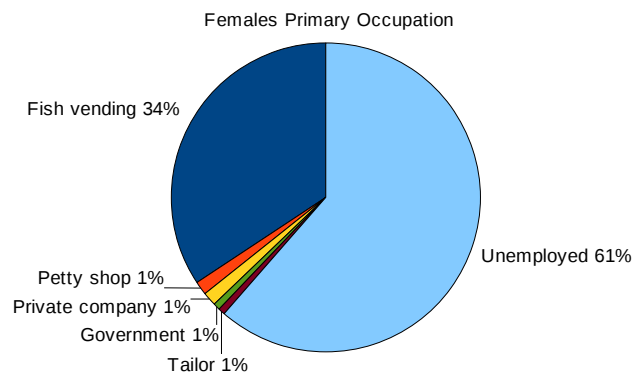


Figure 2: Primary Occupation of Men

34% of women are engaged in fish vending as their primary occupation while 61% of the population are unemployed. 4% are involved in other occupations such as tailoring, work in government and private companies. This is represented in Figure 3.



*Figure 3: Primary Occupation of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. Trawler crew
2. Kattumaram owners
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. The MFRA should be strictly enforced, inshore trawling should be banned.

**Welfare schemes:**

1. Credit linkages can be provided for their working capital as well as in times of emergency.
2. Compensation at the time of accidents/death should be increased.
3. Old age pension must be provided to all old people.

**Infrastructural requirements:**

1. Frequent buses should be provided
2. Market can be constructed at Allampakkam<sup>i</sup>

**Facilitation required:**

1. Training required on driving/navigating mechanized boats.
2. Registration of kattumarams should be facilitated and made compulsory.

3<sup>rd</sup> June 08

**Stake holder group: Trawler crew**

**COGA Analysis**

Caste - Parvatharajakulam

Origin - Heredity

Gender- Male

Age - 30 to 50 years

**Daily activity profile:**

Table 2 represents one trawling cycle (in a day) which is continued for 5 days at a stretch. Crew rest in turns during the 4/5 hours of trawling while the driver of the boat is changed every four hours. The total crew consists of 6 people including the driver.

Time schedule	6.00 -9.00 am	9.00 am – 9.30/10 am <sup>ii</sup>	10.00 am - 2/3.00pm	3.00- 4.00 pm	4.00-5.00 pm	5.00-6.00 pm
Activities	Start from jetty; Travel to depths of 10 fathoms(mostly in other districts)	Set trawl net (izhouvalai) into sea.	Trawling time	Hauling net	Sort out caught fishes.	Reset nets in the sea for next cycle.

*Table 2: Activity profile for a single trawling operation*

**Annual activity profile:**

They fish for approximately 7 and a half months in a year. They do not go fishing during the rough season and the 45 day ban.

**LED Framework Analysis**

Component	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural Resource</b>	Fish depletion <sup>iii</sup>	Use of ring seine; Overfishing	Trawling a day more <sup>iv</sup>	Government should enforce the ban on ring seine
<b>Technology<sup>v</sup></b>				
<b>Infra structure</b>	Transport	Infrequent buses <sup>vi</sup>	Hire autos	
<b>Investment</b>				
<b>Capacity building</b>	Driving of mechanized boats	Lack the knowledge and skill	Dependent on the reliever driver	Training can be provided
<b>Marketing<sup>vii</sup></b>				
<b>Social security</b>	Medical or social	Lack of financial	Borrow it from	Credit linkages



### *Annapanpettai*

	emergencies	support	employer or money lender <sup>viii</sup>	should be facilitated by the government
<b>Institutional support and Policy</b>	No insurance; Insufficient compensation amount	Fatal accidents or death	Government provides Rs. 50,000 in case of death during an operation	Compensation amount can be increased <sup>ix</sup>

## Stakeholder group: Kattumaram owners

### COGA Analysis

Caste - Parvatharajakulam

Origin - Heredity

Gender- Male

Age -50 to 65

### Daily activity profile

Time schedule	11.00-11.30 am	11.30am-12.30 pm	12.30-1.00 pm	4.00-4.30 am	4.30-5.30am	5.30-6.00 am	6.00-7.00 am
Activities	Travel to depths of 6 fathoms	Cast and set nets in the sea	Return home	Travel back to where nets were set	Haul nets	Return to shore	Sort catch

### Annual activity profile

They go fishing 9 months in a year. The remaining three months represent the rough season.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish species <sup>x</sup>	Use of ring seines	Living within their means	Government should enforce the ban on ring seine <sup>xi</sup>
<b>Technology &amp; Capacity building<sup>xii</sup></b>				
<b>Infrastructure</b>				
<b>Investment</b>	Insufficient working capital to replace nets damaged by inshore trawling <sup>xiii</sup>	Lack of financial support	Borrow money from neighbours in order to mend their nets	Inshore trawling should be stopped; Credit linkages can be provided for their working capital
<b>Markets</b>	Low prices <sup>xiv</sup>	Bulk landings from ring seines and trawlers	Get maximum prices by sale through auction <sup>xv</sup>	Standardize the rates for fish

## *Annapanpettai*

<b>Capacity building</b>				
<b>Social security</b>	No insurance for their craft	Not <sup>xvi</sup> registered	At their own risk	Registration of kattumarams should be facilitated
<b>Policy and Institutional support</b>	Old age pension is not provided to all the people in the village <sup>xvii</sup>	Their names in the ration card differ from that given in the co-operative society which is a result of illiteracy.	Depending on their legal heirs.	Government should allow flexibility in formal procedures

## Stakeholder group: Fish vendors

### COGA Analysis:

Caste - Parvatharajakulam

Origin - Nearby fishing villages

Gender- Females

Age - 24 to 55 years

### Daily activities profile:

Time	6.00-6.45 am	7.00 am	7.00-8.00 am	9.00 am-12.30 pm	1.00-3.30pm
Activity	Arrive at sea shore; buy fish from kattumaram owners	Arrive at the local bus stand	Travel time to targeted village or Cuddalore Old Town market	They sell fish street wise	Return to village by bus

### Annual Activities profile:

The months of Puratasi, Iyypasi, Karthigai, and Margazhi represent the rough season as well as the period when they do not go fish vending.

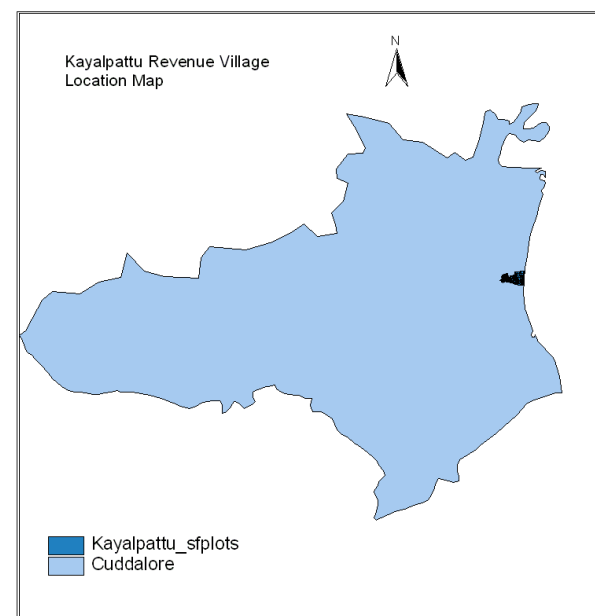
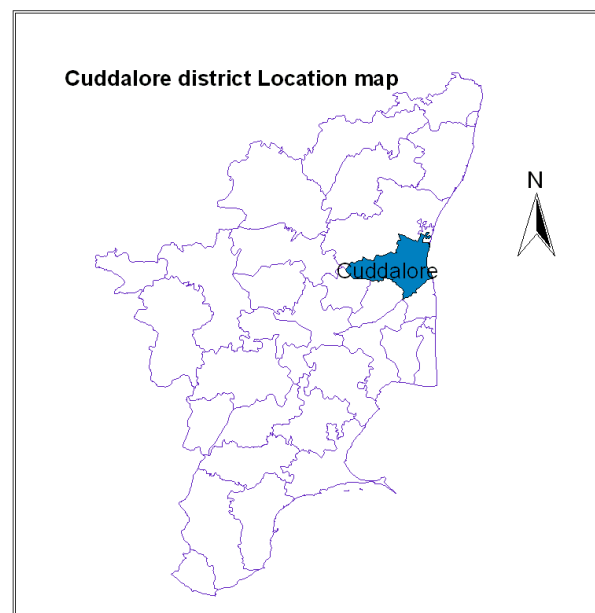
### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decline in fish resources <sup>xviii</sup>	Use of ring seines	Living within their means	Government should enforce the ban on ring seine
<b>Technology</b>				
<b>Infra structure</b>	Arriving at market late <sup>xix</sup>	Infrequent buses; inadequate transportation	Sell and dry fish	More buses can be provided
<b>Investment<sup>xx</sup></b>				
<b>Markets</b>	Arriving at market late	Infrequent buses; inadequate transportation	Distress sale	Establish a market at Allampakkam
<b>Capacity building</b>				
<b>Social security</b>	No insurance	Insufficient earnings to take any scheme	At their own risk	
<b>Policy and</b>	Old age pension is	Only	Take up dry fish	Old age

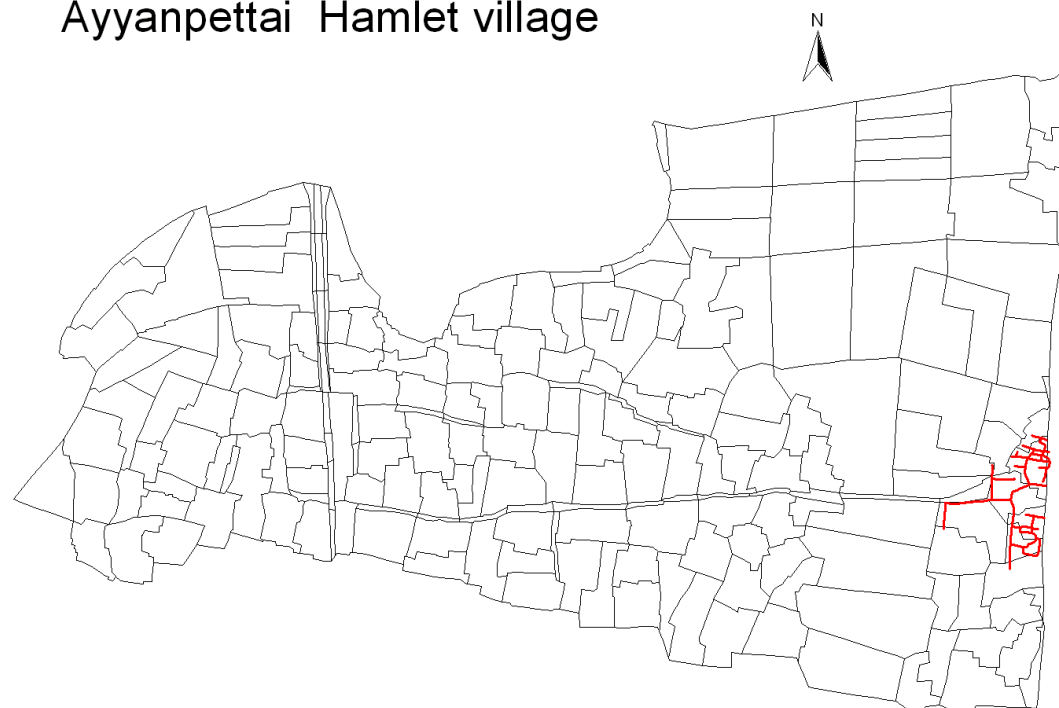
### *Annapanpettai*

<b>Institutional support</b>	not provided to all the people in the village	couples/people without sons are given a pension	vending (in addition) once a week	pension should include all old people. <sup>xxi</sup>
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- i Setting up a market at Allampakkam would benefit 10 villages: Sothikuppam, Rasapettai, Chittiraipettai, Thamanapettaoi, Nayakarpettai, Nanjilingapettai, Periyakuppam, Pettotai, Rediyarpettai, Ayyanpettai and Annapanpettai
- ii Depending on size of net
- iii Income has decreased(ratio 2:1); Mechanized boats are not active due to lack of fish (*Purtasi*)
- iv From 4 days to 5 days at present.
- v They know how to use the various latest instruments like GPS and Echo sounder
- vi Owner calls immediately for work or net mending(when the net is damaged by rocks).
- vii No problems in marketing. Only *Squids and prawns* are sold to a particular trader who is nominated by the employer.
- viii Employer provides interest free loans upto Rs.10000 if it exceeds that amount they borrow from money lenders at the rate of 10 % which is repaid on weekly basis.
- ix The amount can be exceeded to Rs.100000
- x 3 years ago the catch comprised of 7 species (*Kathalai, Kadicha, Kanakathai, Koduva, Parai*) while now only about 2/3 species (*Kanakathai, Mathi, Surai*)
- xi In these 3 years the catch has reduced as 4:1
- xii They are old inhabitants and traditional fishers of the village and are completely familiar with their environment so they do not require any technology or capacity building.
- xiii Mechanized boats should trawl beyond 10 fathoms
- xiv Demands and price reduces at the time of bulk landings.
- xv Market their catch at Cuddalore central market
- xvi Boats are not registered primarily due to insufficient earnings. It is also not compulsory.
- xvii Only 15 old people are given the pension while 45 old people are neglected.
- xviii Catch quantities have decreased from 60 kg 5 years ago to 15 kg at present.
- xix There is one bus at 7am and then at 10am during the day.
- xx Expressed concern over husband's(fishermen) problems in maintenance of damaged gear.
- xxi There are around 20 old women without pension.



## Ayyanpettai Hamlet village



500 0 500 1000 1500 Meters

▲ Ayyanpettai\_streettrack.  
□ Kayalpattu\_sfplots

## Ayyanpettai

### Introduction

This village is located 24 kms to the south east of Cuddalore and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 174 households with an average family size of 4.18 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	99
Female over 35	128
Adult male	189
Adult female	124
Children male	79
Children female	63
Infant male	25
Infant female	20
<b>total</b>	<b>727</b>

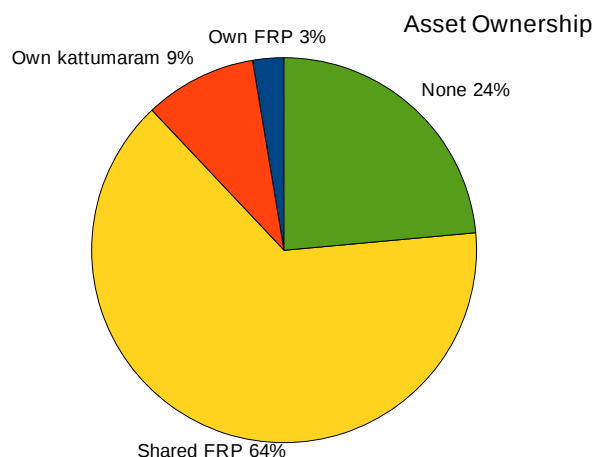
*Table 1: Demographic profile of Ayyanpettai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the the reduction of the beach by 20 m in the last 20 years and the tsunami in 2004 during which 25 houses and 4 vallams were destroyed. No lives were lost.

From 75 thatched houses 60 years ago the village now has 250 houses of which 125 are concrete and the remaining are either tiled or thatched. Electricity supply began 50 years ago. Infrastructure in the village includes a primary school which was established in 1964. Children could attend high school at Periyakuppam which is 3 kms away from their village. Metal roads to the village were laid in 1983 and buses became available 10 years later. These sandy paths were concreted soon after the tsunami. An overhead tank was set up in 1992-1993 prior to which drinking water was obtained from wells. Medical facilities were and still are available in Cuddalore 24 km away from this village.



## Asset ownership

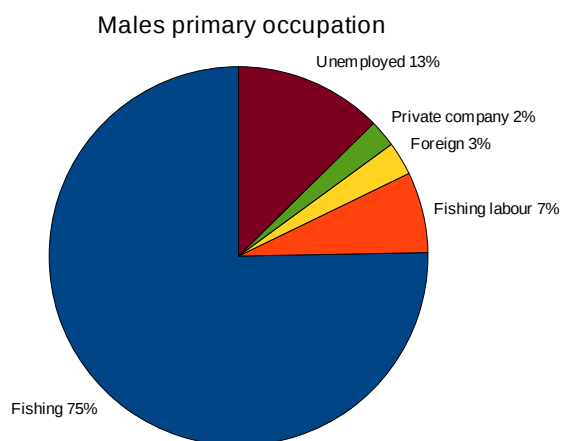


*Figure 1: Asset ownership of Ayyanpettai*

76% of the households owned or shared ownership of fishing craft. However during the LED Analysis it was found that most had sold their boats. The data was originally obtained during the baseline surveys which was conducted a year ago. 24% did not own any (Figure 1)

## Occupational Profile

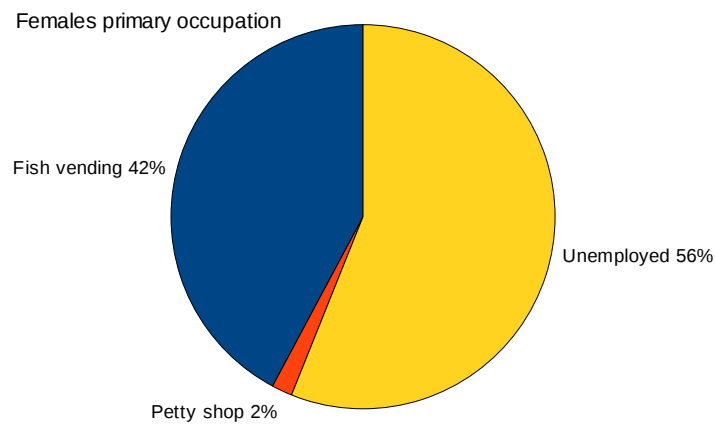
The vast majority of the village men (82%) are engaged in fishing or allied activities while 13% are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

### *Ayyanpettai*

42% of women are engaged in fish vending as their primary occupation while 56% are unemployed. Other occupations include tailoring or running petty shops with just 2% involved in such activities. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 2 major groups were identified from this village and are as follows:

1. Trawler crew
2. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines especially small mesh sized nets.
2. The MFRA should be implemented and strictly enforced.

**Welfare schemes:**

1. Fisheries Co-operative societies should be revived and enforced to function properly.

**Facilitation required:**

1. Require a platform to express grievances and negotiate solutions
2. Ice boxes can be provided
3. Training can be provided for alternative jobs

21<sup>st</sup> May, 08**Stake holder group: Trawler crew**

The table represents one trawling cycle which is continued for 4 days at a stretch. Crew rest in turns during the 4/5 hours of trawling while the driver of the boat is changed every four or five hours. The total crew consists of 6 people including the driver.

**Daily Activities Profile**

Time schedule	4.30-5.30 am	5.30-5.45am	5.45-9.00 am	9.00-9.30 am	9.30am-2.30pm	2.30-3.30 pm	3.30-4.30 pm	4.30-5.30 pm
Activities	Reach Cuddalore	Reach jetty	Start from jetty and travel into the sea	Set trawl net into the sea	Trawling time	Hauling net	Sort out caught fish	Reset nets in the sea for next cycle

**Annual Activities Profile**

They fish for approximately 7 to 8 months in a year. They do not go fishing during the rough season and the 45 day ban.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decline in fish catch <sup>i</sup>	Use of ring seines	Fishing in different locations	Mesh sizes below 60mm should be banned
<b>Technology</b>				
<b>Infra structure</b>				
<b>Investment</b>	Insufficient money for their family expenses	Ban on fishing during spawning period	Borrow money from their employer	Credit linkages can be made available
<b>Markets</b>	Dependent on distant urban traders.  Forced to sell cuttlefish and prawns to export traders	Monopoly of market by traders.	Sell it to distant traders who are equipped to prevent a reduction in the value of the product; Sell the catch to them at reduced rates.(Rs.10 less in case they borrowed a lakh)	Standardize the rates
<b>Capacity building</b>				
<b>Social security</b>	Personal medical, accident, life	Co operative societies	At their own risk <sup>ii</sup>	Cooperative societies should

	insurance	inactive.		be revived and enforced. Awareness on various roles and functions of the Cooperative Societies should be given; Employer should bear the accident premium for the crew
<b>Policy and Institutional support</b>	Lack of implementation of MFRA regulations	Continued use of ring seine inspite of being a banned net		Government should implement and strictly enforce the MFRA. <sup>iii</sup>

## Ayyanpettai

22<sup>nd</sup> May, 08

### Stakeholder group: Fish vendors

#### COGA Analysis:

Caste - Parvatharajakulam

Origin - Nearby fishing villages

Gender- Female

Age - 24 to 55 years

### Daily activities profile

Time schedule	6.00 – 7.30 am	7.30 – 8.30	8.30 – 10.00 am	10.00 -12.30 pm	12.30-2.00 pm
Activity	Arrive at Annankoil landing site	Buy fish	Travel time to targeted village	They sell fish street wise	Return to village by bus

### Annual activities profile

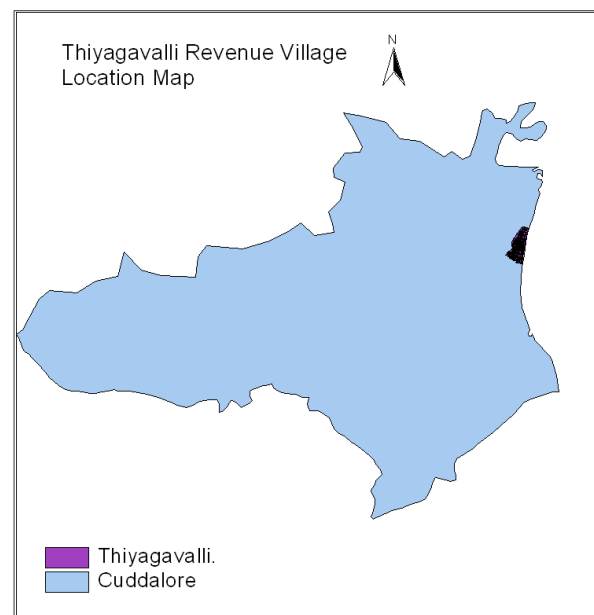
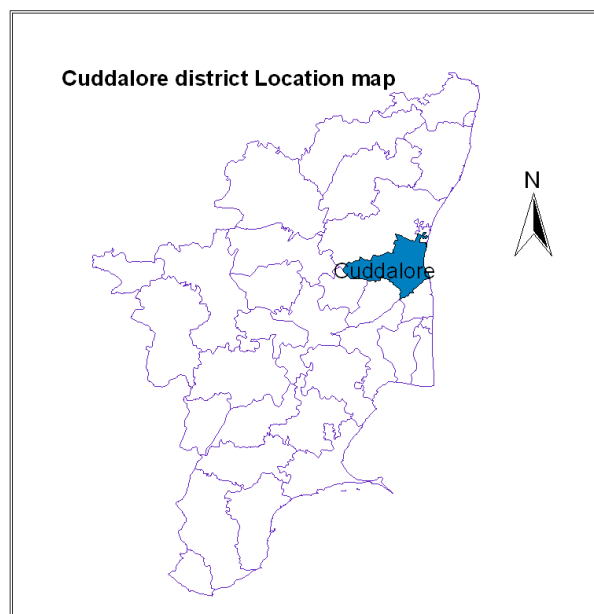
They go fish vending 8 months in a year. The remaining 4 months represent the rough season during which no fish vending occurs.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Insufficient catch for all	Few fish landings in this village	Depend on neighbouring villages. <sup>iv</sup>	Require a platform to express grievances and negotiate solutions
<b>Technology</b>				
<b>Infra structure</b>	No ice plant	Few fish landings in this village	Buy ice from those who have refrigerators	Ice boxes can be provided
<b>Investment</b>	Insufficient working capital	Low income; Competition forces them to invest more.	Borrow from neighbours or pay producers after selling fish	
<b>Market</b>	High investment	Competition between head loaders and bicycle vendors <sup>v</sup>	Purchase fish from neighbouring villages.	Require a platform to express grievances and negotiate solutions
<b>Capacity building</b>	Alternate job opportunities	Fish vending not yielding enough income	Fish vending when possible	Training on alternate jobs with trading support <sup>vi</sup>
<b>Social security</b>				

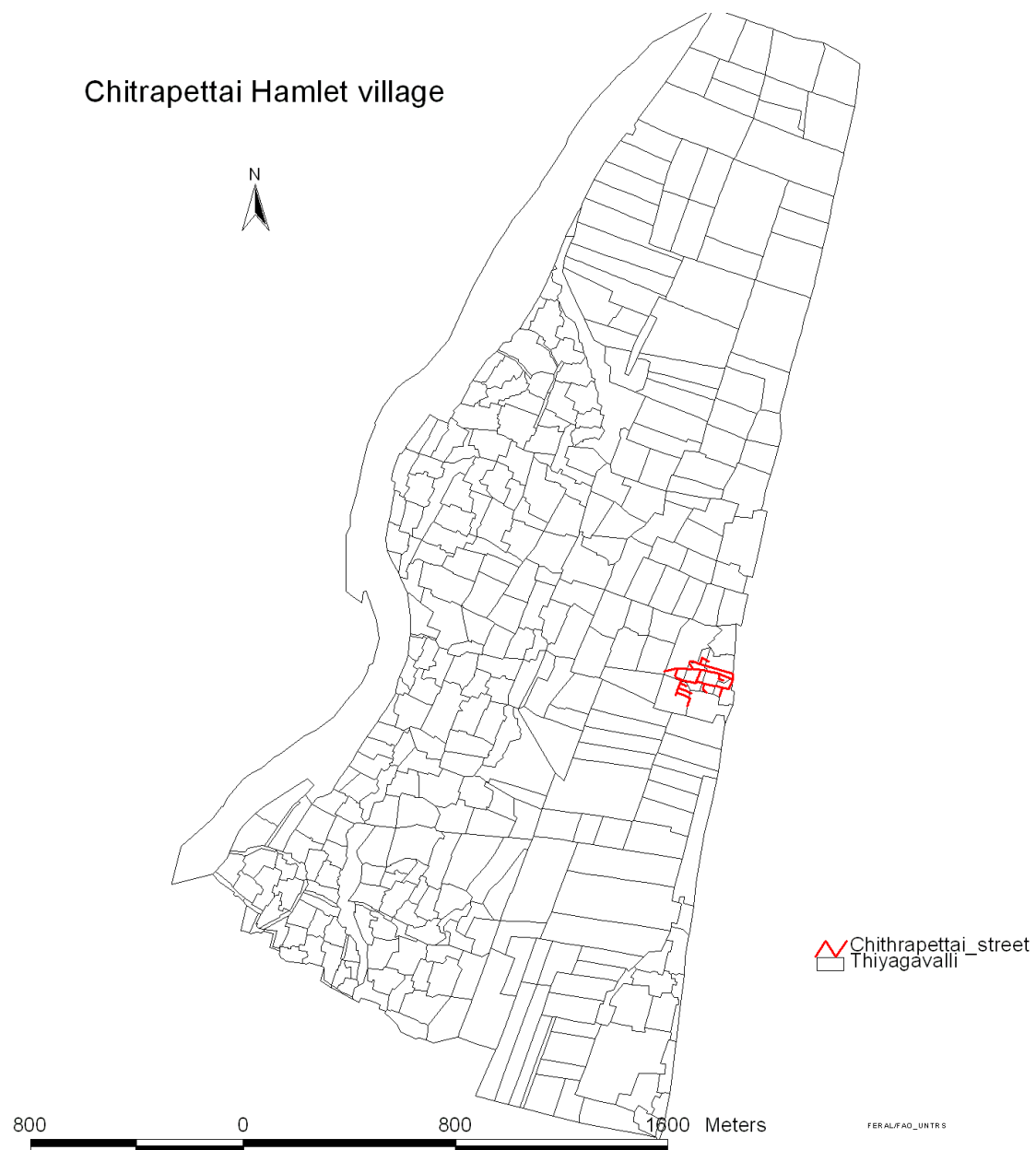
### *Ayyanpettai*

<b>Policy and Institutional support</b>				

- 
- i In the past two years, income has decreased from Rs.1000 to Rs.300 per day
  - ii Borrow money from money lender and prawn broker with interest of 10 % and 3 % respectively per month.
  - iii Government Fisheries inspectors should monitor the implementation of the MFRA and other regulations.
  - iv Purchase fish from Annankoil, 15 kms away from their village
  - v There are 2 bicycle vendors from Kullanchavadi
  - vi Alternate jobs such as pickle processing with supply of raw materials and marketing



## Chitrapettai Hamlet village





## Chithrapettai

### Introduction

This village is located 8kms to the southeast of Cuddalore Old Town and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 176 households with an average family size of 5.04 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	122
Female over 35	123
Adult male below 35	201
Adult female below 35	158
Children male	94
Children female	110
Infant male	42
Infant female	37
total	887

*Table 1: Demographic Profile of Chithrapettai*

The village is believed to be named in memory of a resident called Chithirakular and its origin however could not be identified during the historical mapping session. The major shock the community felt was the tsunami in 2004 during which 25 FRPs and 40 kattumarams were damaged. One life was lost. The electric posts on the streets were severely damaged and there is no electricity in the nearby coastal areas at present. The construction of a new dockyard by the private sector was reported to be a shock as it caused the increased turbidity in the water resulting in a decline of marine resources.

From 75 thatched houses 50 years ago, the village now has 250 houses of which most of them are concrete. Infrastructure in the village includes a primary school established long ago. Children have to attend high school at Cuddalore OT. Roads to the village were sandy paths 15 years ago which were concreted 6 years back. Buses were infrequent making only 3 trips a day. A mini van arranged by the Village Panchayat transports their fish to other places for marketing at present. Post tsunami rehabilitation involved the provision of a water tank and a fish drying yard. Rayan foundation sponsored one truck for this village which was useful to transport fish to the market.

A PVC factory called Chemplast has been under construction for the past two years. Medical facilities are available in Cuddalore old town, 8 km away and for critical cases the people have to go to the Government hospital in Cuddalore. The village lacks sanitation facilities.

Asset Ownership

All households own or share ownership of fishing craft. 66% are single owners of craft while 34% are share holders (Figure 1).

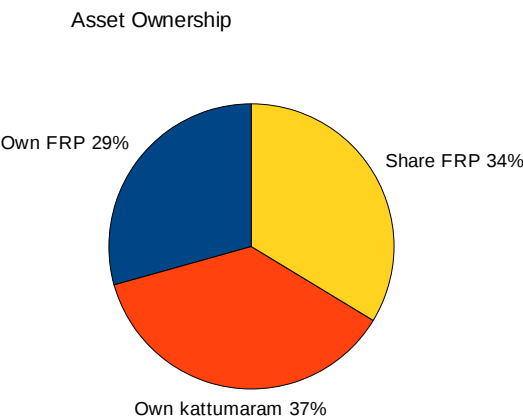


Figure 1: Asset ownership in Chithrapettai

Occupational Profile

The vast majority of the village men (85%) are engaged in fishing or allied activities while 15% are involved in other occupations. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

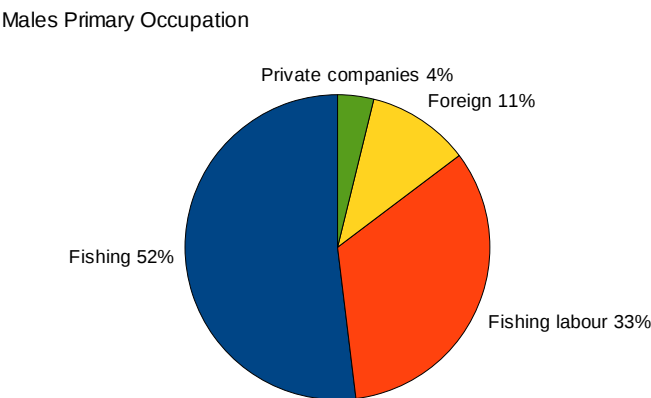
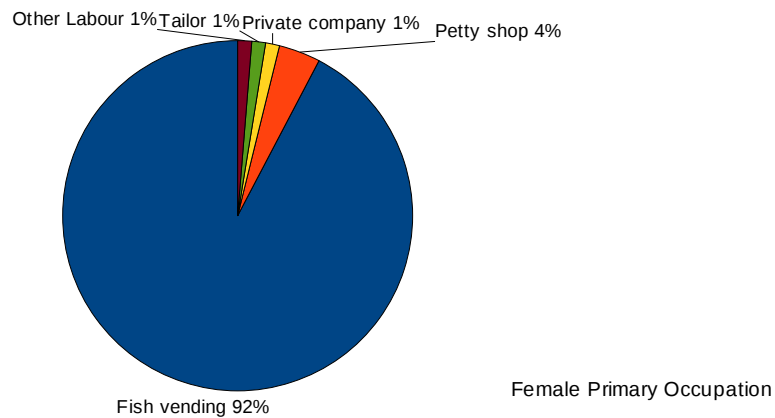


Figure 2: Primary Occupation of Men

### *Chithrapettai*

92% of women are engaged in fish vending as their primary occupation. Other occupations include tailoring or running petty shops with just 7% involved in such activities. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 2 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.

**Facilitation required:**

1. New factories should prioritize the locals for employment
2. Skill based training can be provided for their alternative job
3. Registration of boats to be facilitated to be eligible for the diesel subsidy

**Welfare schemes:**

1. NGOs or Insurance companies can create awareness about various available insurance policies.
2. Old age pension must be provided to all old people.

**Infrastructural requirements:**

1. Bus should make one additional trip in the morning for transporting fish.
2. Market can be constructed at Allampakkam<sup>i</sup>

## *Chithrapettai*

11 June, 08

### **Stakeholder group: Boat owners**

#### **COGA Analysis**

Caste - Paravatharajakulam

Origin - Traditionally from the village

Gender - Males.

Age - 20 to 70 years

#### **Daily Activities profile**

Time schedule	3.00-3.30 am	3.30 - 4.00 am	4.00 - 5.30am	5.30 - 6.am	6 - 7 am
Activities	Start from shore; Travel to sea	Cast nets into sea	Idle while waiting	Sort out catch	Re-cast nets and repeat activity

#### **Annual Activities profile**

They go fishing for 9 months in a year except during the rough season and the 45 ban period.

#### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Declining catch quantities <sup>ii</sup> ; Expansion of industries(i.e SIPCOT expansion) <sup>iii</sup>	Use of ring seines; Establishment of a dockyard for transport of raw materials resulting in the decreased availability of fish <sup>iv</sup>	Living within their means	Ban on ring seine should be enforced; Factories can prioritize them for employment providing alternative job opportunities facilitating a regular income
<b>Technology<sup>v</sup></b>				
<b>Infra structure</b>				
<b>Investment</b>	No diesel subsidy	Boats are unregistered	Purchase at normal rates and fishing 2-3 days a week <sup>vi</sup>	Registration of boats at the earliest <sup>vii</sup>
<b>Market</b>				
<b>Capacity building</b>	Alternate job opportunities	Fishing does not seem viable due to expansion of industries	Fishing only 2-3 days a week	Training necessary to acquire jobs in PVC industry. <sup>viii</sup>

## Chithrapettai

<b>Social security</b>				
<b>Policy and Institutional support</b>	Boats are unregistered	Non payment of loans and high registration fees <sup>ix</sup>		Bank should waive the loans and registration fee should be reconsidered.

**Stakeholder group: Fish vendors**

**COGA Analysis**

Caste -Parvatharajkulam

Origin -Near by fishing villages

Gender-Females

Age -25-60 years

**Daily activities profile:**

Time	7.00-8.30 am	8.45 am	8.45- 9.45am	9.45am – 1.00 pm	1.30-2.30 pm
Activity	Arrive at sea shore; buy fish from kattumaram owners	Arrive at the local bus stand	Travel time to targeted village or Cuddalore Old Town market	They sell fish at market	Return to village by bus

**Annual activities profile:**

They go fish vending only 6 months a year remaining idle for the rest of the year. The idle period includes the rough season and instances of ill health. They go fish vending approximately 20 days a month.

**LED Analysis Framework**

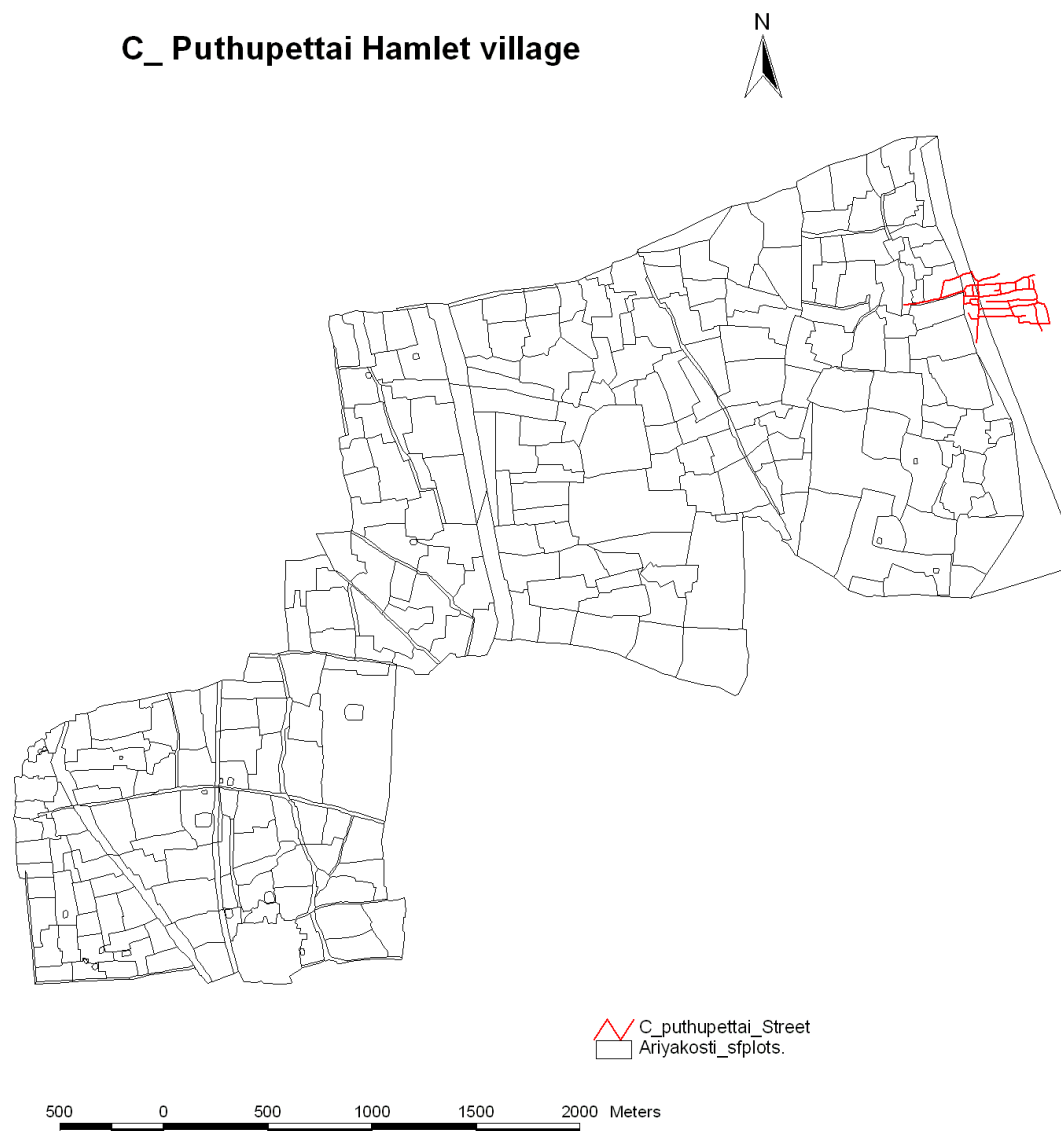
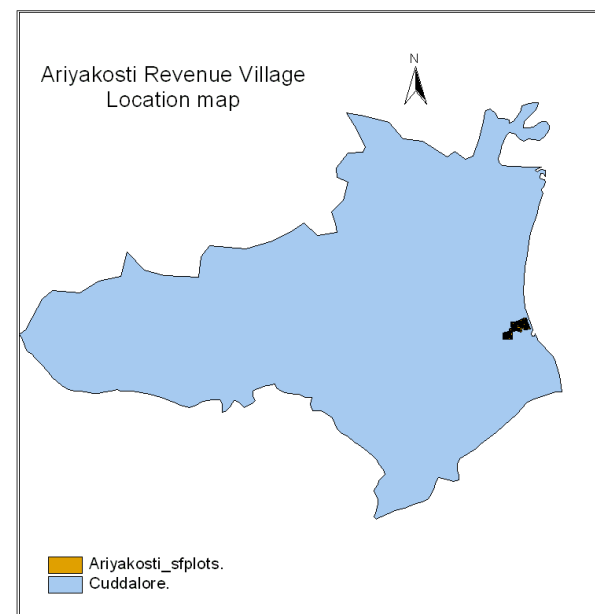
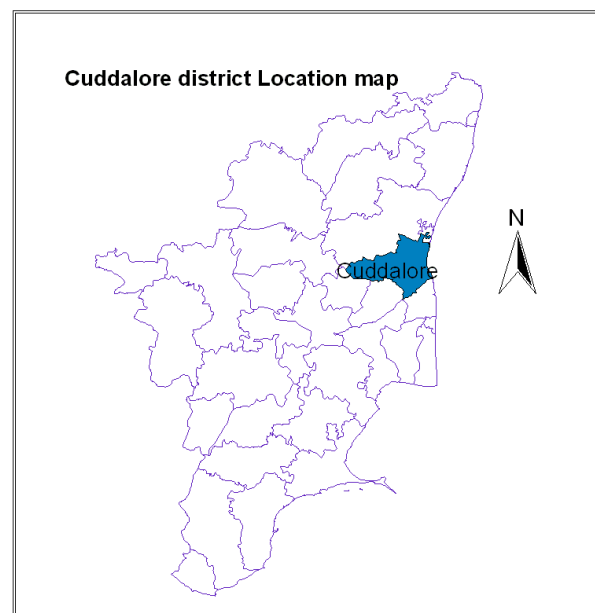
Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategies
<b>Natural resources (FISH)</b>	Insufficient catch quantities	High competition	Earning low profits <sup>x</sup>	Ban on ring seine to be enforced.
<b>Technology<sup>xi</sup></b>				
<b>Infrastructure</b>	Inadequate transportation	Buses make only 2 trips per day <sup>xii</sup>	Use canoe <sup>xiii</sup>	One additional trip is required in the morning <sup>xiv</sup>
<b>Investment<sup>xv</sup></b>				
<b>Markets</b>	Low price	Reach market late	Selling at the price of the day	Market to be established near their village <sup>xvi</sup>
<b>Capacity building<sup>xvii</sup></b>				
<b>Social security</b>	No insurance	Lack of awareness and no surplus income	Borrow from money lenders and neighbours <sup>xviii</sup>	Provide insurance policies <sup>xix</sup>

### *Chithrapettai*

<b>Policy and institution support</b>	Post retirement; old age	No pension plans	Dependant on their sons and family	Provision of pension plans. <sup>xx</sup>
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- i Setting up a market at Allampakkam would benefit 10 villages: Sothikuppam, Rasapettai, Chittirapettai, Thamanapettaoi, Nayakarpettai, Nanjilingapettai, Periyakuppam, Pettotai, Rediyarpettai, Ayyanpettai and Annapanpettai
- ii Catch quantities of FRPs before the widespread use of ring seines was 200 kg which has reduced to 50 kg at present. (Ratio 4:1) with a minimum of 10 species. Common sighted species are vanjaram, karuvalai, parai and kanangathai.
- iii A PVC factory called Chemplast has been under construction for the past two years.
- iv Plenty of disturbance in the water is caused by big boats that are involved bringing in construction materials.
- v They are not interested as they believe that the improvement in technology brought about the over exploitation of resources drastically affecting their lives.
- vi Buy fish at Cuddalore which is around 20 kms from their village.
- vii Only 14 out of 45 boats are receiving a diesel subsidy.
- viii Training with certification in jobs such as welding, JCP driving, hollow block making, etc.
- ix 7 boats were purchased on loans provided by State Bank of India before the tsunami and are yet to be repaid; Rest of the boat owners feel that a fee of Rs.2000 for resgistration is high.
- x Low catches yield low profits in comparison to bulk landings
- xi Sell catch within an hour or so to retail vendors; so do not feel the need for supply of ice/ technology
- xii Bus timings are 09.30 am and 1.00 pm on route number 25.
- xiii Canoe is available at Semmankuppam dock yard which is 1 km from the village.
- xiv A bus at 08.30 am will enable them to reach the market early.
- xv Most fish vendors are relatives of producers; Producers fix the price for catch and the vendors sell at the same rate.
- xvi Market can be established at Allampakkam, which is a common point for approximately 10 fishing villages and also forms an intersection for agricultural villages. Villages that will be benefitted by this are Chittirapettai, Ayyanpettai, Annapanpettai, Thamanapettai, Nayakarpettai, Nanjilingampettai, Periyakuppam, Pettodai and Rediyarpettai. Agricultural villages are Thiagavalli, Naduthittu, Nochikadu, Semankuppam, Sangilikuppam, Karattai and Kullanchavadi.
- xvii Training on tailoring was provided but could not be pursued due to lack of trade links
- xviii 10% and 5% of interest respectively per month
- xix Create awareness about insurance policies and make it a must.
- xx Only 20 women of 50 women are receiving a pension.



## **C-Pudhupettai**

### **Introduction**

This village is located 4 kms to the north of Parangipettai (Portonovo) and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 340 households with an average family size of 4.54 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	186
Female over 35	210
Adult male	378
Adult female	273
Children male	201
Children female	179
Infant male	64
Infant female	52
<b>total</b>	<b>1543</b>

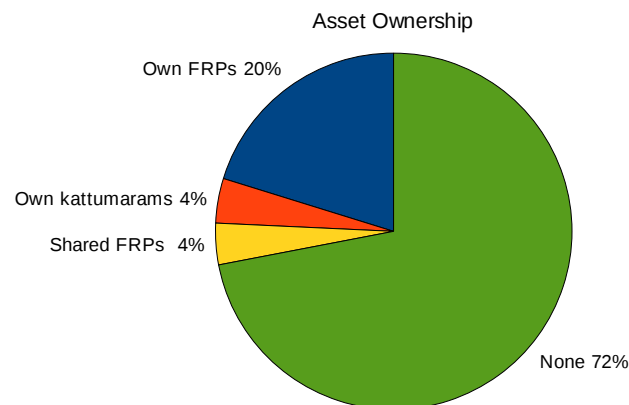
*Table 1: Demographic profile of C-Pudhupettai*

The origin of the village is believed to have come from migrations from Chinnur and Annankoil. The major shocks the community felt were a cyclone 15 years ago during which 3 lives were lost and the 2004 tsunami. No lives were lost during the latter.

The village now has 420 houses of which most are concrete. Infrastructure in the village includes metal roads connecting the hamlets established 30 years ago, the roads within the village were sandy and unlevel. The earlier mode of transportation was horse driven carts which was replaced by buses 30 years back. The seashore has widened considerably in the last 50 years. Medical facilities are available at Parangipettai and Chidambaram till date.

### **Asset ownership**

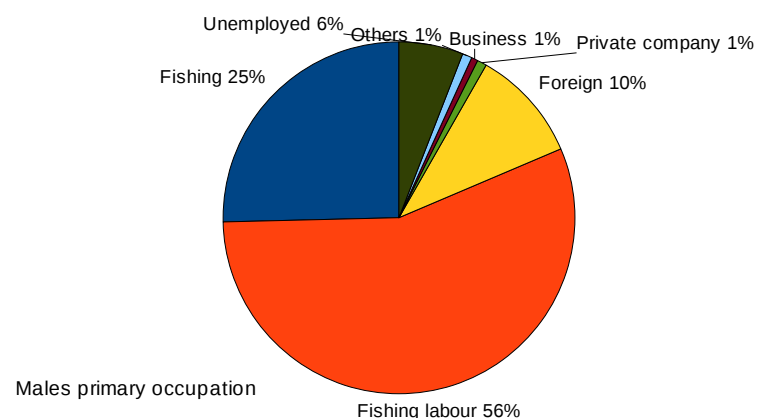
28% of the households own or share ownership of fishing craft. 24% are single owners of craft while 72% do not own any (Figure 1).



*Figure 1: Asset Ownership in C-Pudhupettai*

### **Occupational Profile**

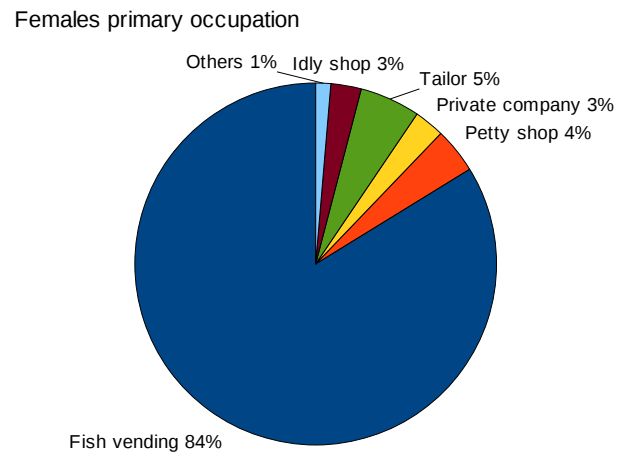
The vast majority of the village men (81%) are engaged in fishing or allied activities while 6% of the men are unemployed. Only 13% are involved in other occupations with the government, private sector or abroad. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupation of Men*

### *C-Pudhupettai*

84% of women are engaged in fish vending as their primary occupation while 16% are involved in other occupations such as tailoring, petty/idly shops and private companies. This is represented in Figure 3.



*Figure 3: Primary Occupation of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. Boat owners
2. Crew members(FRP)
3. Fish vendors

### **Stakeholder Analysis:**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.

#### **Welfare schemes:**

1. Credit linkages can be provided for their working capital as well as in times of emergency.
2. Relief funds during the rough season should be provided on time.
3. Compensation amount of Rs.500 should be given at the beginning of the ban period.
4. Old age pension must be provided to all old people.
5. NGOs can create awareness on various government schemes.

#### **Infrastructural requirements:**

1. Fuel station at Annankoil to be reopened, providing diesel on subsidy.
2. De siltation of Pudupettai river.
3. Auction hall to be constructed for the village.
4. Frequent buses can be facilitated by government.
5. Panchayat should take necessary measures to use the storage shelter.

#### **Facilitation required:**

1. Training required on latest fishing techniques and on operation of GPS units.
2. Procedure for registration of boats should be simplified.
3. Solar drying units required.

23 June,08

**Stakeholder group: Boat owners**

**COGA Analysis**

Caste -Paravatharajakullam

Origin -Heredity

Gender-Males

Age -20 to 60 years

**Daily Activities Profile**

Time	2.00-3.00 am	3.00-4.00 am	4.00-6.30 am	6.30-7.00 am	7.00-8.30	8.30-9.00 am
Activity	They walk to Annankoil from their village	Travel to depths of about 3 fathoms at sea	Cast their nets and wait; idle while waiting	Sort catch	Return to shore	Market their catch

**Annual Activities Profile**

They fish for 8 months in a year, remaining idle the rest of the time due to the 45 day ban and the rough season.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Low fish catches <sup>i</sup>  Decreased number of laborers.	Neighbouring villages use ring seine <sup>ii</sup>  Due to increase in number of boats. <sup>iii</sup>	Forced to use ring seines, a destructive method to make a living <sup>iv</sup> Hire labourers from their village boat owners on alternative days	Ban on ring seine should be enforced by the Government in all villages along the coast. <sup>v</sup>
<b>Technology</b>				
<b>Infrastructure</b>	Landing and parking of boats  Non availability of diesel subsidy from June till date	Formation of a sand bar in the last 5 years has blocked the river; The fuel station at Annankoil has stopped functioning once diesel charges were increased	Landing, marketing and parking at Annankoil (0.5km from their village); Purchase diesel at normal rates from Chidambaram.	Excavation of sandbar <sup>vi</sup> ; Construction of auction hall Reopen the fuel station <sup>vii</sup>
<b>Investment</b>	Insufficient working capital for purchase and	Bank loans	Dependent on informal lenders charging high interest	Banks can provide loans and allow

*C-Pudhupettai*

	maintenance of gear and craft		rates <sup>viii</sup> ; Mortgage jewellery; Borrow from neighbours <sup>ix</sup>	flexibility in loan repayment. <sup>x</sup>
<b>Markets</b>	Sale on credit	Trader normally gives money a week later	In emergency cases the trader provides a note to the money lender authorizing the loan (at 3% interest) to the fisherman <sup>xi</sup>	Provisions for ready cash must be made available especially in time of need
<b>Capacity building</b>	Latest equipments like GPS so as to reduce the fuel cost.	Minimum knowledge on operation of GPS	Learn from other GPS users <sup>xii</sup>	Need specific training on operation of GPS
<b>Social security</b>	Old age	No pension plans	Dependent on their children	Pension plans to be provided to all old people <sup>xiii</sup>
<b>Policy and Institutional support</b>	Compensation to labour in case of accidents during employment; No insurance	Boats are not registered; Lack of awareness on various policy	Manage on their own; At their own risk	Registration can be facilitated and enforced; Awareness on the various policies and schemes can be created



**Stakeholder group: Crew(FRP)**

**COGA Analysis**

Caste - Paravatharajakulam

Origin -Heredity

Gender -Males

Age group -15 to 60 years

**Daily activities profile: Hook and line fishing**

Time	4-5am	5-6am	6-9am	9-10am	10-11am
Activity	Walk to Annankoil	Travel to sea	Use hook and line to catch fish	Travel back to shore	Sort and market catch

**Seasonal fishing Activities profile for flying fish: 3 months (June to August)**

Time	2.00-2.30 am	2.30-6.30 am	6.30-7.00 am	7.00-10.00 am	10.00 - 11.00 am	11.00-5.00 pm	5.00-6.30 pm
Activity	Walk to Annankoil	Travel an average distance of 45 kms at sea	Cast their nets	Idle while waiting	Haul nets	Return to shore <sup>xiv</sup>	Sort and market catch

**Annual activities profile**

They go fishing nearly 6 months a year and for 3 months they participate in the flying fish seasonal fishing as laborers. They remain idle for the rest of the year.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish	Use of ring seine	Living within their means	Ban on ring seine should be enforced by the Government <sup>xv</sup>
<b>Technology</b>				
<b>Infra structure</b>	Boats unable to land	Sand bar formation at river mouth	Dependent on the neighbouring village, Annankoil for marketing	Excavation of the river mouth.
<b>Investment</b>				
<b>Markets</b>				
<b>Capacity building</b>	Minimum share in profits due to higher fuel expenses	Lack of technical knowledge on operation of	Learn from those who have obtained the knowledge from working abroad	Training on the latest fishing equipment and techniques

*C-Pudhupettai*

		GPS units		
<b>Social security</b>	No ready money; During rough season; Accidents	Weekly wages; No surplus income; No accident insurance	Dependent on informal money lenders charging high interests; Mortgage jewellery; Borrow from neighbours; Employers provide support for first aid.	Provide relief funds at the required time <sup>xvi</sup> Boat insurance should be compulsory
<b>Policy and Institutional support</b>	Old age	No pension	Dependent on their children	Government should provide pension to all

24<sup>th</sup> June, 08

**Stakeholder group: Fish vendors (dry fish vendor)**

**COGA Analysis**

Caste - Parvatharajkulam

Origin - from different villages (males are from the same village)

Gender- Female

Age -20 – 65 years

Marital status – Married

**Daily activities profile:**

Landing occurs at various times depending on the species caught. Fish vendors time their activities accordingly and hence could not specify exact timings.

Time	Activity
30 minutes	Travel time to reach landing site i.e., Annankoil
1-2 hours	Purchase fish at market
30 minutes	Transport fish to drying place in the village
4-5 hours	Washing and cleaning; work in preparation to dry fish
2-4 days	Fish drying (depending on the weather)
Once a week	Market dry fish at the market in Santhai

**Annual activities profile:**

They do not go fish vending during the rough season. They sell their old stock at the market during the ban period.

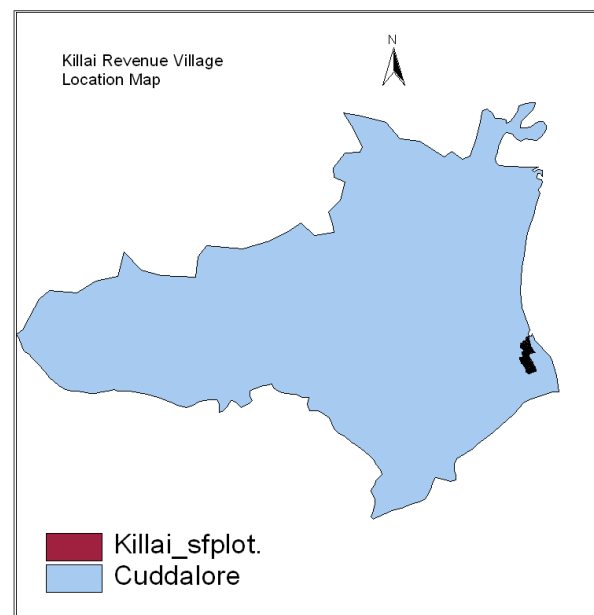
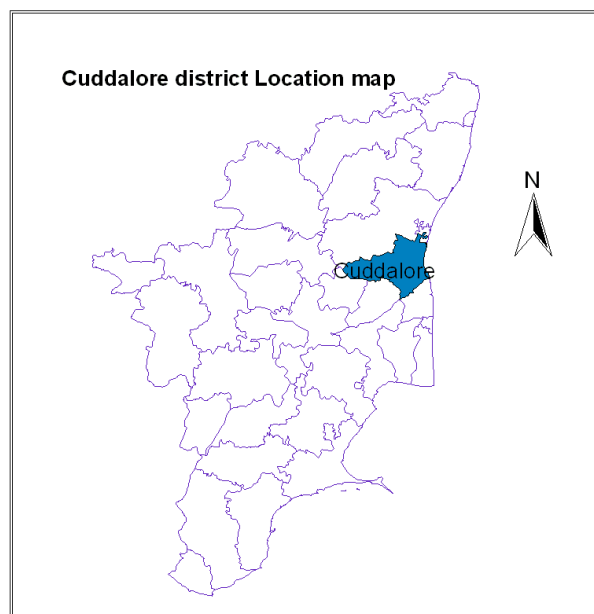
**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	No landings at the village;  High price	Sandbar formation at the river mouth; Plenty competitors at the market <sup>xvii</sup>	Purchase fish at Annankoil where boats are landing. Buy fish in the high value	River should be de silted in order for boats to land in their village
<b>Technology</b>	Unable to dry fish during the rainy season	No provision to dry fish during the rains	Dry it when there is sunlight	Establish solar drying units <sup>xviii</sup>
<b>Infrastructure</b>	Store dry fish in a thatched temporary shelter during the	Insufficient storage space resulting in loss in	Store in their houses if quantity exceeds the space in the	Permit storage in the newly constructed

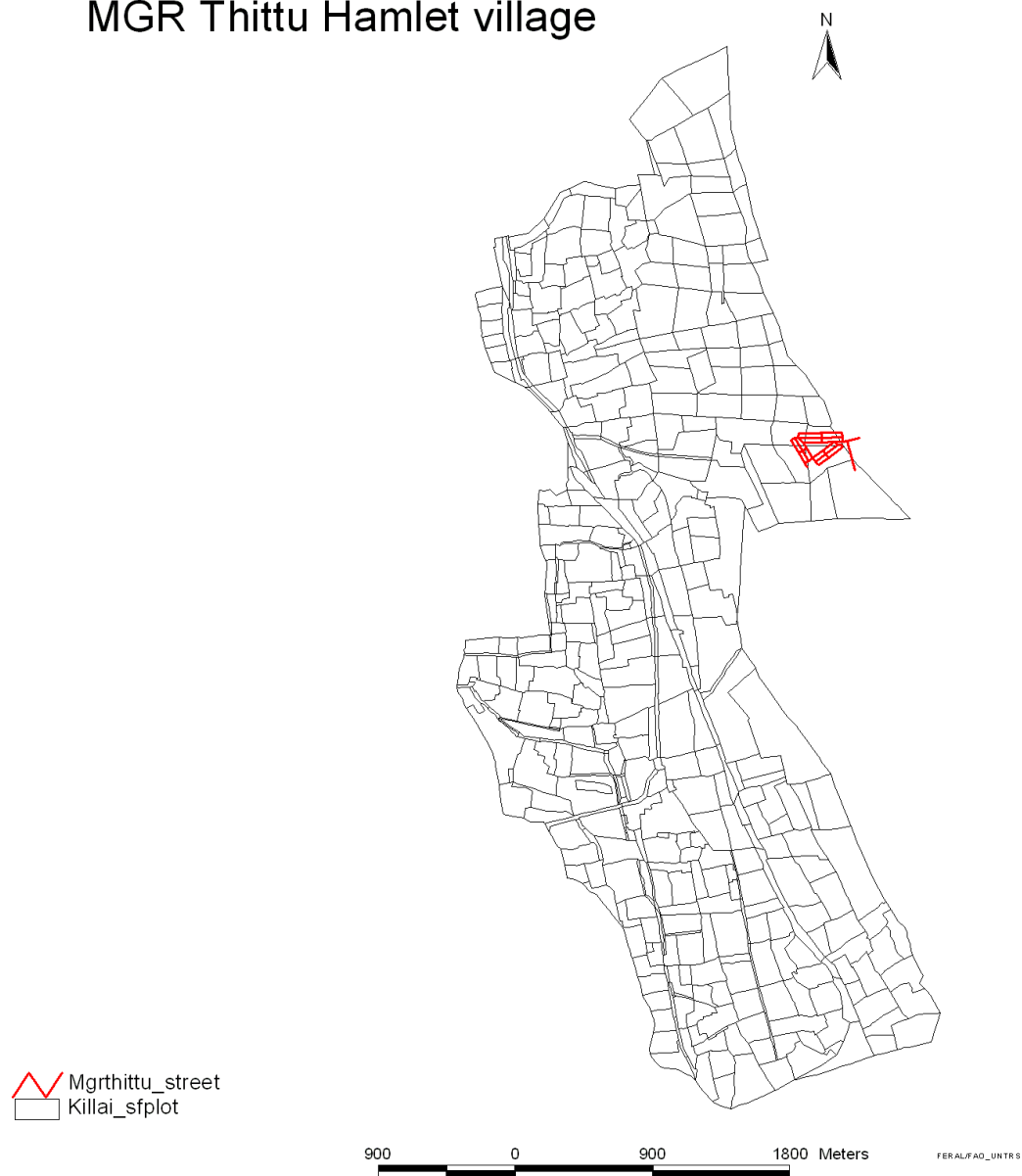
*C-Pudhupettai*

	rain	their business	shelter	storage facility which is still unused. <sup>xi</sup>
<b>Investment</b>	High interests	Insufficient working capital	Borrow from neighbours, interest rate is 3-4 % per month.	SHGs can be promoted <sup>xx</sup>
<b>Markets</b>	Competition is high <sup>xxi</sup>	Inability to reach the market on time <sup>xxii</sup>	Start earlier or hire auto rickshaws	Frequency of buses can be increased
<b>Capacity building</b>				
<b>Social security</b>	Old age	No pension	Work as housemaids	Old age pension to be provided to all old people
<b>Policy and Institutional support</b>	Difficulties during the ban period	Compensation amount of Rs.500 is not given on time	Borrow from neighbours	Should be provided at the specific time.

- i 10 years ago they used to catch 75 kgs (species include Sukka, Thenparai, Perumparai and Kuliri )of fish which was worth of Rs.1000. Whereas now they are catching only 30kg.
- ii Ring seines eliminate huge shoals at once and its usage has increased in the last two years.
- iii There were 70 boats before the tsunami which has increased to 87 of which 15 were sold to villages like *Poombuhar and Akkarapettai*
- iv 5 Ring seines in the village and are being used from July 2008
- v If the ring seine is banned through out the east coast they are ready to give up this destructive method of fishing.
- vi The river to be excavated is Pudupettai river. The distance from Annankoil to Pudupettai is around 1 km.
- vii There was a private fuel station at Annankoil which was helpful when there was a demand for diesel but was closed after the hike in diesel prices.
- viii Money lenders charge an interest of 10 % with the condition of repayments on a weekly basis. The principal amount ranges from 3000-5000 INR
- ix The rate of interest ranges from 3-5 % /month:simple interest.
- x SHGs was started for men; but they were not provided with loans and the amount saved was given back to them 1 year ago. The bank is a Government bank at Annankoil
- xi eg:producer needs Rs.10,000, the money lender gives only Rs.7000 and the remaining Rs.3000 forms the interest; the trader repays the loan to the money lender with interest within the specified time
- xii Some have gone abroad and returned. They are familiar with the operation of a GPS as they were involved in fishing there.
- xiii 50 people are not receiving old age pension in this village
- xiv Travel time varies according to weight of net in the boat.
- xv Income has reduced from Rs.1000 to Rs.250 in the last two years apparently caused by the increasing operations of ring seines.
- xvi In the month of *Iyypasi*
- xvii Traders from Ayyanpettai and Pudukuppam , bicycle traders from Kullanchavadi, Buvanagiri, Chidambaram and also distant urban traders from Kerala
- xviii An NGO proposed to establish a solar drying unit about 2 years ago but this was abandoned because it did not fulfill the requirement of 60 people.
- xix Around 60-70 people are involved in this activity and the storage shelter can accommodate only 30 people
- xx There are 10 SHGs providing loans upto Rs.5000 which is insufficient;This can be increased to Rs.10000
- xxi If they reach the market late they have to compete with more dry fish vendor
- xxii Have to depend on buses, waiting for an hour in case they miss one



## MGR Thittu Hamlet village



## MGR Thittu

### Introduction

This village is located to the south of Pichavaram along the backwaters and lies in the Cuddalore district. The people relocated to this place after the tsunami. The fishing hamlet is comprised of the Pattinavar caste group and has 178 households with an average family size of 3.85 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Adult male	235
Adult female	210
Male children	81
Female children	66
Male infants	48
Female infants	46
<b>Total</b>	<b>686</b>

*Table 1: Demographic profile of MGR Thittu*

The village, originally an island was located to the north east of Pichavaram began with 20 families in 1967 and was a temporary settlement. From 1969, migration of people from Killai, Muzhkuthurai and Chinnavaikal gradually transformed it into a permanent settlement. The major shock the community felt was the 2004 tsunami inspite of being affected by cyclones often. 3 lives were lost, kattumarams were carried away and 30 FRPs were damaged. The village owned a total of 40 FRPs and 100 katumarams.

The village had good drinking water facilities, electricity supply and a primary school from 1980. Infrastructure in the village includes 180 concrete houses provided by an NGO after the tsunami who had also purchased the land. Also the village now has 60 FRPs. The only mode of transportation is by canoe charging a fee of Rs.1. The traditional panchayat has been active till date. A fish cooperative society exists in Killai and is active.

### Asset ownership

95% of the households own or share ownership of fishing craft. 2% are single owners of craft while 5% do not own any. (Figure 1)

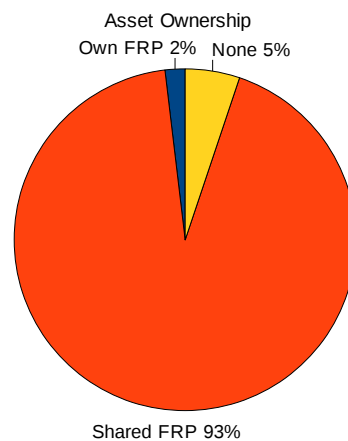


Figure 1: Asset ownership of MGR Thittu

### Occupational Profile

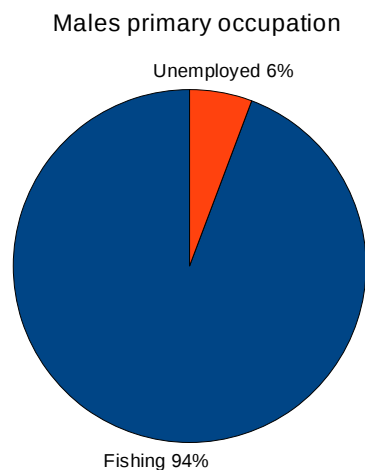
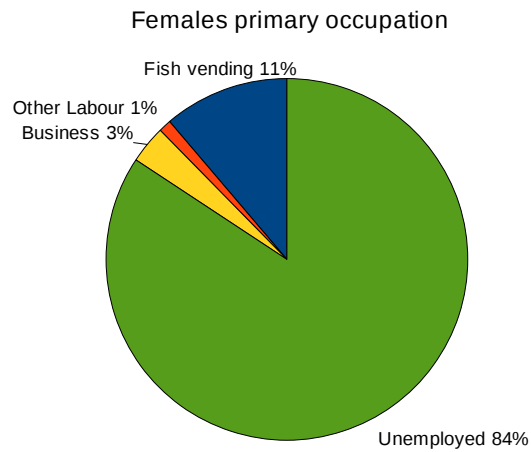


Figure 2: Primary Occupation of Men

The vast majority of the village men (94%) are engaged in fishing while 6% of the men are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



11% of women are engaged in fish vending as their primary occupation while 84% of the population are unemployed. 4% are involved in other occupations and work in government or private companies. This is represented in Figure 3.



*Figure 3: Primary Occupation of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 4 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Kattumaram owners
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Welfare schemes:**

1. Banks can facilitate credit linkages for their working capital.
2. Diesel subsidy can be provided.
3. Government should make provisions for pension plans for all old people.

**Infrastructural requirements:**

1. More frequent buses required in the morning hours
2. Ice plant can be established at Killai region

**Facilitation required:**

1. Excavation needs to be done for 1.5kms into the river Mudumunai.
2. Training on operations of GPS units can be provided.
3. Government should simplify the boat registration procedure.

MGR Thittu

10<sup>th</sup> June, 08

### Stakeholder group:FRP Owners

#### COGA Analysis

Caste - Pattinavar

Origin -Heredity

Genders -Males

Age group -15 to 60 years

#### Daily activity profile

Time	2.00-3.00 am	3.00-4.00 am	4.00-5.00 am	5.00-6.00 am	6.00-7.00 am
Activity	Start from shore and travel to an average depth of 5 fathoms at sea.	Cast their nets and wait.	Haul nets and sort catch. Recast the nets and wait.	Return to shore.	Sort catch and sell to head loaders

#### Annual activity profile

They go fishing nearly 9 months in a year, inclusive of back water fishing for 3 months, remaining idle the rest of the time.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Back water level low  Spend more time and fuel <sup>i</sup>	Formation of sand bar at the river mouth(after establishment of new settlement) <sup>ii</sup> Fish shoals cannot be viewed from the new settlement. <sup>iii</sup>	Fish whenever the water level increases in the back waters	Excavate the river mouth <sup>iv</sup>
<b>Technology</b>	No diesel subsidy	Boats unregistered <sup>v</sup>	Buy at normal rate.	Diesel subsidy can be provided
<b>Infrastructure</b>	Boats unable to land	River mouth blocked because of sand bar	Market at Annankoil	Excavate the river mouth
<b>Investment</b>	Insufficient working capital for	Quality has reduced	Dependent on informal money lenders charging	Quality check or set up of a

	maintenance of damaged gear	considerably <sup>vi</sup>	high interests; Mortgage jewellery; Borrow from neighbours	cooperative store for nets required
<b>Markets</b>	Low prices	Bulk landings by modernized fishers <sup>vii</sup> Middle men involved <sup>viii</sup>	Sell according to the day's rate	Government should standardize the prices <sup>ix</sup>
<b>Capacity building</b>	Unable to use GPS units	Lack of training	Use the traditional knowledge passed down from their fore fathers	Suitable training on the latest fishing methods. <sup>x</sup>
<b>Social security</b>	No insurance	Boats unregistered	Approach the fisheries department for registration	Government to reduce formalities and do the needful for small scale fishers
<b>Policy and Institutional support</b>	Boats are unregistered	Not possible as most of the boats in this village are donations	Approach the fisheries department to register.	Government to reduce formalities and do the needful for small scale fishers

11<sup>th</sup> June, 08

### Stakeholder group: Fish vendors

#### COGA Analysis

Caste -Pattinavar

Origin -Killai

Gender-Females

Age -30 to50 years(Married)

#### Daily Activities Profile

Time	6.00 am	6.00-7.00am	7.00-8.00am	9.00 am – 1.00 pm	1.00-3.00pm
Activity	Arrive at seashore	Buy fish	Travel to Chidambaram market	Sell fish	Return to village by bus

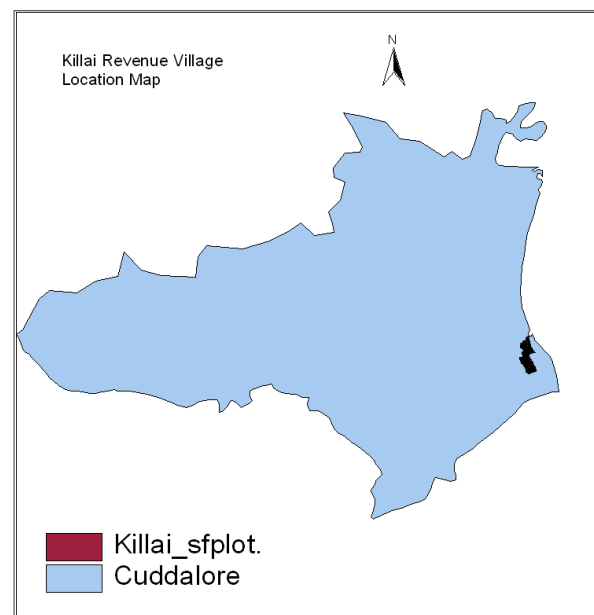
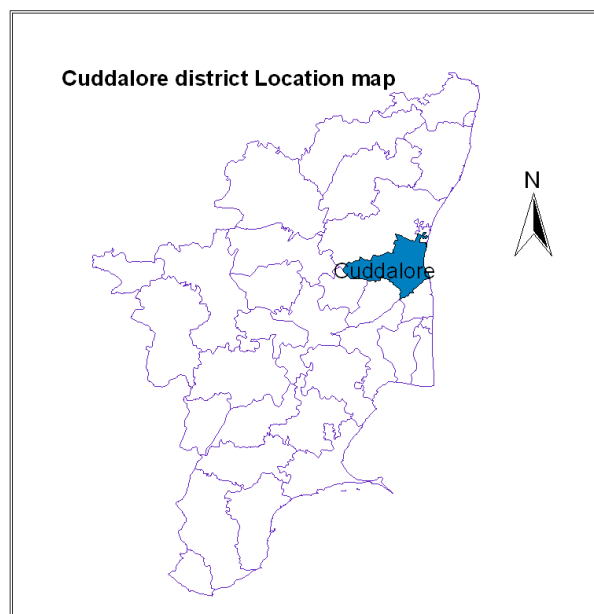
#### Annual Activities Profile

They sell fish nearly 8 months in a year, remaining idle for the rest of the year. The idle period includes the rough season, non availability of fish, traditional family functions and ill health.

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decreased availability of fish	Inconvenience of boat landing due to formation of sand bar at river mouth <sup>xi</sup>	Buy fish from Annankoil	Mudumunai river mouth needs to be excavated
<b>Technology<sup>xii</sup></b>				
<b>Infra structure</b>	Sale of ice is low <sup>xiii</sup> ;  Transport	No ice plant  Only one bus at 7am and then at 10.30am <sup>xiv</sup>	Buy ice from people who own refrigerators Walk up to Killai (1 and 1/2 kms) or do marketing the next day	Establish an ice plant at Killai so that a cluster of villages would be benefited <sup>xv</sup> Can be provided with frequent buses during the morning hours
<b>Investment</b>	Insufficient working capital	Rates of fish vary everyday	Buy on credit from fishers and repay the next day.	Standardize the price <sup>xvi</sup>

<b>Markets</b>	Low profits	High cost price	Living within their means	Standardize the price
<b>Capacity<sup>xvii</sup> building</b>				
<b>Social security</b>	No insurance	No surplus income <sup>xviii</sup>	At their own risk	Government can regulate/standardize the prices
<b>Policy and Institutional support</b>	Old age	No pension	Depend on their children or do fish processing such as cleaning and drying	Old age pension to be provided <sup>xix</sup>

- i Fuel consumption has increased to 8 litres/day now from 5 litres/day. Fishing time has increased by 1 hour.
- ii Great floods 50 years ago washed away the sands accumulated at the river mouth, however the increasing constructions of dams across rivers has led to formation of sand bars at river mouths.
- iii The tsunami displaced them from their original location along the coast from where the fish shoals were easily visible. At their present location this is impossible.
- iv Excavation is to be done for 1.5 kms in Mudhumunai river.
- v An NGO Efficor provided the boats promising to register the boats as well. In view of this, they collected photographs of all the boats (arrangement was 1 boat for 5 people) This has not been fulfilled as yet and when they approached the fisheries department they were charged Rs. 2000 as registration and insurance fee per year.
- vi Quality and durability of nets has reduced to half its initial value I.e from 6 months to 3 months at present. Also the sand is sticky in texture which is not suitable for the nets. Investment required for the various nets: Salangaivalai @ Rs.6000 ,Mathivalai @ Rs.20000 and Kanakatha valai @ Rs.30000 per year
- vii Ring seines land catches in bulk. 50 kg of fish was sold at Rs.500 INR earlier while now 50 kg is sold at Rs. 800. Artisan catch quantities have decreased from 50 kg to 3 kg at present.
- viii Distant urban traders from Kerala used to do marketing at Annankoil earlier, at present, however they place orders with a local agent/ middleman who decides the price with the producer. As a result the price is low.
- ix The government or private organizations can fix a rate for fish to ensure a minimum but regular income for the producer This is practiced at Annankoil for high value species and can be attempted for all species.
- x Training in GPS will facilitate widespread use which will then help in reducing fuel costs .
- xi Marketing is done at Annankoil due to sand bar in Mutdhunai river.
- xii They do not feel the need as they follow the traditional method and are efficient. Also catches are declining.
- xiii Only small catches are landed at the village while larger catches are landed at Annankoil. This uncertainty in landing in turn affects the quantity of ice required.
- xiv Bus timings can be postponed from 7 am to 9am as the fishers arrive late. They do vending at Chidambaram, Manarkudi, Parangipettai, Mutlur and Annankoil
- xv If an ice plant is set up at Killai which forms an intersection for 12 villages, Pillumedu, Pattaradi, Chinnavaikal, MGR Nagar, Kalaigan nagar Muzhukuthurai, MGR thittu, and Killai will be benefited
- xvi If the price of fish is stable then their capital can be finite amount.
- xvii They are not interested in secondary occupations/alternate jobs
- xviii The difference in the cost price and selling price is very low
- xix 30 people can be granted old age pensions



## Muzhukuthurai Hamlet village





## Muzhukuthurai

### Introduction

This village is located 5 kms to the north of Pichavaram and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 161 households with an average family size of 3.54 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	0
Female over 35	0
Adult male	176
Adult female	199
Children male	83
Children female	86
Infant male	9
Infant female	17
total	570

*Table 1: Demographic Profile of Muzhukuthurai*

The village is so named as it was the place where idols of deities were drowned during festivals by the neighbouring villaages of Chidambaram and is believed to have originated 80 years ago when people from Killai and Pichavaram migrated into it. The major shock the community felt was the tsunami in 2004 during which no lives were lost.

15 years ago the village only had thatched houses. Following the tsunami the village now has 150 concrete houses. Infrastructure in the village includes a primary school which was established 30 years ago. Children can attend high school at Killai which is 3 kms away from their village. Roads in the village are level sandy roads. Buses were frequently available in the last 10 years. Medical facilities were and still are available in Killai. A cooperative society for women was formed in 1994.

### Asset Ownership

35% of the households own or share ownership of fishing craft. 18% are single owners of craft while 66% do not own any (Figure 1).

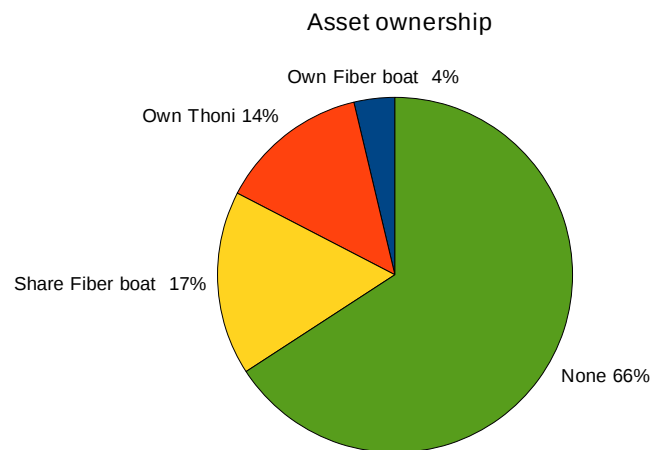


Figure 1: Asset Ownership of Muzhukutthurai

### Occupational Profile

The vast majority of the village men (56%) are engaged in fishing or allied activities while 20% are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

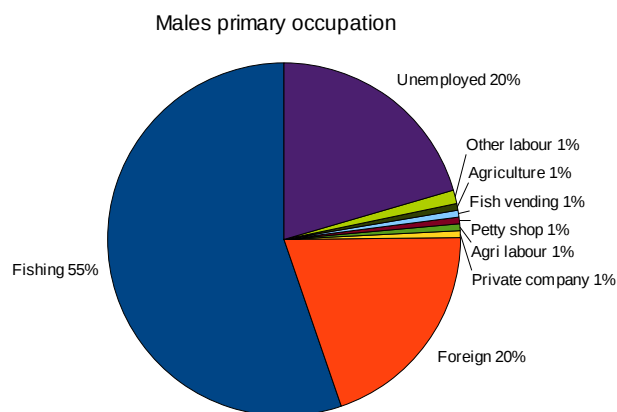
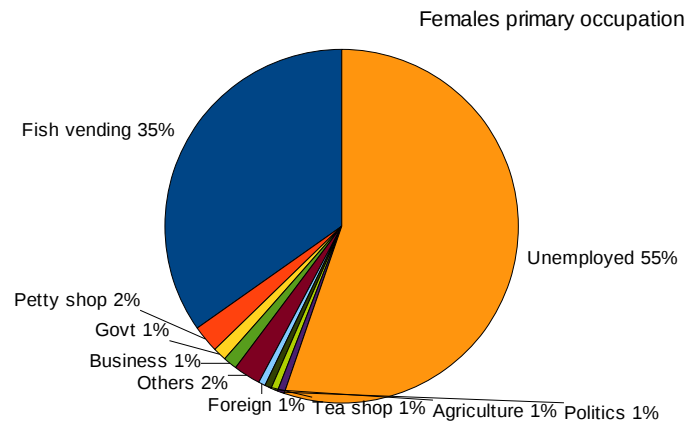


Figure 2: Primary Occupations of Men

35% of women are engaged in fish vending as their primary occupation while 55% are unemployed. Other occupations include running petty shops, government, etc., with 10% involved in such activities. This is presented in Figure 3.



*Figure 3: Primary Occupation of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP Boat owners
2. Crew members
3. Fish vendors

### **Stakeholder Analysis**

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. The MFRA should be strictly enforced and implemented.

#### **Welfare schemes:**

1. Banks can facilitate credit linkages for their working capital and for their family expenses.
2. Government should provide the monsoon relief on time.

#### **Infrastructural requirements:**

1. Cement drying yard required for drying fish.
2. Private companies can establish an ice plant at Killai village.
3. Regular buses can be arranged by the respective department for transportation as well as for transporting fish.

#### **Facilitation required:**

1. Desiltation of Mudhumunai river mouth.
2. Registration of boats to be eligible for diesel subsidy should be facilitated by government.
3. Government or NGOs can standardize the rates of fish to ensure a minimum but regular income for the producers/ fishermen.
4. Training on operation of GPS units can be provided.

### Stakeholder group: FRP Owners

#### COGA Analysis

Caste -Parvatharajakulam

Origin -Heredity

Genders -Males.

Age group -25 to 60 years

#### Daily activity profile

Time	2.00-3.00 am	3.00-4.00 am	4.00-5.00 am	5.00-6.00 am	6.00-7.00 am
Activity	Start from shore and travel to an average depth of 5 fathoms	Cast their nets and wait.	Haul nets, sort catch and recast nets.	Return to shore.	Sort catch and sell it to head loaders

#### Annual activity profile

They go fishing nearly 9 months in a year, inclusive of back water fishing for 3 months, remaining idle the rest of the time.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Back water level low  Low catch <sup>i</sup> ;	Formation of sand bar at the river mouth <sup>ii</sup> Use of ring seine	Fish whenever the water level increases in the back waters Diversification to ring seine <sup>iii</sup> Had to spend more fuel as well as more time <sup>iv</sup>	Excavate the river mouth <sup>v</sup>
<b>Technology</b>	No diesel subsidy	Boats unregistered	Buy at normal rate	Diesel subsidy can be provided <sup>vi</sup>
<b>Infrastructure</b>	Boats unable to land	River mouth blocked because of sand bar	Market at Annankoil	Excavate the river mouth
<b>Investment</b>	Insufficient working capital for maintenance of damaged gear	Quality and durability has reduced considerably <sup>vii</sup>	Dependent on informal money lenders charging high interests; Mortgage jewellery; Borrow from neighbours	Quality check or set up of a cooperative store for nets required
<b>Markets</b>	Low prices	Bulk landings by modernized fishers <sup>viii</sup>	Sell according to the day's rate	Government should standardize the prices <sup>ix</sup>
<b>Capacity</b>	Unable to use GPS	Lack of training	Use the traditional	Suitable

*Muzhukuthurai*

<b>building</b>	units		knowledge passed down from their fore fathers	training on the latest fishing methods. <sup>x</sup>
<b>Social security</b>	No insurance for boats	Boats unregistered	Approach the fisheries department for registration	Government to reduce formalities and do the needful for small scale fishers <sup>xi</sup>
<b>Policy and Institutional support</b>	Boats are unregistered	Not possible as most of the boats in this village are donations	Approach the fisheries department to register.	Government to reduce formalities and do the needful for small scale fishers

**Stakeholder group: Crew members**

**LED Framework Analysis**

<b>Components</b>	<b>Problems</b>	<b>Causes</b>	<b>Coping strategy</b>	<b>Gaps to be addressed in coping strategy</b>
<b>Natural resources (FISH)</b>	Decline in catch	Use of ring seines	Fishing in different locations	Ban on use of mesh sizes below 60mm <sup>xii</sup>
<b>Technology</b>				
<b>Infrastructure</b>	Inadequate transport	Infrequent and irregular buses	Walk around 2-3km to Mudasaloodai jetty	Regularity of buses to be monitored <sup>xiii</sup>
<b>Investment</b>				
<b>Markets</b>				
<b>Capacity building</b>				
<b>Social security</b>	Unable to take insurance policies; social ceremonies	No surplus income	Borrow from money lender at 10% interest rate; Mortgage jewellery at 3% interest rate per month	
<b>Policy and Institutional support</b>	Non implementation of MFRA regulations	Use of ring seine	Fish in different locations	Government should enforce the MFRA strictly <sup>xiv</sup>

## Stakeholder group: Fish vendors

### COGA Analysis:

Caste -Parvatharajakulam

Origin -from Killai and Pichavaram 80 years ago.

Gender-Female

Age -25 years and above(after marriage); they marry at 19 and after childbirth and nursing they start fish vending

### Daily activities profile:

Those selling at the main market start their day at 5.00 am working till 3.00 pm after which they return home and continue with household activities.

Those selling door to door, start at 7.00 am continuing till 2.00pm.

### Annual activities profile:

They go fish vending 8 months in a year. The remaining 4 months is the rough season and is considered as the lean period.

### LED Framework Analysis

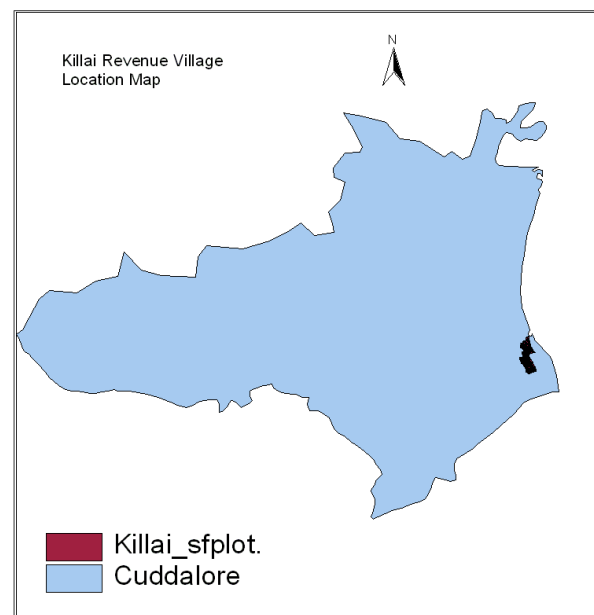
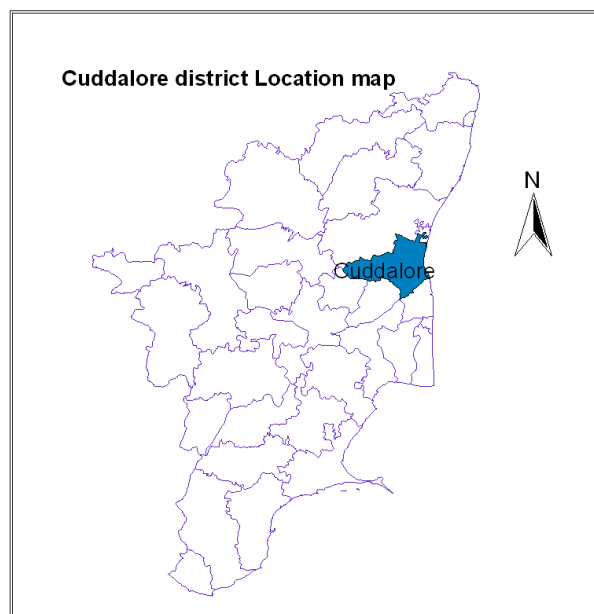
Component	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resource (FISH)</b>	Decreased availability of fish <sup>xv</sup> ; Valuable fish not available	Use of ring seine Overcapacity in fish vending	Purchase from neighbouring villages	Ban on ring seine should be enforced. <sup>xvi</sup>
<b>Technology</b>	Drying fish	No drying yard	Dry fish on the roads	Cemented dry yard required
<b>Infrastructure</b>	Supply of ice; Inadequate and infrequent transport	Large catches <sup>xvii</sup> ; Buses irregular skipping trips at times	Travel 4-5 km to purchase ice; Walk 2-3km	Set up an ice factory <sup>xviii</sup> Regularity of buses to be monitored
<b>Investment</b>	Insufficient working capital	Less income	Mortgage/sell jewellery; Borrow from money lenders	Involvement of banks and SHGs required
<b>Markets</b>	Market access	Constrained by entry fees	Pay Rs.5 as entry fees and Rs.10 for their fish load <sup>xix</sup>	Fees unnecessary
<b>Capacity building</b>				
<b>Social security</b>	Rough season	No income	Borrow from	Relief amounts to



### *Muzhukuthurai*

			money lenders	be given at the onset of the rough season <sup>xx</sup>
<b>Policy and institutional support</b>	Non availability of groceries granted by Government		Borrow from neighbours	Rations to be given at the specific period

- i Catch quantities have decreased from 10 baskets=100 Kg(10 years ago) to 3 kg at present.
- ii Great floods 50 years ago washed away the sands accumulated at the river mouth, however the increasing constructions of dams across rivers has led to formation of sand bars at river mouths.
- iii At present there is one ring seine in this village
- iv Spending 5 litres/day earlier; 8 litres/day is consumed at present and fishing time has increased by 1 hour.
- v Excavation is to be done for 1.5 kms into Mudhumunai river.
- vi Only 2 of 28 boats are provided with subsidy diesel.
- vii Quality and durability of nets has reduced to half its initial value I.e from 6 months to 3 months at present. Also the sand is sticky in texture which is not suitable for the nets. Investment required for the various nets: Salangaivalai @ Rs.6000 ,Mathivalai @ Rs.20000 and Kanakatha valai @ Rs. 30000 per year
- viii Ring seines land catches in bulk. 50 kg of fish was sold at Rs.500 earlier while now 50 kg is sold at Rs. 800. Artisan catch quantities have decreased from 50 kg to 3 kg at present.
- ix This is practiced at Annankoil for high value species and can be attempted for all species.
- x Training in GPS will facilitate widespread use which will then help in reducing fuel costs .
- xi An NGO Efficor provided the boats promising to register the boats as well. In view of this, they collected photographs of all the boats (arrangement was 1 boat for 5 people)This has not been fulfilled as yet and when they approached the fisheries department they were charged Rs. 2000 as registration and insurance fee per year.
- xii Ban ring seines with small mesh sizes so that capture of juveniles can be prevented.
- xiii Buses are the primary mode of transportation to/through several villages and at times some trips are skipped;this has to be monitored
- xiv Ban on ring seine should be implemented quickly.
- xv Fish catch has decreased in the ratio of 10:1; The species unavailable are *Kanankatha, Valai and surai*
- xvi Ring seine should be banned immediately as its operation has cost them their employment in addition to contributing to the declining fish catch.
- xvii On days when they have a good catch, ice is not available. The ice plant is in Mudasaloodai which is about 4 kms from their village. A shorter route exists in the form of a path along the beach, through which Mudasaloodai is 1km away. If this is made into a proper road, they would be able to travel with a help of a bicycle.
- xviii An ice factory set up at Killai would benefit 12 villages as it forms an intersection for the same.
- xix Entry fees at Chidambaram Muncipal market.
- xx Relief amounts for the rough season to be given in the month of Iyypasi (the beginning of the rough season)



## Patradi Hamlet village



## **Pattaradi**

### **Introduction**

This village is located north east of Pichavaram (about 100 m) along the backwaters and lies in the Cuddalore District. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 65 households with an average family size of 3.5 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Adult males	84
Adult females	91
Children males	38
Children females	27
Infant males	6
Infant females	4
<b>total</b>	<b>250</b>

*Table 1: Demographic profile of Pattaradi*

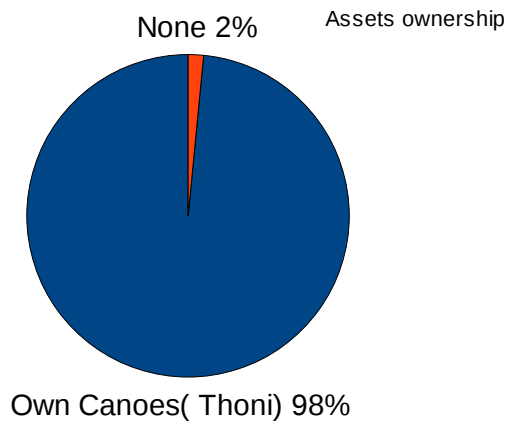
Migration of people from the village Killai, 1 km north of Pattaradi is believed to have led to the formation of the village 30 years ago. The major shock the community felt was the tsunami in 2004 during which the canoes were carried away. No lives were lost.

From 100 thatched houses 30 years ago the village now has 65 concrete houses due to migrations of people to MGR Thittu, Muzhukuthurai and Killai. Infrastructure in the village includes a community hall, overhead tank and children's park. Roads within the village were sandy paths and the major road connecting the hamlets was metaled 20 years ago. Transport facilities became available 5 years later. Drinking water was available from springs called Vallal Kuttai though the water was salty. The fisher folk used to buy drinking water at Rs.2 per pot.

The village lacks in sanitation. During post tsunami rehabilitations program houses were constructed with attached toilets but without sewage tanks, as a result of which this provision is dis functional.

### Asset ownership

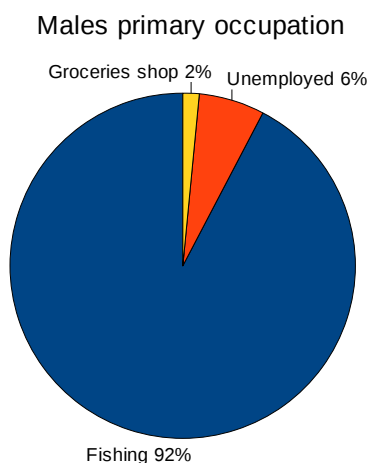
98% of the households possess single ownership of canoes/thonis while only 2% do not own any (Figure 1).



*Figure 1: Asset ownership of Pattaradi*

### Occupational Profile

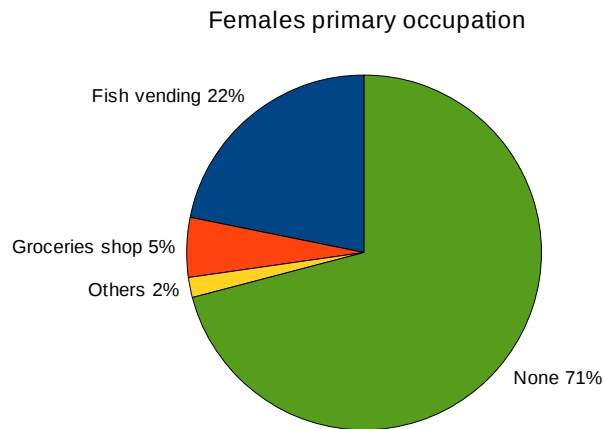
The vast majority of the village men (92%) are engaged in fishing or allied activities while 6% are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupation of Men*

### *Pattaradi*

22% of women are engaged in fish vending as their primary occupation while 71% are unemployed. Other occupations include grocery shops with just 7% involved in such activities. This is presented in Figure 3.



*Figure 3: Primary Occupation of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. Canoe owners
2. Ring seine crew
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. Government can enforce a law that does not allow nets being tied at the river mouth to prevent sand accumulation.

**Welfare schemes:**

1. Diesel subsidy required.
1. Credit linkages can be provided for their working capital.
1. Relief for the rough season should be provided on time.
1. Old age pension must be provided to all old people.

**Infrastructural requirements:**

1. Government/various NGOs can open the newly constructed market building in consultation with the respective villages..

**Facilitation required:**

1. NGOs can provide training for alternative jobs with marketing support.
2. GPS training can be provided.

*Pattaradi*

13<sup>th</sup> June, 08

### **Stakeholder group: Canoe owners**

#### **COGA Analysis**

Caste -Parvatharajakulam

**Origin**-Heredity

**Gender**-Males

**Age** -15 to 60 years

#### **Daily activities profile**

<b>Time</b>	3.00-4.00 am	4.00-5.00 am	5.00-6.30am	6.30-7.30am	7.30-8.00 am
<b>Activity</b>	Start from shore and travel to depths of 3 fathoms at sea	Cast their nets and wait.	Sort catch and recast nets in a different location.	Return to shore	Sort out and hand over to their wives for marketing

#### **Annual activities profile**

They go fishing nearly 9 months in a year, inclusive of back water fishing for 3 months, remaining idle the rest of the time.

#### **LED Framework Analysis**

<b>Components</b>	<b>Problems</b>	<b>Causes</b>	<b>Coping strategy</b>	<b>Gaps to be addressed in coping strategy</b>
<b>Natural resources (FISH)</b>	Low catches;  Sand accumulation	Tsunami altered the composition of seawater <sup>i</sup> Nets tied at the river mouth by neighbouring villages <sup>ii</sup>	Employed as ring seine labourers <sup>iii</sup>  Fishing 2-3 times a week	Ban on ring seine should be enforced.; Government can enforce a law preventing nets from being tied at the river mouths
<b>Technology</b>	Unable to compete with modernized fishers	No GPS Unit	Use old traditional methods	GPS units can be provided to small scale fishers
<b>Infra structure</b>	Dis functional market	Poor plumbing causing leaks in several places <sup>iv</sup>	Use the old street markets at Killai	The recently constructed market should be made functional <sup>v</sup>
<b>Investment</b>	Insufficient working capital for	Poor quality <sup>vi</sup> ; Bivalves <sup>vii</sup>	Borrow from neighbours;	Loans through banks with



## *Pattaradi*

	maintenance of damaged gear.		Borrow from money lenders <sup>viii</sup> Mortgage jewellery	flexibility in repayment of instalments <sup>ix</sup>
<b>Markets</b>	Fish rates are low	Bulk landings from ring seines	Sell fish according to the rate of bulk catchers with low profits	Standardize/regulate the price <sup>x</sup>
<b>Capacity building</b>	GPS training	Unaware of its operation and use	Use old traditional methods learned from their ancestors	Provide suitable training
<b>Social security</b>	Lack of insurance	No surplus income	At their own risk	
<b>Policy and Institutional support</b>	No retirement pension	Not aware <sup>xi</sup>	Net mending jobs	Pension for all old people to be provided. <sup>xii</sup>

*Pattaradi*

12<sup>th</sup> June, 08

**Stakeholder group: Ring seine crew**

**COGA Analysis:**

Caste -Parvatharajakulam

Origin -Killai

Gender-Males

Age -25 to 50 years

**Daily activities profile**

Time schedule	6.00-7.00am	7.00-9.00 am	9.00-10.00/ 11.00 am	11.00 am- 12.00 pm	12.00-1.00pm	1.00 pm
Activities	Start from shore towards the neighbouring village	Crossing backwaters(1 hour) and travel to sea	Cast the nets into the sea and wait; idle while waiting	Haul net and sort catch	Reset nets for each cycle(3 cycles in a day)	Carrier boats take catch to market

**Annual activities profile**

They do ring seining for 3 months a year while the remaining months are spent in regular fishing using their own canoes.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Low catches	Overfishing <sup>xiii</sup>	Use the ring seine three times a day	
<b>Technology</b>	Diesel	Large quantities required <sup>xiv</sup>	Buy at normal price	Subsidies can be provided <sup>xv</sup>
<b>Infrastructure</b>	No market	Market dis functional	Marketing at Annankoil	The market should be made functional
<b>Investment</b>				
<b>Markets</b>	Low price  No ready money	Large landings from neighbouring villages <sup>xvi</sup> Dependent on traders	Traders determine the rates according to the trend in demand for fish Receive payments weekly	Standardize/ regulate the price  Government can trade at a standard price <sup>xvii</sup>

*Pattaradi*

<b>Capacity building</b>	Secondary job	Fishing no longer seems viable	Fishing 2-3 times a week	
<b>Social security</b>	No insurance	No surplus income <sup>xviii</sup>	At their own risk	
<b>Policy and Institutional support</b>	Rough season benefits	Unavailable at the specific time	Borrow from money lenders	Should be provided at the beginning of the rough season <sup>xix</sup>

Pattaradi

11<sup>th</sup> June, 08

### Stakeholder group: Fish vendors

#### COGA Analysis:

Caste - Parvatharajakulam

Origin - Killai fishing villages.

Gender - Females

Age - 30 to 60 years

#### Daily activities profile

Time	6.00-7.00 am	7.00-8.00 am	8.00-9.00 am	9.00-10.00 am	10.00-12.00 pm	12.00-1.00 pm
Activity	Start towards the shore and wait for the fishermen to return	Purchase and ice fish	Travel by bus to Chidambaram	Reach market and sell	Marketing	Return home from Chidambaram

#### Annual activities profile

They go fish vending nearly 6 months a year remaining idle the rest of the year.

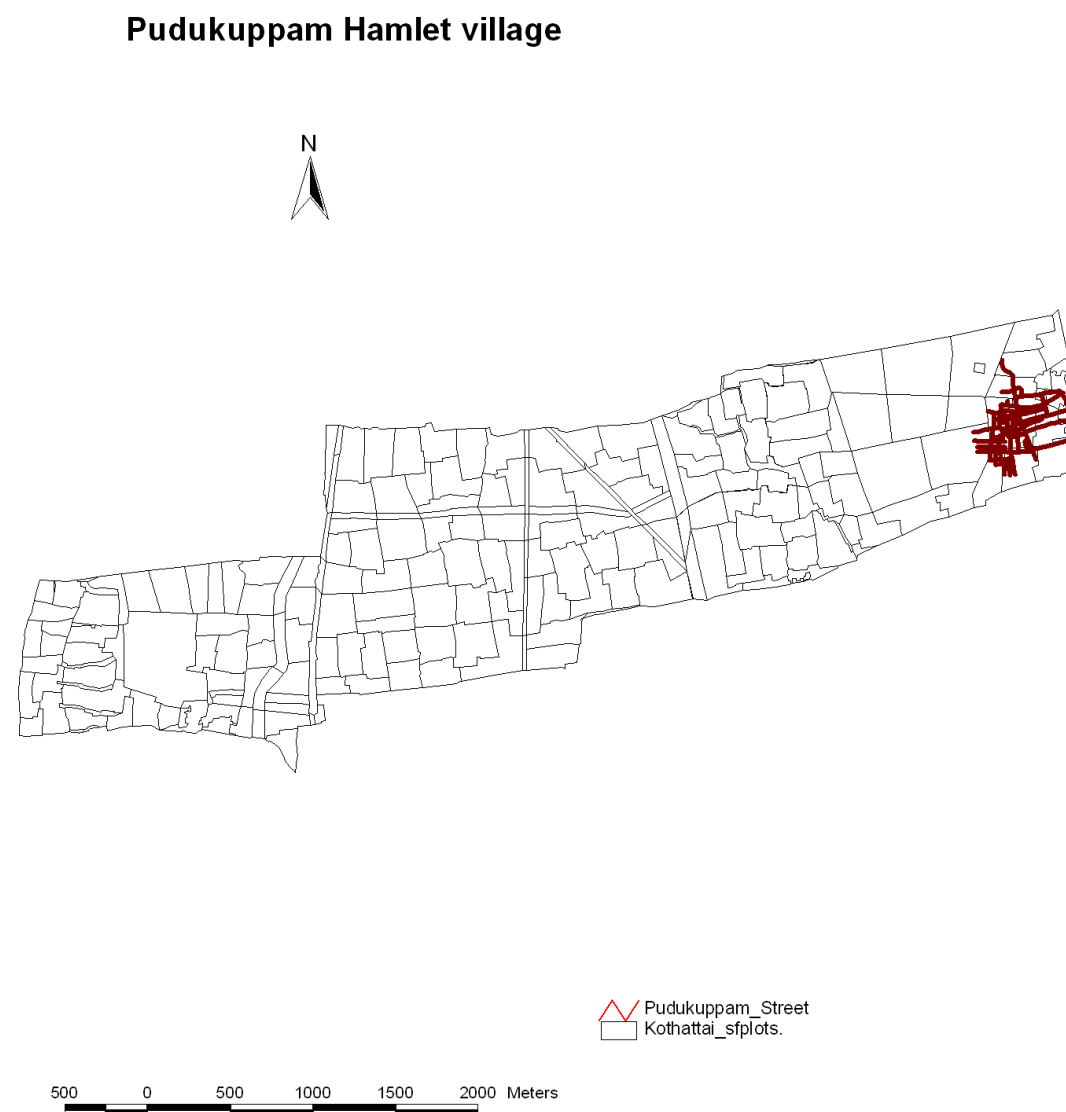
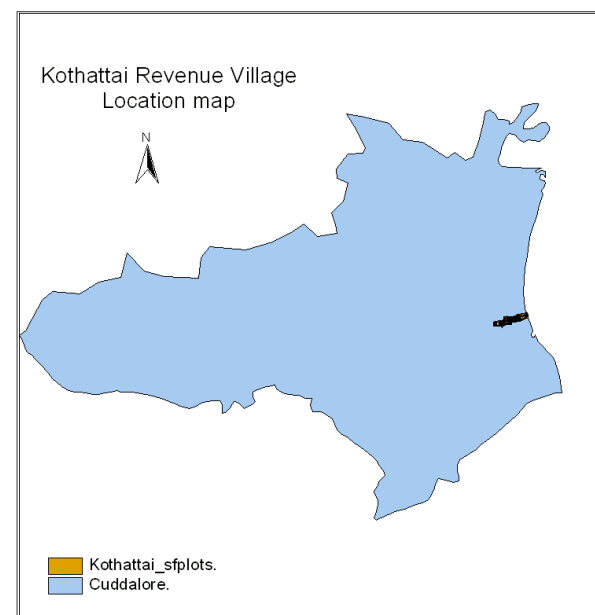
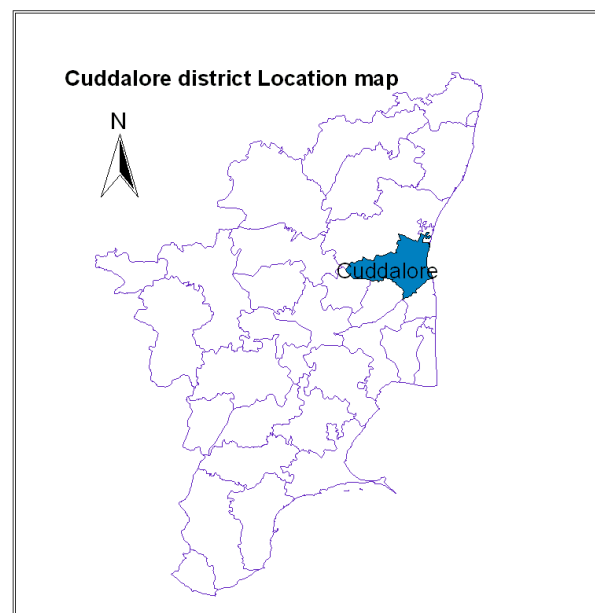
#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Quantity of fish low	The composition of seawater has changed; Few shore fishers <sup>xx</sup>	Dependent on neighbouring villages <sup>xxi</sup>	Ban on ring seine should be enforced.
<b>Technology</b>				
<b>Infrastructure</b>				
<b>Investment</b>	Capital	Price variation; Scarcity of fishes	Buying on credit from fishermen	Loans to be provided <sup>xxii</sup>
<b>Markets</b>	Dis functional market	Poor plumbing causing leaks in several places	Marketing at Chidambaram and nearby villages of the same <sup>xxiii</sup>	Market should be made functional so transportation cost can be saved
<b>Capacity building</b>	Secondary job(pickle making)  Alternate jobs <sup>xxiv</sup>	Marketing  Fishing no longer seems viable <sup>xxv</sup>	  Fish vending only thrice a week	They prefer regular employment with a regular income (expect

*Pattaradi*

				a minimum of Rs.100/day)
<b>Social security</b>	No insurance	No surplus income	At their own risk	Prices can be regulated
<b>Policy and Institutional support</b>	Old age, handicapped	No pension	Doing fish vending at local markets <sup>xxvi</sup>	Pension to be provided to all

- i A large number of fish were killed during the tsunami due to a composite mixture of toxic substances (black in color). The water proved fatal for 2-3 people in that village.
- ii Nets are tied at river mouths by villagers from *Killai, Pillumedu, Pattaradi and Chinnavaikal*.
- iii They are participating in ring seine operations for these past two years as labour in neighbouring villages namely *Chinnavaikal, Pillumedu and Muzhukuthurai*. At present there are 20 people involved in ring seine operation
- iv The market was disfunctional due to conflict among neighboring villages and poor construction. It was constructed for the villages, Pattaradi, Pillumedu, Chinnavaikal. But the people of Killai have now taken possession of this market though still not using it.
- v The Government should interfere in this conflict and make the market functional.
- vi The quality and durability of nets has reduced from 6 months to 3 months
- vii Bivalves have increased in the last two years
- viii Loans from money lenders are at 10% interest rates and have to be repaid on a weekly basis.
- ix Around 30-40 villagers have borrowed loans from the bank at Killai but could not repay; these loans are being borne by the Government presently. The installments cannot be repaid during the rough season.
- x The Government should standardize/ regulate the price for all fish species.
- xi They are not aware of the available schemes. A copy of benefits can be displayed in the village community hall to create awareness among all.
- xii 1 out of 9 people is receiving a pension. This needs to be extended to all
- xiii Ring seining is increasing by the day. No FRPs or ring seines in this village. There are 2 ring seines each in *Chinnavaikal and Pillumedu*
- xiv 50 litres of diesel is required per day which is purchased at Chidambaram or from traders in the village at price of Rs.40
- xv Subsidies can be provided at Mudasaloodai which is 5 kms from the village .
- xvi Villagers from Samiyarpettai ,Velingrayanpettai, C-puthupettai, Mudasaloodai are trading in Annankoil
- xvii They believe if the government takes over trading their income would be safeguarded by a standard price.
- xviii 2 years back their income was Rs.500/share which has now reduced to 100-250INR/share
- xix Relief for the rough season should be provided at the beginning of the month *Iyypasi*
- xx Shore fishers are few due to low catches and widespread operation of the ring seine
- xxi There are 20 fish vendors and they purchase fish at Mudasaloodai.
- xxii About 20 women in this village doing fish vending .They require about Rs.5000 for their working capital
- xxiii They are head loaders in villages such as Samiyarpettai ,Puthukuppam,C-Puthupettai,Mudasaloodai.
- xxiv The women were trained in pickle processing but due to their inability to market, this was not pursued as an alternative to fish vending. Government or organizations can render support to enhance alternate opportunities.
- xxv Due to scarcity of fish and high competition they feel it is not viable
- xxvi Market on sides of roads at Killai



## Pudukuppam-Kothatai

### Introduction

This village is located to 8 kms to the north of Parangipettai and lies in the Cuddalore district. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 308 households with an average family size of 4.2 persons. The demographic profile of the village is provided in Table1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	190
Female over 35	192
Adult male	312
Adult Female	228
Children Male	150
Children Female	129
Infant Male	53
Infant Female	39
<b>total</b>	<b>1293</b>

*Table 1: Demographic profile of Pudukuppam-Kothatai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt were the 2004 tsunami and a cyclone in May 2008. No lives were lost during the latter though 101 people died during the tsunami.

From 170 huts in the 1960s, the village now has 300 houses of which most are concrete. Infrastructure in the village includes roads approaching the village, a net mending hall, an auction hall, storage hall and a drying yard. A metal road connecting the hamlets was established 20 years ago. The roads within the village were sandy and unlevel which were concreted 2 years back facilitating transportation. Medical facilities are available at Parangipettai.



### Asset Ownership

27% of the households own or share ownership of fishing craft. 15% are single owners of craft while 73% do not own any (Figure 1).

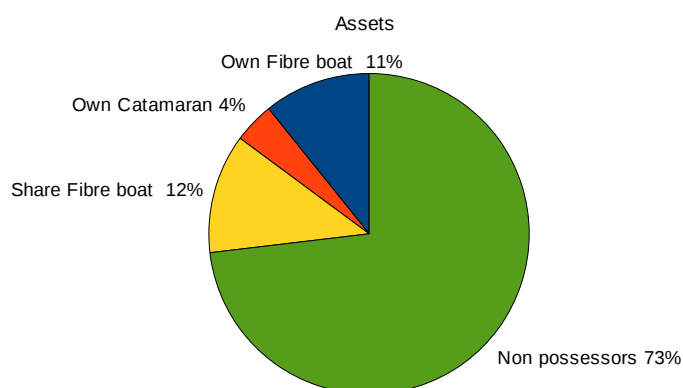


Figure 1: Asset Ownership in Pudukuppam-Kothatai

### Occupational Profile

The vast majority of the village men (82%) are engaged in fishing or allied activities while 7% of the men are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

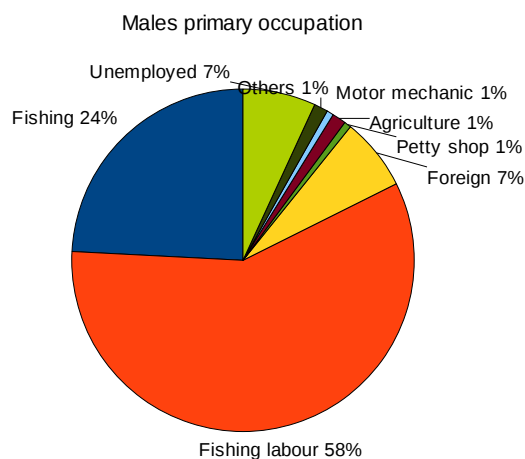
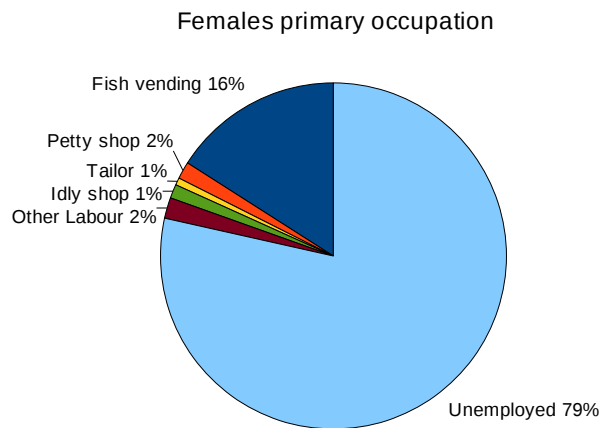


Figure 2: Primary Occupation of Men

### *Pudukuppam-Kothatai*

16% of women are engaged in fish vending as their primary occupation while 79% of the population are unemployed. 6% are involved in other occupations (petty shops, idly shops, other labor) and government jobs. This is represented in Figure 3.



*Figure 3: Primary Occupation of Women*

**Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. FRP boat owners
2. Crew members
3. Fish vendors

***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

**Recommendations made by all groups:**

**Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.

**Welfare schemes:**

1. Credit linkages can be provided for their working capital.
2. Fisheries department should provide compensation during the ban period.
3. Old age pension must be provided to all old people.
4. Villagers who are not registered in the fisheries co operative should be enrolled.

**Infrastructural requirements:**

1. Market can be constructed at Allampakkam<sup>i</sup>
2. Construction of cement tubs in that village for processing the dry fish.
3. Fish drying yard and storage room can be constructed as required.

**Facilitation required:**

1. Training required on operation of GPS units.
2. Registration should be facilitated for boats provided after the tsunami.
3. Training on fish related occupations, as an individual activity can be provided.

## *Pudukuppam-Kothatai*

10<sup>th</sup> June, 08

### **Stakeholder group: Boat owners**

#### **COGA Analysis**

Caste -Parvatharajakulam

**Origin** -Heredity

**Gender**-Males.

**Age** -15 to 60 years

### **Daily Activities Profile**

Time	3.00-4.00 am	4.00-5.00 am	5.00-6.00 am	6.00-7.00 am
Activity	Start towards the sea crossing the back waters	Cast their nets and wait; resting while waiting	Haul nets and return to shore	Sort catch and sell to vendors.

### **Annual Activities profile**

They fish for nearly 9 months in a year and are idle during the remaining months.

### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Insufficient earnings due to insufficient catch <sup>ii</sup> Decline in the number of laborers <sup>iii</sup>	Use of ring seine <sup>iv</sup>  Hired by mechanized boat employers	Forced to become labourers in mechanized boats <sup>v</sup> Fish when crew is ready <sup>vi</sup> Sell the FRP boats <sup>vii</sup>	Government should enforce the ban on the ring seine and support the artisanal fishers
<b>Technology</b>	GPS units provided earlier have been sold <sup>viii</sup>	Inability to operate	Use old traditional methods	Suitable training can be provided
<b>Infrastructure</b>	Auction building is not used <sup>ix</sup>	No regular fish production	Marketing is done at Annankoil, a neighbouring village	
<b>Investment</b>	No loans	Boats are unregistered because they were donations <sup>x</sup>	Approach the fisheries department in vain	Government can facilitate the registration <sup>xi</sup>
<b>Markets</b>	No regular prices	No facilitating agent	Sell their catch at Annankoil where SIFFS is regulating the price <sup>xii</sup>	SIFFS can work in this village too
<b>Capacity building</b>	GPS training	Unable to operate	Use their compass to find direction	Training on operation of

*Pudukuppam-Kothatai*

				GPS units
<b>Social security</b>	No compensation during the ban period	People of other castes were also enrolled in the co-operative society because of which new members are not being enrolled.	Attempted overcoming this obstacle but with no success	Fisheries department intervene and resolve this issue
<b>Policy and Institutional support</b>	Preservation of resources	Ring seine	Not doing fishing often	Ban on ring seine should be enforced to make fishing viable <sup>xiii</sup>

10<sup>th</sup> June, 08

**Stakeholder group:Crew members**

**COGA Analysis**

Caste -Parvatharajakulam

Origin -Heredity

Gender-Males

Age -15 to 60 years

**Daily Activities Profile**

Time	3.00-4.00 am	4.00-5.00 am	5.00-6.00 am	6.00-7.00 am
Activity	Start towards the sea crossing the back waters	Cast their nets and wait; resting while waiting	Haul nets and return to shore	Sort catch and sell to vendors.

**Annual Activities Profile**

They fish for nearly 6 months a year and for 3 months they seek employment on mechanized boats. They are idle the rest of the year.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Low income <sup>xiv</sup>	Catches are low	Fishing at depths of 40 fathoms	
<b>Technology</b>	GPS units provided earlier have been sold	Inability to operate	Use old traditional methods	Suitable training can be provided
<b>Infrastructure</b>				
<b>Investment</b>				
<b>Markets<sup>xv</sup></b>				
<b>Capacity building</b>	Lack GPS units	Lack knowledge to operate	Use old traditional methods	Training in operation of GPS units
<b>Social security</b>	Insufficient savings; Prolonged rough seasons; Hospitalization	No surplus income	Borrow from neighbours; Dependent on boat owners; Mortgage jewellery	Government should make insurance compulsory for boats
<b>Policy and Institutional support</b>	Some of them are not included in the fish co-operative society	Enrolment procedure has not been updated (those attaining 18	Approach the fisheries department to assist them in this matter	Government should update the membership procedure

*Pudukuppam-Kothatai*

		years of age each year are not enrolled)		every year according to the number of eligible members
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## Stakeholder group: Fish vendors

### COGA Analysis

Caste - Parvatharajkulam

Origin - Different villages

Gender-Female

Age -20 – 60 years

Marital Status: Married

### Daily activities profile

Time	7.00 am	7.00-11.00 am	11.00 –2.00 pm	2.00–3.00 pm	3.00 – 4.00 pm
Activity	Arrive at seashore	Buy fish at auction	Sell fish (head-loaders)	Collect money from the buyer	Return walking to the village

### Annual activities profile

They do not go fish vending during the rough season and the ban period.

### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resource (Fish)</b>	Valuable fish nor large fish available <sup>xvi</sup>	Use of ring seine; No landing in this village; High competition with other vendors <sup>xvii</sup>	Buy small quantities of fish from Annankoil	Boats to land at their village
<b>Technology</b>	Processing the dry fish	No cement tub for mixing the salt with fish	Mixing it on the beach	Construction of cement tubs in that village
<b>Infra structure</b>	No market building; Not enough space to dry fish and to store it	Small fish drying yard and storage room	Sell fish walking a maximum distance of 5km; Drying it on the beach	Concrete market building can be constructed <sup>xviii</sup> ; Fish drying yard and storage room can be constructed as required <sup>xix</sup>
<b>Investment</b>	Less income	Insufficient daily working capital	Borrow from money lender at 3% monthly interest	Department of fisheries and societies can act as facilitators for credit linkage <sup>xx</sup>
<b>Capacity</b>	Non fish related	Group activity		Training on individual



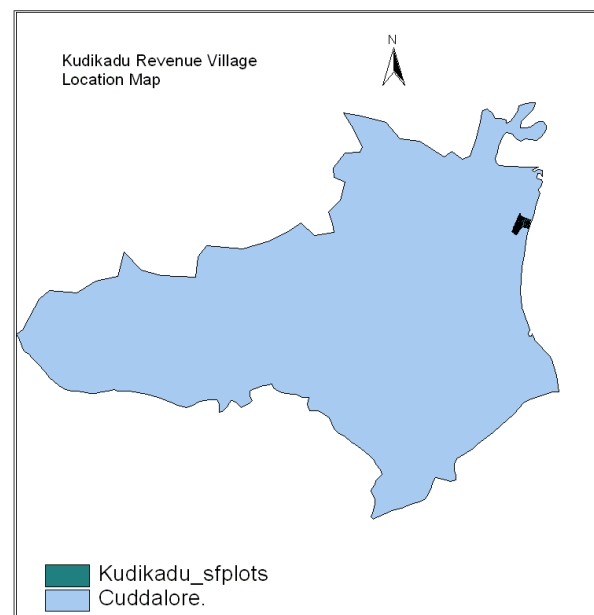
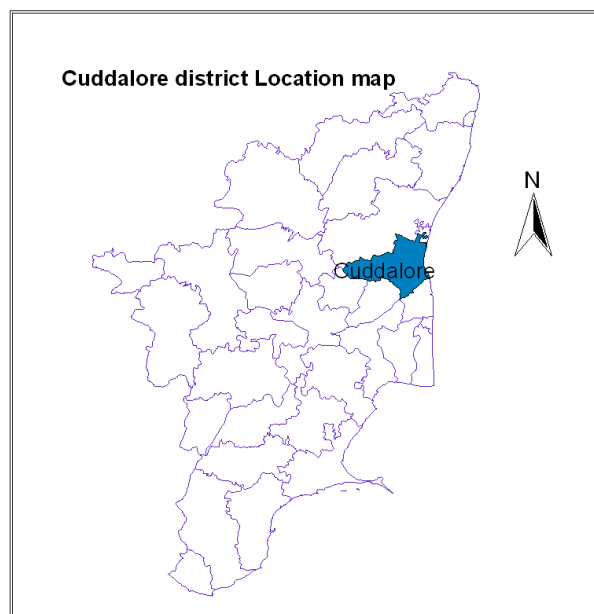
*Pudukuppam-Kothatai*

<b>building</b>	income generation program training was provided by NGOs which was not successful			fish related activity can be provided <sup>xxi</sup>
<b>Social security</b>	Post retirement/old age	No pension	Dependent on their sons and in laws.	Old age pension can be provided <sup>xxii</sup>
<b>Government policy</b>	Delay in getting compensations from the Government <sup>xxiii</sup>	Unaware of the various government policies related to fishing sector		NGOs and other organizations can conduct awareness programs on the various government policies and schemes

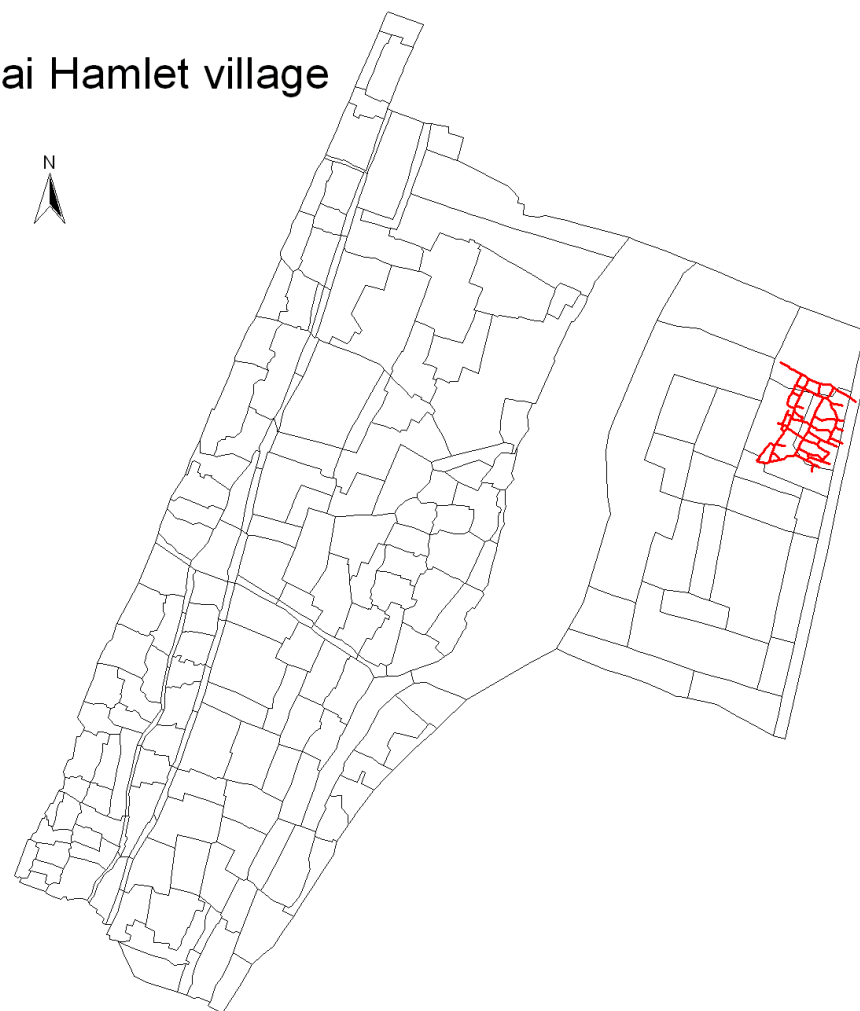
**Note on market:**

The producer takes advances from the auctioneer (a maximum of Rs.20,000) who is a woman. There are five auctioneers in this village. The producer hands over the catch to her (from whom they had taken advance) and then she starts bidding. The highest bidders(fish vendors) usually get the fish. The auctioneer usually takes Rs.10 worth of fish from each catch after which she auctions it to the vendors.

- i Setting up a market at Allampakkam would benefit 10 villages: Sothikuppam, Rasapettai, Chittiraipettai, Thamanapettaoi, Nayakarpettai, Nanjilingapettai, Periyakuppam, Pettotai, Rediyarpettai, Ayyanpettai and Annapanpettai
- ii Catch quantities have decreased from 4000-5000 fish 10 years ago to 1000-2000 fishes at present. The price for 100 fish= 2 ½ kg ranges from Rs45-75. Species varieties have also reduced from a maximum of ten to lesser.
- iii There were only kattumarams before the tsunami. World vision granted 30 FRPs during the Post Tsunami rehabilitation program I.e 1 boat is shared by 5 people. If any one crew member participates as labour on mechanized boats, the entire crew is unable to fish as they would have to provide a share to him as well.
- iv Ring seines catch entire shoals/schools of fish(from small to large sizes) thus affecting reproduction of the species
- v Insufficient income has resulted in most forming labor on mechanized boats. At present there are around 100 people who are crew
- vi Go fishing 2-3 days a week
- vii Around 10 boats have been sold to ring seine users from Samiyarpettai and Parangipettai
- viii Around 30 GPS units were granted along with the boats by World vision of which only 2/3 remain. The rest were sold.
- ix During the tsunami 35 people died who were vendors from other villages. It is believed that marketing has been abandoned due to fear. There were many vendors(bicycle and head loaders) before the tsunami.
- x 7-8 boats are unregistered as they are unable to pay the insurance premium for insurance. The government has registered all remaining boats.
- xi It is important for social and institutional support
- xii Marketing is done only for gill netters and not others as they yield low catches.
- xiii Ban of ring seine is essential due to the rapid decline in catch in the last two years.
- xiv Income has reduced from Rs.1000 to Rs.400 in the past two years.
- xv Landing is done at Annankoil, an established centre.
- xvi Catch quantities have been reduced by 75%. The fish caught there were Kanakathai, Prawns, Keechaan, Karai and Savalai
- xvii There are nearly 150 fish vendor, which includes cycle vendors from Kullanchavadi, Chinoor pudupettai and Ayyanpettai
- xviii Market can be constructed at Allapakkam.
- xix There are around 50 women doing vending in this village.
- xx At present there are 5 SHGs.
- xxi Training in fish/prawn pickle processing at international standards
- xxii There are around 25 old people in this village not receiving any pension. Only 4 women are provided with widow pension.
- xxiii Rs. 50,000 for people who deceased during the Tsunami is yet to be received.



## Rasapettai Hamlet village



Rasapettai\_street  
Kudikadu\_sfplots

900 0 900 1800 Meters

## Rasapettai

### Introduction

This village is located 12 kms to the south east of Cuddalore and lies in the Cuddalore District. It is separated from Cuddalore by a river. The fishing hamlet is comprised of the Parvatharajakulam (Chettiyar and Pillai) caste group and has 305 households with an average family size of 4.61 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	188
Female over 35	190
Adult male	317
Adult female	255
Children male	221
Children female	157
Infant male	44
Infant female	35
<b>total</b>	<b>1407</b>

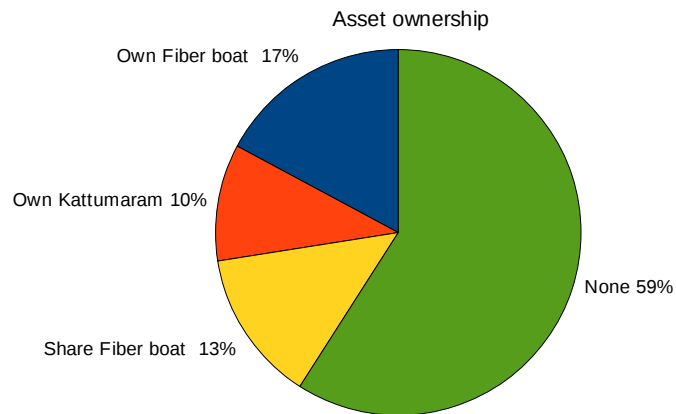
*Table 1: Demographic Profile of Rasapettai*

The origin of the village could not be identified during the historical mapping session. People from Samiyarpettai are believed to have migrated into this village. The major shock the community felt was the tsunami in 2004 during which 2 lives were lost. Most of the kattumarams were damaged and carried away as well.

From 120 thatched houses 50 years ago, the village now has 320 houses of which most are concrete. Infrastructure in the village includes a primary school established 50 years ago which is now a middle school. Canoes were the earlier mode of transportation at a fee of 25 paise and at present the construction of the bridge is underway. The sandy paths in the village were concreted soon after the tsunami. Two overhead tanks were also constructed around the same time after the tsunami of which one is disfunctional. Prior to this water was obtained from wells and by using hand pumps. Medical facilities are available at the Primary Health centre at Kannarapettai and for critical cases people have to go to Cuddalore. A medical camp for old people is conducted once every month by an NGO working in this village.

### **Asset ownership**

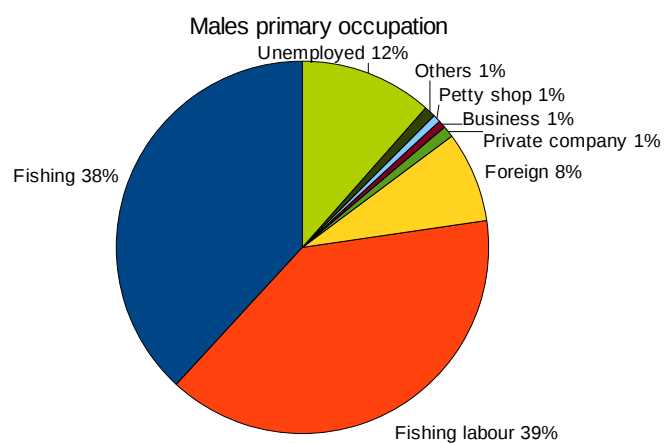
40% of the households own or share ownership of fishing craft. 27% are single owners of craft while 59% do not own any (Figure 1)



*Figure 1: Asset Ownership in Rasapettai*

### **Occupational profile**

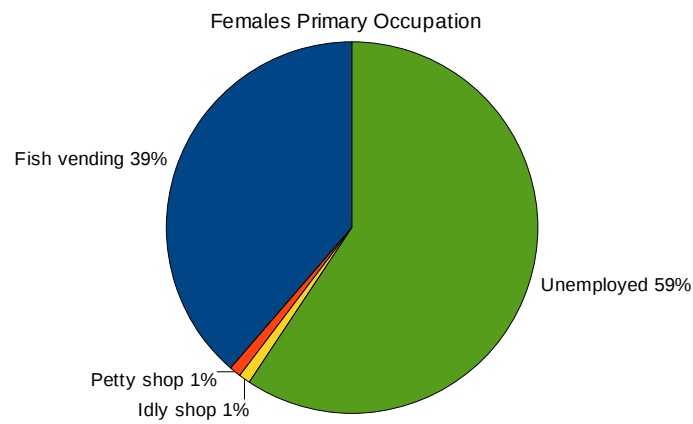
The vast majority of the village men (77%) are engaged in fishing or allied activities while 12% are unemployed. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2: Primary Occupations of Men*

### *Rasapettai*

39% of women are engaged in fish vending as their primary occupation while 59% are unemployed. Other occupations include tailoring or running petty shops, idly shops, etc., with just 2% involved in such activities. This is presented in Figure 3.



*Figure 3: Primary Occupation of Women*

### **Identification of major stakeholders:**

Preceding the stakeholder analysis, was the identification of the major stakeholder groups. 3 major groups were identified from this village and are as follows:

1. Trawler crew
2. Kattumaram owners
3. Fish vendors

### ***Stakeholder Analysis***

The stakeholder analysis revealed the problems faced by each group, as well as their present coping strategies with specific recommendations made by each group.

### **Recommendations made by all groups:**

#### **Resource management and Enforcement:**

1. Government should enforce the ban on ring seines.
2. The MFRA should be strictly enforced.

#### **Infrastructural requirements:**

1. Establish Government fuel station at Sothikuppam village for providing diesel on subsidy.
2. Market can be constructed at Allampakkam<sup>i</sup>

#### **Welfare schemes:**

1. Credit linkages can be provided for their working capital.
2. Government should provide the compensation for rough season on time.
3. Old age pension should be provided to non SHG members; Government should ensure all aged people are members of SHGs.
4. NGOs can create awareness on the various insurance policies applicable to them.

#### **Facilitation required:**

1. Training required on operation of GPS units
2. Procedure for registration of boats should be simplified.

*Rasapettai*

9<sup>th</sup> June, 08

**Stakeholder group: FRP boat owners**

### **COGA Analysis**

Caste - Paravatharajakulam

Origin - Heredity

Gender - Male

Age - 15 to 60 years

### **Daily activities profile**

Time	3.00-3.30 am	3.30-4.00 am	4.00-4.30 am	4.30-5.00 am	5.00-5.30 am	5.30-6.00 am	6.00-6.30 am	6.30-7.00 am
Activity	Start from shore and travel to an average depth of 8 fathoms	Cast their nets	Wait	Haul net and sort catch	Recast their nets	Wait	Haul net and return to shore	Sort catch and send to market

### **Annual activities profile**

They fish for 6 months a year participating as labor in ring seine operations for the remaining 6 months<sup>ii</sup>

### **LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Declining quantity and quality of catch <sup>iii</sup>	Use of ring seine and trawl gear <sup>iv</sup>	Fishing thrice a week	Ban the use of destructive fishing techniques; Government should enforce the MFRA rules strictly.
<b>Technology</b>	Lack of Spares (eg: oil filter);  No diesel subsidy	8 HP (LG Engine) <sup>v</sup> ;  Boats unregistered <sup>vi</sup>	Purchase from Kerala and Andhra Pradesh;  Purchase within the village at the	Common engine of 10 HP will improve their situation (Lambardini); Government can provide diesel



## Rasapettai

			additional hike of Rs.2/ litre	subsidy for all boats
<b>Infrastructure</b>	No markets  No easy access to market or village  No fuel station;	No roads connecting the village to the nearest town (Cuddalore.OT) River isolating this village, no direct road connecting the village from town (Cuddalore) <sup>vii</sup> ;	Use canoe as the mode of transport to cross the village <sup>viii</sup>  Use the (sand piled) temporary bridge	Setting up a new market close to Alapakkam so that a cluster of villages will be benefited and will also reduce the competition and conflicts in trading <sup>ix</sup> ; Proper bridge should be constructed to connect the village <sup>x</sup> ; Establish a petrol bunk near the village <sup>xi</sup>
<b>Investment</b>	Purchase of diesel  Damaged nets	Declining catches <sup>xii</sup>  Mechanized boats (Inshore trawling at night)	Dependent on informal money lenders charging high interest rates Mortgage jewellery; borrow from neighbours	Bank or NGOs can provide loans for their working capital
<b>Market</b>	If bulk of the same species is caught, the price reduces considerably	Distant urban traders prioritize the dominant fishing villages <sup>xiii</sup>	Have to wait for the fisherfolk <sup>xiv</sup> from the dominating villages to finish their trade. <sup>xv</sup>	
<b>Capacity building</b>	Latest equipment like GPS units	Unable to operate	Use traditional methods	Suitable training to learn about the latest fishing methods to be provided enabling a reduction in effort and fuel expenses
<b>Social security</b>	Old age <sup>xvi</sup>	No pension		Non members of the residing SHG are not provided with support
<b>Policy and Institutional support<sup>xvii</sup></b>	No diesel subsidy;  Lack of boat insurance	Boats are unregistered The boats were insured in Kerala at the time of donation or purchase, insurance at the time of renewal was not possible <sup>xviii</sup>	Approach the fisheries department to register	Government to reduce formalities and do the needful for small scale fishers <sup>xix</sup>

Rasapettai

11<sup>th</sup> June, 08

### Stakeholder group: Crew (Mechanized boat)

#### COGA Analysis

Caste - Parvatharajakulam

Origin - Heredity; Some of the people from neighbouring villages have migrated for work.

Gender- Male

Age - from 22 to 55 years

#### Daily Activities Profile:

The table represents one trawling cycle which is continued for 5-6 days at a stretch. Nearly 60 people are involved in trawling as labor. The total crew consists of 12 people including the driver of which 6 people rest while the other 6 go for one trawling trip, alternating with the number of trips and sharing the profits of each trip equally.

Time schedule	4.00 -6.00 am	6.00 – 6.30 / 7.00 am	7.00 – 11.00 am	11.00 -12.00 pm	12.00 –12.15 pm
Activities	Start from jetty; Travel to sea mostly other districts	Set trawl net into sea.	Trawling time	Sort out caught fishes	Again set net into sea

#### Sharing in earnings

Labour earns 19% of the selling price while the boat owner takes 81% (boat maintenance, net maintenance and diesel cost)

#### Annual Activities Profile

They do not go trawling during the 45 day ban as well as the rough season.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
Natural Resource (Fish)	Reduction in fish populations <sup>xx</sup>	Use of ring seine <sup>xxi</sup>	Earning according to catch	Ban on ring seine should be enforced.
Technology				
Infra structure	Access to the town	No transport to reach town, sometimes employer calls for immediate	Use the canoe to cross the river and hire an auto to reach Cuddalore OT.	The bridge construction near Sothikuppam is currently underway and should be completed shortly.

*Rasapettai*

		work unexpectedly		
<b>Investment</b>				
<b>Market</b>	Depreciation in shares	Money borrowed by employer from traders	Squid and prawns has to be sold to the money lenders in the market at a discount of Rs.20/kg	
<b>Capacity building</b>				
<b>Social security</b>	Family expenses	No financial support during the non fishing period	Owner provides loans upto Rs.10,000 free of interest;If more money is required, the money lender provided it at 3% interest per month	Awareness on micro credit finance can be created;SHGs for men can be formed
<b>Policy and institutional support</b>	Accidents	No insurance	Borrow from mechanized boat owners	Awareness about the various insurance policies can be created

### Stakeholder Group: Fish vendors at the market

#### COGA Analysis

Caste - Parvatharajkulam

Origin - Different villages

Gender- Female

Age - Two different age groups are doing fish vending:

1. Start at the age of 30 and retire at 60
2. Start after the death of their husband and retire at 65

Marital status:Married

#### Daily Activities Profile:

Time	5.00-6.00 am	6.00-6.30 am	6.30-7.00 am	7.00 am-1.00 pm	1.00-3.00 pm
Activity	Travel to old town jetty	Buy fish	Travel to market	Sell fish	Return to village by bus

#### Annual Activities Profile:

They do fish vending through out the year including the rough season and ban period. They buy fish, prawn etc., from the inland fisher folk.

#### LED Framework Analysis

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	High cost price of fish <sup>xxii</sup>	High competition <sup>xxiii</sup>	Make low profits (Maximum 20%)	Government should give preference to them
<b>Technology</b>	Low profits  Loss of fish, capital losses	They don't have necessary equipment to measure fish They sell fish without ice boxes so by noon fish start spoiling	Use the traditional way calculating by heaps  Sell at low prices, dry the spoiling fish	Need measurement scales and vessels; Ice boxes to be provided, will preserve fish for longer time <sup>xxiv</sup>
<b>Infrastructure</b>	Cross river on canoes	One canoe used taking 45 minutes to return from a single trip	Due to late arrival at market,the value of fish reduces	The bridge construction near Sothikuppam is currently underway and

## Rasapettai

				should be completed shortly
<b>Investment</b>	Less income	Get loans on high interest so their investments are low	Borrow from money lender at 3% monthly interest	Department of fisheries and societies can act as facilitators for credit linkages (Rs.3000 per person)
<b>Markets</b>				
<b>Capacity building</b>	Training in tailoring provided	No trade/market linkage	Forced to continue with their traditional job	Trade links required and they prefer regular employment
<b>Social security</b>	Old age and post retirement		Dependent on their sons and in laws	

**Stakeholder group: Fish vendors (Family members of the boat owners):**

**COGA Analysis**

Caste - Parvatharajkulam

Origin - from different villages (males are from the same village)

Gender- Female

Age - 20-60 years

Marital status – Married

**Daily Activities Profile:**

There is no uniform schedule for their work; their daily activities timed according to the time of fish landings. Given is a brief account of the approximate time taken for their work:

- One hour to take the fish from Rasapettai to Cuddalore
- One and half an hour to sell at the auction
- One hour to return home

**Annual Activities Profile:**

The months of Puratasi, Iyypasi, Karthigai, and Margazhi are considered to be the lean period during which they do not go fish vending.

**LED Framework Analysis**

Components	Problems	Causes	Coping strategy	Gaps to be addressed in coping strategy
<b>Natural resources (FISH)</b>	Decline in catch <sup>xxv</sup>	Use of ring seine <sup>xxvi</sup>	Purchase whatever is available	Ban on ring seine should be enforced.
<b>Technology</b>	Non use of solar drying unit	Weight of catch reduced significantly; price for the product is also very less	Drying it on the sea shore	
<b>Infrastructure</b>	Transport	No frequent buses due to lack of connecting roads to town	Hire auto from the river bank to Cuddalore. Cost is Rs.15 (Rs.10/basket and Rs.5 /person)	The bridge construction near Sothikuppam is currently underway and should be completed shortly
<b>Investment</b>	Working capital		Borrow from money	Bank can

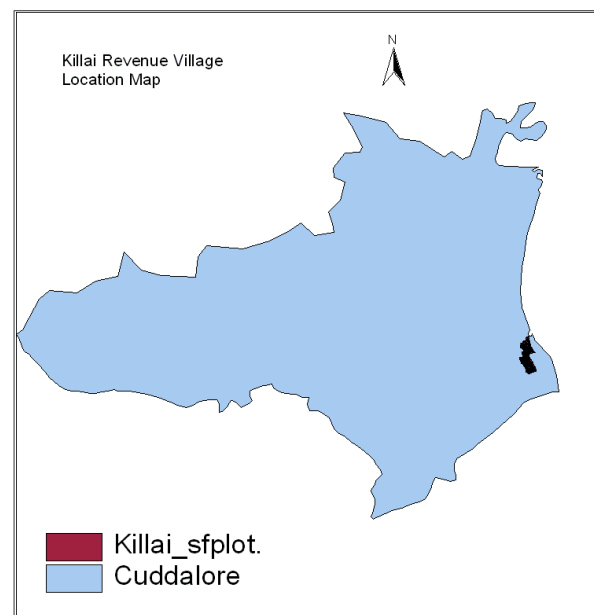
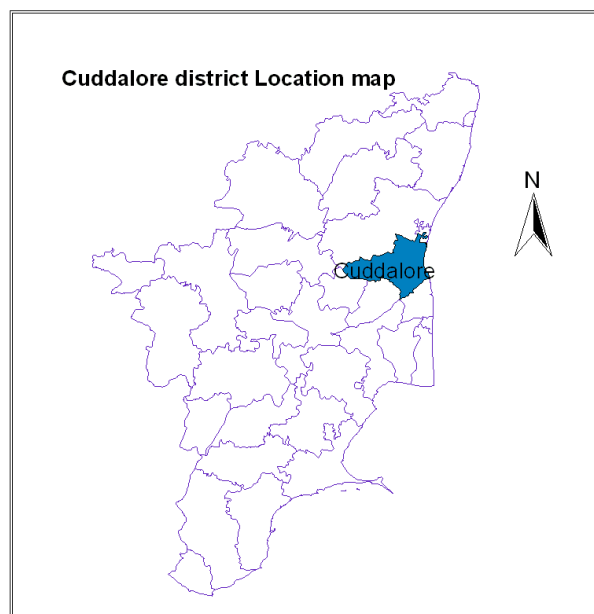
## Rasapettai

			lender at a monthly interest of 10%	facilitate loans for their working capital
<b>Markets</b>				
<b>Capacity building</b>	Fish pickling  Employment Guarantee Act (100 days work) <sup>xxvii</sup>	Insufficient catch  Unpaid	Given up this activity  Quit the job	Ban on ring seine should be enforced since the bulk catch are purchased by distant urban traders
<b>Social security</b>	Old age <sup>xxviii</sup> and post retirement		Some paying life insurance; Dependent on their children; Members of SHG for old age group(save Rs.55 monthly)	Government should provide old age pension to all old people
<b>Institutional Support and Policy</b>	Rough season	Non availability of rough season compensation of Rs.500 rough season	Borrow from neighbours	Compensation to be given at the specific time <sup>xxix</sup>

## *Rasapettai*

- 
- i Setting up a market at Allampakkam would benefit 10 villages: Sothikuppam, Rasapettai, Chittiraipettai, Thamanapettaoi, Nayakarpettai, Nanjilingapettai, Periyakuppam, Pettotai, Rediyarpettai, Ayyanpettai and Annapanpettai
  - ii In view of the declining resources in artisanal fishing and in small investment fisheries, further investment in the same is considered as a risk (as catches are expected to be low) which would result in most of them depending on credit.
  - iii Catch quantities have decreased from 10 baskets, 10 years ago to 2 baskets a year now, approximately 6 kg only. The species has also declined from 10 to 2 at present. The fishing time has increased from 5 to 8 hours while the distance has increased from 7 to 22 fathoms and diesel utility from 5 to 10 litres.
  - iv Ring seines catch entire fish shoals/schools while inshore trawling destroys the spawning areas.
  - v 62 LG 8 HP engines were granted of which only 10 engines remain; others replaced by 10HP Lambardini engines
  - vi Boats are unregistered because insurance was not renewed. The subsidy was available for 42 boats in the past but due to the present low income the subsidy is no longer available to them.
  - vii Distance is 7 kms with an unbridged river in between.
  - viii Only 1 canoe which takes upto 45 minutes to return
  - ix Setting up a market at Allapakkam would benefit 10 villages: Sothikuppam, Rasapettai, Chittiraipettai, Thamanapettaoi, Nayakarpettai, Nanjilingapettai, Periyakuppam, Pettotai, Rediyarpettai, Ayyanpettai and Annapanpettai
  - x Construction of the bridge is underway.
  - xi Establish a fuel station at Sothikuppam
  - xii Fuel costs exceed catch quantities & earnings
  - xiii Devanapattinam is the dominating village
  - xiv Resource destruction is believed to be caused by the fishermen of large villages and though the latter admit to it they seem to lack the courage to rectify this problem.
  - xv Trading takes about 2-3 hours
  - xvi There are around 50 old people in the village of which only 10 are benefited with pensions
  - xvii They have taken personal insurance policies
  - xviii The cost to renew is Rs.2000 and to create a new account it costs Rs.4000. If renewal is not done within the specific period, it is considered as a new account.
  - xix There are around 60 FRPs with 2 ring seines at present
  - xx Their income has reduced from Rs.1000 to Rs.250/day per head.
  - xxi Ring seines catch entire shoals and its use is on the rise. There has not been any substantial catch in the last two months.
  - xxii Due to the hike in diesel prices, the costs have also increased.
  - xxiii Due to decreasing landings in all the fishing villages, people are increasing at the market so the price is getting high.
  - xxiv Around 25 people are in need of ice boxes
  - xxv The availability of valuable fish has decreased (Vawwa, Kizhanga)
  - xxvi Ring seine catches are purchased by traders; Their only option is small scale fishers.
  - xxvii This was a scheme devised by the Government for people seeking income during the ban period and this was not paid
  - xxviii There are around 20 old people in this village
  - xxix Relief for the rough season should be given at the beginning of *Iyypasi*





## Chinnavaikal Hamlet village



## Chinnavaikal

### Introduction

The village is 2 km to the north of Pichavaram and lies in the Cuddalore district. The fishing hamlet is comprised of the Pattinavar caste group and has 286 households with an average family size of 4.18 persons. The demographic profile of the village is provided in Table1.

<b>Population</b>	<b>Total</b>
Adult male	92
Adult female	87
Children male	29
Children female	17
Infant male	8
Infant female	4
<b>total</b>	<b>237</b>

*Table 1: Demographic profile of Chinnavaikal*

The village originated 60 years ago and was an island located to the east of Pichavaram. It was initially a temporary settlement where people would reside for 7 months for the purpose of fishing and return to Killai only during the rough season. It became a permanent settlement 10 years before the tsunami with no electricity supply, however and comprised of only thatched houses. All the people were migrants from Killai. The major shocks the community felt was the 2004 tsunami which caused the relocation of the village to the south of Pichavaram.

Roads in the village were sandy paths and the only mode of transport to reach this village from Killai was by canoe at a fee of 25 paise. For schooling or medical purposes people had to go to Killai.

### Asset Ownership

All of the households own fishing craft with 29% and 71% as single owners of mechanized boats and thonis respectively (Figure 1)

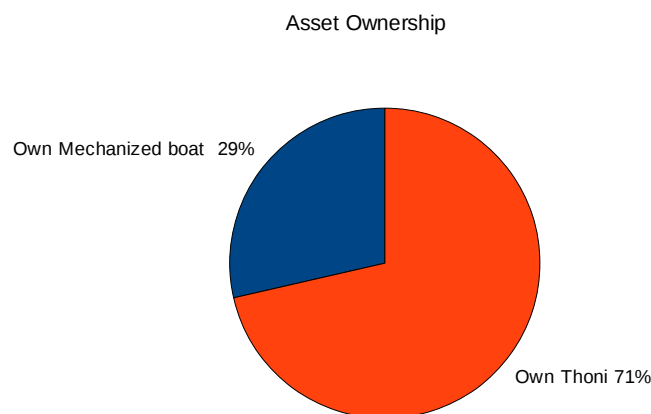


Figure 1: Asset Ownership in Chinnavaikal

### Occupational profile

The vast majority of the village men (95%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

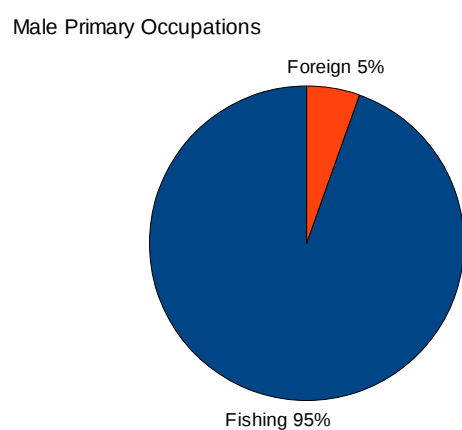
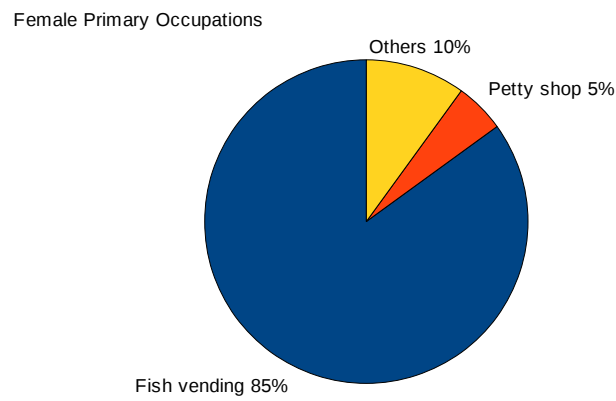
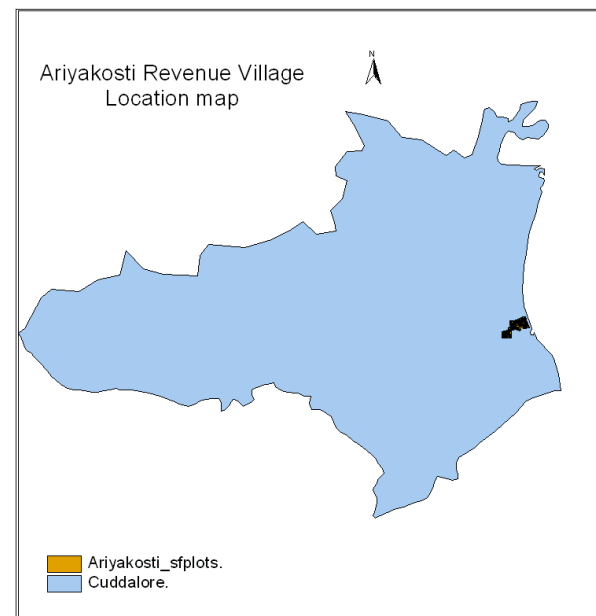
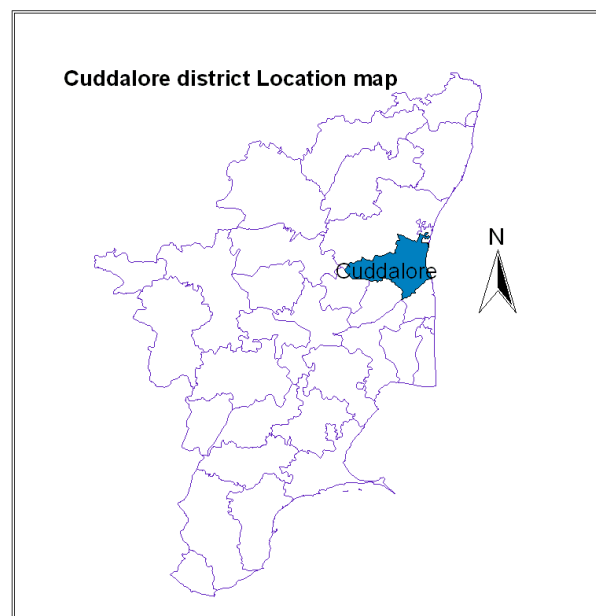


Figure 2: Primary Occupations of Men

85% of women are engaged in fish vending as their primary occupation. 15% are involved in other occupations. This is presented in Figure 3



*Figure 3: Primary Occupations of Women*



## Chinnur North

### Introduction

Chinnur (north) is located 36 kms to the southeast of Cuddalore district. The fishing hamlet is comprised of the Paravatharajakulam. caste group and has 133 households with an average family size of 4.27 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	77
Female over 35	84
Adult male	123
Adult Femal	104
Children Male	69
Children Female	69
Infant Male	20
Infant Female	22
total	568

*Table 1: Demographic profile of Chinnur North*

The origin of the village could not be identified during the historical mapping sessions. The entire village was called Chinnur but a religious clash on the importance of two temples in the north and south of the village resulted in the respective divisions 15 years ago. Many men from neighboring villages migrated after their marriage. The major shock the community felt was the 2004 tsunami during which 8 lives were lost. Additionally 6 kattumarams and 15 trawlers were also destroyed.

50 years ago there were 60 thatched and now the village has 150 houses of which most are concrete. Infrastructure in the village includes a primary school established 30 years ago by the Government which is active till date. Children have to attend high school in Parangipettai or Periyakuppam. Roads connecting the hamlets were metaled 20 years ago whereas roads within the village were unleveled sandy paths till the tsunami after which they were concreted. Buses were available since 1998. The village obtains their water supply through pipelines from Mutloor for the past 10 years prior to which water could be obtained from wells and by using hand pumps. Drinking water is still a problem however. Medical facilities are available at the primary health centre in Parangipettai and for serious cases they have to go to Cuddalore. A community hall is also present in the village.

Asset Ownership

All of the households own or share ownership of fishing craft. 86% are single owners of craft. This is represented in Figure 1.

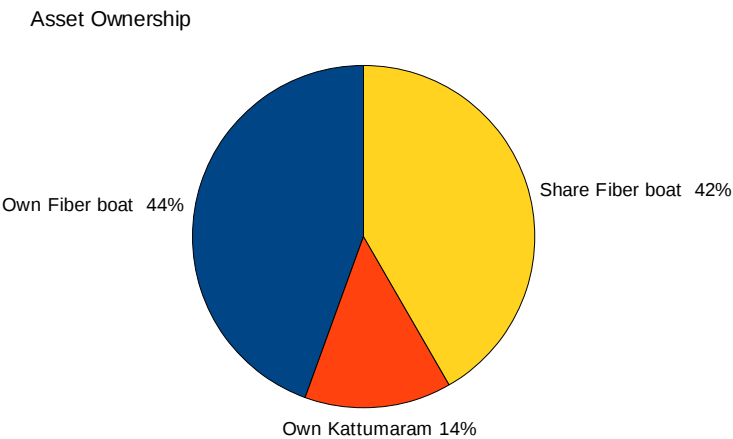


Figure 1: Asset Ownership in Chinnur North

Occupational profile

The vast majority of the village men (94%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

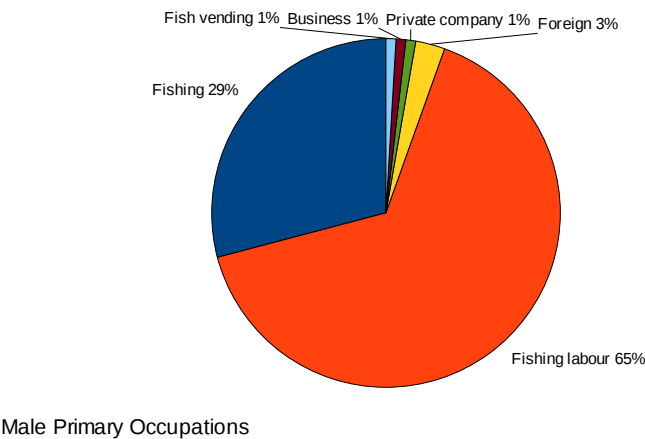
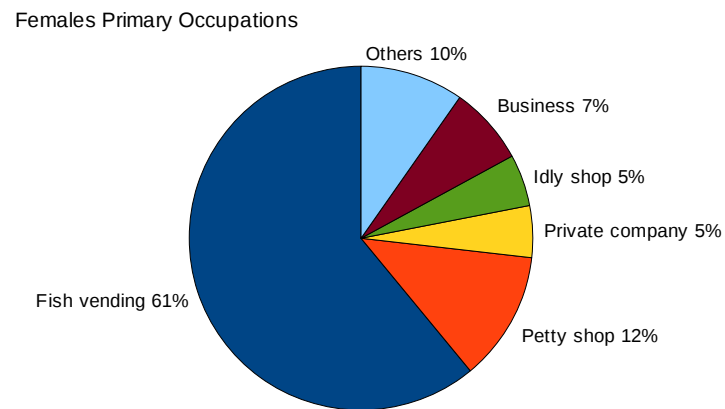


Figure 2: Primary Occupations of Men

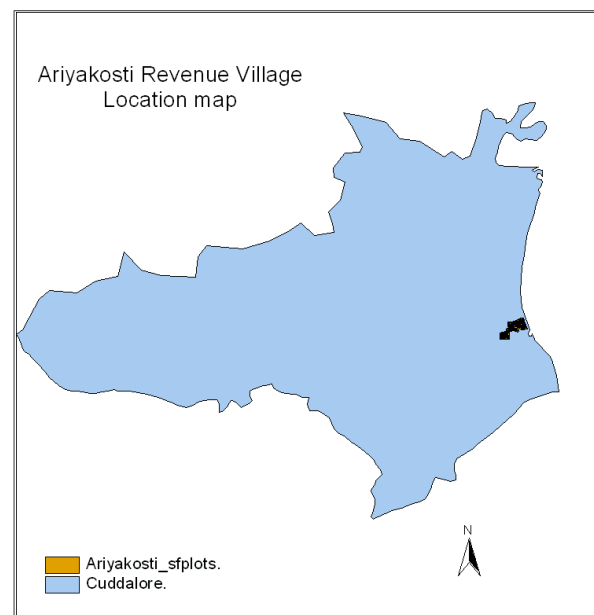
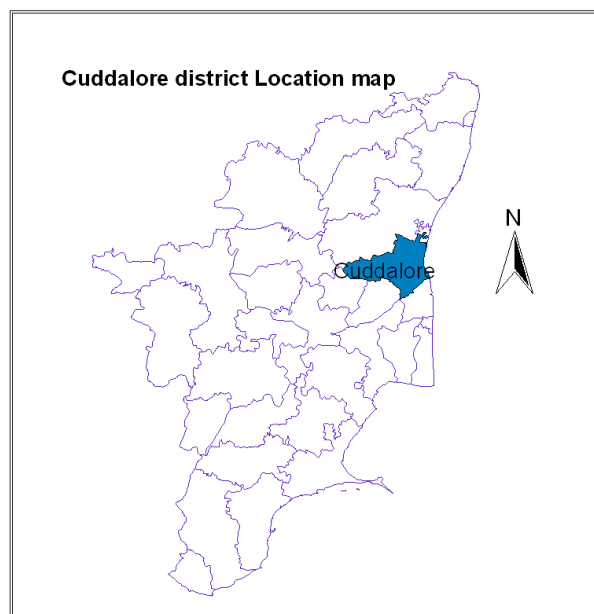
### *Chinnur North*

61% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies, running petty shops/idly shops, etc with 39% involved in such activities. This is presented in Figure 3.

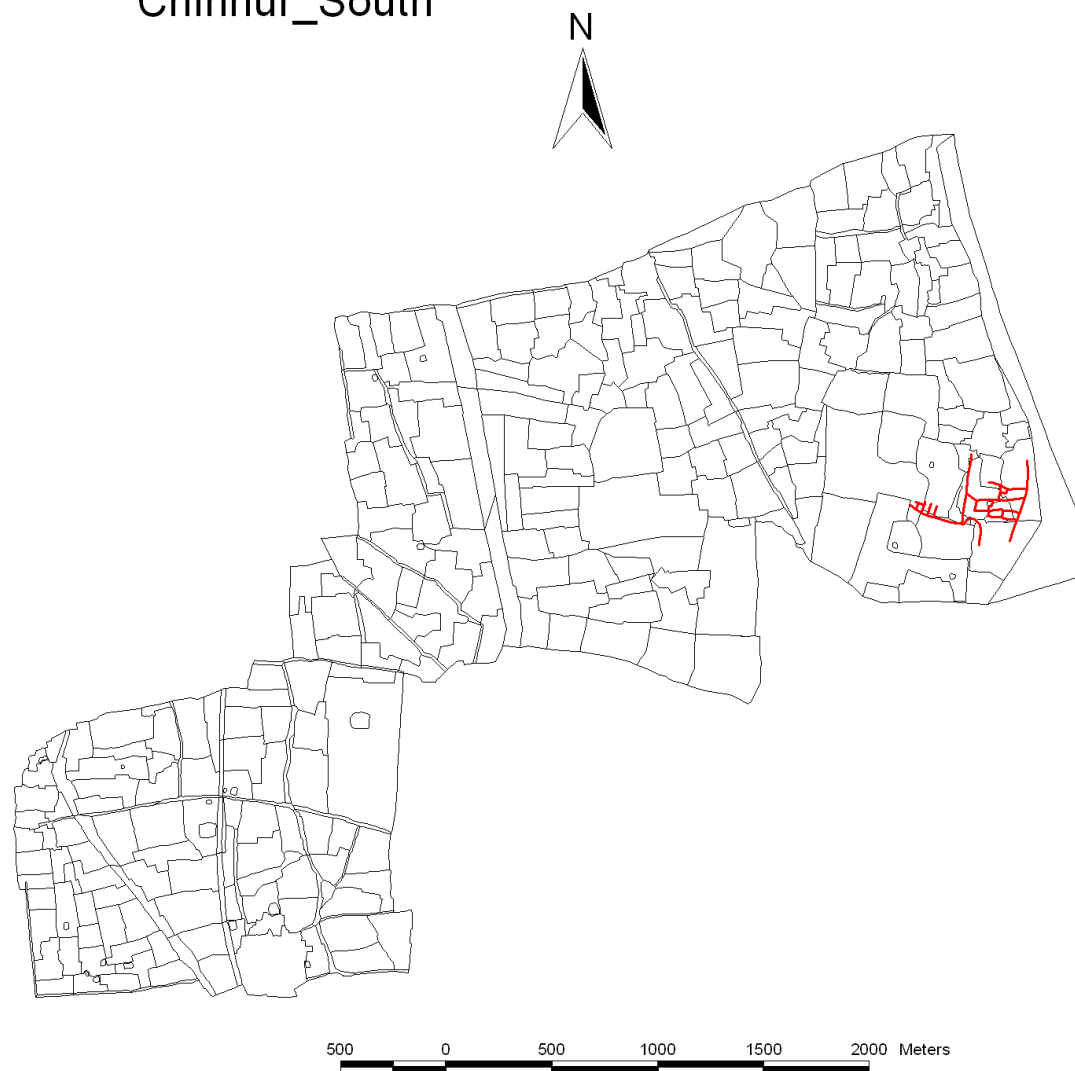


*Figure 3: Primary Occupations of Women*





## Chinnur\_South



## Chinnur South

### Introduction

This village is located 35 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 133 households with an average family size of 4.27 persons. The demographic profile of the village is provided in Table1.

Population of the village	Total
Male over 35	106
Female over 35	139
Adult male	202
Adult female	167
Children male	149
Children female	89
Infant male	36
Infant female	31
total	919

*Table 1: Demographic profile of Chinnur South*

The origin of the village could not be identified during the historical mapping sessions. The entire village was called Chinnur but a religious clash on the importance of two temples in the north and south of the village resulted in the respective divisions 15 years ago. Nearly 150 families from adjacent villages such as Ponnanthitu, Killai, and Karaikal migrated to this village. The major shocks the community felt was the 2004 tsunami during which 20 lives were lost.

From 50 thatched houses 60 years ago, the village now has 210 houses of which about 25 are thatched and the remaining are concrete. Infrastructure in the village includes a primary school established 30 years ago. Children have to attend high school in Parangipettai. Roads in the village were sandy paths earlier and were metaled 20 years ago. These were concreted after the tsunami. The government constructed an overhead tank around the same time prior to which the people could obtain water from wells and by using hand pumps. Medical facilities are available at the primary health centre in Pudhupettai and Parangipettai till date. For serious medical cases people have to go to Chidambaram or Cuddalore. The village has one net mending hall, one community hall and good transportation facilities at present.

### Asset Ownership

All of the households own or share ownership of fishing craft. 93% are single owners of craft. This is represented in Figure 1.

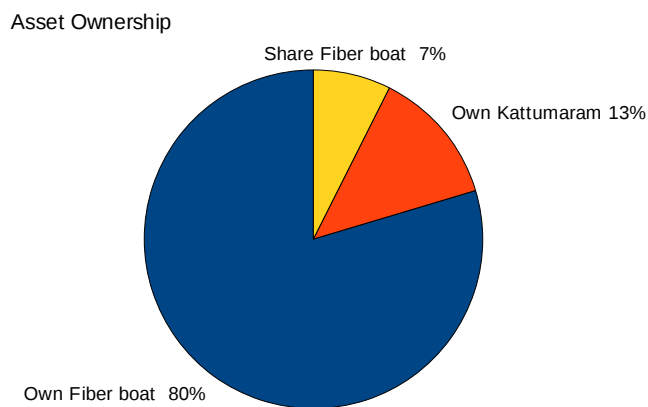


Figure 1: Asset ownership in Chinnur South

### Occupational profile

The vast majority of the village men (68%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

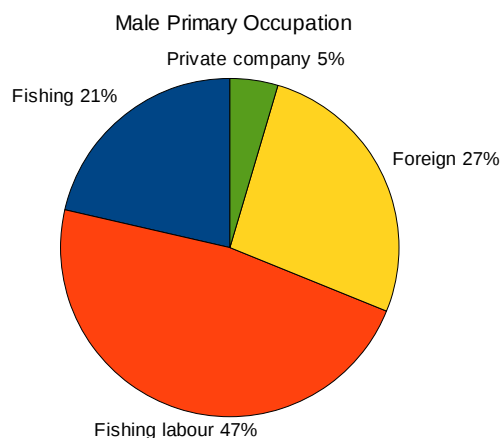
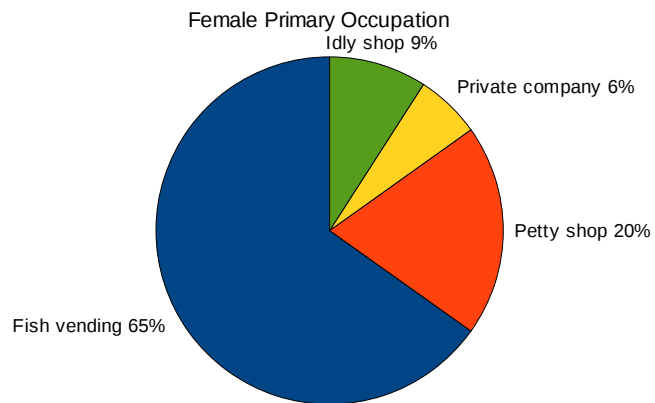


Figure 2: Primary Occupations of Men

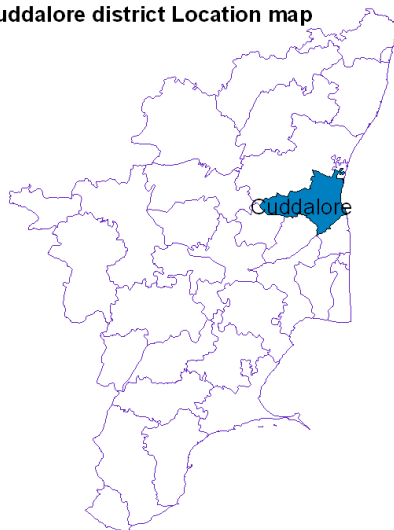
### *Chinnur South*

65% of women are engaged in fish vending as their primary occupation. 35% are involved in occupations such as work in private companies, idly shops and petty shops. This is presented in Figure 3.

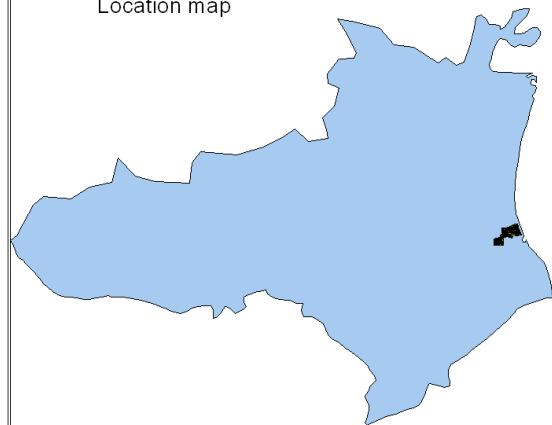


*Figure 3: Primary Occupations of Women*

Cuddalore district Location map

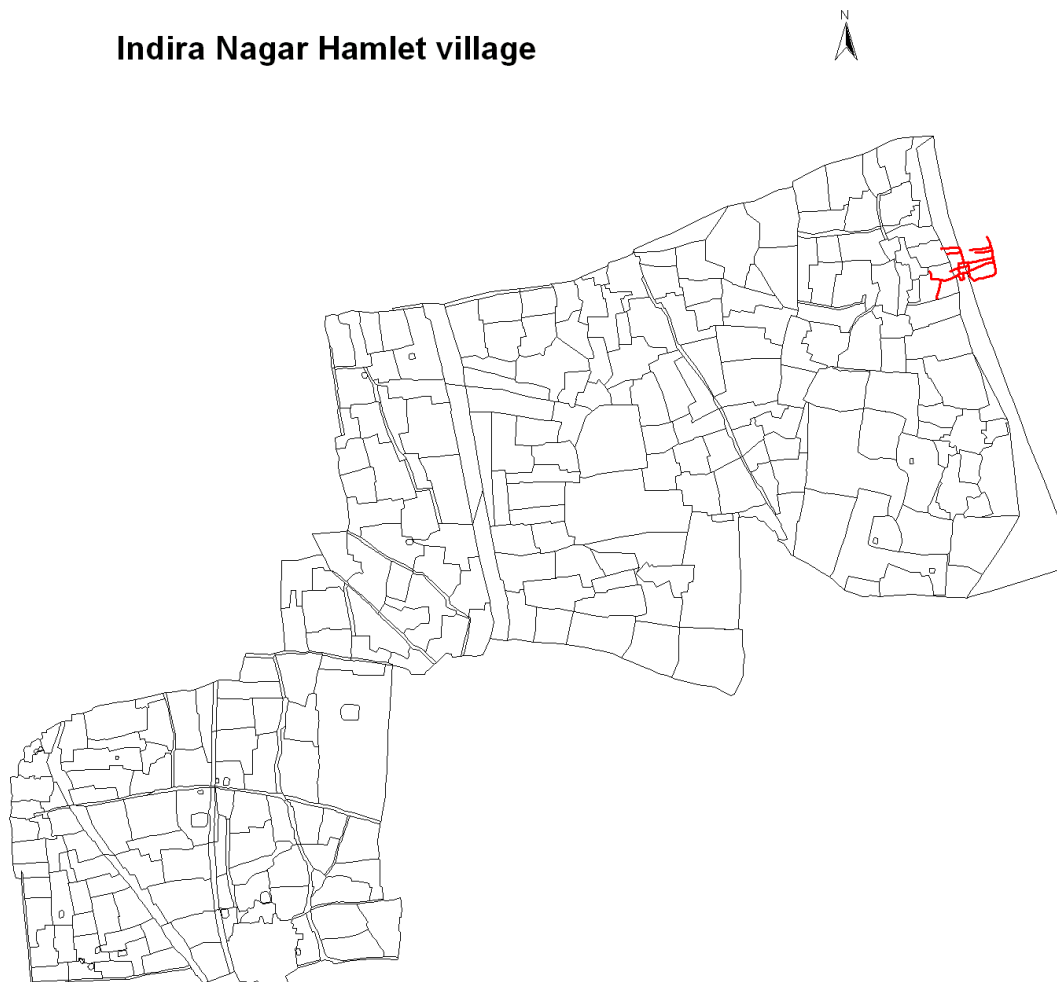


Ariyakosti Revenue Village  
Location map



Ariyakosti\_sfplots.  
Cuddalore.

Indira Nagar Hamlet village



500 0 500 1000 Meters

Indiranagar\_street  
Ariyakosti\_sfplots

## Indira Nagar

### Introduction

This village is located 36 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 103 households with an average family size of 3.5 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	35
Female over 35	57
Adult male	97
Adult female	76
Children male	55
Children female	28
Infant male	8
Infant female	5
total	361

*Table 1: Demographic profile of Indira Nagar*

The origin of the village could not be determined during the historical mapping sessions. The entire village was earlier called C-Pudupettai which fragmented due to poor administration. It was then renamed Indira nagar 30 years ago during Indira Gandhi's reign of office.

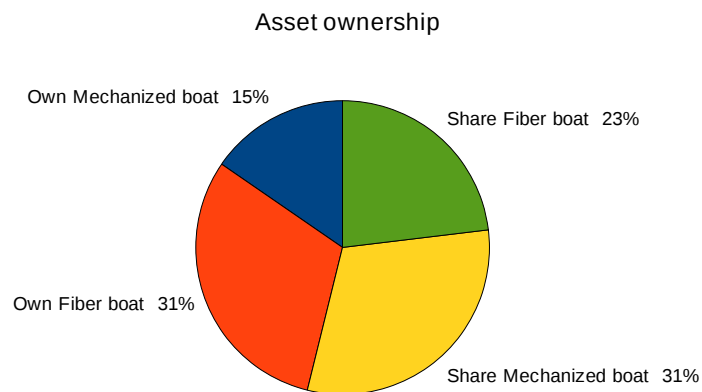
The major shocks the community felt was the 2004 tsunami during which 2 lives were lost and 12 kattumarams, 10 FRPs were completely damaged.

From 130 thatched houses 20 years ago, the village now has 200 houses of which most are tiled and the rest are concrete and thatched. Infrastructure in the village includes a primary school established in 2000. Children could attend high school at C-Pudhupettai. Roads connecting the hamlets were metaled 20 years ago while the roads within the village were unlevel and sandy. Buses were available from 1998. People go to Pudhupettai and Parangipettai in case of medical emergencies. At present the village has one net mending hall, one community hall, a child development centre, concrete roads and good transport facilities.

### Asset Ownership

All of the households own or share ownership of fishing craft. 46% are single owners of craft. This is represented in Figure 1.

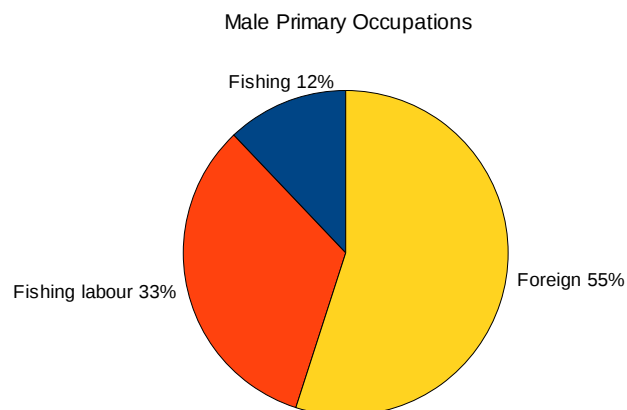
*Figure 1: Asset Ownership in Indira Nagar*



### Occupational profile

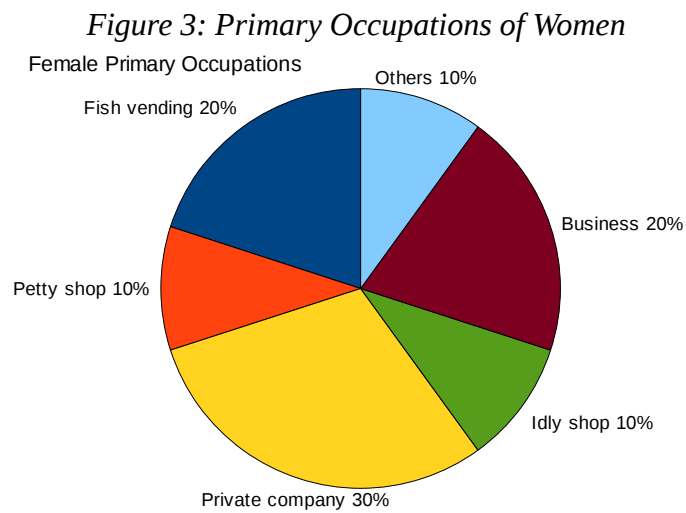
45% of the village men are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

*Figure 2: Primary Occupations of Men*

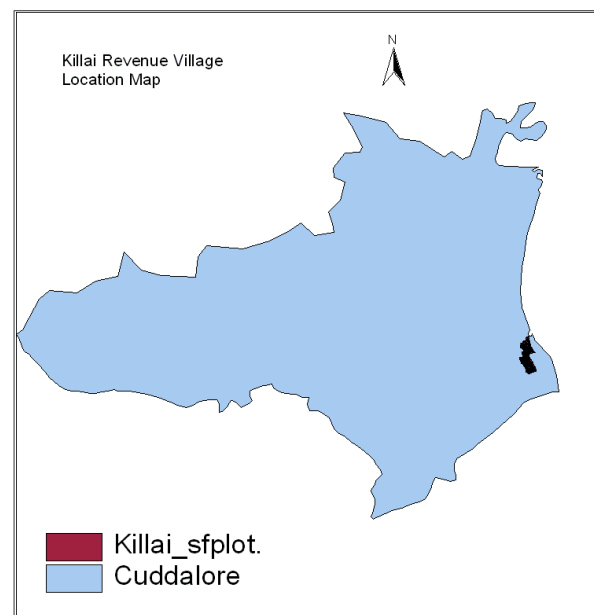
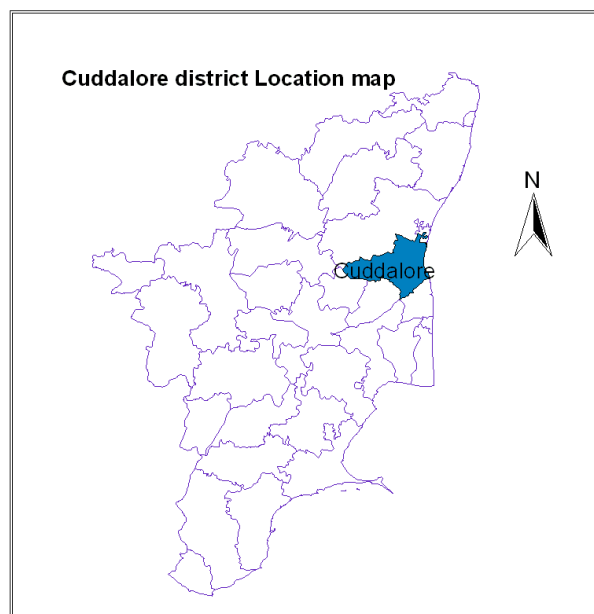


## Indira Nagar

Only 20% of the village women are engaged in fish vending as their primary occupation. Other occupations include work in private companies/various businesses, petty shop and idly shops with 80% of the women involved in such activities. This is presented in Figure 3.







## Kalaingar Nagar Hamlet village



## Kailaingnagar

### Introduction

This village is located 0.3 kms to the north east of Killai and lies in the Cuddalore district. The fishing hamlet is comprised of the Padayatchimedu caste group and other Scheduled castes employed as laborers in agriculture and back water fishing. There are 165 households with an average family size of 3.61 persons. The demographic profile of the village is provided in Table 1.

Population	Total
Adult male	149
Adult female	159
Children male	131
Children female	109
Infant male	25
Infant female	23
total	596

Table 1: Demographic profile of Kalaingnagar

The village originated 15 years ago and was named after the ruling leader at that time and was a temporary settlement initially.

The village has 165 concrete houses. Infrastructure in the village includes a primary school which is now a middle school. Roads connecting the hamlets were metaled 20 years ago while roads within the village were concreted after the tsunami.

### Asset Ownership

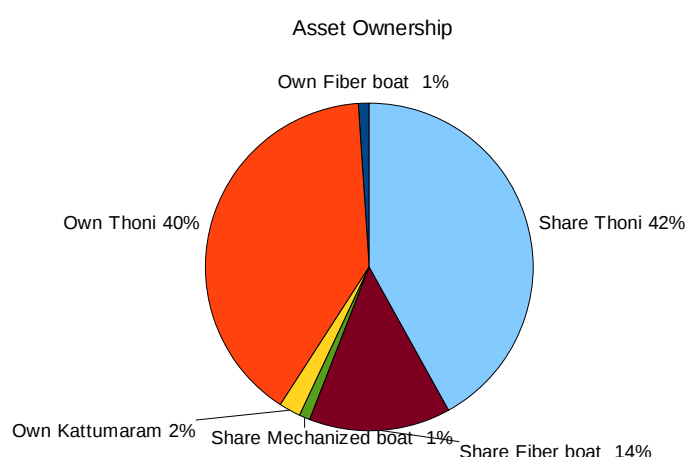
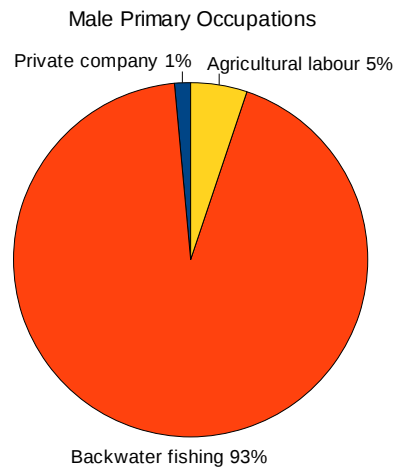


Figure 1: Asset Ownership in Kalaingnagar

All of the households own or share ownership of fishing craft. 43% are single owners of craft (Figure 1).

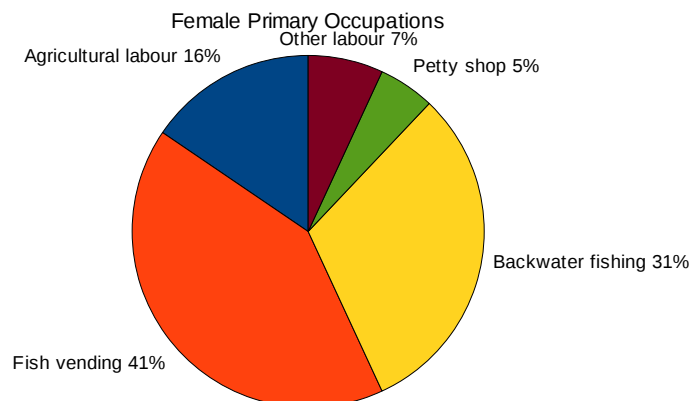
### Occupational profile

The vast majority of the village men (93%) are engaged in backwater fishing. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

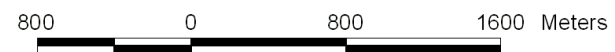
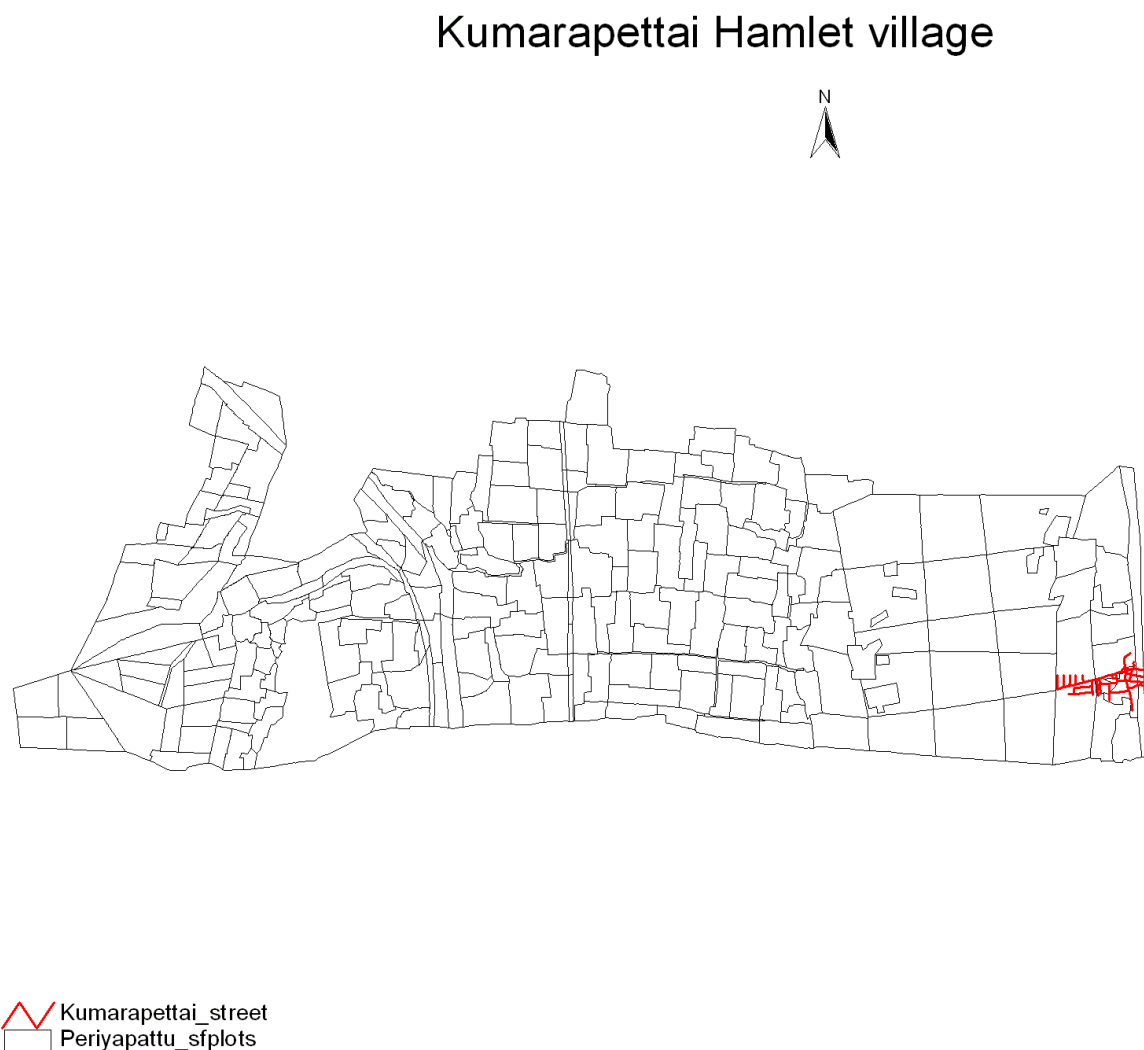
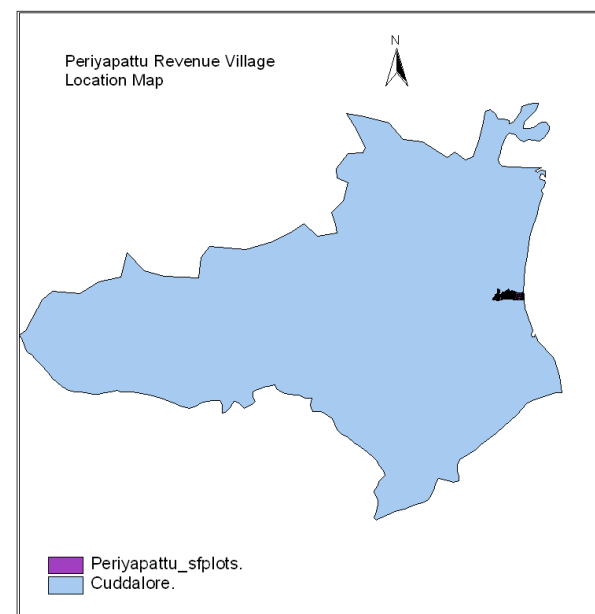
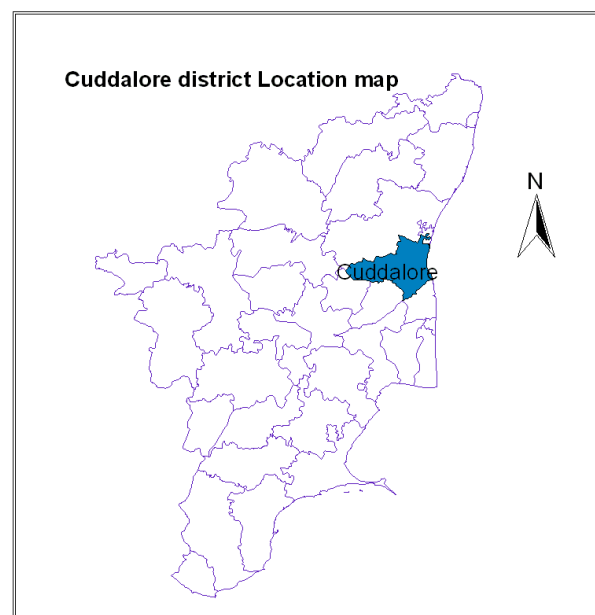


*Figure 2: Primary Occupations of Men*

41% of women are engaged in fish vending as their primary occupation while 31% are involved in back water fishing. 28% are involved in other occupations such as agricultural labor, petty shops, etc. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## **Kumarapettai**

### **Introduction**

This village is located 29 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 91 households with an average family size of 4.11 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	62
Female over 35	70
Adult male	91
Adult female	70
Children male	35
Children female	25
Infant male	11
Infant female	10
total	374

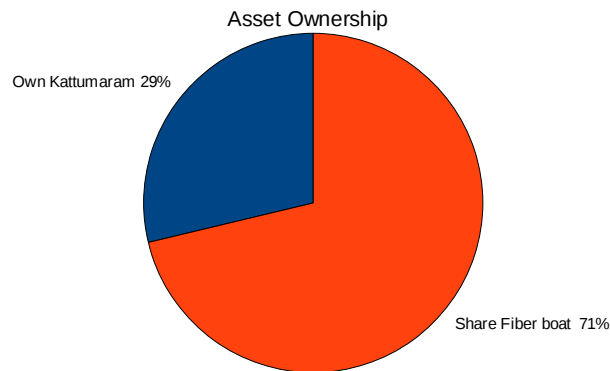
*Table 1: Demographic profile of Kumarapettai*

The origin of the village could not be determined during the historical mapping sessions. The major shocks the community felt was the 2004 tsunami during which 4 people died and about 65 kattumarams, 2 FRPs and 20 houses were destroyed.

From 30 thatched houses 50 years ago the village now has 210 houses of which most are concrete. Infrastructure in the village includes a primary school which is active till date. Students have to attend high school at Samiyarpettai. Roads connecting the hamlets were metaled 18 years ago by the Government. The roads in the village are concrete at present. Buses became available in 1998. An overhead tank was constructed by the Government in 2001 prior to which drinking water could be obtained from wells and by using hand pumps. The nearest hospital is at Parangipettai or Pudhuchathiram which is 5 km and 7 km away from the village respectively. The village has one community hall, one multipurpose disaster shelter and good transport facilities at present.

### **Asset Ownership**

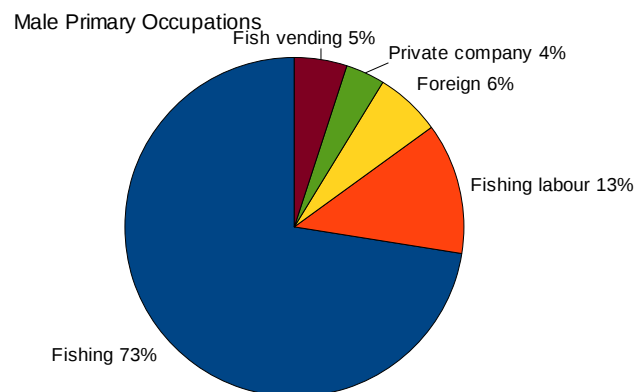
All of the households own or share ownership of fishing craft. 29% are single owners of craft (Figure 1).



*Figure 1: Asset Ownership in Kumarapettai*

### **Occupational profile**

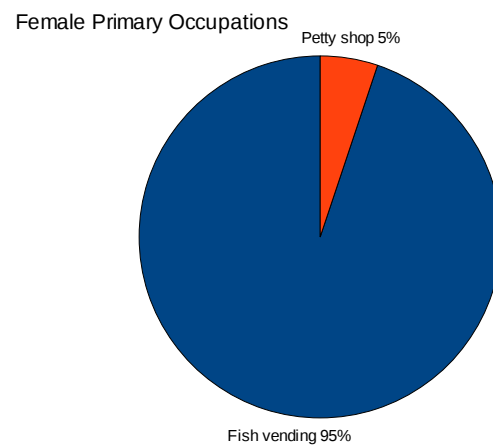
The vast majority of the village men (86%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



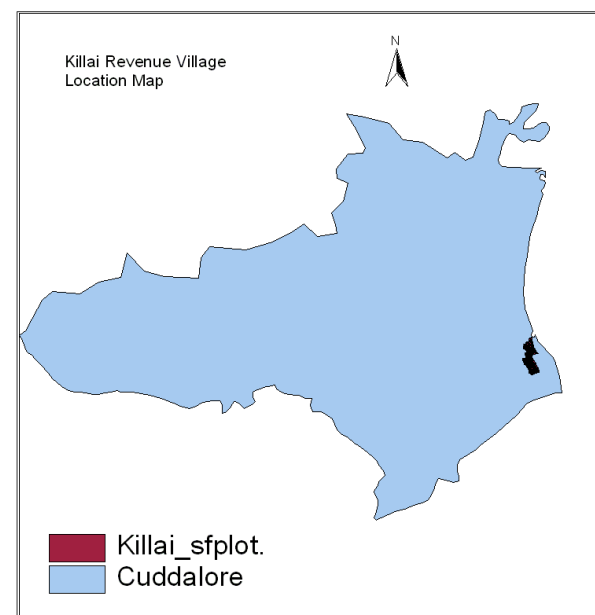
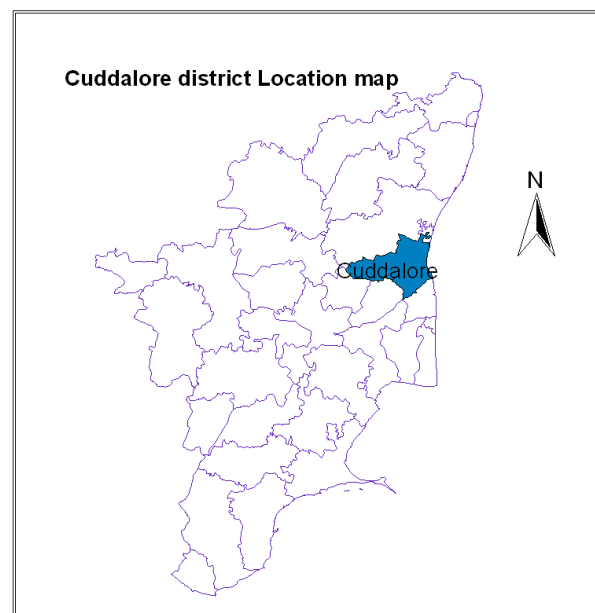
*Figure 2: Primary Occupations of Men*

### *Kumarapettai*

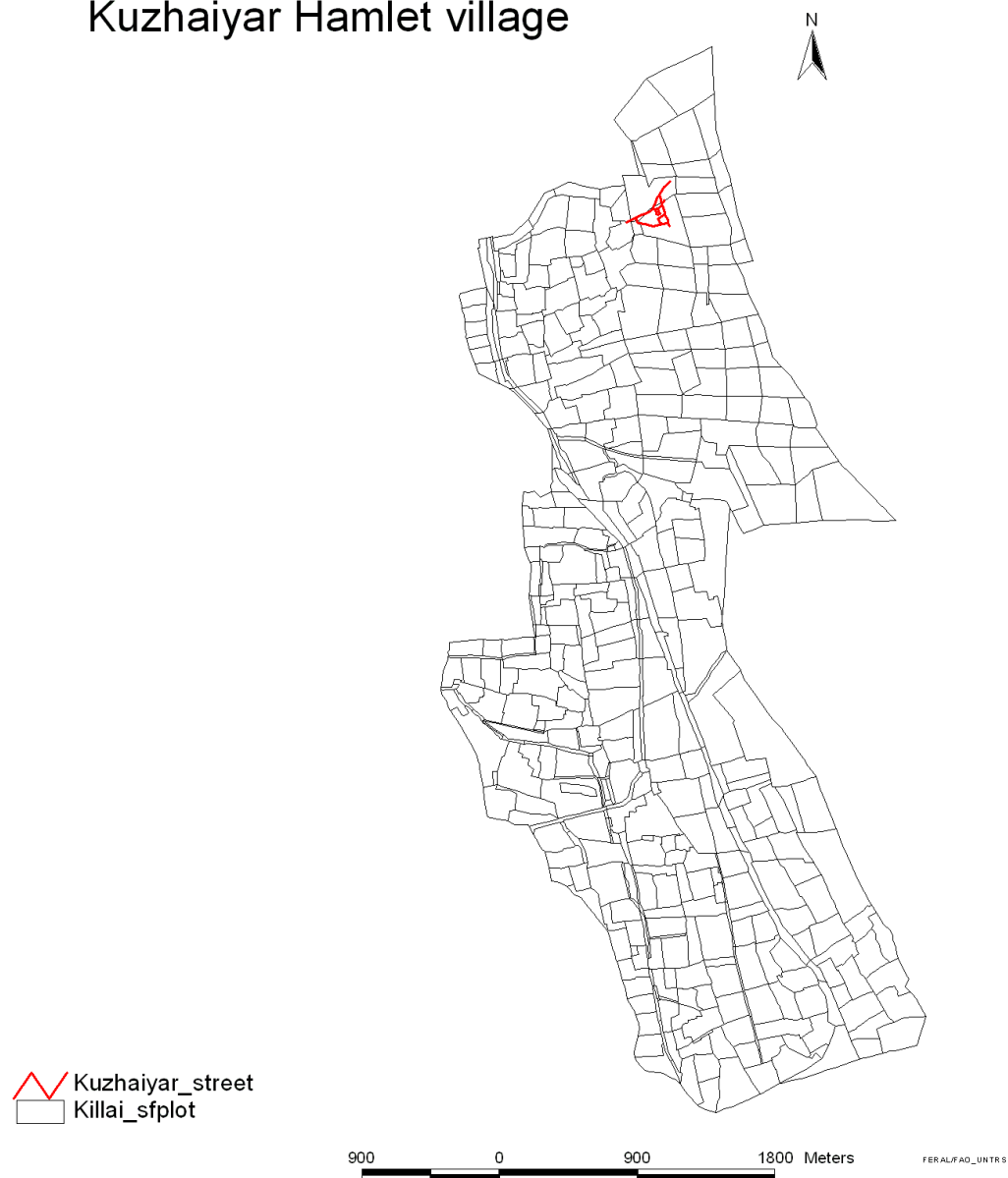
95% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Kuzhaiyar Hamlet village





## Kuzhaiyar

### Introduction

This village is located 1km to the south west of Mudasaloodai and lies in the Cuddalore district. The fishing hamlet is comprised of the Pattinavar and Padayatchi caste group and has 88 households with an average family size of 3.86 persons. The demographic profile of the village is provided in Table 1.

<b>Population</b>	<b>Total</b>
Adult male	83
Adult female	94
Children male	71
Children female	70
Infant male	5
Infant female	17
total	340

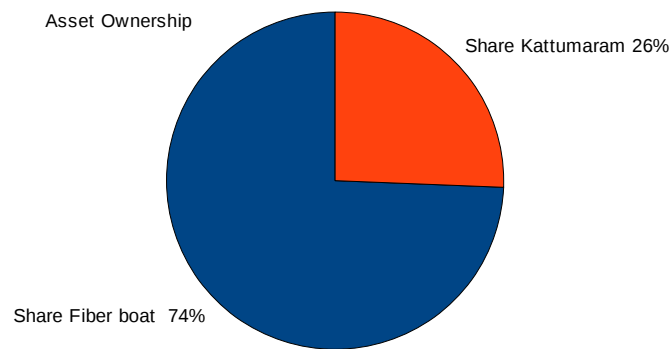
*Table 1: Demographic profile of Kuzhaiyar*

The origin of the village could not be identified during the historical mapping sessions. Many people are migrating out of this village to Devanampattinam and Chinnur for better education for their children as well as job opportunities for themselves.

Roads to Killai were sandy paths 20 years ago but the establishment of the new marketing centre at Mudasaloodai resulted in good roads and transport facilities for the village. Children had to attend middle school at Ponnathittu. Medical facilities are available at Killai which has developed since.

### Asset Ownership

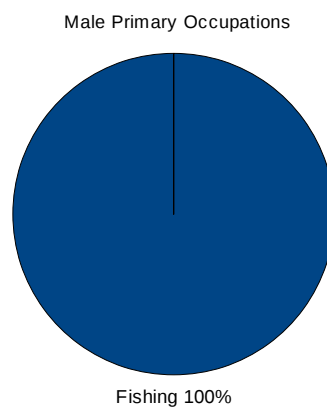
All of the households share ownership of fishing craft. This is represented in Figure 1.



*Figure 1: Asset ownership in Kuzhaiyar*

### Occupational profile

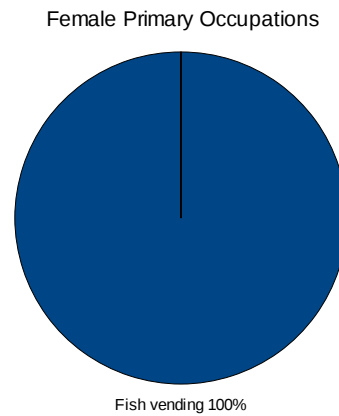
All the men of the village are engaged in fishing. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



*Figure 2 : Primary Occupation of Men*

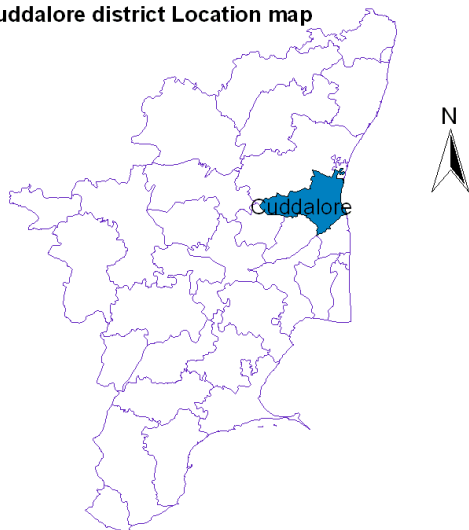
*Kuzhaiyar*

All the women of the village are engaged in fish vending as their primary occupation. This is presented in Figure 3.

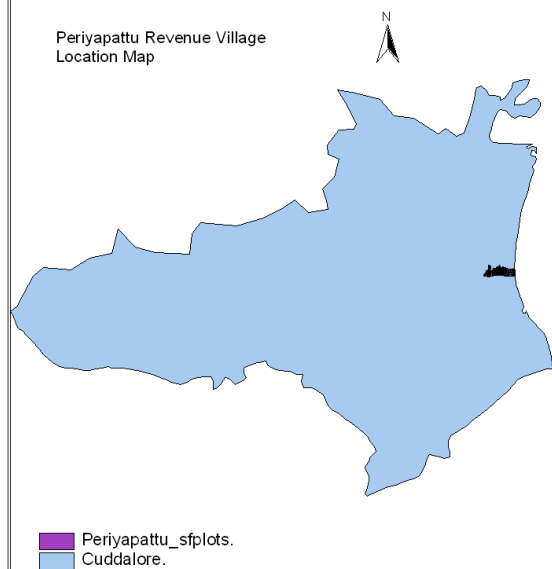


*Figure 3: Primary Occupation of Women*

Cuddalore district Location map



Periyapattu Revenue Village Location Map



Madavapallam Hamlet village



▲ Madavapallam\_street  
□ Periyapattu\_sfplots

800 0 800 1600 Meters

## Madavapallam

### Introduction

This village is located 30 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 63 households with an average family size of 3.78 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	35
Female over 35	45
Adult male	42
Adult female	27
Children male	37
Children female	40
Infant male	9
Infant female	3
total	238

*Table 1: Demographic profile of Madavapallam*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 1 life was lost, 25 kattumarams, 1 FRP and 20 houses were destroyed.

From 50 thatched houses 50 years ago, the village now has 65 houses of which most are concrete. Infrastructure includes roads connecting the hamlets which were metaled 15 years ago and buses were available from 1998. Roads within the village were concreted after the tsunami. An overhead tank was constructed in 2004 prior to which drinking water could be obtained from wells and by using hand pumps. The nearest hospital is at Parangipettai and Pudhuchathiram which is 8 km and 6 km away respectively. The village lacks a school and children have to go to Samiyarpettai and Kumarapettai for this purpose. At present the village has concrete roads, one community hall and good transport facilities.

### Asset Ownership

All of the households own or share ownership of fishing craft. 34% are single owners of craft (Figure 1).

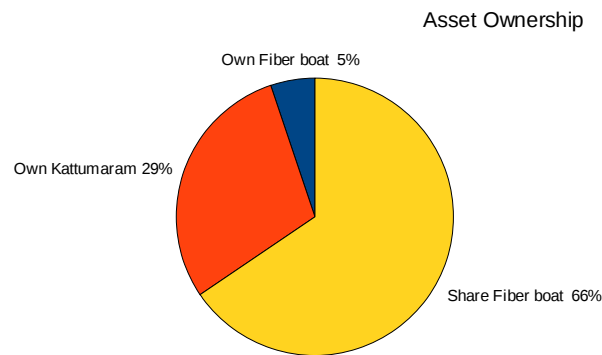


Figure 1: Asset Ownership of Madavapallam

### Occupational profile

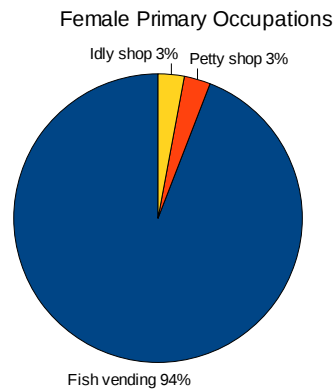
The vast majority of the village men (96%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.



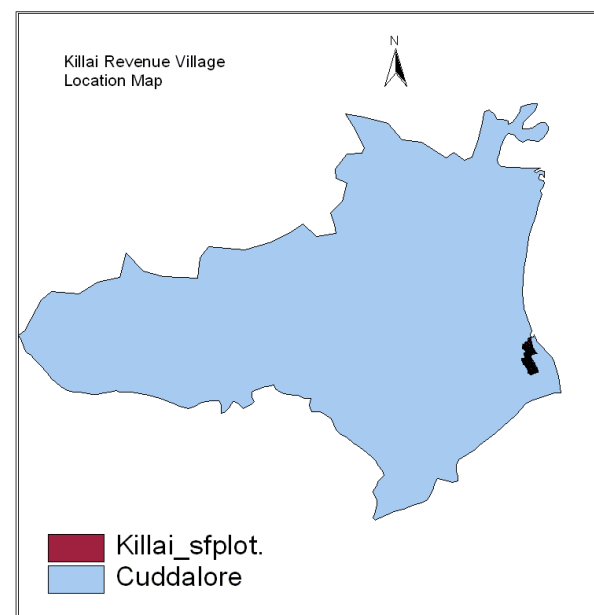
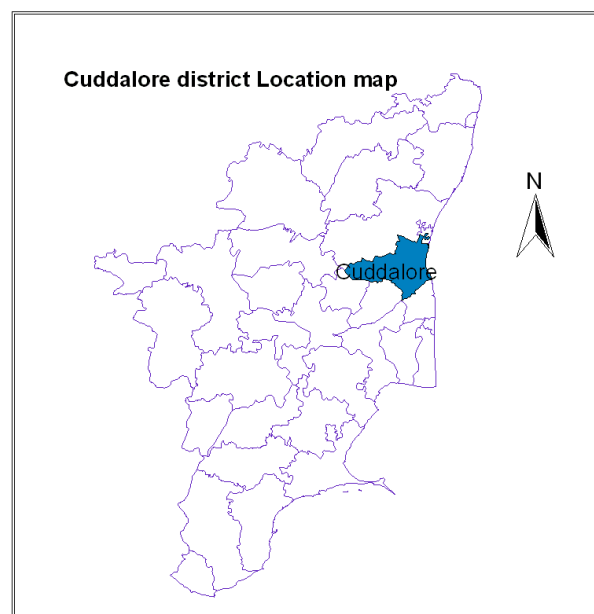
Figure 2: Primary Occupations of Men

### *Madavapallam*

94% of women are engaged in fish vending as their primary occupation. Other occupations include running petty shops and idly shops with 6% involved in the same. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



Mgrnagar\_street  
Killai\_sfplot

## MGR Nagar Hamlet village





## MGR Nagar

### Introduction

This village is located 1 km to the north of Killai and lies in the Cuddalore district. The fishing hamlet is comprised of the Irulars/Padayatchimedu caste group and has 131 households with an average family size of 3.42 persons. The demographic profile of the village is provided in Table 1.

Population	Total
Adult male	126
Adult female	143
Children male	82
Children female	46
Infant male	28
Infant female	23
<b>total</b>	<b>448</b>

Table 1: Demographic profile of MGR Nagar

The origin of the village was reported to be 35 years ago when former Chief minister and actor Mr M.G.Ramachandran were shooting a film at Killai. The villagers put forth a petition stating they had no proper land to settle and pleaded with them to resolve the issue. Following this incident, land was purchased in the north of Killai and people from nearby areas migrated into it and formed a settlement. The major shocks the community felt was the 2004 tsunami during which no loss occurred.

Infrastructure in the village includes concrete roads and 131 concrete houses

### Asset Ownership

All of the households own or share ownership of fishing craft. 24% are single owners of craft Figure 1.

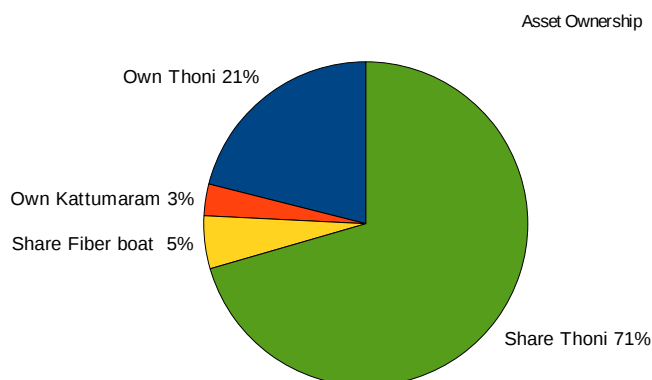


Figure 1: Asset Ownership in MGR Nagar

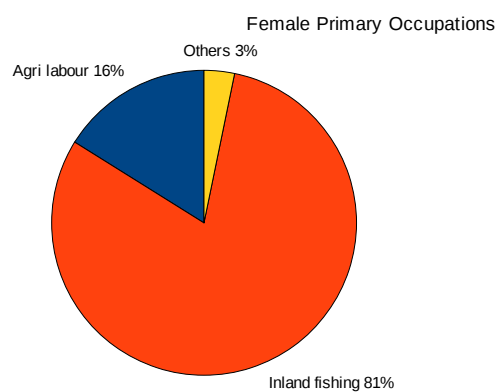
### Occupational profile

The vast majority of the village men (95%) are engaged in inland fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

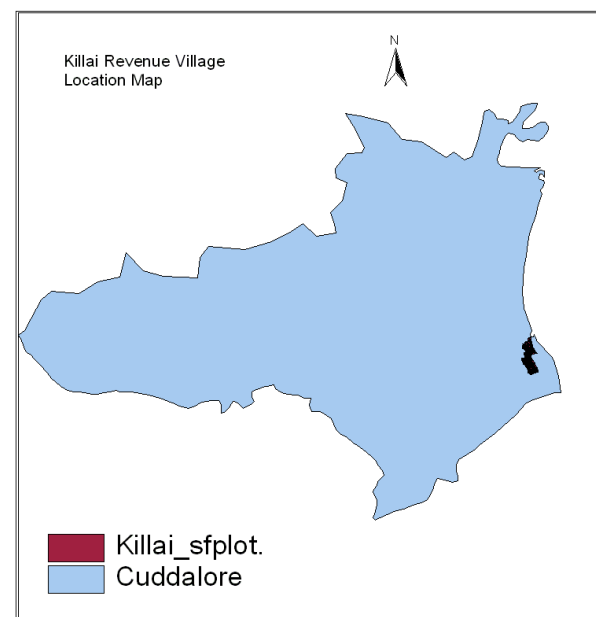
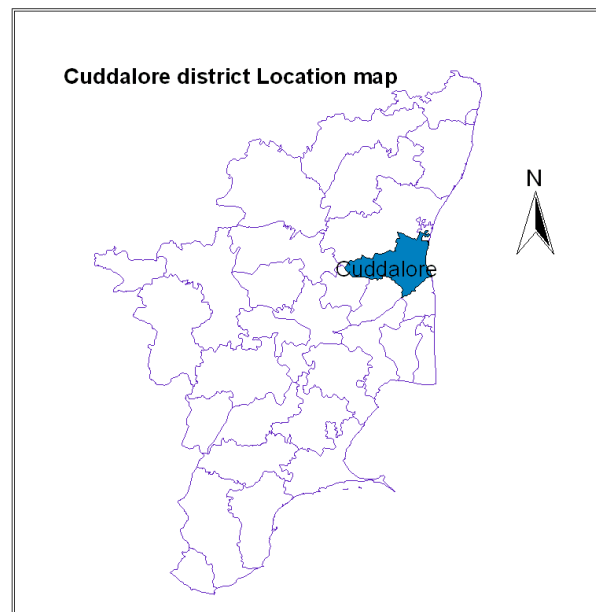


*Figure 2: Primary Occupations of Men*

81% of women are engaged in back water fishing as their primary occupation. Other occupations include agricultural labor. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Nadumudasaloodai Hamlet village



## Nadumudasaloodai

### Introduction

This village is located 0.5 kms to the south of Mudasaloodai along the back waters and lies in the Cuddalore district. The fishing hamlet is comprised of the Pattinavar caste group and has 26 households with an average family size of 4.15 persons. The demographic profile of the village is provided in Table 1.

Population	Total
Adult male	28
Adult female	27
Children male	23
Children female	19
Infant male	6
Infant female	5
total	108

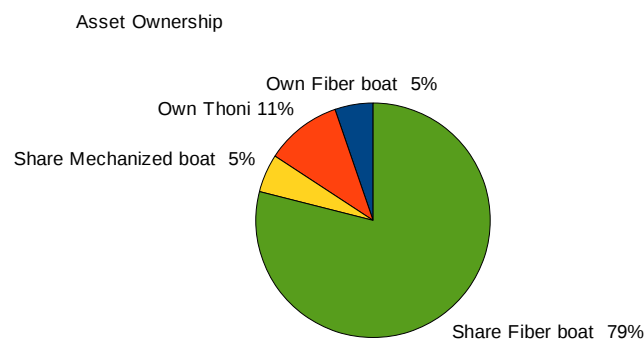
*Table 1: Demographic profile of Nadumudasaloodai*

The village was formerly an island to the south east of Killai and is believed to have originated 100 years ago. It was formerly a temporary settlement where people descended upon for 7 months to fish and then returned to Killai during the rough season. All migrants into this village were from Muzhukuthurai and Killai. The major shocks the community felt was the 2004 tsunami during which no loss occurred.

Infrastructure in the village includes 26 concrete houses, electricity supply and good transportation facilities. Roads in the village were sandy paths. Medical facilities are available at Killai and Parangipettai.

### Asset Ownership

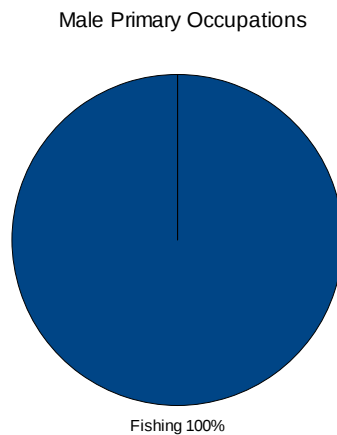
All of the households own or share ownership of fishing craft. 16% are single owners of craft (Figure 1).



*Figure 1: Asset Ownership in Nadumudasaloodai*

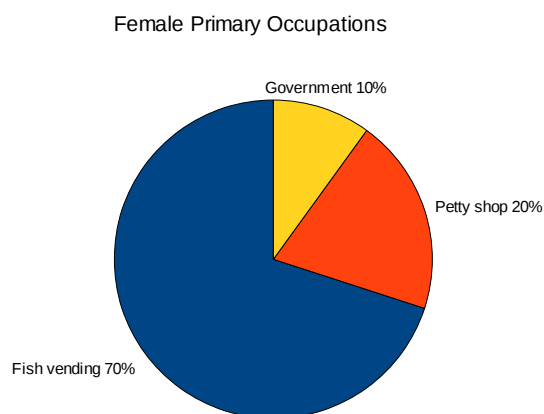
### Occupational profile

All the village men are engaged in fishing. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

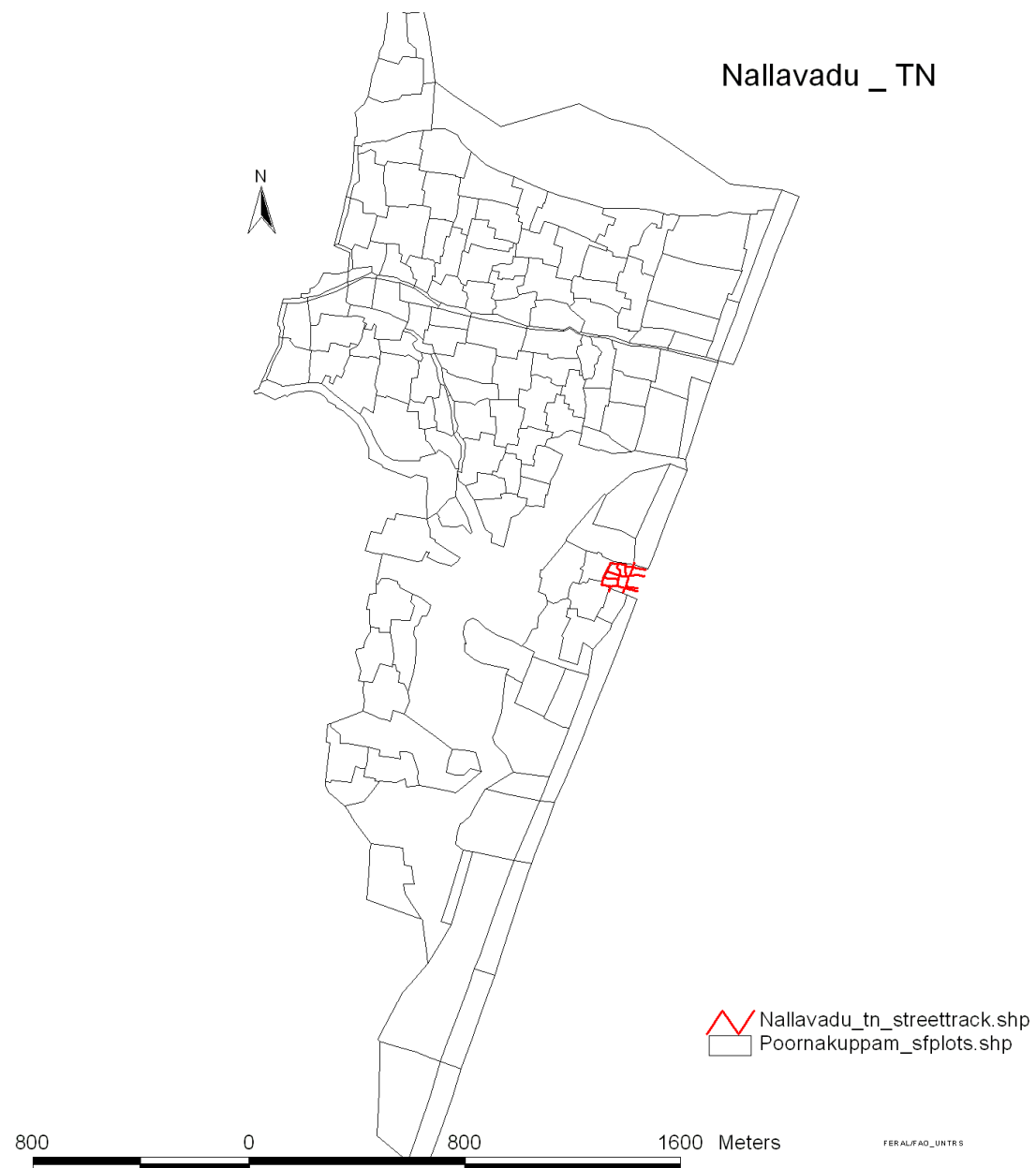
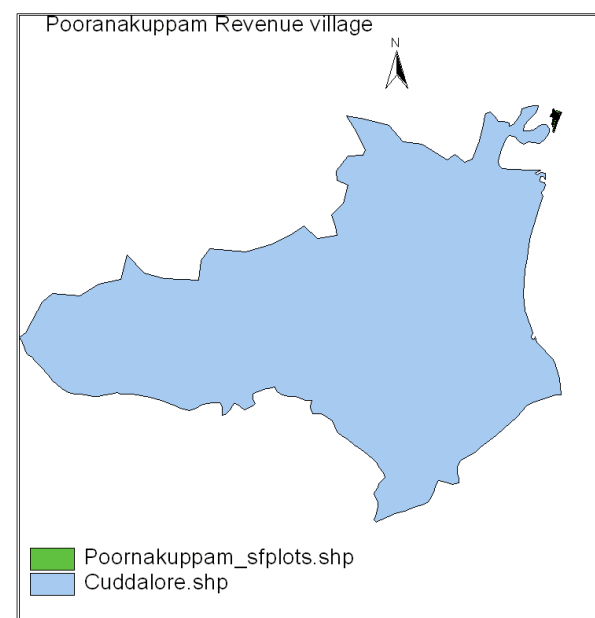
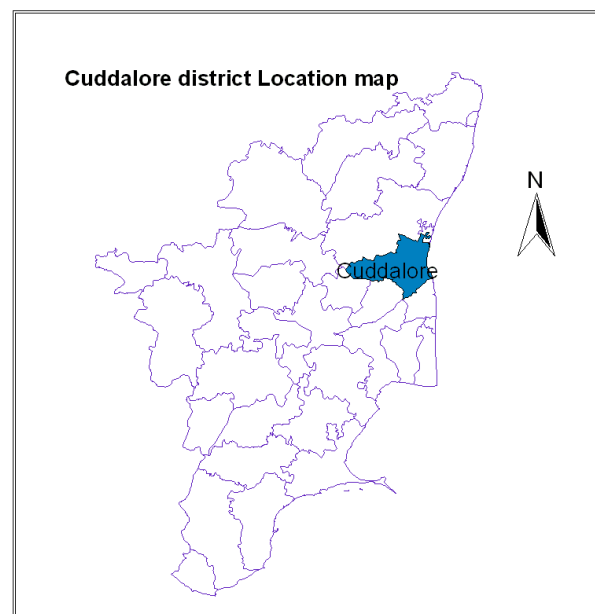


*Figure 2: Primary Occupations of Men*

70% of women are engaged in fish vending as their primary occupation. 30% are involved in other occupations such as government jobs or work in petty shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Nallavadu Tamil Nadu

### Introduction

This village is located 15 kms to the north east of Cuddalore. The fishing hamlet is comprised of the Pattinavar caste group and has 148 households with an average family size of 3.39 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	89
Female over 35	99
Adult male	93
Adult female	74
Children male	65
Children female	56
Infant male	13
Infant female	13
total	502

*Table 1: Demographic profile of Nallavadu Tamil Nadu*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which no loss occurred.

From 200 thatched houses 35 years ago, the village now has 150 houses of which 90 are concrete, 4 tiled and 60 thatched. Infrastructure in the village includes a primary school established in 1968. Students have to attend high school in Nallavadu south (Puducherry). The village obtained electricity 30 years ago. Roads in the village were metaled 20 years ago. Buses were introduced in 1993. An overhead tank was constructed around the same time prior to which the people obtained their drinking water from wells and by using hand pumps. The nearest hospital was at Thavalakuppam PHC and Government hospital Puducherry which is 3km and 15 km away from this village respectively.

Asset Ownership

All of the households own or share ownership of fishing craft. 19% are single owners of craft (Figure 1).

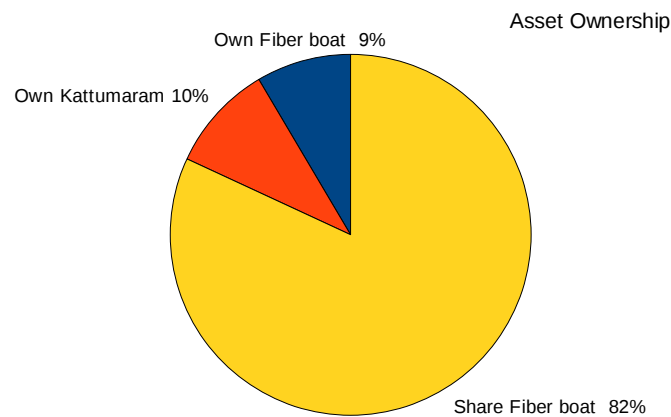


Figure 1: Asset Ownership in Nallavadu Tamil Nadu

Occupational profile

The vast majority of the village men (91%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

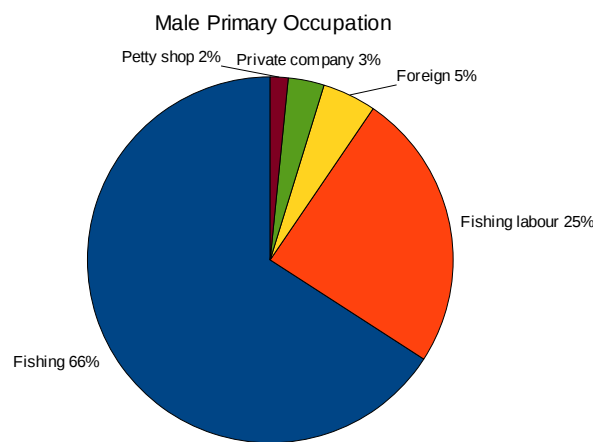
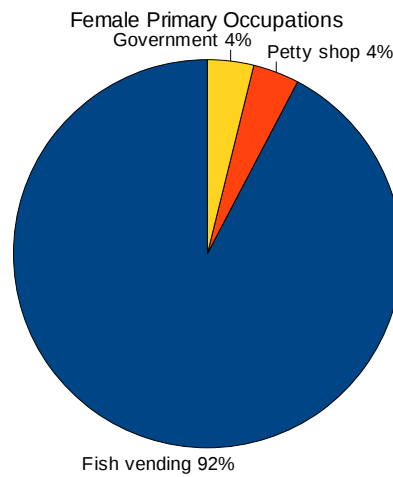


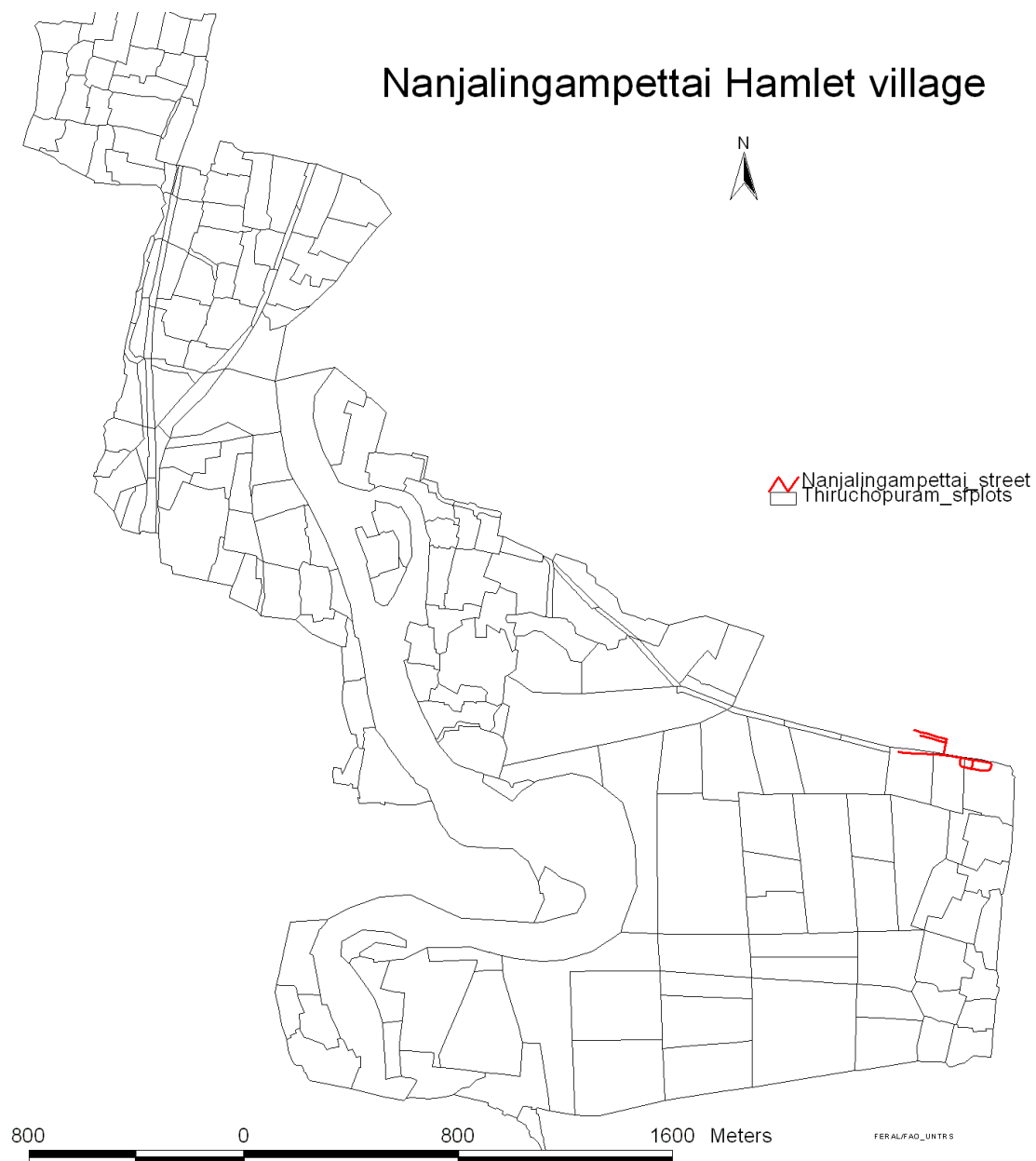
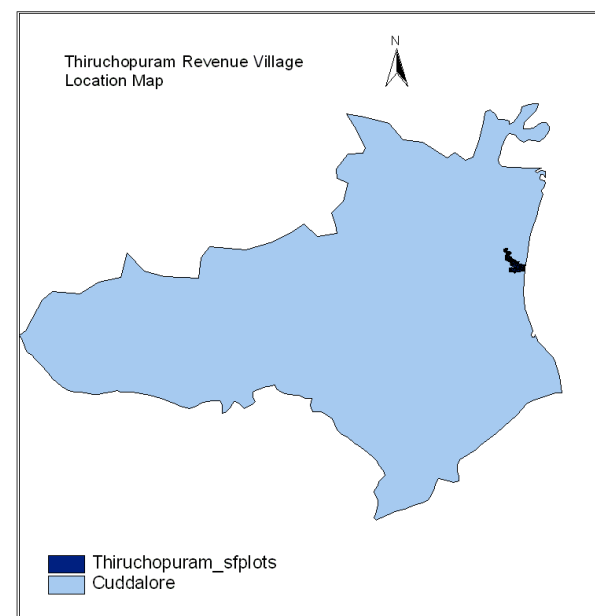
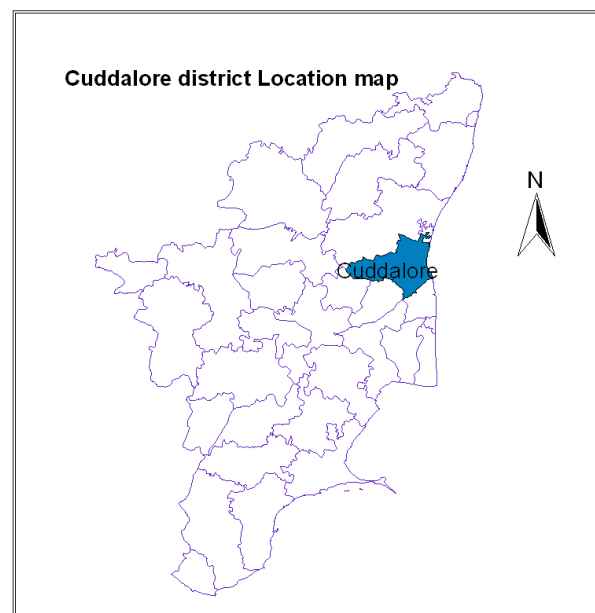
Figure 2: Primary Occupations of Men



92% of women are engaged in fish vending as their primary occupation. Other occupations include Government jobs and petty shop. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Nanjalingampettai

### Introduction

This village is located 24 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 76 households with an average family size of 4.63 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	40
Female over 35	57
Adult male	87
Adult female	69
Children male	38
Children female	43
Infant male	11
Infant female	7
total	352

*Table 1: Demographic profile of Nanjalingampettai*

The origin of the village could not be identified during the historical mapping session. The village was named on account of the presence of 4 Sivalingams in the village. The major shocks the community felt was the 2004 tsunami during which one life was lost and 25 kattumarams were damaged.

From 55 thatched houses 50 years ago the village now has 106 houses of which most are concrete. Infrastructure in the village includes a primary school established in 1989. Students have to attend high school in Periyakuppam which is 3 km away. Electricity supply was available from 1987. Roads connecting the hamlets were metaled 15 years ago by the Government. Roads in the village were concreted after the tsunami. Buses were introduced in 2000 prior to which people had to walk a distance of 4 km to catch the train from Alapakkam. An overhead tank was constructed in 2001 prior to which drinking water was obtained from wells and by using hand pumps. Medical facilities are available at Thiruchopuram which is 2 km away from this village. At present the village has one community hall, concrete roads and good transport facilities.

### Asset Ownership

All of the households own or share ownership of fishing craft. 27% are single owners of craft (Figure 1).

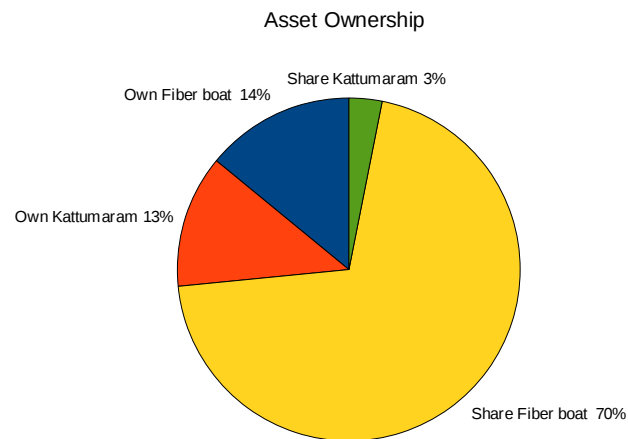


Figure 1: Asset Ownership in Nanjalingampettai

### Occupational profile

The vast majority of the village men (97%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

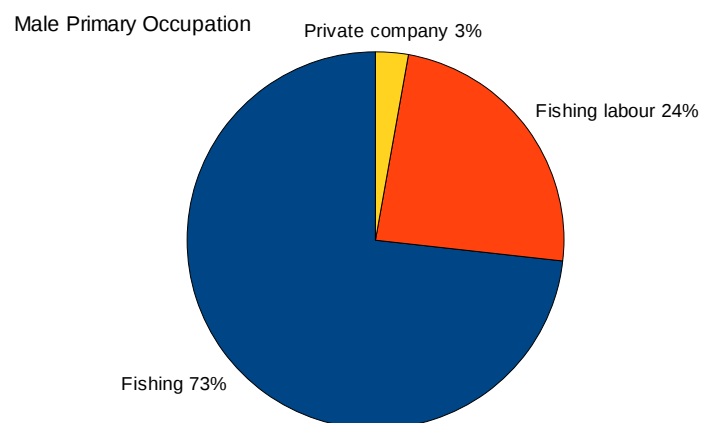
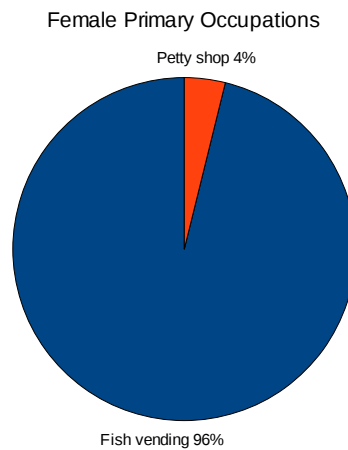
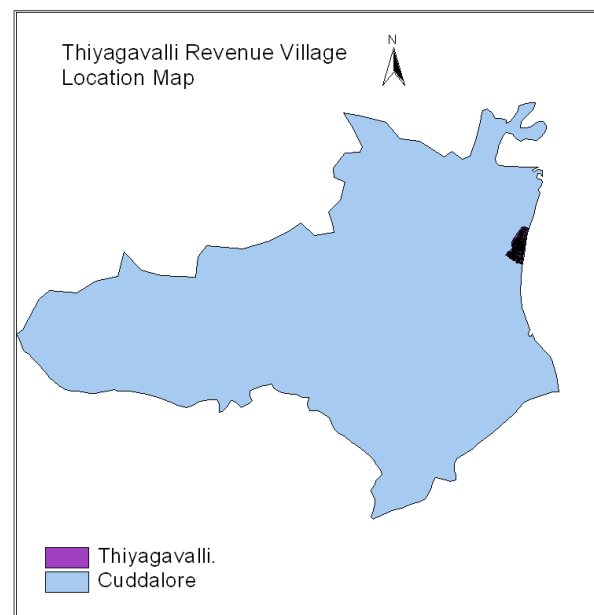
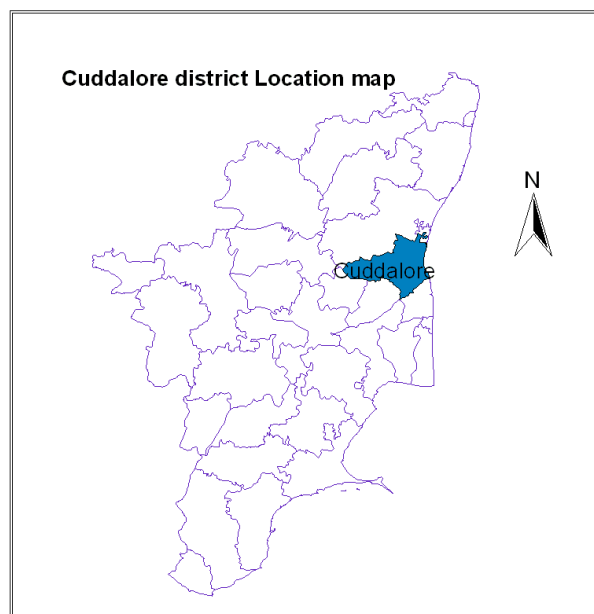


Figure 2: Primary Occupations of Men

96% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Nayakarpettai Hamlet village



## Nayakarpettai

### Introduction

This village is located 23 kms to the south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 59 households with an average family size of 4.22 persons. The demographic profile of the village is provided in Table 1.

<b>Population</b>	<b>Total</b>
Adult male	102
Adult female	102
Children male	3
Children female	21
Infant male	13
Infant female	8
total	249

*Table 1: Demographic profile of Nayakarpettai*

The origin of the village could not be identified during the historical mapping sessions. It received its name from an ancient ruler called Nayakar. The major shocks the community felt was the 2004 tsunami during which one life was lost and 15 kattumarams were damaged.

From 40 thatched houses 50 years ago, the village now has 55 houses of which half are thatched and the remaining are tiled or concrete. Infrastructure in the village includes an overhead tank constructed 15 years ago prior to which drinking water was obtained from wells and by using hand pumps. Roads in the village were metaled in 1982 by the Government. Children could attend primary school at Nanjalingampettai and high school at Periyakuppam. Medical facilities are available at the primary health centre at Thiruchopuram and the General Hospital at Cuddalore provides medical attention for critical cases.

Asset Ownership

All of the households share ownership of kattumarams. This is represented in Figure 1.

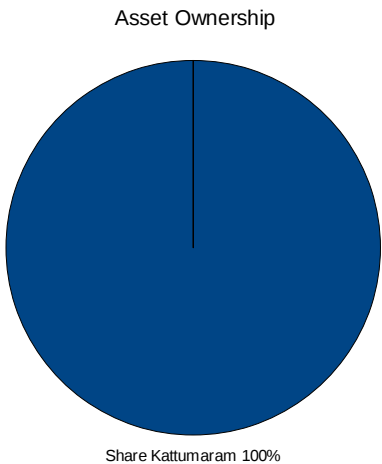


Figure 1: Asset ownership in Nayakkarpettai

Occupational profile

All the village men are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

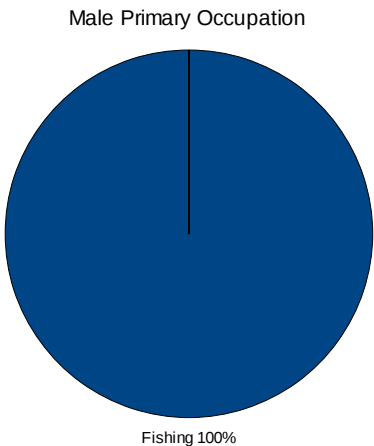
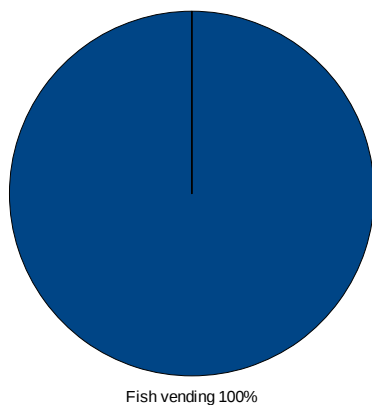


Figure 2: Primary Occupation of Men

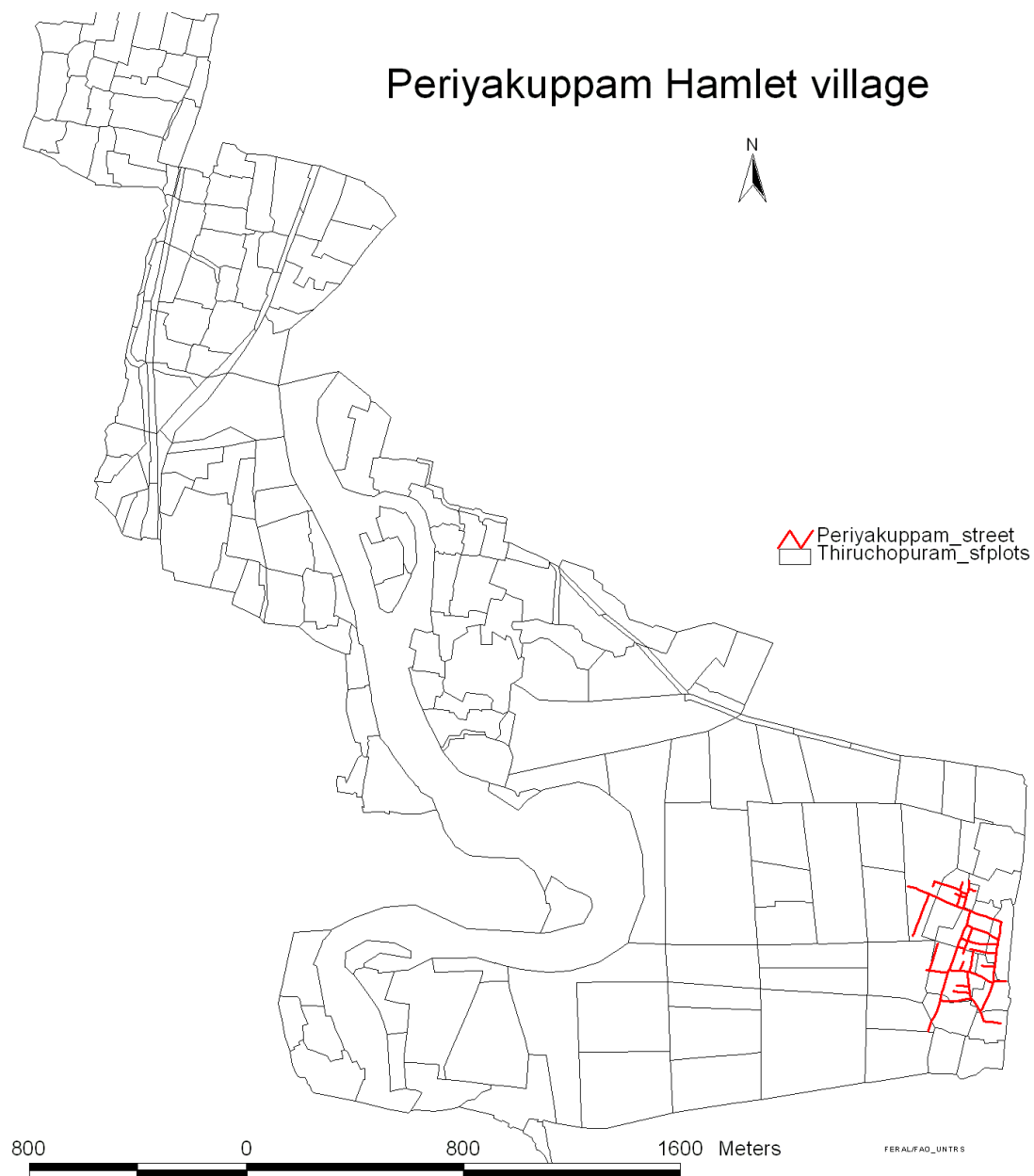
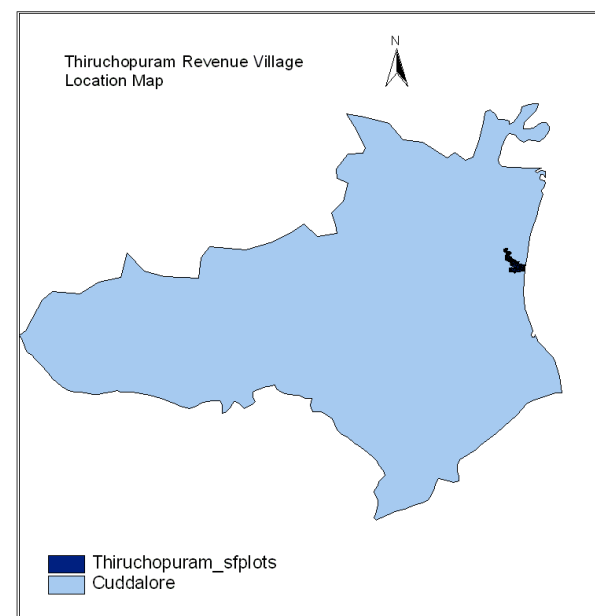
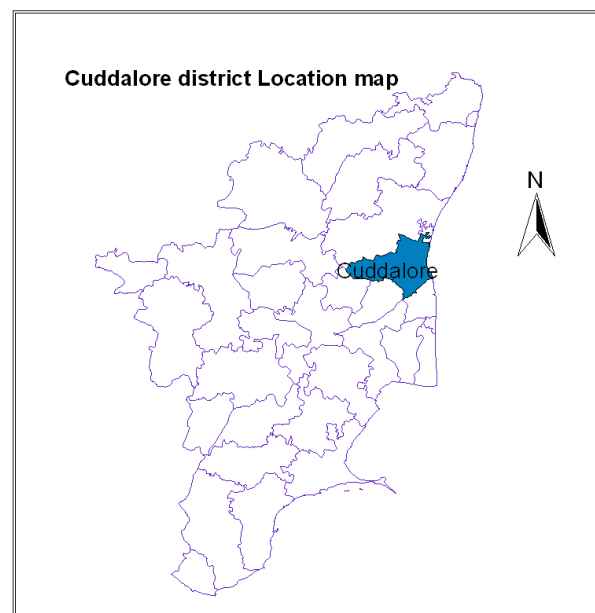


### *Nayakarpettai*

All the village women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3 : Primary Occupation of Women*



## Periyakuppam

### Introduction

This village is located 25 kms to the south east of Pondicherry. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 246 households with an average family size of 4.83 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Male over 35	202
Female over 35	214
Adult male	240
Adult female	215
Children male	119
Children female	128
Infant male	37
Infant female	33
total	1188

*Table 1: Demographic profile of Periyakuppam*

The origin of the village could not be determined during the historical session. The major shocks the community felt was the 2004 tsunami during which 2 lives were lost and about 80 catamarans, 25 trawlers and nearly 35 houses were destroyed.

From 300 thatched houses 50 years ago the village now has 700 houses of which most are concrete. Infrastructure in the village includes a primary school which became a high school in 1966. A cyclone shelter and a students hostel was set up by the Government in 1984. Roads connecting the hamlets were metaled 15 years ago and buses were available since 1998 prior to which people had to walk 4km to catch the train at Alapakkam. Drinking water was obtained from wells or by using hand pumps till an overhead tank was constructed by the Government in 2000. Medical facilities are available at a primary health center within the village while people had to go to Cuddalore for serious cases. At present the village has one net mending hall, one community hall, concrete roads and good transport.

### Asset Ownership

All of the households own or share ownership of fishing craft. 54% are single owners of craft (Figure 1).

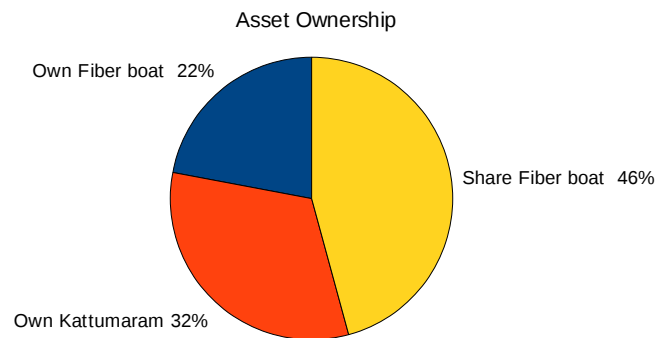


Figure 1: Asset Ownership in Periyakuppam

### Occupational profile

The vast majority of the village men (81%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

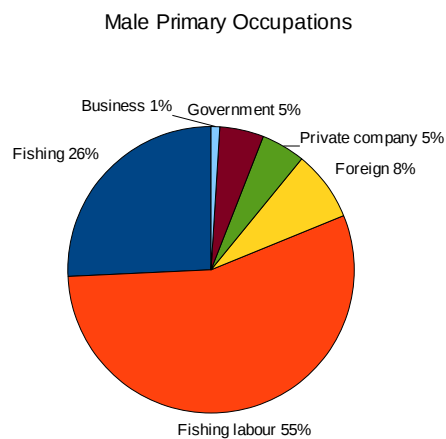
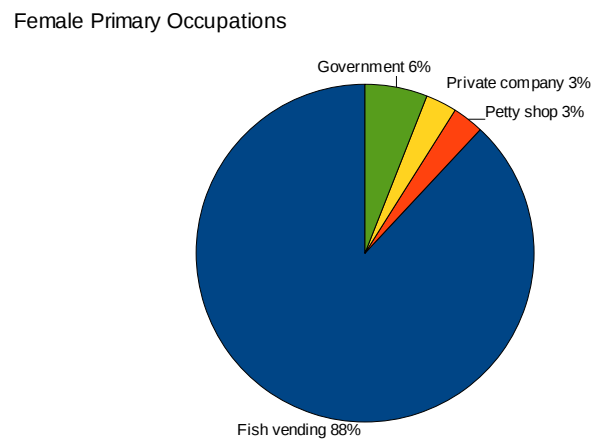


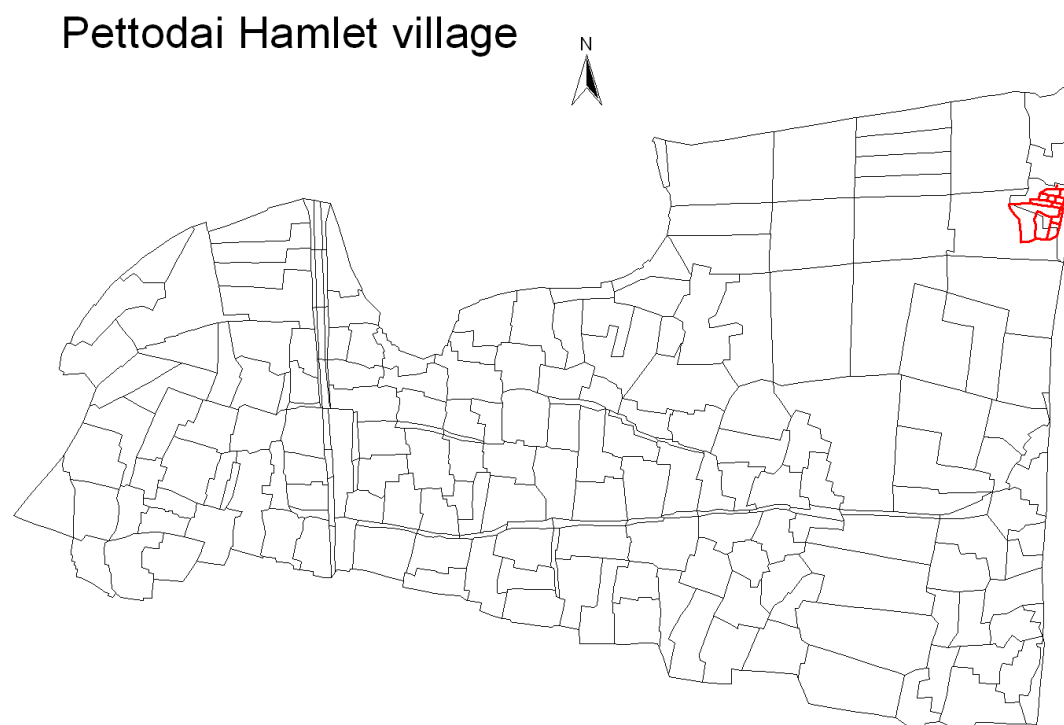
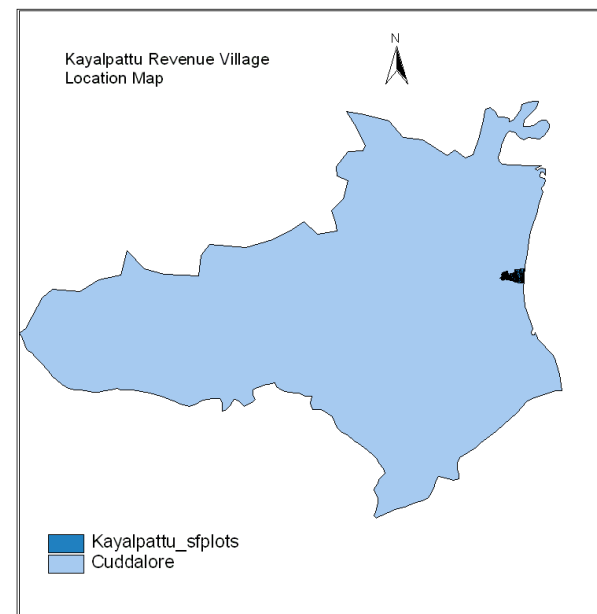
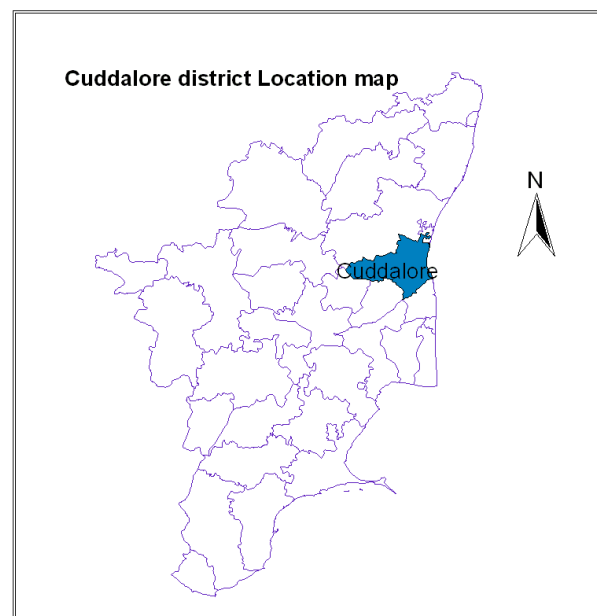
Figure 2: Primary Occupations of Men

### *Periyakuppam*

88% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies, petty shops or government jobs. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



500 0 500 1000 1500 Meters

## Pettodai

### Introduction

This village is located 24 kms south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 133 households with an average family size of 4.74 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	79
Female over 35	92
Adult male	135
Adult female	126
Children male	80
Children female	70
Infant male	25
Infant female	24
total	631

*Table 1: Demographic profile of Pettodai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which there was minimal damage occurred.

From 100 thatched houses 30 years ago, the village now has 400 houses of which most are concrete. The village obtained electricity supply 30 years ago. Infrastructure in the village include roads which were metaled 20 years ago followed by the introduction of buses 5 years later. An overhead tank was constructed by the Government around the same time prior to which drinking water was obtained by using hand pumps and from wells. Children had to go to Periyakuppam for primary education. Medical facilities are available at the primary health centre in Thiruchopuram and the Government hospital at Cuddalore with the former being 3 km away from this village.

### Asset Ownership

All of the households own or share ownership of fishing craft. 52% are single owners of craft (Figure 1).

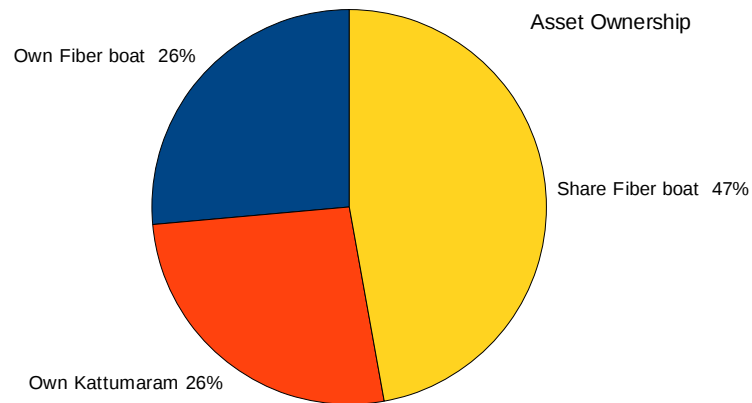


Figure 1: Asset Ownership in Pettodai

### Occupational profile

The vast majority of the village men (96%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

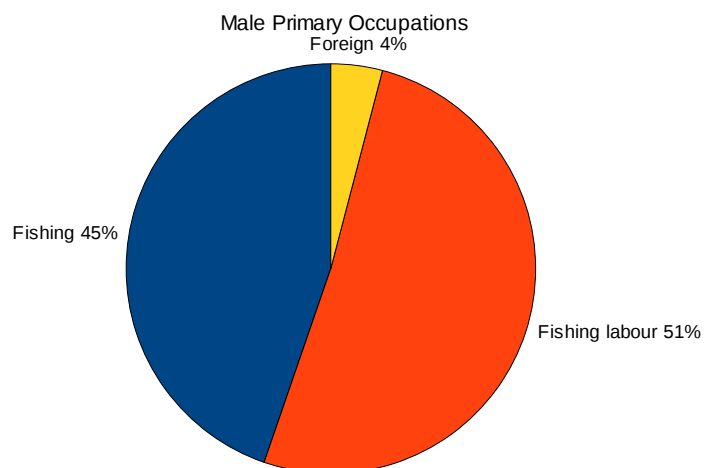
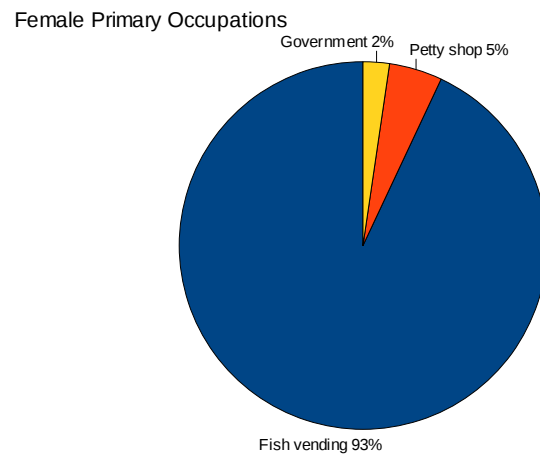


Figure 2: Primary Occupations of Men

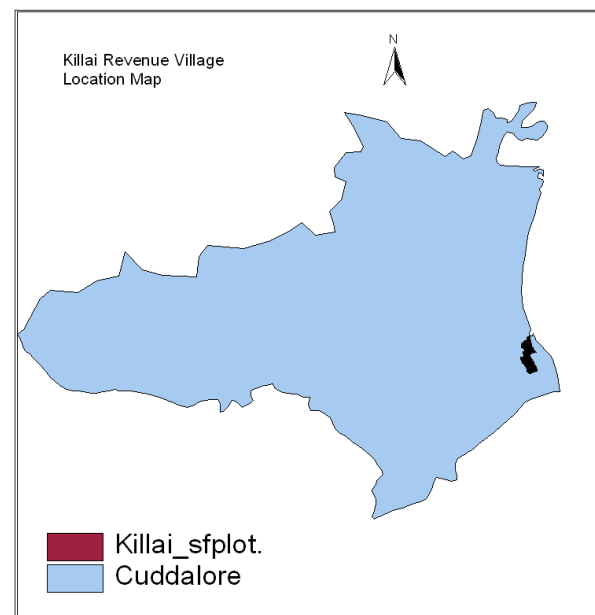
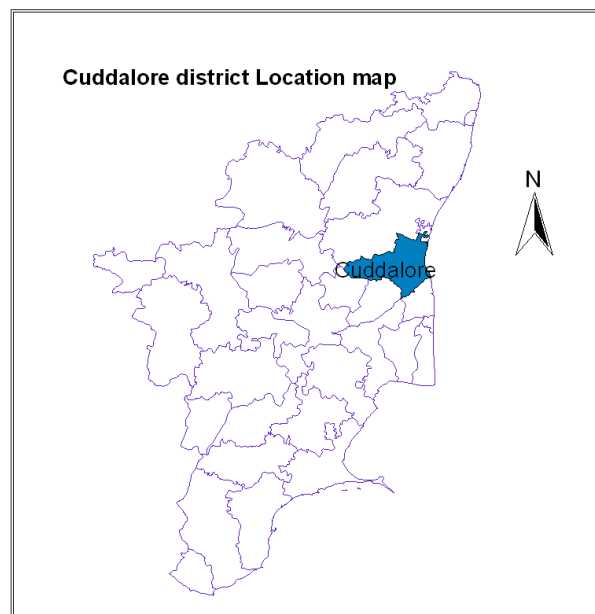


## *Pettodai*

93% of women are engaged in fish vending as their primary occupation. Other occupations include petty shops and government jobs. This is presented in Figure 3.



*Figure 3:Primary Occupations of Women*



Killai\_sfplot.  
Pillumedu\_street

## Pillumedu Hamlet village



## Pillumedu

### Introduction

This village is located 0.1 km to the south of Pichavaram along the back waters and lies in the Cuddalore district. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 82 households with an average family size of 4.16 persons. The demographic profile of the village is provided in Table 1.

<b>Population</b>	<b>Total</b>
Adult male	115
Adult female	102
Children male	72
Children female	40
Infant male	4
Infant female	8
total	341

*Table 1: Demographic profile of Pillumedu*

The village originated 50 years ago when people from Killai and T.S Pettai migrated into this village for the purpose of fishing. It was originally an island situated north east of Pichavaram and was initially a temporary settlement for 7 months a year where people returned to Killai during the rough season. It became a permanent settlement in 1989. The major shocks the community felt was the 2004 tsunami during which all assets were lost, after which the village was relocated to the present location.

The village has 82 concrete houses. Infrastructure in the village includes a high school established long ago which is active till date. Roads in the village were sandy paths earlier with buses scheduled every two hours from T.S. Pettai and Pichavaram. The other mode of transport were their own canoes. At present there are frequent buses i.e., every half an hour from Pichavaram. Medical facilities are available at the primary health centre in Killai. Recently a hospital was established close to Kalaigan nagar, 0.2km away from Killai.

### Asset Ownership

All of the households own or share ownership of fishing craft. 50% are single owners of craft. This is presented in Figure 1.

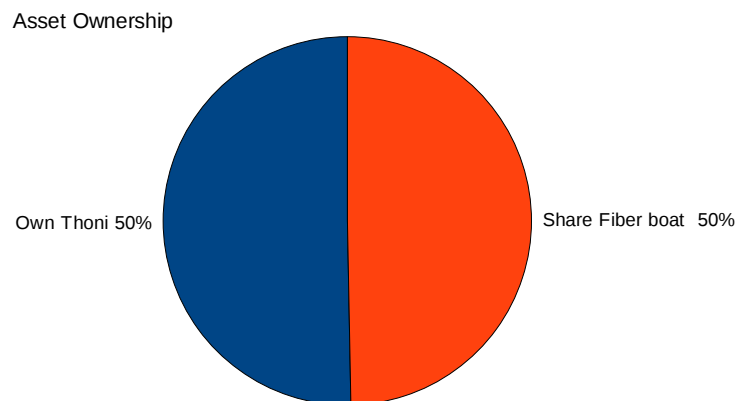


Figure 1: Asset Ownership in Pillumedu

### Occupational profile

The vast majority of the village men (68%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

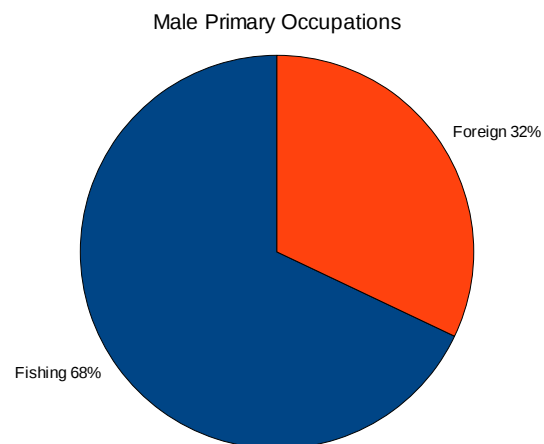
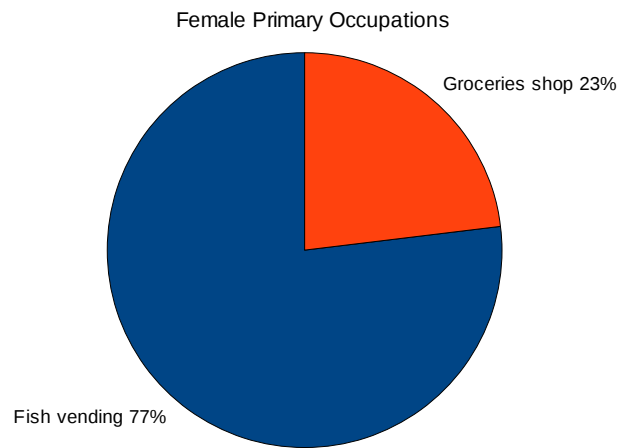


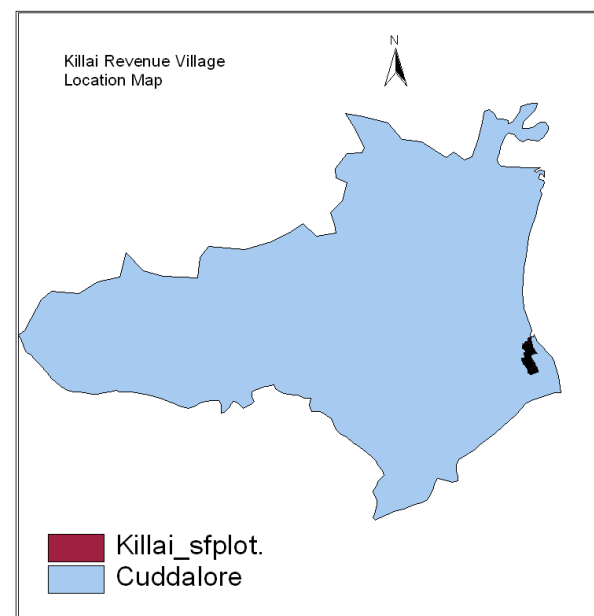
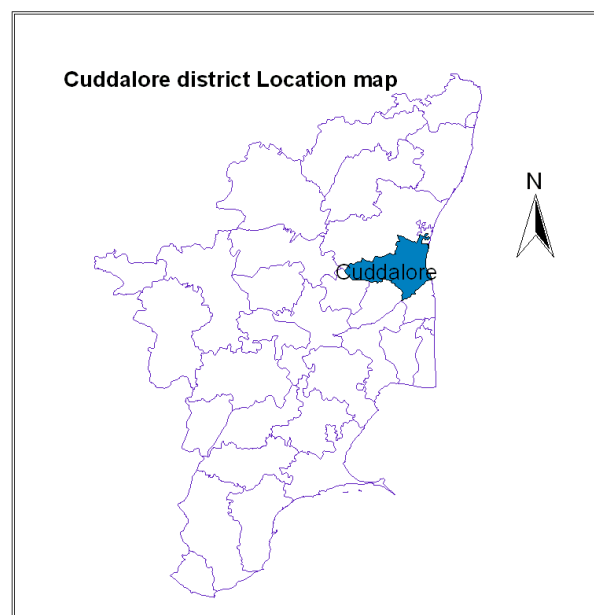
Figure 2: Primary Occupations of Men

### *Pillumedu*

77% of women are engaged in fish vending as their primary occupation while 23% work in groceries shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Ponnathittu Hamlet village



## Ponanthittu

### Introduction

This village is located 1.5 kms to the west of Mudasaloodai and lies in the Cuddalore district. The fishing hamlet is comprised of the Scheduled caste group and has 117 households with an average family size of 4.51 persons. The demographic profile of the village is provided in Table 1.

<b>Population</b>	<b>Total</b>
Adult male	184
Adult female	175
Children male	70
Children female	61
Infant male	22
Infant female	14
total	526

*Table 1: Demographic profile of Ponanthittu*

The village is believed to have originated 400 years ago and was an island of sand dunes. It is believed to be named after a person called Ponnen, who established a separate settlement for his community because of caste related issues. 3 families of different castes are supposed to have initiated the formation of this village. Later people from Parangipettai and Silambimangalam migrated into this village. Their original occupation was agriculture labour which was replaced by fishing 18 years ago following the establishment of a separate market place in Mudasaloodai. The major shocks the community felt was the 2004 tsunami during which no loss occurred.

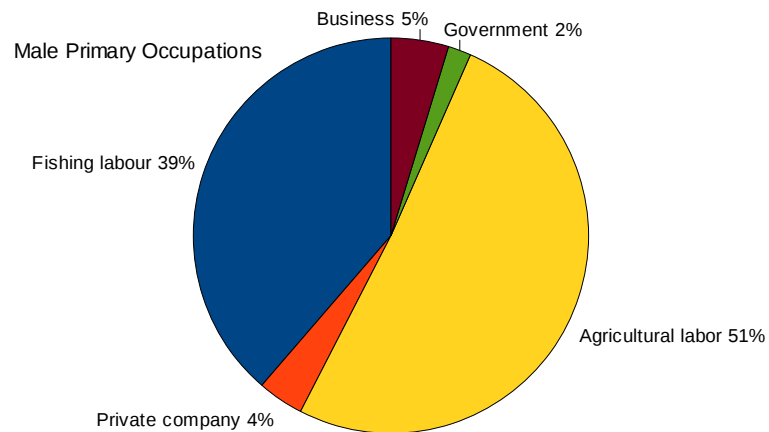
The village has 130 houses of which 89 are concrete. Infrastructure in the village includes a primary school established in 1993 by the Government which is now a middle school. Roads connecting the hamlets were metaled 20 years ago and roads within the village were concreted after the tsunami. People used canoes to cross the Vellar river to go to Parangipettai.

### Asset Ownership

No assets were recorded in this village.

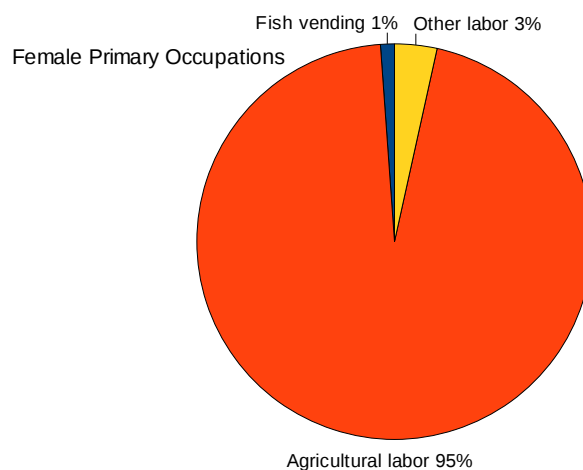
### Occupational profile

The majority of the village men (51%) are employed as agricultural labor while 39% are engaged as fishing labor. This is presented in Figure 1. Men do not appear to be engaged in any secondary occupations.



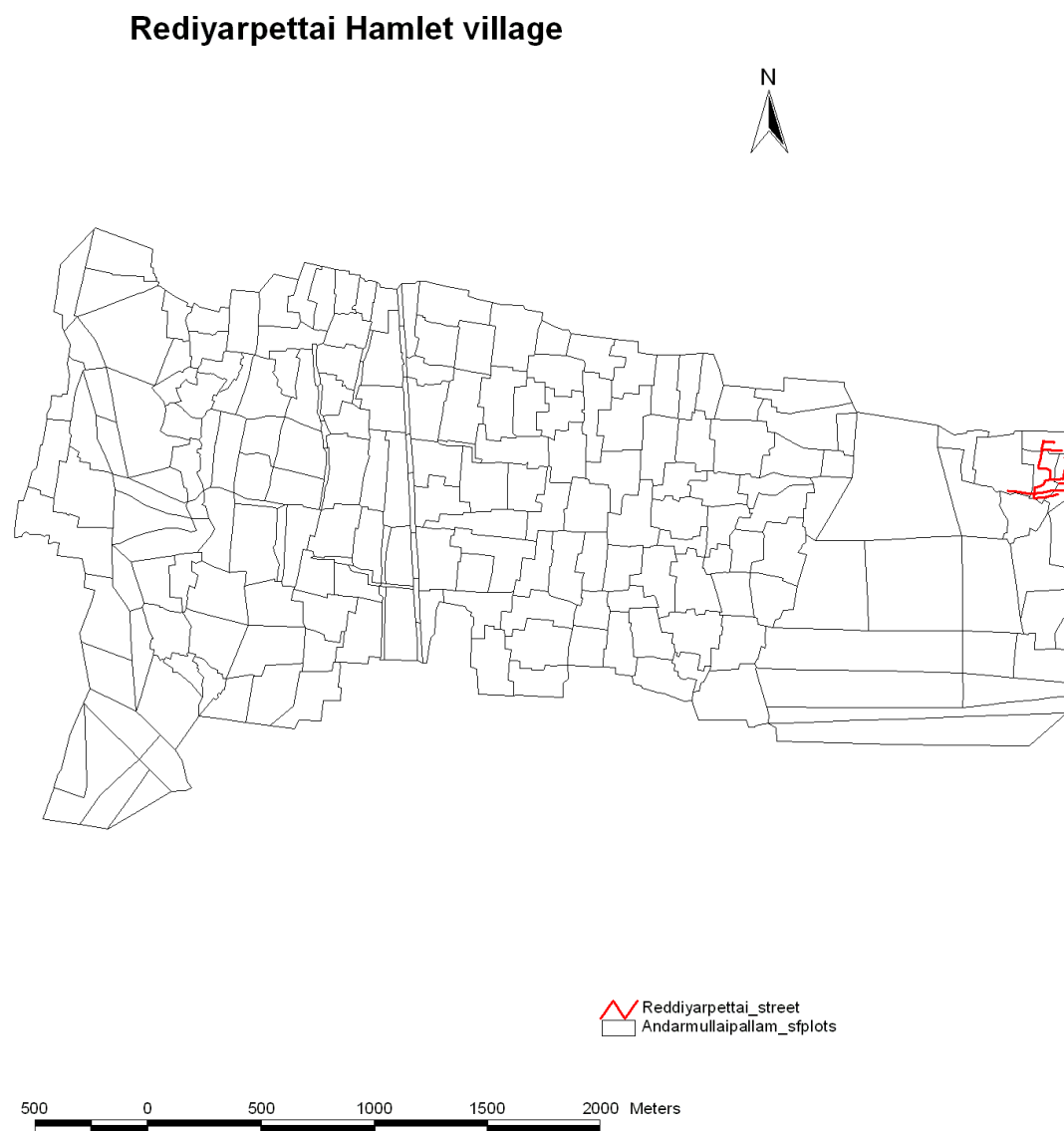
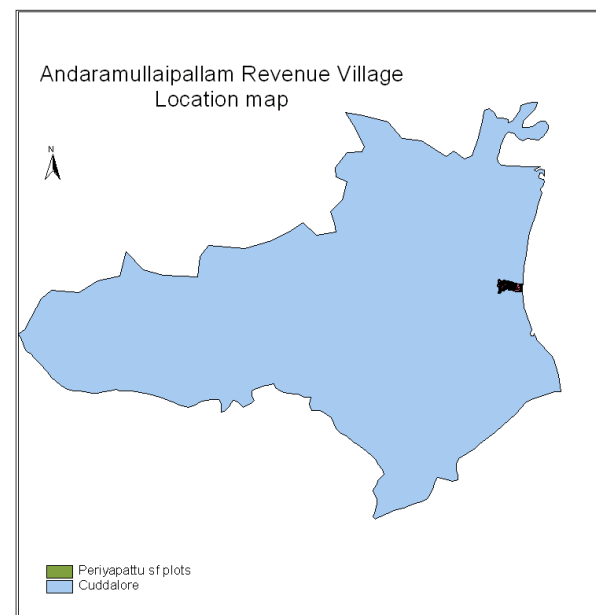
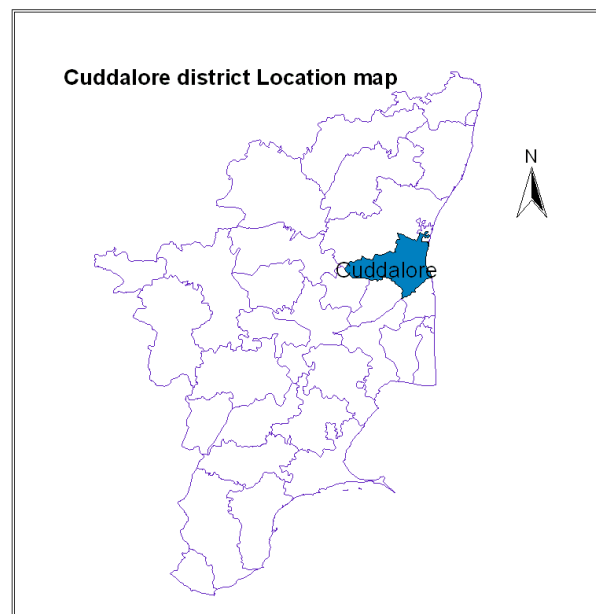
*Figure 1: Primary Occupations of Men*

95% of women are engaged as agricultural labor as their primary occupation. This is presented in Figure 2.



*Figure 2: Primary Occupations of Women*





## Reddiyarpettai

### Introduction

This village is located 22 kms south east of Cuddalore. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 144 households with an average family size of 4.59 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	116
Female over 35	102
Adult male	144
Adult female	100
Children male	92
Children female	80
Infant male	13
Infant female	14
total	661

*Table 1: Demographic profile of Reddiyarpettai*

The origin of the village could not be identified during the historical mapping session and is believed to be named after the owner of the village who was known as Muthulinga Reddiyar. The major shocks the community felt was the 2004 tsunami during which two lives were lost. Nearly 40 houses and 200 kattumarams were destroyed.

60 years ago the village had 60 thatched houses which has now increased to 200 houses of which most are concrete. The village obtained electricity supply in 1980. Infrastructure in the village includes a primary school established by the Government which has remained unopened due to poor attendance. However the few students present, attend the school at Periyakuppam. An overhead tank was constructed in this village in 1998 prior to which drinking water was obtained by using hand pumps. Buses were available from 1998. Medical facilities are available at Parangipettai and Cuddalore.

### Asset Ownership

All of the households own or share ownership of fishing craft. 38% are single owners of craft. This is presented in Figure 1.

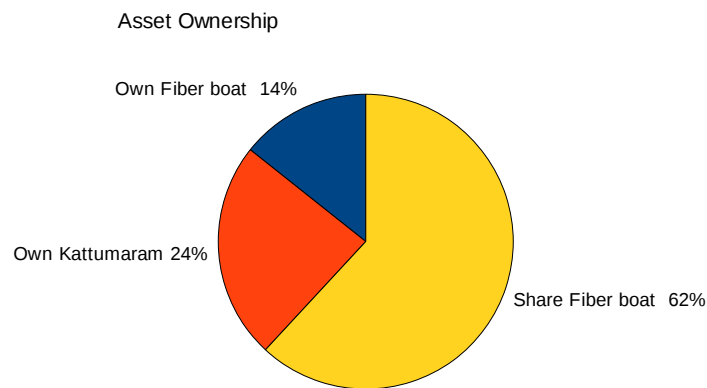


Figure 1: Asset Ownership in Reddiyarpettai

### Occupational profile

The vast majority of the village men (93%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

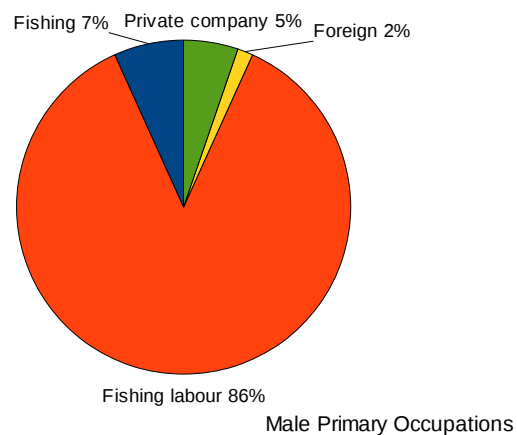
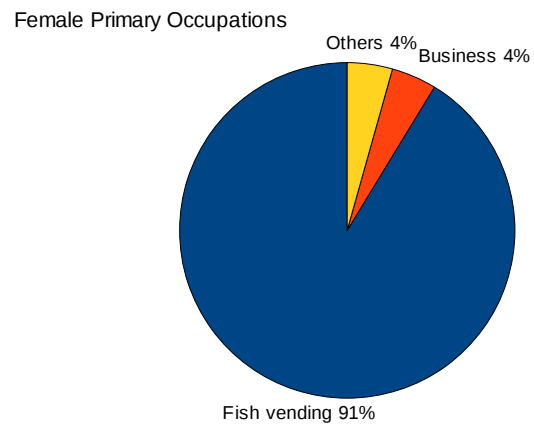


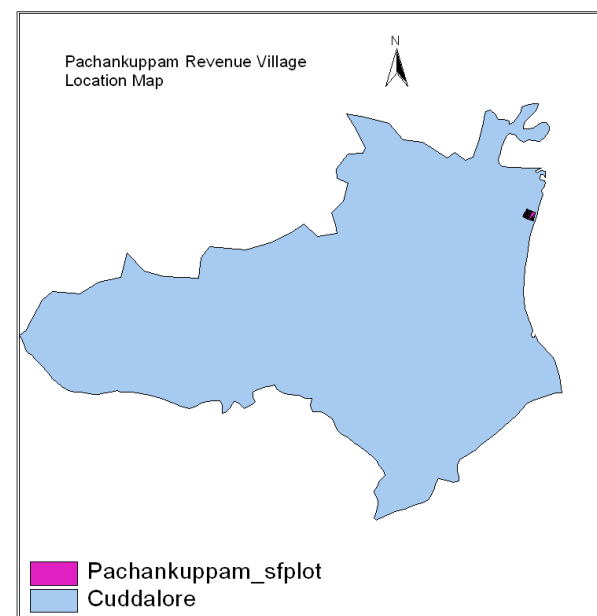
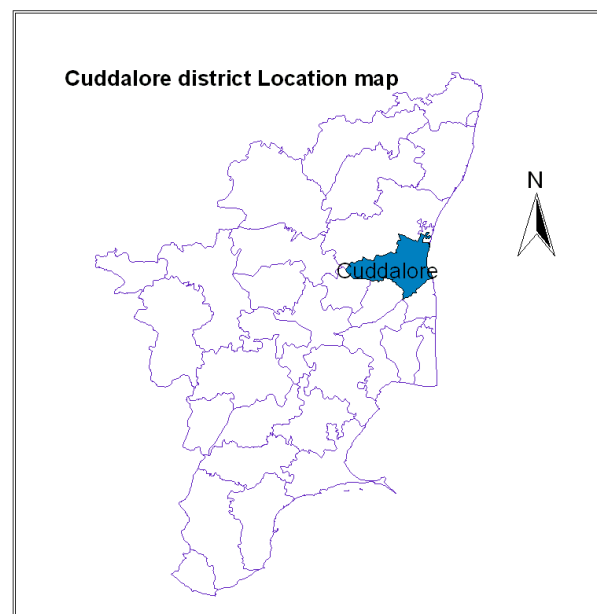
Figure 2: Primary Occupations of Men

### *Reddiyarpettai*

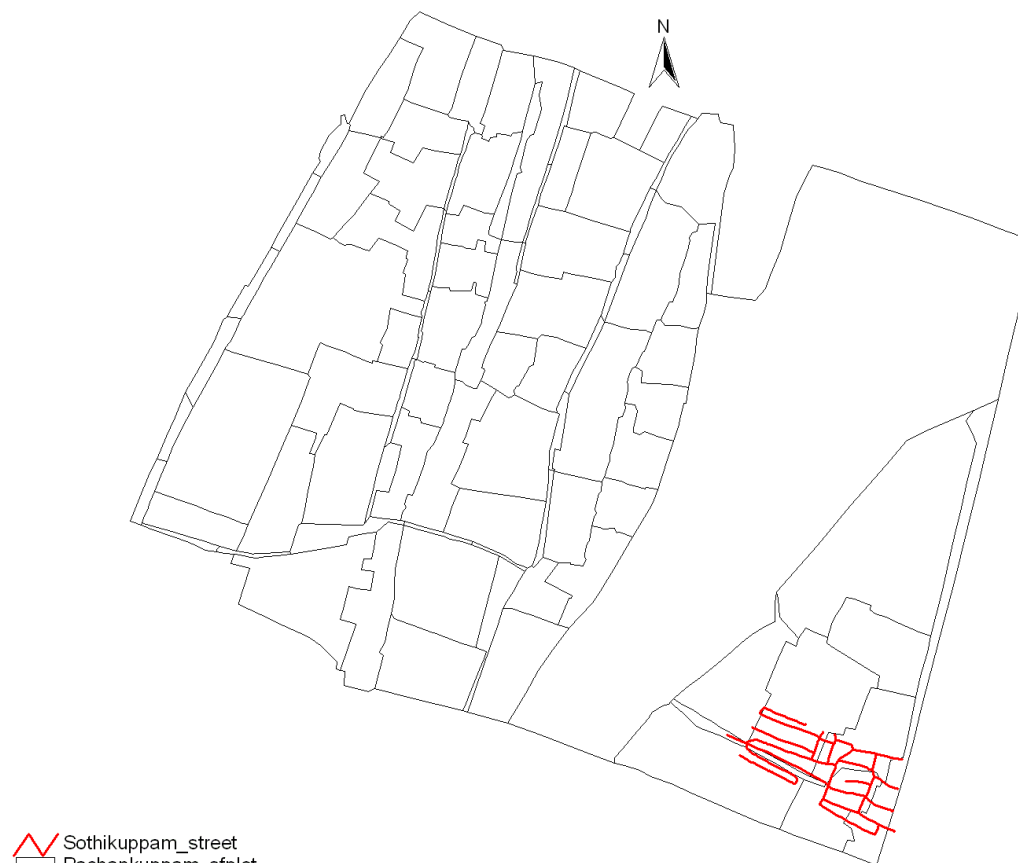
91% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Sothikuppam Hamlet village



500 0 500 1000 Meters

## Sothikuppam

### Introduction

This village is located 13 kms to the south of Cuddalore and lies in the Cuddalore district. The fishing hamlet is comprised of the Parvatharajakulam caste group and has 311 households with an average family size of 4.73 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	218
Female over 35	226
Adult male	322
Adult female	238
Children male	207
Children female	167
Infant male	50
Infant female	43
total	1471

*Table 1: Demographic Profile of Sothikuppam*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the loss of a 200 m stretch of beach 50 years ago. In 2002 the capsizing of a canoe while crossing the river resulted in the loss of 22 children and 2 adults and in 2004, the tsunami struck during which 20 lives were lost, 50 kattumarams and 1 mechanized boat was damaged.

From 225 thatched houses 50 years ago, the village now has 400 houses of which 150 are concrete. Infrastructure in the village has developed in the last ten years following the establishment of concrete roads, a middle school which was earlier a primary school, a net mending hall and an overhead tank which is still unused however. The bridge construction is underway. Medical facilities are available at Cuddalore OT.

Asset Ownership

All the households own or share ownership of fishing craft. 33% are single owners of craft. This is presented in Figure 1.

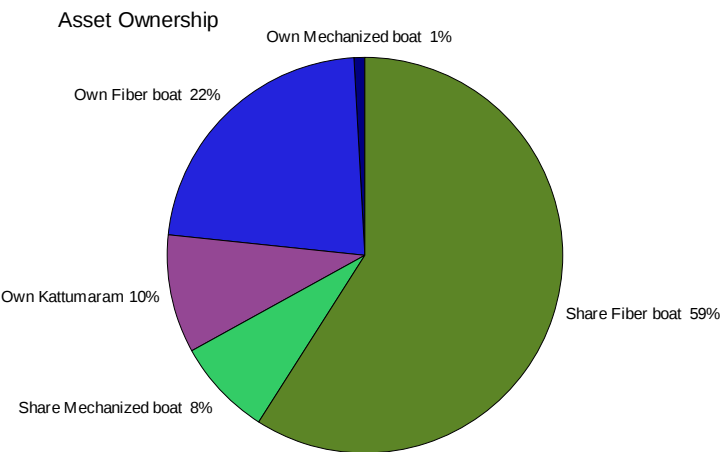


Figure 1: Asset Ownership in Sothikuppam

Occupational Profile

The vast majority of the village men are involved in fishing or allied activities i.e., 93%. This is presented in Figure 2. Men do not appear to be involved in any secondary occupations.

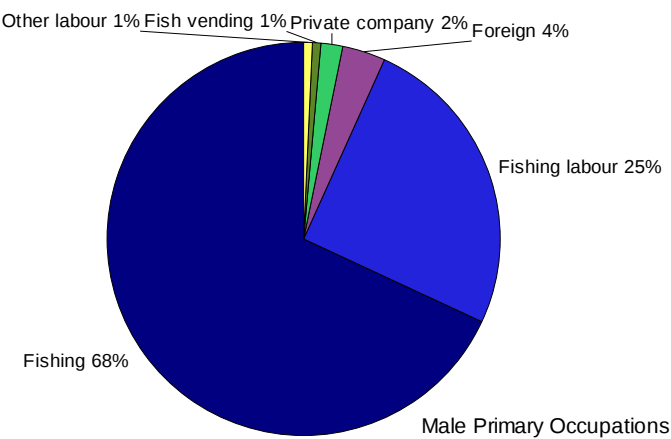
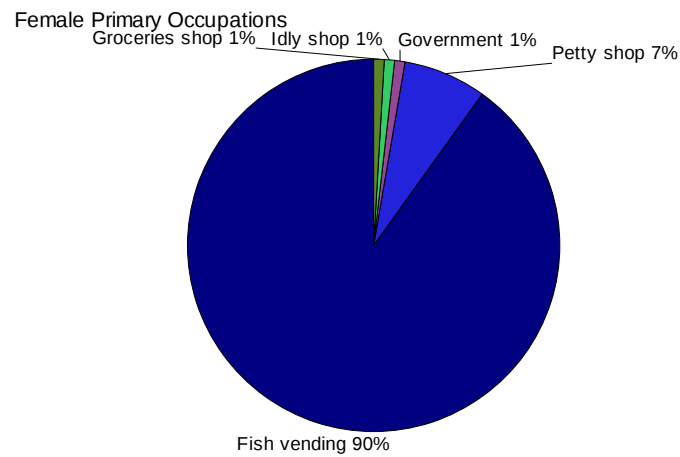


Figure 2: Primary Occupations of Men

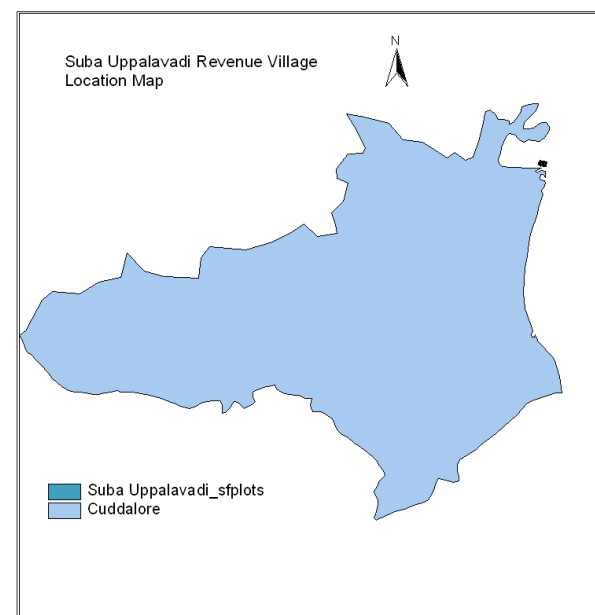
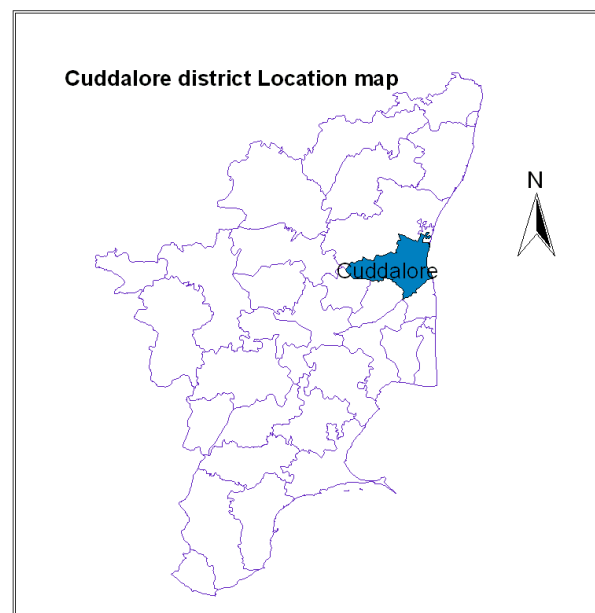
### *Sothikuppam*

90% of the village women are involved in fish vending as their primary occupation. This is presented in Figure 3. Other occupations include Government jobs, idly shops, petty shops and groceries shop.

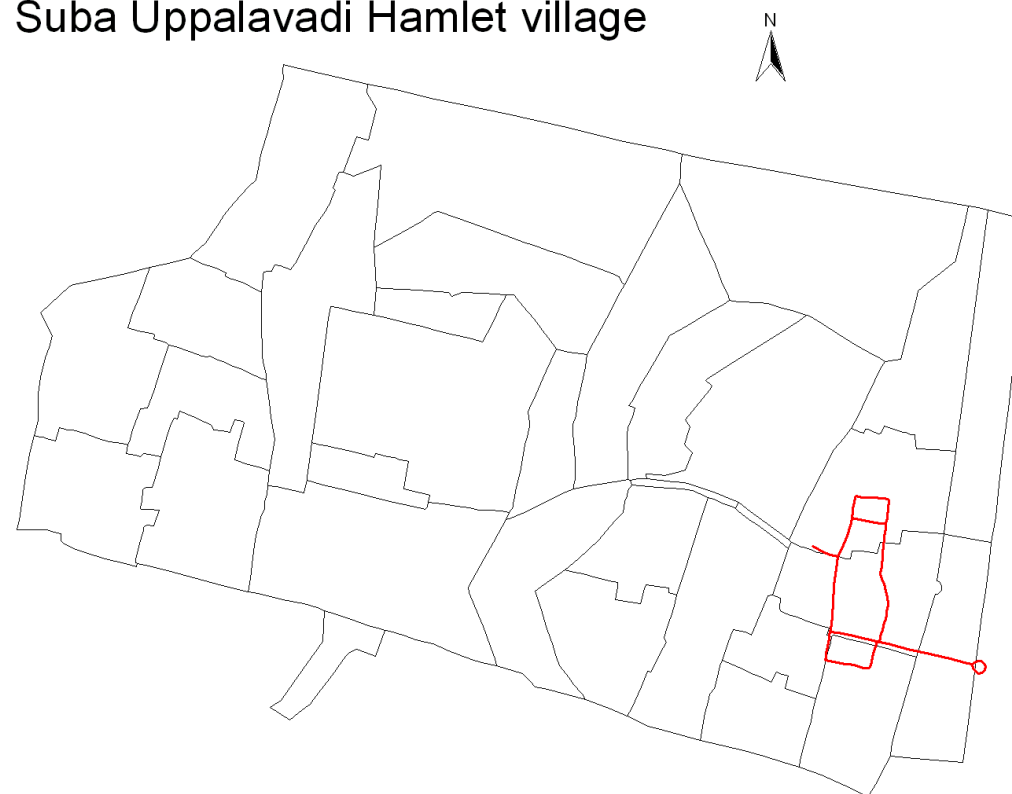


*Figure 3: Primary Occupations of Women*





## Suba Uppalavadi Hamlet village



200 0 200 400 600 Meters

Suba Uppalavadi  
Suba Uppalavadi\_street

FERAL/FAO\_UNTRS

## Suba Uppalavadi

### Introduction

This village is located 2 kms to the north east of Cuddalore and lies in the Cuddalore district. The fishing hamlet is comprised of the Parvatharajakulam and Padayatchi caste group and has 28 households with an average family size of 3.79 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	21
Female over 35	17
Adult male	23
Adult female	20
Children male	8
Children female	11
Infant male	1
Infant female	5
total	106

*Table 1: Demographic profile of Suba Uppalavadi*

The origin of the village could not be identified during the historical mapping session. The village was earlier called Moolavazhy and was renamed 25 years ago. The major shocks the community felt was the 2004 tsunami during which 4 lives were lost.

50 years ago the village had 85 thatched houses and has now increased to 100 houses of which most are concrete. Infrastructure in the village includes a primary school established in 1989 which is active till date. Students have to attend high school at Cuddalore, 2km away from the village. Roads in the village were sandy paths earlier but are metaled at present. An overhead tank was constructed in 2001 prior to which drinking water was obtained from wells and by using hand pumps. A borewell was constructed after the tsunami for agricultural purposes. Medical facilities are available at the general hospital in Cuddalore till date.

### Asset Ownership

All of the households own kattumarams. This is presented in Figure 1.

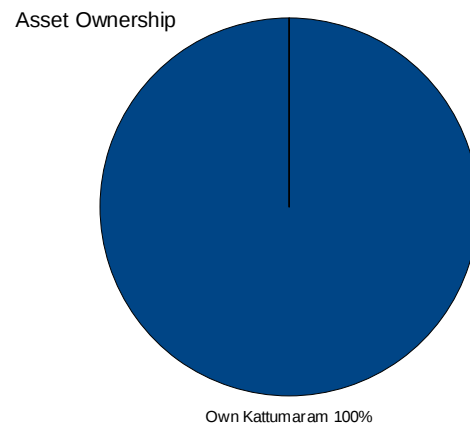


Figure 1: Asset Ownership in Suba Uppalavadi

### Occupational profile

The vast majority of the village men (90%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

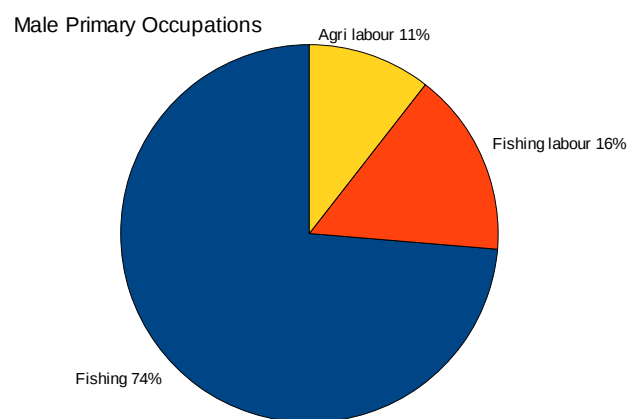
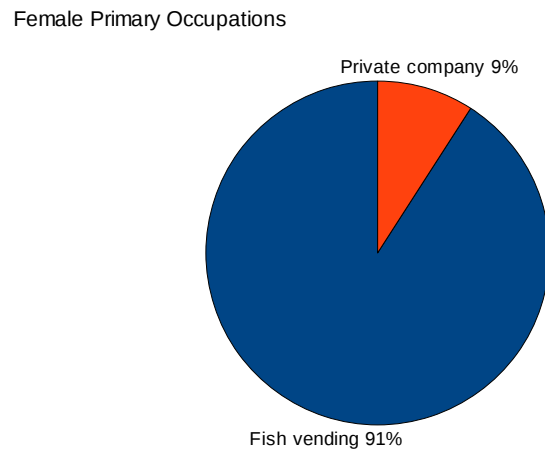


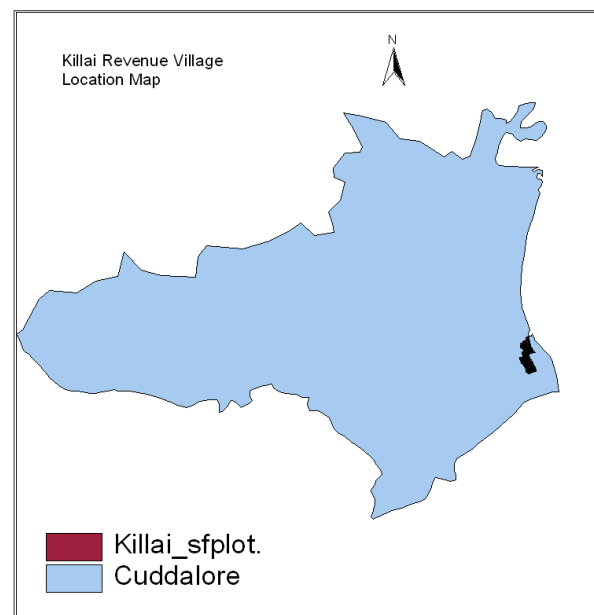
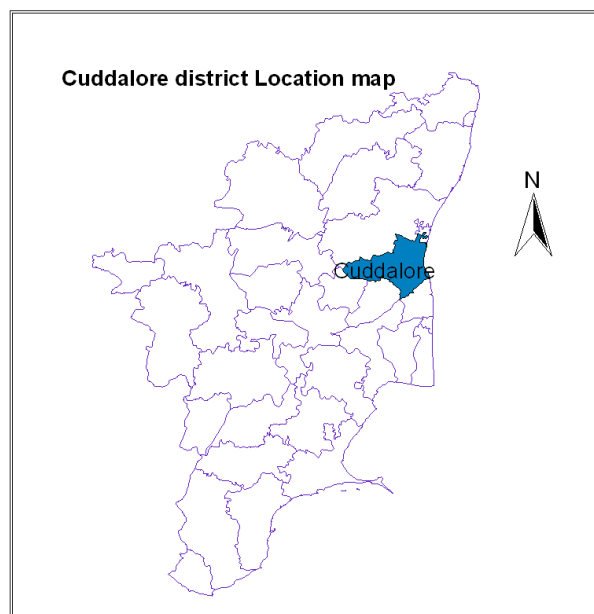
Figure 2: Primary Occupations of Men

### *Suba Uppalavadi*

91% of women are engaged in fish vending as their primary occupation. Other occupations include work in private companies. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*



## Suriya Nagar Hamlet village



## **Suriya Nagar**

### **Introduction**

This village is located 1.5 kms to the north of Mudasaloodai along the backwaters and lies in the Cuddalore district. The fishing hamlet is comprised of the Pattinavar (Chettiyar) caste group and has 104 households with an average family size of 3.61 persons. The demographic profile of the village is provided in Table 1.

<b>Population of the village</b>	<b>Total</b>
Adult male	113
Adult female	101
Children male	78
Children female	59
Infant male	16
Infant female	8
total	375

*Table 1: Demographic profile of Suriya Nagar*

Originally the village was an island north east of Pichavaram which is in the Cuddalore district. It was a temporary settlement in the 1960s where people would migrate for 7 months to fish and return to Killai during the rough season. The gradual migration of people from Killai transformed the village into a permanent settlement. The major shocks the community felt was the 2004 tsunami during which 2 lives were lost and resulted in the present location of the village with the formation of a new settlement.

Infrastructure in the village includes electricity supply and good drinking water facilities from 1977.

Asset Ownership

All of the households own or share ownership of fishing craft. 60% are single owners of craft (Figure 1).

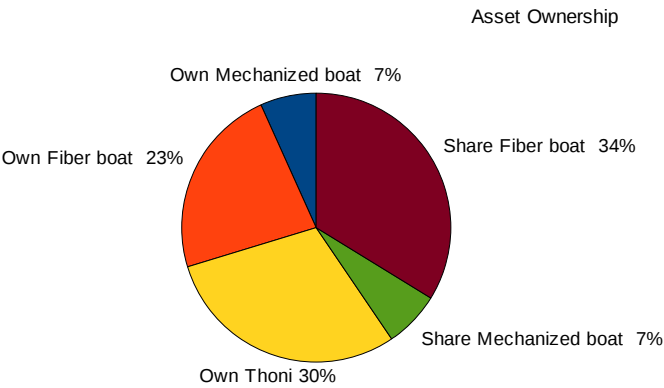


Figure 1: Asset Ownership in Suriya Nagar

Occupational profile

The vast majority of the village men (75%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

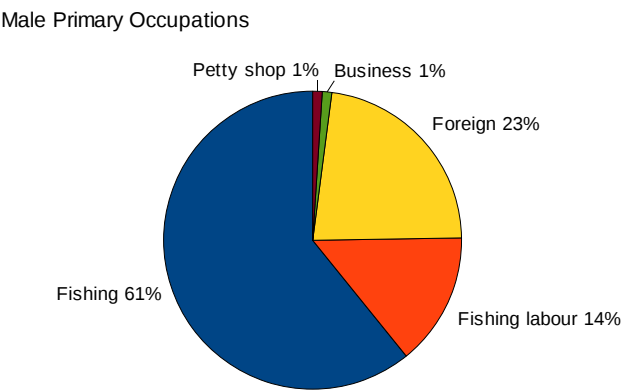
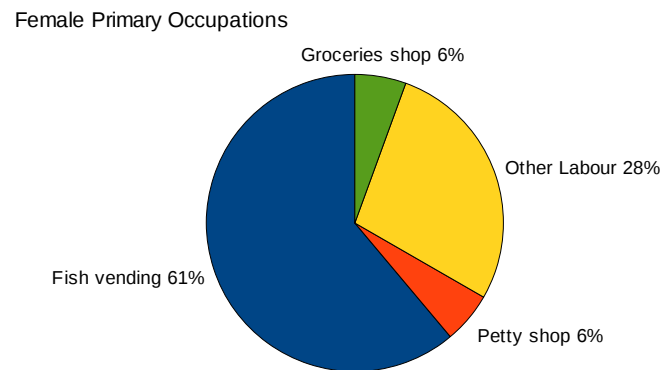


Figure 2: Primary Occupations of Men

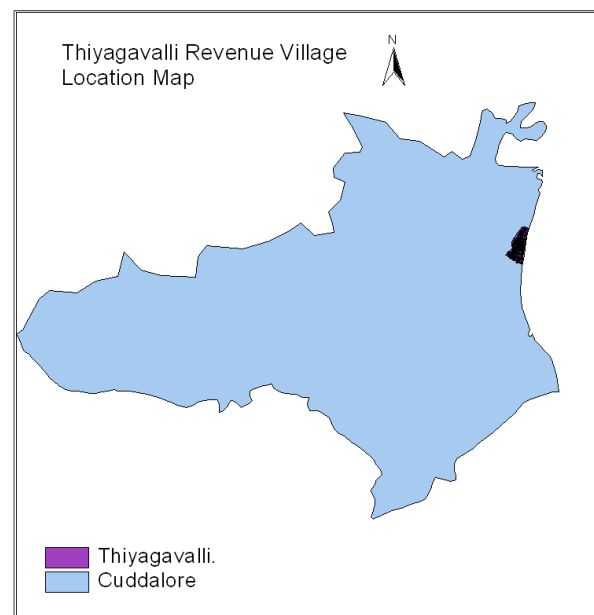
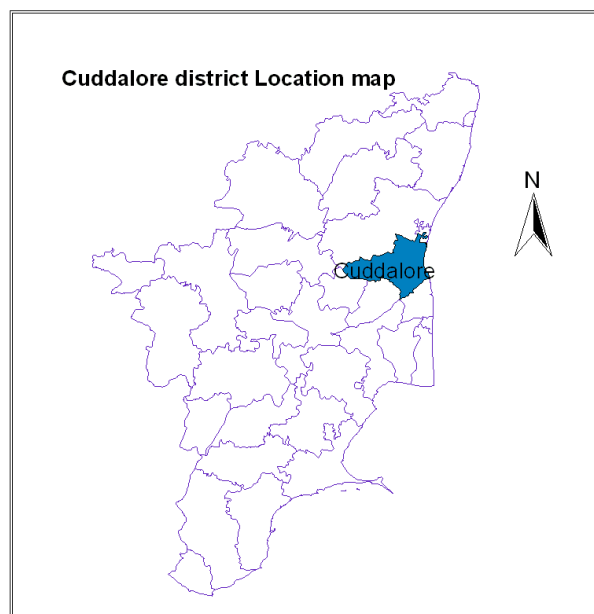
61% of women are engaged in fish vending as their primary occupation. 40% are

involved in running petty shops or grocery shops as well as other labor. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*





## Thamanampettai Hamlet village



## Thamanampettai

### Introduction

This village is located 20 kms to the south east of Cuddalore and lies in the Cuddalore district. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 133 households with an average family size of 4.27 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	101
Female over 35	117
Adult male	106
Adult female	101
Children male	93
Children female	68
Infant male	14
Infant female	11
total	611

*Table 1: Demographic profile of Thamanampettai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 8 houses were damaged.

The village had 75 thatched houses 50 years ago and presently has 200 houses of which most are concrete. Infrastructure in the village includes a primary school established long ago which is active till date. Students have to attend high school in Periyakuppam. Buses were introduced in 1988 though few and infrequent till date. An overhead tank was constructed 5 years later prior to which drinking water was obtained from wells and by using hand pumps. Medical facilities are available at the primary health centre in Thiruchopuram, 3 km away and Government hospital in Cuddalore.

### Asset Ownership

All of the households own or share ownership of fishing craft. 41% are single owners of craft (Figure 1).

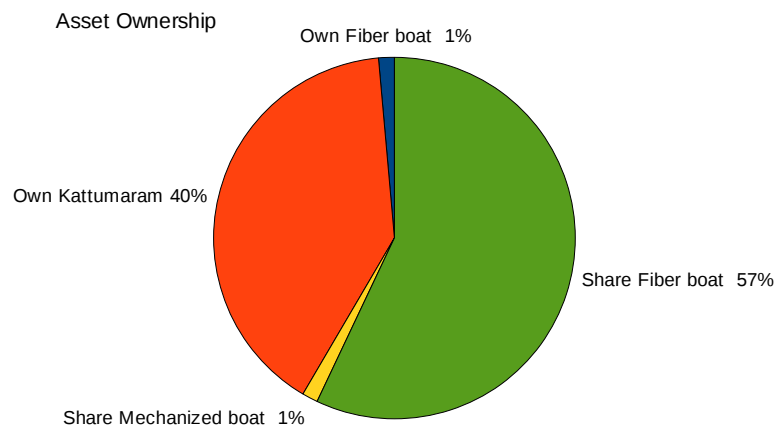


Figure 1: Asset Ownership in Thamanampettai

### Occupational profile

The vast majority of the village men (97%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

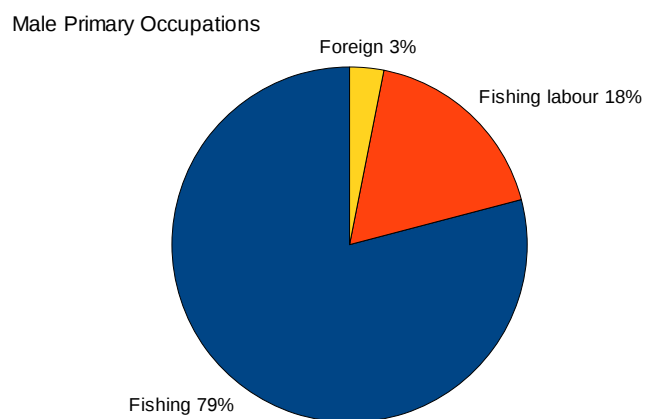
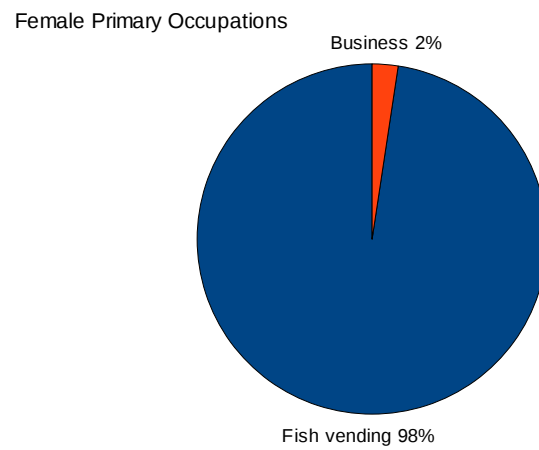


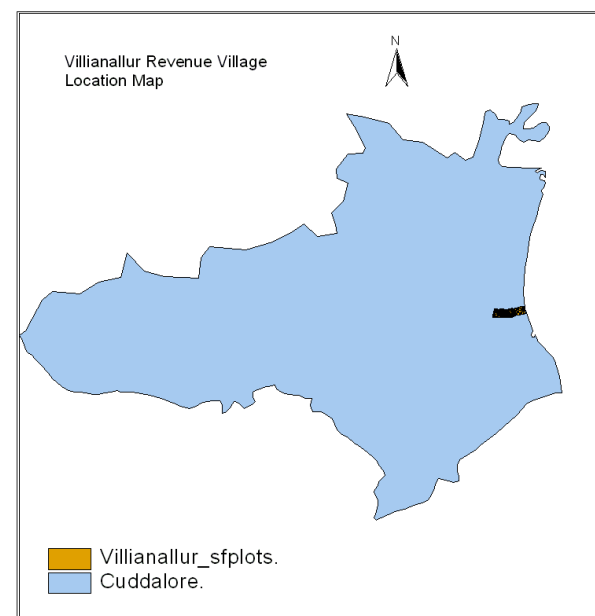
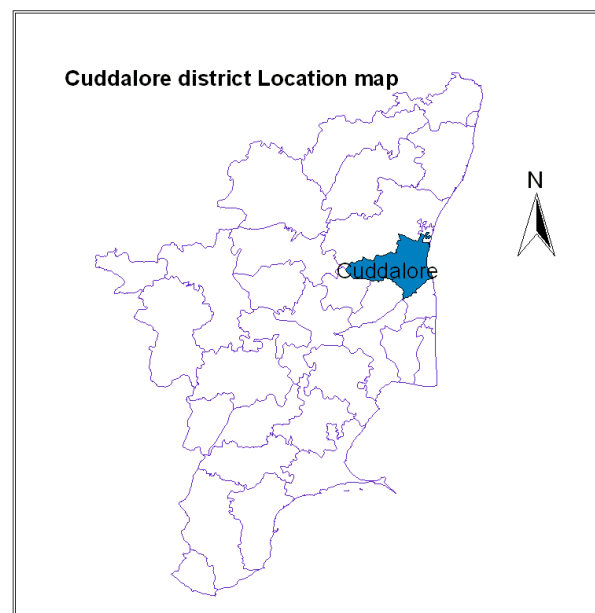
Figure 2: Primary Occupations of Men

## *Thamanampettai*

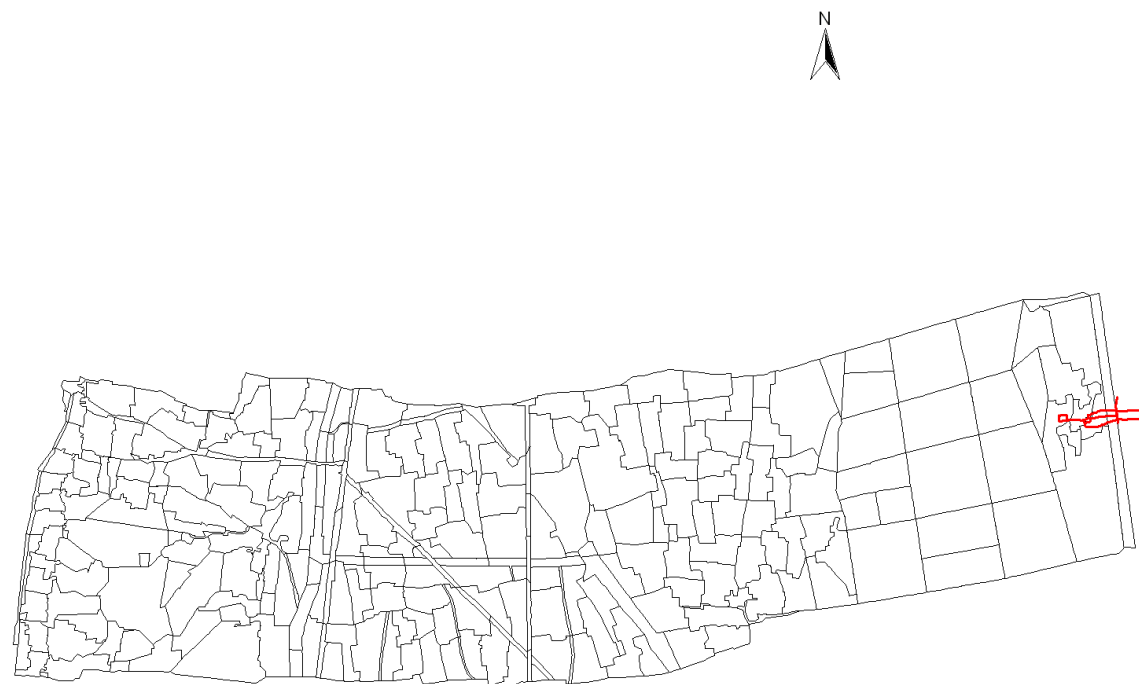
98% of women are engaged in fish vending as their primary occupation. This is presented in Figure 3.





*Figure 3: Primary Occupations of Women*



## Vellingarayanpettai Hamlet village



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## Vellingarayanpettai

### Introduction

This village is located 31 kms to the south east of Cuddalore and lies in the Cuddalore district. The fishing hamlet is comprised of the Paravatharajakulam caste group and has 90 households with an average family size of 4.23 persons. The demographic profile of the village is provided in Table 1.

Population of the village	Total
Male over 35	59
Female over 35	56
Adult male	83
Adult female	71
Children male	39
Children female	48
Infant male	12
Infant female	13
total	381

*Table 1: Demographic profile of Vellingarayanpettai*

The origin of the village could not be identified during the historical mapping session. The major shocks the community felt was the 2004 tsunami during which 7 lives were lost and about 10 kattumarams, 1 FRP and nearly 15 houses were destroyed.

From 50 thatched houses 50 years ago, the village now has 200 houses of which most are concrete. Infrastructure in the village includes a primary school established long ago which is active till date. Students have to attend high school at Parangipettai or Samiyarpettai. Roads connecting the hamlets were metaled 30 years ago while roads within the village were sandy and unlevel. An overhead tank was constructed in 1993 and buses were introduced 5 years later, I.e., in 1998. Medical facilities are available at Samiyarpettai, Parangipettai, or Cuddalore till date. The village has one net mending hall, one community hall, a park for children, concrete roads and good transport facilities at present.

Asset Ownership

All of the households own or share ownership of fishing craft. 26% are single owners of craft (Figure 1).

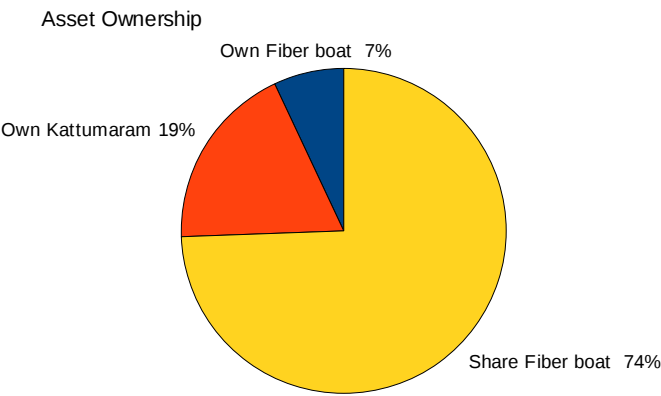


Figure 1: Asset Ownership in Vellingarayanpettai

Occupational profile

The vast majority of the village men (81%) are engaged in fishing or allied activities. This is presented in Figure 2. Men do not appear to be engaged in any secondary occupations.

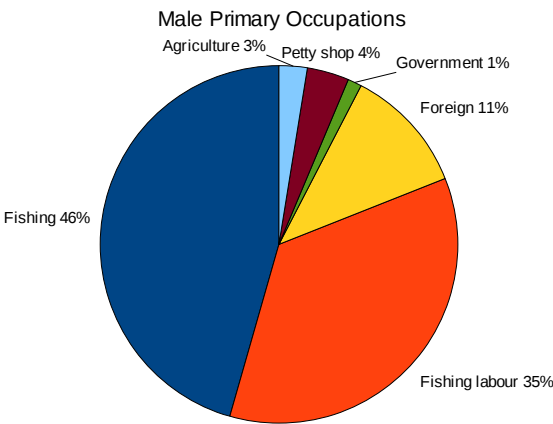
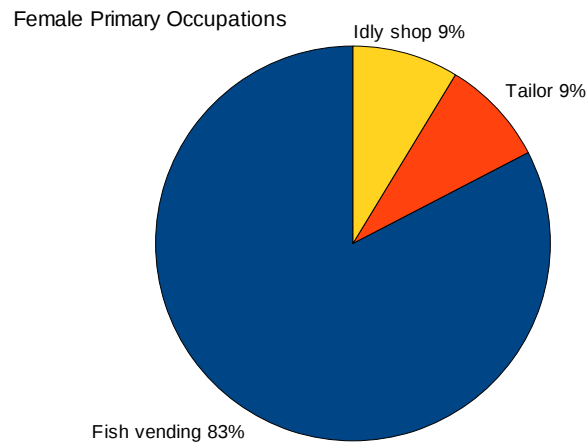


Figure 2: Primary Occupations of Men

### *Vellingarayanpettai*

83% of women are engaged in fish vending as their primary occupation. Other occupations include tailoring or work in idly shops. This is presented in Figure 3.



*Figure 3: Primary Occupations of Women*