Indian National Centre for Ocean Information Services & M.S. Swaminathan Research Foundation
Season Based Fish Catch Calendar

INCOIS-MSSRF Season Based Fish Catch Calendar MSSRF / RR / 11 / 30

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INCOIS-MSSRF

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Foreword

Since 1997, M S Swaminathan Research Foundation has been providing knowledge connectivity to the rural communities in the form of setting up and running Village Resource Centres (VRCs) and Village Knowledge Centres (VKCs). The main purpose is to provide need based locale-specific demand-driven information to the resource poor, marginal farmers and fisher folk using different communication tools. It also includes conducting need based training and awareness programmes and making linkages with various experts and organizations in view of knowledge into action.

In this background, since 2005, MSSRF is partnering with Indian National Centre for Ocean Information Services (INCOIS) to provide capacity building of fisher folk for effective use of INCOIS scientific information such as Ocean State Forecast and Potential Fishing Zone information to address the livelihood security and safety on sea.

Indian has 8,123 km length of coastline including the coastlines of Andaman and Nicobar Islands in the Bay of Bengal and Lakshwadweep Islands in the Arabian Sea. There are ten maritime states with 3,827 fishing villages and 1,914 traditional fish landing centers. Among the 10 states Tamil Nadu is a major coastal state that has a significant population dependent on fishing. In Tamil Nadu, there are 581 marine fishing villages and 1,92,152 families' dependant on fishing. In Pudhucherry, there are 28 marine fishing villages and 11,541 families rely on fishing.

Traditionally Tamilnadu has long coast line and healthy fishing industry. However, in recent times the segment has taken a hit with dwindling stocks predominantly affecting the small fisher folk. In this backdrop comprehensive research is being carried out to enhance productivity per catch of fisher folk using scientific methods. Refining such scientific methods need constant feed back and understanding of traditional fishing knowledge and practices. To address this MSSRF has developed participatory season based fish catch calendar with the technical inputs of local fisher folk and financial support of INCOIS. The main aim of the fish catch calendar is to capture valuable data regarding the capture of various fish species in different months and seasons across the Tamilnadu and Puducherry coast. The calendar provides insights into the availability of major shoal fishes in different times and seasons thus enabling researchers to fine tune their research. It also helps policymakers, agencies working towards the coastal systems research in the areas of welfare, productivity and livelihood of the fisher folk to draw plans based on the seasonal fish catch calendar. The participatory exercise is being carried out since 2009 in 39 coastal villages.

I am grateful to all my colleagues particularly Ms S. Velvizhi and Mr S. Surendran for coordinating entire exercise in a participatory mode with great dedication. I also thank Ms Nancy Anabel for providing valuable inputs for compiling this data in such a presentable manner. All my colleagues who have all participated in the participatory data collection are listed in this publication.

I am also grateful to Dr P. Santhanam, Assistant Professor, Department of Marine Science, Bharathidasan University, Tiruchirappalli and Dr V. Ravi, Assistant Professor (Sr.), CAS in Marine Biology, Faculty of Marine Science, Annamalai University, Parangipettai for providing their scientific inputs to refine this publication to the next level.

MSSRF is very grateful to INCOIS and the visionary leader Dr Satheesh C. Shenoi and his colleagues Dr T. Srinivasa Kumar and Dr M. Nagaraja Kumar for helping us to take transformational research inputs to fisher folk through participatory mode.

I also thank Mr R.E. Ravikumar, Square Screens - for providing all the help to make several corrections and produce this publication in an attractive manner.

South | kwoaay S. Senthilkumaran Director - IEC

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Introduction

Since 1992, M S Swaminathan Research Foundation has been pioneering the knowledge empowerment of resource poor, marginal farming, fishing and landless rural families in India. Harnessing the modern computer and satellite based Information Communication and Technology (ICT), the Village Resource and Knowledge Centres (VRC & VKC) set up by MSSRF using bottom up approach have been providing locale and time specific, demand driven information to the rural communities. Notably it plays a significant role in being a bridge between the research and rural communities' for facilitating the process of providing real time solutions to address the issues pertaining to lives and livelihoods of the rural community in the emerging trend of changing scenario.

MSSRF works with marine fishing communities through the platform of VRC's & VKC's in both Tamil Nadu and Pudhucherry for more than a decade. The unique feature of VRC is the bottom up approach that facilitates constant engagement with the fishing community for understanding their existing issues and needs related to development and livelihood, mapping the current knowledge and skill base and identifying the scope for research priorities. Such participatory tools and approach play a predominant role in recording the feedback / voices of community for taking an appropriate decision leading to research. Currently several research organizations and agencies engaged in improving the productivity of fisheries sector and enhancing the livelihoods of fishing communities are also turning to participatory tools as a source of capturing the wealth of knowledge and practices of the fishing community. Understanding and capturing such traditional knowledge and practices of the fishing community are vital as it provides invaluable insights in streamlining research for improving the productivity of fish catch and thereby enhancing the livelihoods of fishing community. Seasonality Mapping is one of the significant tools to elicit information to understand the fishing pattern, species availability across different seasons from the fishing community.

In this backdrop, it was decided to study the availability of shoal fishes, juveniles and various fish species across different months and seasons from fisher folk under MSSRF – INCOIS project through seasonality Mapping. The exercise brought out crucial information on the availability of shoal fishes and juveniles of various species during different seasons of the year along with diversified fish species, wind direction and wind pattern. It also helps policy makers and agencies working towards the coastal welfare, productivity and livelihood of the fisher folk to draw plans based on the seasonal calendar.

The season based fish catch calendar was commissioned for 39 villages across Tamil Nadu and Pudhucherry. An overview of the district level availability of shoal species and juveniles corresponding to major seasonal variation such as Pre monsoon, monsoon, post monsoon and summer has been given. The entire exercise and the invaluable data provide the reader with a rich tool for performing analysis correlating various data within and outside this book.

Methodology

The exercise on seasonality mapping was carried out in 39 marine fishing villages in 7 districts of Tamil Nadu and the Union Territory of Pudhucherry by the NVA team of MSSRF. Before implementing the exercise, a common understanding was created through an orientation to the staff who were involved in the exercise. The field staffs were given a list of names of various fish species available in Tamil Nadu and Pudhucherry coast encompassing local vernacular, common and scientific names for obtaining uniform understanding. The villages had been selected based on a set criterion such as having fishing as major form of livelihood, population of above 1,000 and a landing centre. In order to identify the variations in the fish species in terms of fish catch / availability as shoal and juveniles, wind pattern, wind direction in relation to different seasons, seasonality mapping which is one of the Participatory Rural Appraisal tools was used in the aforementioned villages. Focus Group discussion was used as a method to execute the seasonality mapping. The target group was identified for the exercise keeping the criteria like current involvement in fishing, represents different age group, users of different crafts and gears. A checklist was devised corresponding to the objective for eliciting the information required from the target group through seasonality mapping. Participatory approach was employed through out the exercise to collect the data.

The collected data have been cross verified and updated. Subsequently the mapped data have been compiled and analyzed to identify the availability of diversified fish species across different seasons, availability of shoal fishes, and availability of juveniles captured by the fisher folk.

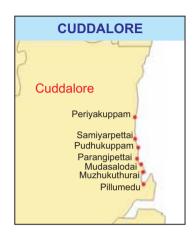
How to Reference the following study report?

The book is divided into six segments; each segment represents the season based fish catch calendar for a particular district or a combination of two districts. At the beginning of the each segment of district, an overview of the seasonal calendar is presented; following which the seasonal calendar for each village of that particular district is provided. The data of each village is presented into two pages arranged in left and right hand side.

Left hand side portion consists of brief profile of the village with illustrative map indicating the location of the village. At the right hand side, the season based fish calendar of the respective village illustrated in the form of circles divided into segments. Each of the seasonal calendars consists of three circles arranged in concentric manner. The inner most of layer consists of month wise calendar either corresponding to English or Tamil months. The next layer consists of wind data corresponding to the particular month following by the outermost layer containing the fish species captured by the fisher community in the respective month. If the month is situated in between a segment consisting wind direction and fish species, then it corresponds to the English calendar and in case if the month is situated at the periphery of each segment, it refers to the Tamil calendar. The type of wind is indicated by the direction from where the wind is originating. Within each seasonal calendar, the names of juvenile fishes and fishes available as shoals are indicated in different colours, which can be referred from the legend provided in each calendar.

Finding Map Location



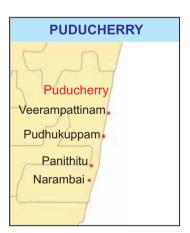












Wind Direction and Types

Wind Name in Tamil	Туре	Representation
Vadai Katru	N	Winds arriving from Northern direction
Kondal Katru	E	Winds arriving from Eastern direction
Sozha Katru	S	Winds arriving from Southern direction
Katchan Katru	W	Winds arriving from Western direction
Vadai Katchan	NW	Winds arriving from North Westerly direction
Vadai Kondal	NE	Winds arriving from North Easterly direction
Sozha Katchan	SW	Winds arriving from South Westerly direction
Sozha Kondal	SE	Winds arriving from South Easterly direction

P.S: Based on different seasons the wind direction may be subject to slight or gradual shift.

Puducherry

Overview

The Union Territory of Puducherry has a 15 marine fishing villages along its 24 Km coast line, housing more than 1 lakh people. The annual fish production is to the tune of 35,000 metric tonnes.

The seasonal mapping exercise was carried out in the villages of Veerampattinam, Narambai, Panithittu and Pudhukuppam. The major species captured by the fishermen in Pudhucherry are Mackerel, Oil Sardine, Squid, Octopus, Cuttlefish, Wolf herring, Seerfish, Flyingfish, Anchovies, Carangids, Barracuda, Rayfish, Catfish, Crab and Ribbonfish. The fishermen in these villages venture out for fishing using trawlers, fibre reinforced plastic boats and country boats and deploy gears such as Gill net, Flyingfish net, Pomfret net, Trawl net, Anchovies net, Crab net, Floating net, Purse seine and Prawn net for capturing fishes.

Fishes like Mackerel, Oil Sardine and Lesser Sardines are available as shoals and captured by the fishermen in different seasons of the year. Tuna, Anchovies, Silverbellies, Catfish, Seerfish and Paste Shrimp are available as shoals and captured by the fisher folk during the post monsoon season. Carangids, Tuna, Seerfish and Rayfish are available as shoals and captured by the fisher men during the summer season while Seerfish and Silverbellies are available as shoals and caught by them in the pre monsoon season.

The juveniles of Carangids are captured by the fishing community in the month of June, September and October. Silverbellies juveniles are captured in the months of May, August and from October to December. The juveniles of Octopus, Cuttlefish, Rayfish, Flatfish, Silverbellies, Goatfish, Carangids and Squids are captured during pre monsoon season. The juveniles of Barracuda, Mojarras and Carangids are captured in the summer season.

Narambai

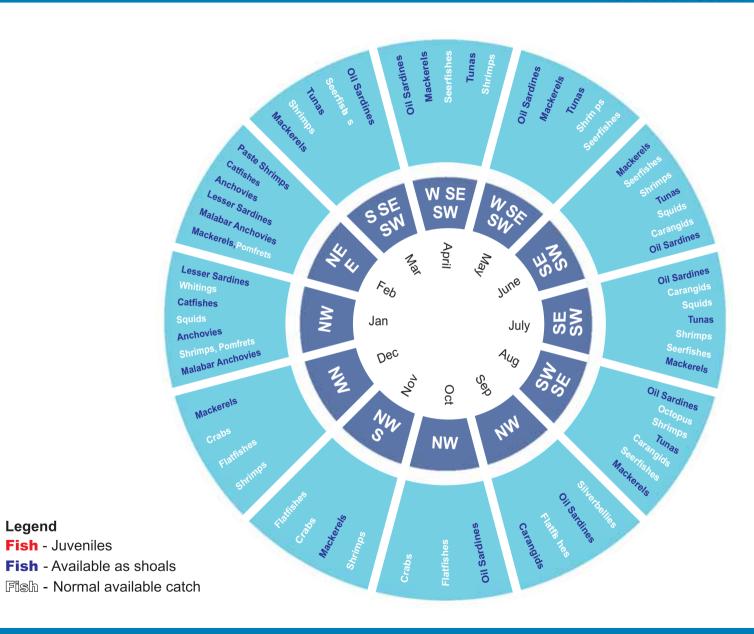


Latitude : 11.812133° N Longitude: 79.801183° E



Village Name	Narambai
Panchayat	Narambai
Name of Block and District	Puducherry
Population	1117
Number of households	340
Number of people involved in fishing	275
Total number of fishing vessels	165
Trawlers	5
Fibre boat / Vallams	53
Catamarans	107
Types of gears	Pair net, Pannu net, Kavalai net, Mani net, Crab net, Kola net, Disco net Madha net, Adil Valai, Sennankunni net, Nettili net, Launch net, Kattu net

Fish Catch Seasonal Calendar



Legend

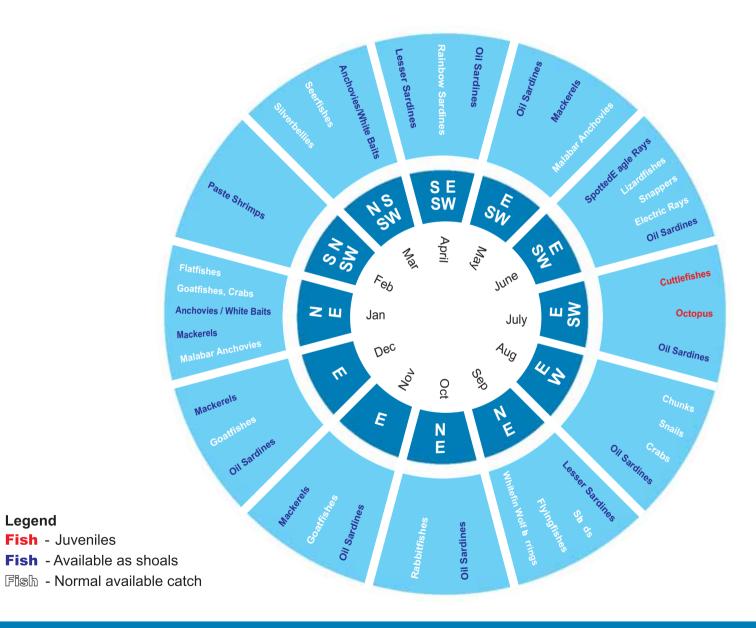
Panithitu



Latitude : 11.810017° N Longitude: 79.803683° E



Village Name	Panithitu
Panchayat	Panithitu
Name of Block and District	Puducherry
Population	1900
Number of households	456
Number of people involved in fishing	300
Total number of fishing vessels	143
Trawlers	2
Fibre boat / Vallams	111
Catamarans	30
Types of gears	Pair net, Pannu net, Kavalai net, Mani net, Crab net, Kola net, Disco net Madha net, Adil net, Sennankunni net, Nettili net, Launch net, Kattu net



Legend

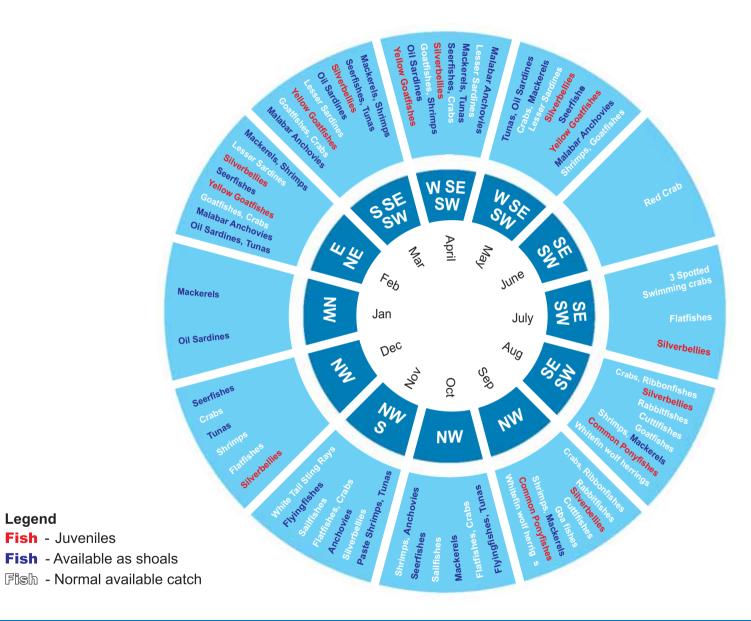
Pudhukuppam



Latitude : 11.865917° N Longitude: 79.818533° E



Village Name	Pudhukuppam
Panchayat	Pudhukuppam
Name of Block and District	Puducherry
Population	1000
Number of households	250
Number of people involved in fishing	400
Total number of fishing vessels	150
Fibre boat / FRB	50
Catamaran and Trawlers	100
Types of gears	Kacha net, Sardine net, Ribbonfish net, Cast net, Disco net, Shore Seine.



Legend

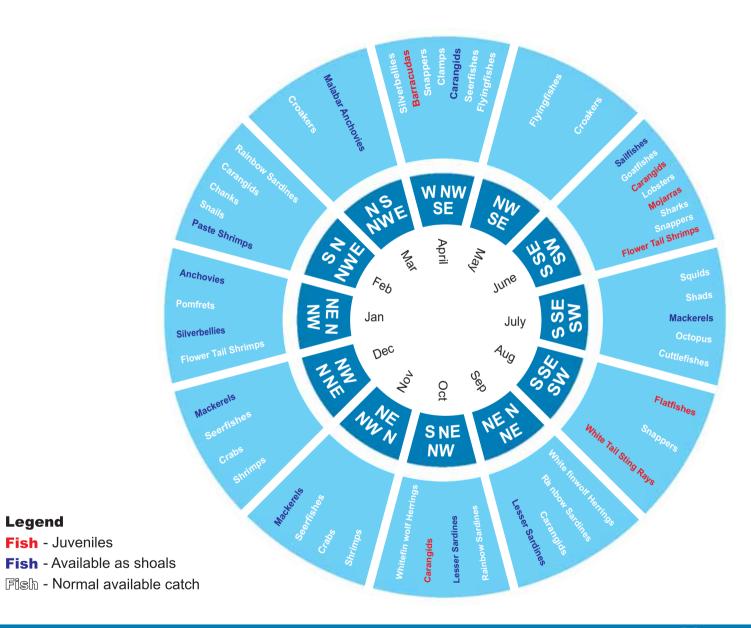
Veerampattinam



Latitude : 11.894217° N Longitude: 79.824617° E



Village Name	Veerampattinam
Panchayat	Veerampattinum
Name of Block and District	Puducherry
Population	7000
Number of households	1550
Number of people involved in fishing	1800
Total number of fishing vessels	350
Trawlers	13
Fibre boat / Vallams	187
Catamarans	150
Types of gears	Mada net, White Tail Sting Ray net, Paste Shrimp net, Trawl net, Kattu net, Gill net, Flyingfish net, Anchovy net, Shark net, Paasi net, Lobster neti, Prawn net



Legend

Cuddalore

Overview

Cuddalore district is a major coastal district comprising of 45 fishing villages spread over a coast line of 57.5 Km. It houses 3 major fish landing centres. There are around 51,000 fisher folk with 13,769 fishermen directly engaged in fishing. The annual fish production runs approximately to the tune of 18,000 metric tons. The fishermen in these village venture out for fishing using fibre reinforced plastic boats, country boats and trawlers and deploy gears such as Gill net, Crab net, Prawn net, Cast net, Stake net, Trawl net, Pair trawl net, Shore Seine and Purse Seine for capturing fishes.

The seasonality mapping was carried out in 7 villages in and around Chidambaram such as Mudasalodai, Pillumedu, Pudhukuppam, Periyakuppam, Muzhukkuthurai, Parangipettai and Samiyarpettai. Some of the major marine species that were documented during the exercises were Lesser Sardine, Mackerel, Karut Croackers, Mullet, Anchovies, Catfish, Shrimps, Flyingfish, Tiger Perch, Rainbow Sardine, Cuttlefish, Yellow Goatfish, Pomfret, Ribbonfish, Seerfish, Tuna, Whitefin wolf herring, Silverbellies, Carangids, Lizardfish, Crab.

The juveniles of Seerfish are available in the beginning of summer, pre monsoon and during the end of post monsoon and monsoon seasons respectively. The juveniles of Tuna are available throughout the pre monsoon season, while the juveniles of Seerfish, Oil Sardine, Malabar Anchovies, Silverbellies and Lesser Sardine are prevalent in the post monsoon season. The juveniles of Seerfish, Oil Sardine, Mackerel, Silverbellies and Croackers are available in the summer season and the Carangids are available in the month of September and October.

Mudasalodai

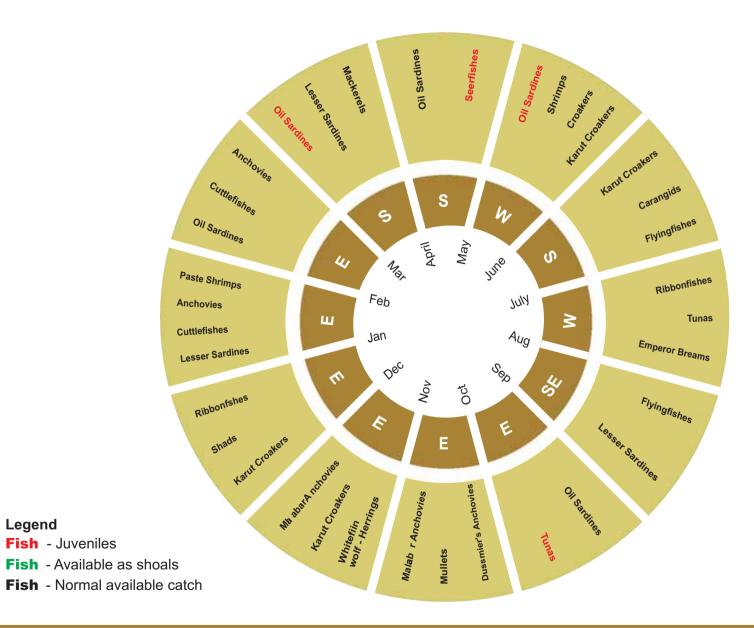


Latitude : 11.484367° N Longitude: 79.774633° E



Village Name	Mudasalodai
Panchayat	Killai
Name of Block and District	Parangipettai Block, Cuddalore District
Population	1248
Number of households	261
Number of people involved in fishing	>500
Total number of fishing vessels	189
Trawlers	69
Fibre boat / Vallams	120
Catamaran	Nil
Types of gears	Gills nets in different Mesh sizes, Purse Seine Net, Flying Fish net, Pair Gill net, Pair Trawling net, Shrimp net

Fish Catch Seasonal Calendar



Legend

Muzhukuthurai

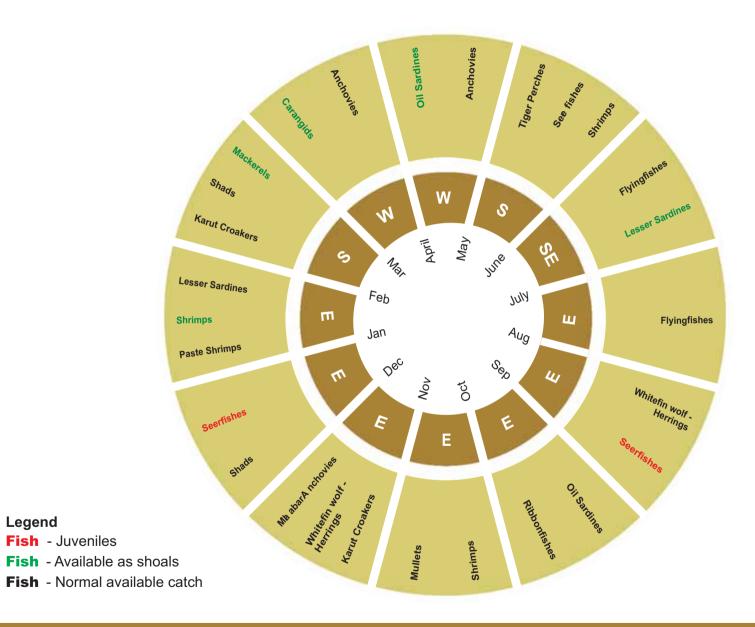


Latitude : 11.464433° N Longitude: 79.779450° E



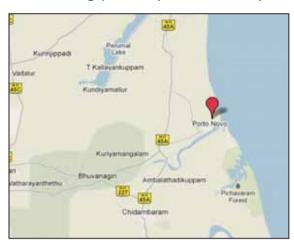
Village Name	Muzhukuthurai
Panchayat	Killai
Name of Block and District	Parangipettai Block, Cuddalore District
Population	528
Number of households	161
Number of people involved in fishing	98
Total number of fishing vessels	45
Trawlers	Nil
Fibre boat / Vallams	45
Catamarans	Nil
Types of gears	Pair Gill net, Purse Seine net, Gill net, Prawn net, Flyingfish net

Fish Catch Seasonal Calendar



Legend

Parangipettai (Porto Novo)

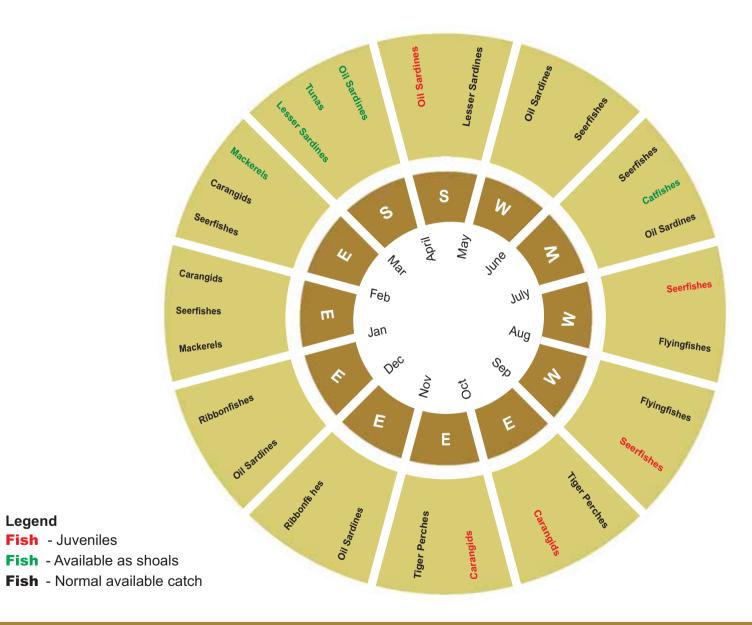


Latitude : 11.498583° N Longitude: 79.763517° E



Village Name	Parangipettai (Porto Novo)
Panchayat	Parangipettai
Name of Block and District	Parangipettai Block, Cuddalore District
Population	20,912
Number of households	4614
Number of people involved in fishing	500
Total number of fishing vessels	300
Trawlers	2
Fibre boat / Vallam / FRB	298
Catamarans	Nil
Types of gears	Purse Seine net, Gill net, Ring net, Flyingfish net, Crab net

Fish Catch Seasonal Calendar



Legend

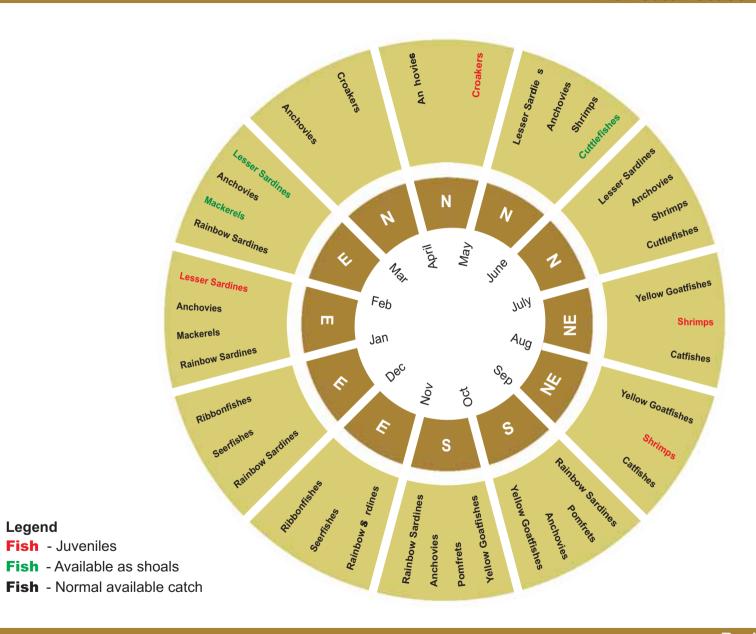
Periyakuppam



Latitude : 11.603717° N Longitude: 79.758017° E



Village Name	Periyakuppam
Panchayat	Kurunjippadi
Name of Block and District	Kurunjippadi Block, Cuddalore District
Population	1700
Number of households	750
Number of people involved in fishing	<500
Total number of fishing vessels	65
Trawler	Nil
Fibre boat / Vallam / FRB	15
Catamarans	50
Types of gears	Gill nets with different mesh sizes, Flyingfish net, Purse Seine, Disco net



Legend

Pillumedu

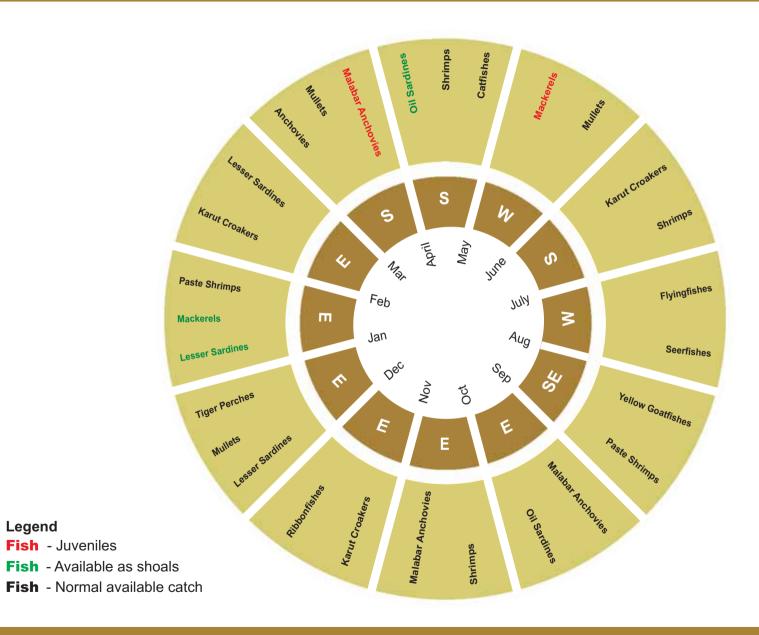


Latitude : 11.433166° N Longitude: 79.780983° E



Village Name	Pillumedu
Panchayat	Killai
Name of Block and District	Parangipettai Block, Cuddalore District
Population	588
Number of households	82
Number of people involved in fishing	70
Total number of fishing vessels	179
Trawler	Nil
Fibre boat / Vallam / FRB	179
Catamaran	Nil
Types of gears	Pair net, Purse Seine, Gill net, Prawn net, Flyingfish net

Fish Catch Seasonal Calendar



Legend

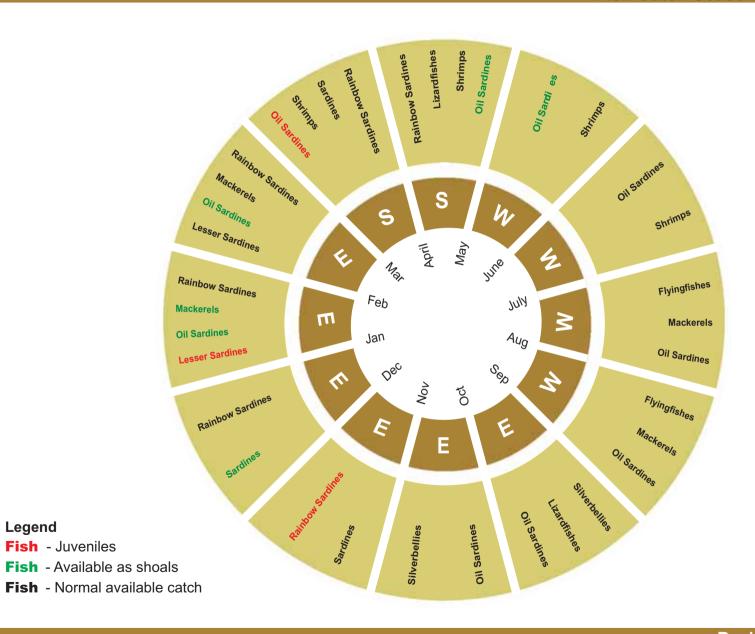
Pudhukuppam



Latitude : 11.526933° N Longitude: 79.766250° E



Village Name	Pudhukuppam
Panchayat	Kothattai
Name of Block and District	Parangipettai Block, Cuddalore District
Population	3000
Number of households	500
Number of people involved in fishing	2500
Total number of fishing vessels	115
Trawler	Nil
Fibre boat / Vallam / FRB	107
Catamarans	8
Types of gears	Prawn net, Gill net, Purse Seine, Kattu net, Pair net, Flyingfish net, Disco net



Legend

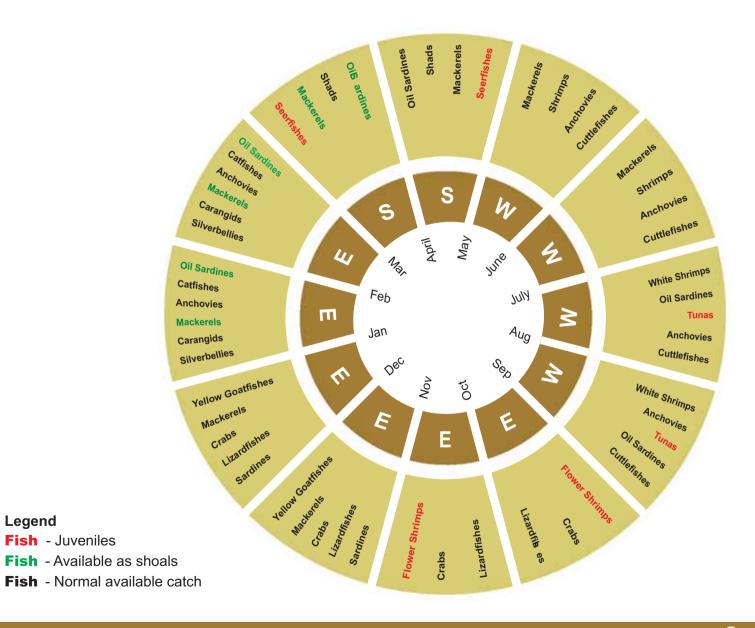
Samiyarpettai



Latitude : 11.549700° N Longitude: 79.758317° E



Village Name	Samiyarpettai
Panchayat	Silambimangalam
Name of Block and District	Parangipettai Block, Cuddalore District
Population	2000
Number of households	600
Number of people involved in fishing	600
Total number of fishing vessels	82
Trawler	Nil
Fibre boat / Vallams	72
Catamarans	10
Types of gears	Shore Seine, Fish net, Prawn net, Gill net, Ring net



Legend

Nagapattinam

Overview

The district of Nagapattinam is a major fishing centre with more than 64 marine fishing villages spanning across a 187 Km stretch of shore line. There are approximately 75,000 people living in these fishing villages. There are 4 main fish landing centers and 42 minor fish landing centers located in this district. The annual fish production of Nagapattinam District is around 80,000 metric tonnes, which is around 18% of the overall fish production of the State of Tamil Nadu.

The fishermen of this district capture Mackerel, Seerfishes, Oil Sardines, Grouper, Emperor bream, Flyingfishes, Crab, Squids, Shrimps, Ribbonfishes, Barracuda, Tuna, Yellowfin Tuna, Lobsters, Pomfrets, Catfishes, Rays, Skates, Croakers, Anchovies and Silverbellies. Nagapattinam coast is one of the major source for catching flying fishes during the summer season, which is also evident in the seasonality mapping carried out among the fisher folk in eight villages such as Akkaraipettai, Samathanpettai, Poombuhar, Vanagiri, Pazhayar, Tharangambadi, Kalikuppam and Chinnangudi. The fishermen in these villages venture out for fishing using trawlers, fibre reinforced plastic boats and country boats and deploy gears such as Trawl net, Purse Seine net, Pair Trawl net, Ring net, Flyingfish net, Floating net, Crab net and Rayfish net for capturing fishes.

Oil Sardines and Mackerel are available as shoals and are captured by the fishing community throughout the year. Fishes like Anchovies, Oil Sardine, Mackerel, Carangids, Croackers, Silverbellies, Flatfishes and Pomfret are available as shoals and captured during the monsoon, pre and post monsoon seasons. While fishes like Oil Sardines, Flyingfishes, Mackerels, Anchovies and Croakers are available as shoals and captured during the summer season. The juveniles of Mackerel fishes are caught by the fishermen all throught the year. It is identified that juveniles of Anchovies, Silverbellies and Carangids are captured during post monsoon, while Croakers, Oil Sardine and Anchovies are captured as juveniles in summer and pre monsoon. It is also found that the fisher folk catch Flatfishes and Silverbellies as juveniles during the monsoon season.

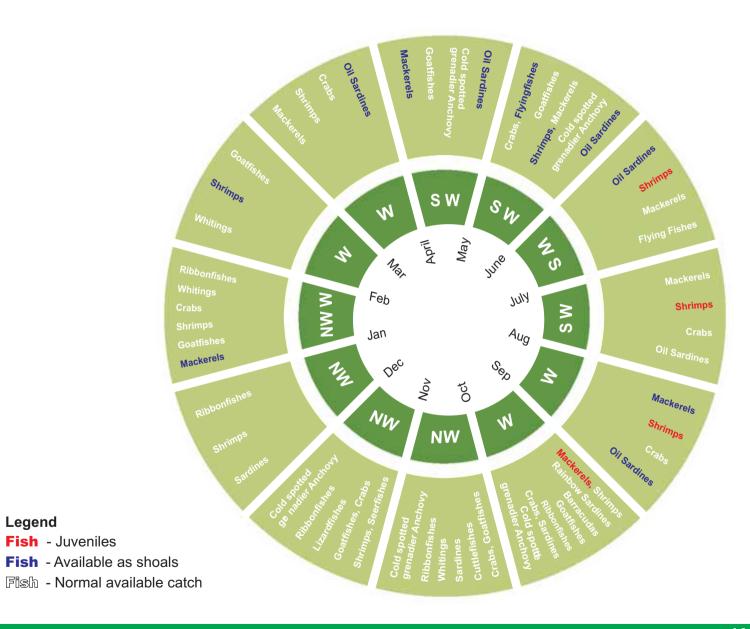
Kalikuppam



Latitude : 10.977783° N Longitude: 79.852050° E

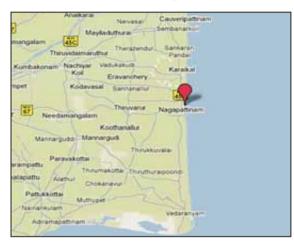


Village Name	Kalikuppam
Panchayat	Kalikuppam
Name of Block and District	Karaikal
Population	1786
Number of households	415
Number of people involved in fishing	522
Total number of fishing vessels	149
Trawlers	6
Fibre boat / Vallams	128
Catamarans	15
Types of Gears	Gill net, Flyingfish net



Legend

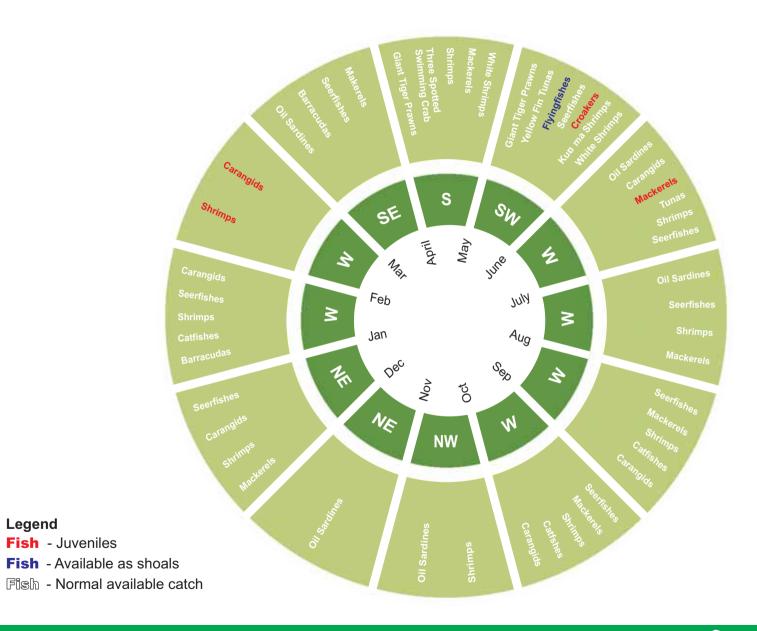
Samathanpettai



Latitude : 10.798567° N Longitude: 79.850933° E



Village Name	Samathanpettai
Panchayat	Samathanpettai
Name of Block and District	Nagapattinam
Population	2500
Number of households	510
Number of people involved in fishing	752
Total number of fishing vessels	190
Trawlers	10
Fibre boat / Vallams	140
Catamarans	40
Types of gears	Gill net, Purse Seine net, Trawl net, Flyingfish nets



Legend

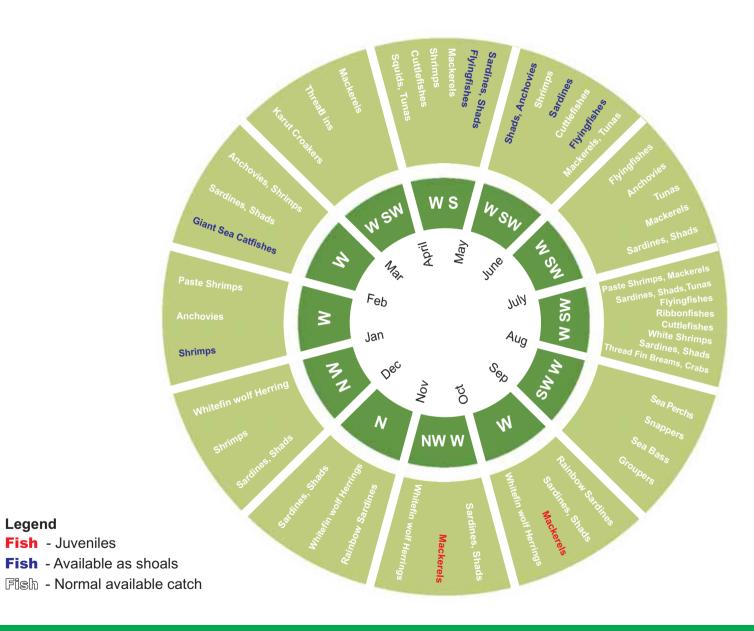
Vanagiri



Latitude : 11.130583° N Longitude: 79.857867° E



Village Name	Vanagiri
Panchayat	Vanagiri
Name of Block and District	Sirkazhi, Nagapattinam District
Population	5800
Number of households	900
Number of people involved in fishing	2800
Total number of fishing vessels	210
Trawlers	15
Fibre boat / Vallams	180
Catamarans	15
Types of gears	Purse Seine, Ring net, Gill net, Trawl net



Legend

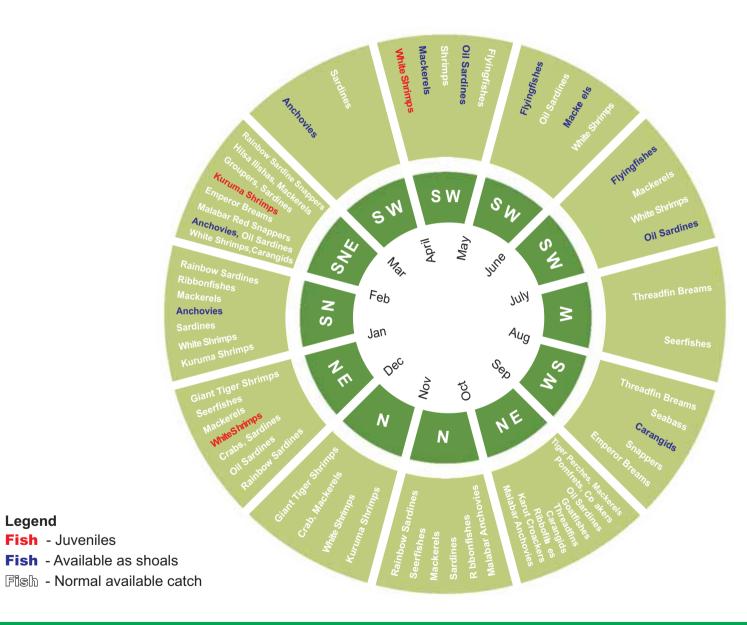
Tharangambadi



Latitude : 11.032317° N Longitude: 79.855517° E

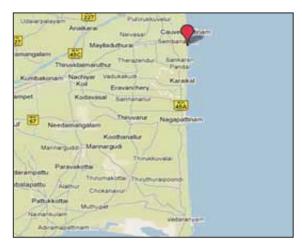


Village Name	Tharangambadi
Panchayat	Tharangambadi
Name of Block and District	Tharangambadi, Nagapattinam District
Population	9525
Number of households	2018
Number of people involved in fishing	3258
Total number of fishing vessels	300
Trawlers	30
Fibre boat / Vallams	250
Catamarans	20
Types of gears	Purse Seine, Ring net, Gill net, Trawl net



Legend

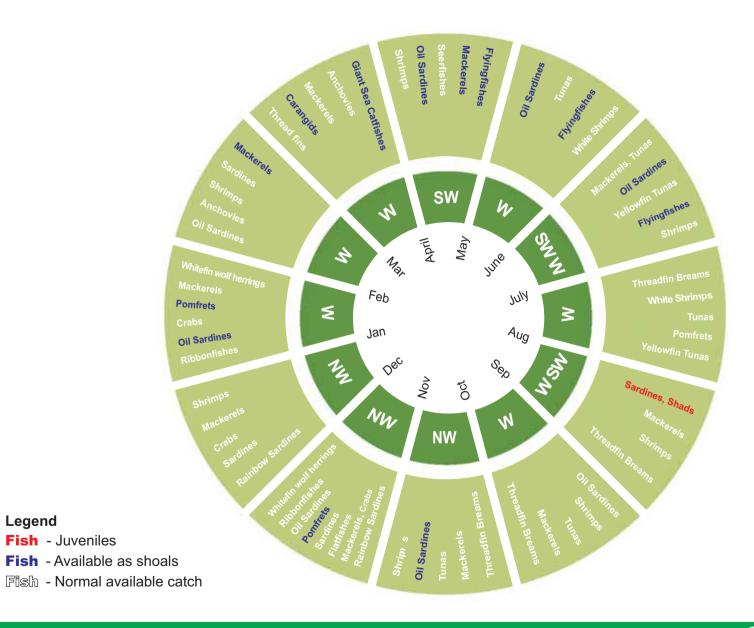
Chinnangudi



Latitude : 11.094050° N Longitude: 79.853667° E



Village Name	Chinnangudi
Panchayat	Chinnangudi
Name of Block and District	Sembanarkoil, Nagapattinam District
Population	4081
Number of households	946
Number of people involved in fishing	1800
Total number of fishing vessels	190
Trawlers	5
Fibre boat / Vallams	165
Catamarans	20
Types of gears	Flyingfish net, Ring net, Gill net, Ray net



Legend

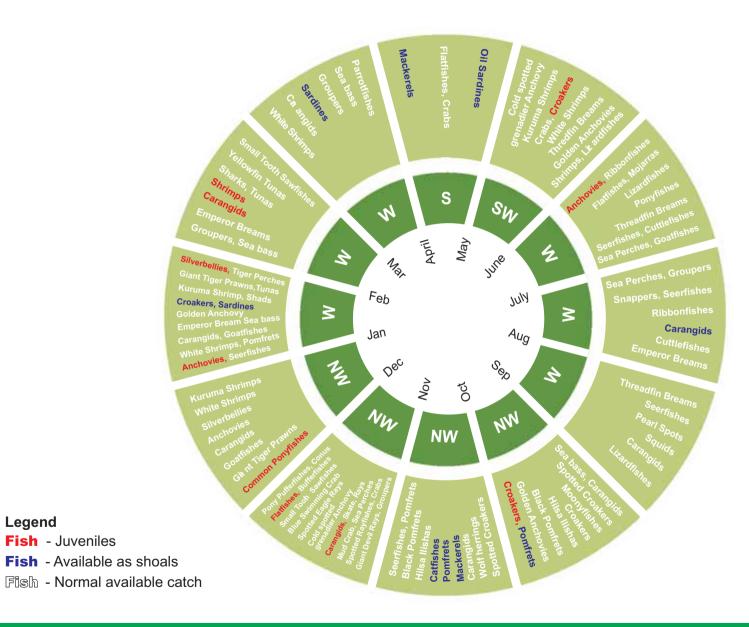
Akkaraipettai



Latitude : 10.744667° N Longitude: 79.848283° E



Village Name	Akkaraipettai
Panchayat	Akkaraipettai
Name of Block and District	Nagapattinam
Population	10,000
Number of households	2,226
Number of people involved in fishing	2,240
Total number of fishing vessels	470
Trawlers	250
Fibre boat / Vallams	200
Catamarans	20
Types of gears	Gill net, Ring net, Purse Seine, Trawl net



Legend

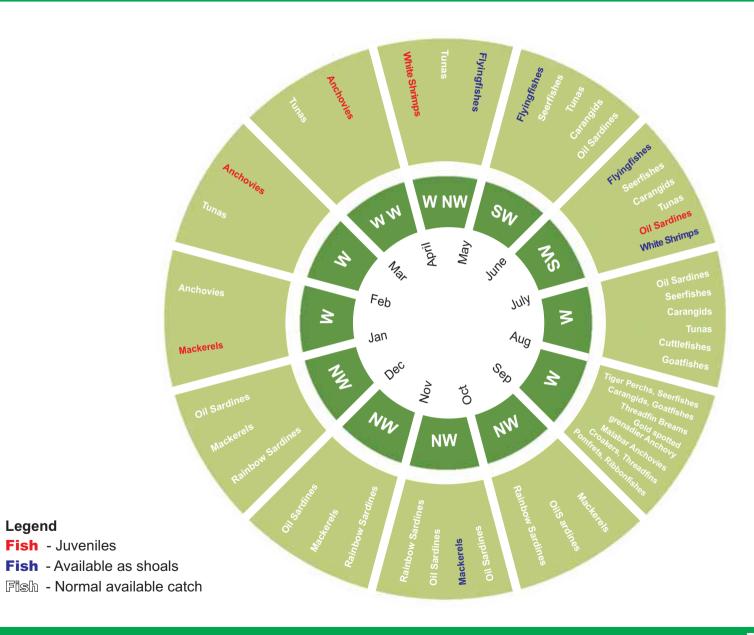
Poombuhar



Latitude : 11.144100° N Longitude: 79.851050° E



Village Name	Kaveri Poompattinam
Panchayat	Kaveri Poompattinam
Name of Block and District	Sirkazhi, Nagapattinam District
Population	8896
Number of households	2164
Number of people involved in fishing	4800
Total number of fishing vessels	470
Trawlers	40
Fibre boat / Vallams	400
Catamarans	30
Types of gears	Purse net, Pair Trawl net, Ring net, Gill net



Legend

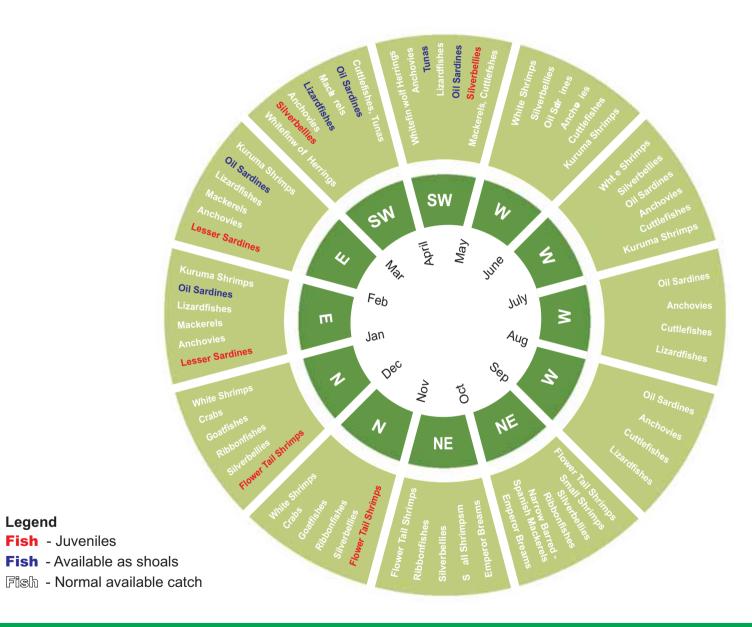
Pazhayar



Latitude : 11.358966° N Longitude: 79.823900° E



Village Name	Pazhayar
Panchayat	Pudhupattinam
Name of Block and District	Kollidam Block, Nagapattinam District
Population	6000
Number of households	1200
Number of people involved in fishing	4000
Total number of fishing vessels	570
Trawlers	220
Fibre boat / Vallam / FRB	350
Catamaran	Nil
Types of gears	Trawl net (Shore Seine), Prawn net, Ring net, Trawl net (Specific Design for Anchovies)



Legend

Kanyakumari

Overview

The 71.5 km long coast line of Kanyakumari district has the distinction of facing the Bay of Bengal, the Arabian sea and the Indian Ocean. The eastern part of the district comprising of 11.5 km of coastline and the western parts comprises of 60 km of coast. The district contains 42 marine fishing villages with a total fishing population of around 1,37,000. There are two major fishing harbours namely Chinna Muttam and Kollachal.

The seasonal mapping exercise was carried out across 5 villages namely Kovalam, Keezhamanakudi, Pudhur, Kadiyapattinam and Neerodi. Out of these five villages, Kovalam and Keezhamanakudi are located in the east coast of Kanyakumari district while Pudhur, Kadiyapattinam and Neerodi are situated in the west coast of Kanyakumari district. The fishermen in these villages venture out for fishing using fibre reinforced plastic boats, country boats and trawlers and deploy gears such as Sardine nets, Ribbonfish nets, Disco nets, Shore Seine, Mackerel net, Purse Seine, Hook and Line, Rayfish net, Anchovies net and Emperor Bream net for capturing fishes.

The common species that are captured by the fisher folk in the east coast of Kanyakumari are Wolf herring, Garfish, Ponyfish, Carangids, Deep Bodied Sardinella, Mackerel, Anchovies, Solefish, Shrimp, Croakers, Skates, Malabar Trevally, Black Pomfret, Indian Goatfish, Ribbonfish, Sawfish, Emperor Bream, Tuna, Cuttlefish and Rayfish. Fishes like Anchovies and Commerson's Anchovies are available as shoals and captured in summer, pre monsoon and monsoon season in this east coast. Croakers and Oil Sardines are available as shoal in pre monsoon season. The juveniles of Wolf herring and Emperor Bream are available in the post monsoon season. The juveniles of Carangids are available in the monsoon season and in post monsoon season. The juveniles of Croakers are available in pre monsoon season, while the juveniles of Barracuda and Sawfishes are available in the monsoon season.

The common fish species such as Anchovies, Barracuda, Oil Sardines, Wolf Herring, Carangids, Mackerel, Threadfin Bream, Block Pomfrets, Ribbonfishes, Goatfishes, Croakers are available in the west coast of Kanyakumari. Fishes like Tuna, Oil Sardines and Anchovies are the dominant shoals available in summer season. Cuttlefishes are found as shoal in the end of pre monsoon and in the beginning of monsoon seasons. In the post monsoon season, Mackerels are available as shoals. During the post monsoon season, the juveniles of Tuna, Garfish and Horse Mackerels are available. The juveniles of Emperor Bream and Barracuda exist in the pre monsoon season. The juveniles of Seerfish, Carangid, Garfish and Horse Mackerels are prevailing during monsoon season.

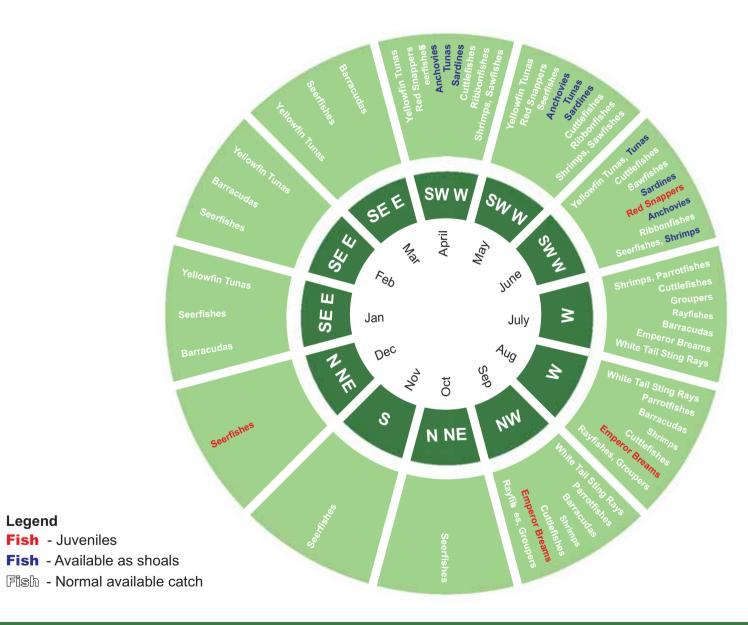
Kadiapattanam



Latitude : 8.132650° N Longitude: 77.305183° E



Village Name	Kadiapattanam
Panchayat	Muttom
Name of Block and District	Kalkulam, Kanyakumari District
Population	13,000
Number of households	2150
Number of people involved in fishing	5100
Total number of fishing vessels	275
Trawlers	251
Fibre boat / Vallams	150
Catamarans	100
Types of gears	Whitefin wolf herring net, Sardine net, Valla net, Ellumba Patta net Ring net, Hook & Line, Purse Seine



Legend

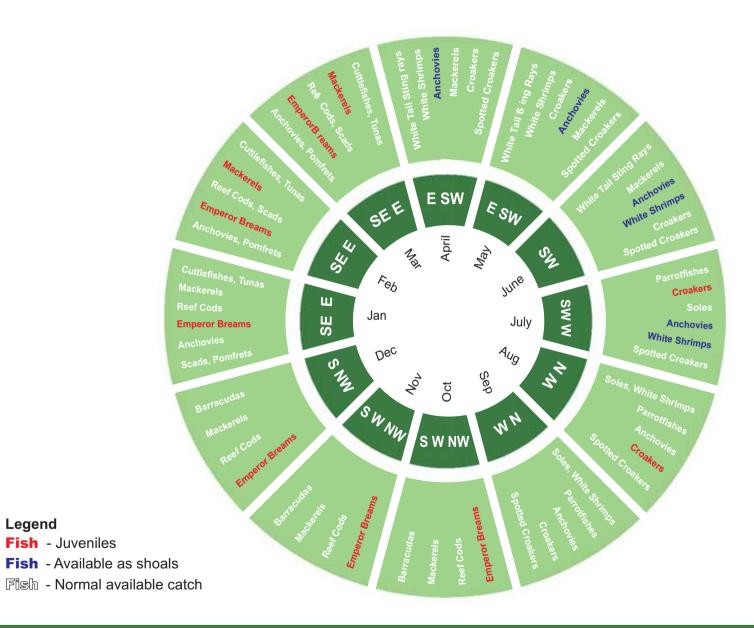
Keezhamanakudi



Latitude : 8.090850° N Longitude: 77.490767° E



Village Name	Keezhamanakudi
Panchayat	Manakudi
Name of Block and District	Agastheeswaram, Kanyakumari Dt.
Population	2056
Number of households	586
Number of people involved in fishing	450
Total number of fishing vessels	100
Trawlers	Nil
Fibre boat / Vallams	50
Catamarans	50
Types of gears	Challa net, Kacha net, Kathu net, Yecha net, Disco net, Kanras net, Kankoosh net, Kancha net, Mattu



Legend

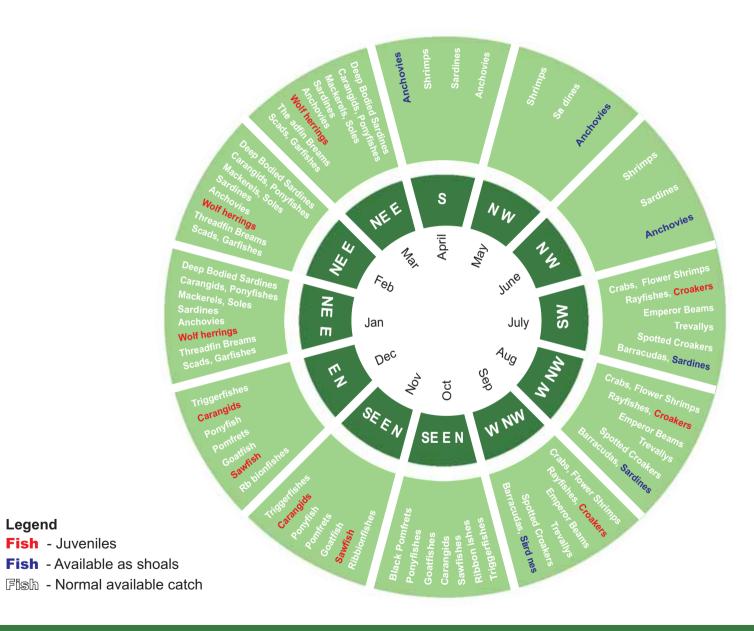
Kovalam



Latitude : 8.082617° N Longitude: 77.525567° E



Village Name	Kovalam
Panchayat	Kovalam
Name of Block and District	Agatheeswaram, Kanyakumari District
Population	4328
Number of households	1123
Number of people involved in fishing	2100
Total number of fishing vessels	260
Trawlers	Nil
Fibre boat / Vallams	60
Catamarans	200
Types of gears	Kacha net, Sardine net, Ribbonfish net, Cast net, Disco net, Shore Seine



Legend

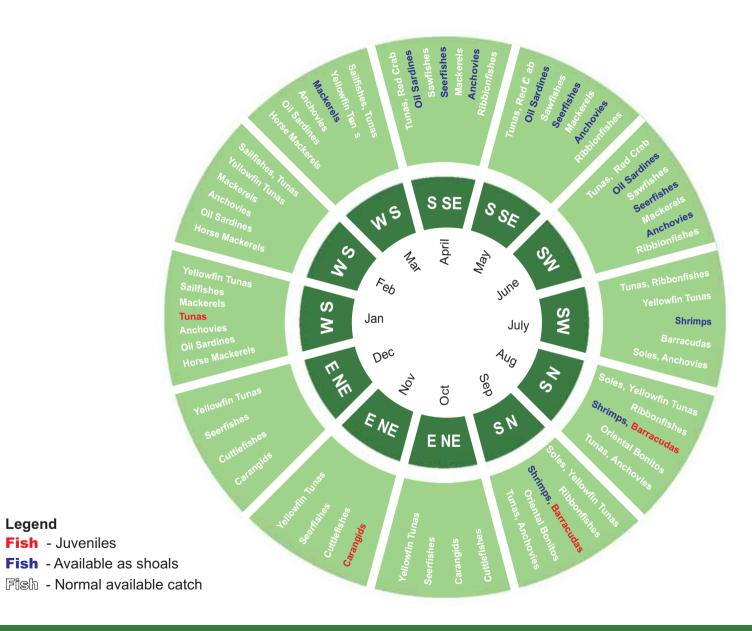
Neerodi



Latitude : 8.289483° N Longitude: 77.102317° E



Village Name	Neerodi
Panchayat	Kollangcode
Name of Block and District	Munchira, Kanyakumari Dt.
Population	7896
Number of households	1479
Number of people involved in fishing	5000
Total number of fishing vessels	1650
Trawlers	Nil
Fibre boat / Vallams	650
Catamarans	1000
Types of gears	Challa net, Kacha net, Role net, Shore Seine, Hook & Line, Eacha Net



Legend

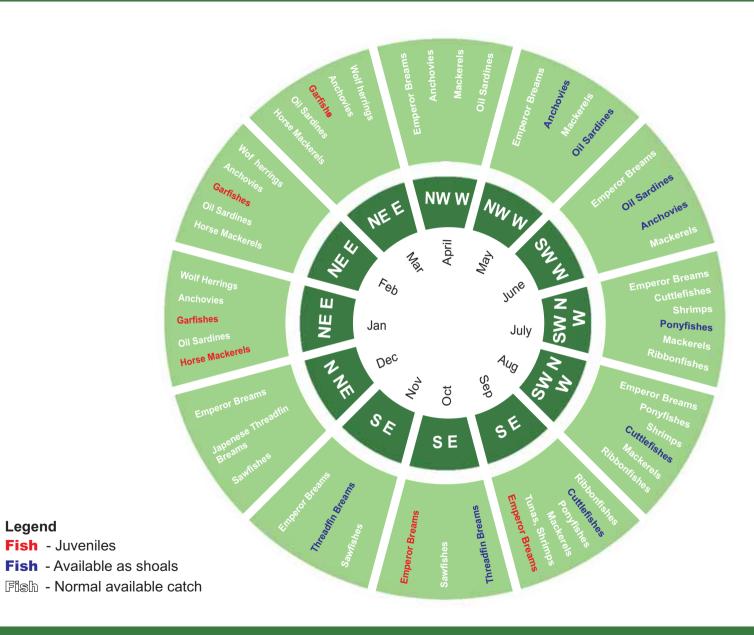
Puthur



Latitude : 8.161217° N Longitude: 77.280933° E



Village Name	Puthur
Panchayat	Mandaikadu, Kallukuttam
Name of Block and District	Kalkulam, Kanyakumari Dt.
Population	3525
Number of households	895
Number of people involved in fishing	>1050
Total number of fishing vessels	197
Trawlers	2
Fibre boat / Vallams	70
Catamarans	125
Types of gears	Challa net, Kacha net, Shore Seine, Hook & Line, Mattu



Legend

Pudukkottai and Thanjavur

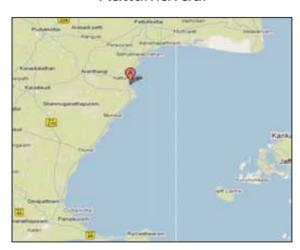
Overview

The district of Pudukottai has 42.8 km stretch of coast line comprising 32 marine fishing villages. There are 25,027 people living in these fishing villages. The annual fish production of pudukottai District is around 21,000 metric tonnes.

The seasonality mapping was carried out in 4 villages namely Kattumavadi, Pudhukudi (south), Vadakku Amma Pattinam and Pratharama pattinam. Along with the above mentioned fishing villages, a study was also carried out in Sethubavachattram, a marine fishing village located in Thanjavur district near Pudukottai District. Some of the major marine species which were documented during the exercises were Shrimps, Crabs, Squids, Oil Sardines, Mullet, Mojarras, Snapper, Spine Foot, Milkfish, Catfish, Rayfish, Indian Halibut, Barracuda, Leather Skin, Garfish, Tuna, Indian Threadfin, Carangids, Croakers, Seabass and Flatfishes.

Fishes like Lesser Sardine are available as shoals during the post monsoon season. Mojarras, Snapper, Leather Skin are available as shoals during the summer season. Snapper and Mullet are available in the beginning of pre monsoon season. The juveniles of Mullets are available in the end of pre monsoon and the beginning of monsoon season whereas the juveniles of Catfish and Sea Bream are available during the monsoon season. The juveniles of Rabbitfish are available at the beginning of pre monsoon season.

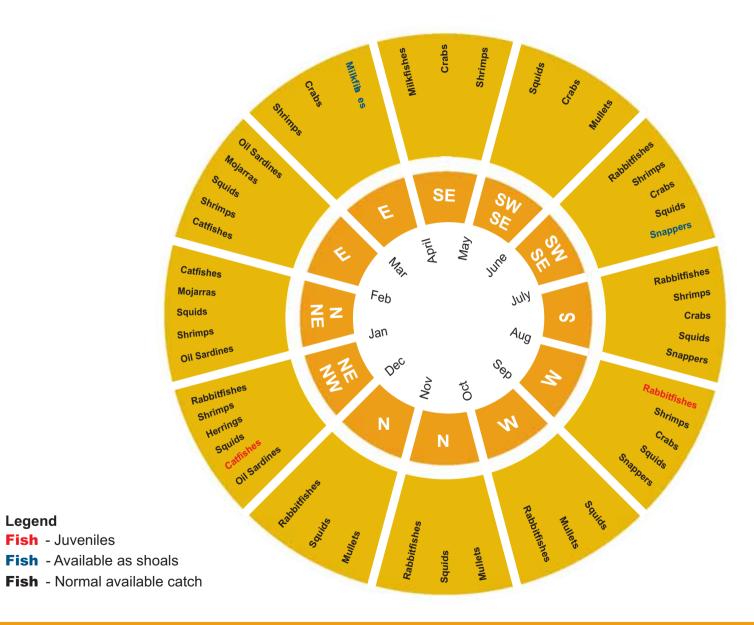
Kattumavadi



Latitude : 10.133316° N Longitude: 79.226833° E



Village Name	Kattumavadi
Panchayat	Kattumavadi
Name of Block and District	Manamelkudi, Pudukottai District
Population	720
Number of households	180
Number of people involved in fishing	85
Total number of fishing vessels	116
Trawlers	56
Fibre boat / Vallams	60
Catamarans	Nil
Types of gears	Crab net, Prawn net, Milkfish net, Trawl net, Hook & Line



Legend

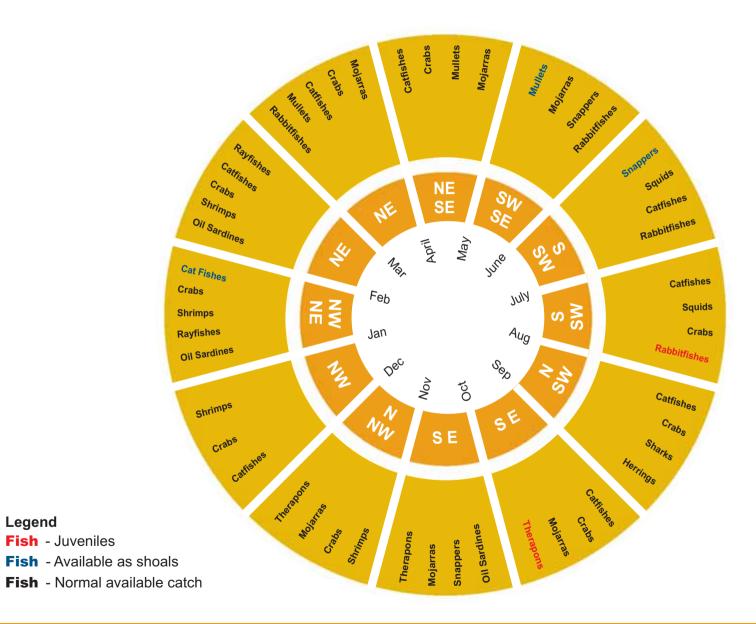
Pratharamapattinam



Latitude : 10.102250° N Longitude: 79.227100° E



Village Name	Pratharamapattinam
Panchayat	Krishnajipattinam
Name of Block and District	Manamelkudi, Pudukottai District
Population	1808
Number of households	260
Number of people involved in fishing	150
Total number of fishing vessels	50
Trawlers	Nil
Fibre boat / Vallams	40
Catamarans	10
Types of gears	Senkani net, Kicken Muchen (A special type of bagnet modified for Squid fish), Mullet net Rayfish net, Prawn net



Legend

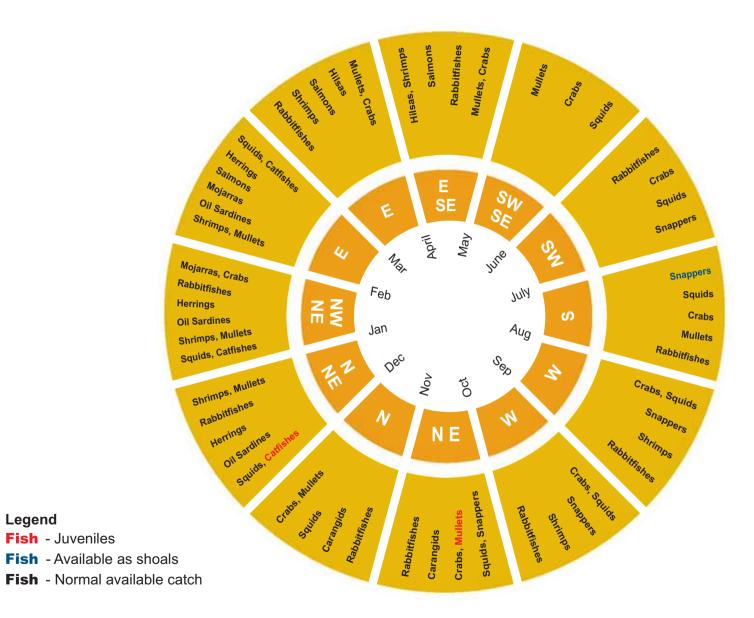
Sethubava chathiram



Latitude : 10.152516° N Longitude: 79.226533° E



Village Name	Sethubava chathiram
Panchayat	Sethubava chathiram
Name of Block and District	Sethubava chathiram, Thanjavur District
Population	1630
Number of households	330
Number of people involved in fishing	425
Total number of fishing vessels	123
Trawlers	80
Fibre boat / Vallams	33
Catamarans	10
Types of gears	Crab net, Squid net, Murrel net, Prawn net



Legend

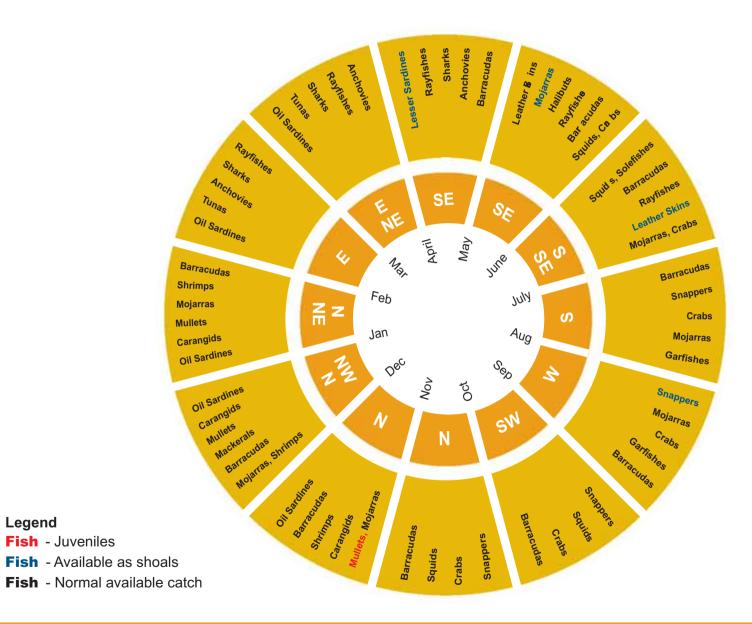
South Pudukudi



Latitude : 9.993383° N Longitude: 79.212167° E



Village Name	South Pudukudi
Panchayat	Kottaipattinam
Name of Block and District	Manamelkudi, Pudukottai District
Population	1586
Number of households	375
Number of people involved in fishing	640
Total number of fishing vessels	250
Trawlers	Nil
Fibre boat / Vallams	250
Catamarans	Nil
Types of gears	Senkani Net, Murrel Net, Prawn Net, Crab Net, Squid Net, Katta Net, Kalinkan Net



Legend

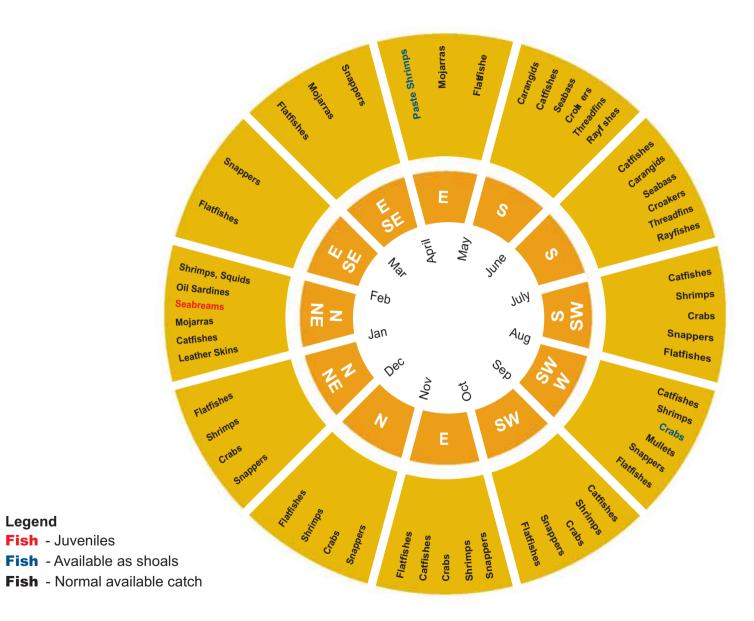
Vadakku Ammapattinam



Latitude : 10.797111° N Longitude: 79.845433° E



Village Name	Vadakku Ammapattinam
Panchayat	Manamelkudi
Name of Block and District	Manamelkudi, Pudukottai District
Population	4124
Number of households	158
Number of people involved in fishing	150
Total number of fishing vessels	150
Trawlers	Nil
Fibre boat / Vallams	150
Catamarans	Nil
Types of gears	Mullet net, Squid net, Murrel net, Prawn net, Senkani net, Crab net



Legend

Ramanathapuram & Thoothukudi

Overview

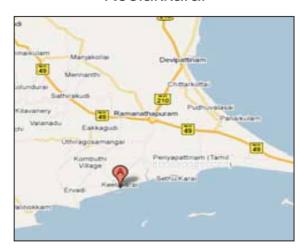
The coast line of Ramanathapuram district spans 271 km including Gulf of Mannar (141 km) and Palk Straight (130 km). The total fishing population is around 1, 24, 387 dwelling in 78 marine fishing villages. There are 17 main fish landing centers located in this district.

The seasonality mapping was carried out through participatory approach in 10 different villages namely Pamban, Mandapam, Thangatchimadam, Olaikuda, Verkodu, Kilakarai, Mangaleshwari Nagar, Vembar, Seeniyappa Dargha and Valangapuri. The fishermen in these villages venture out for fishing using Trawlers, Fibre Reinforced plastic boats and country boats and deploy gears such as Trawl net, Crab net, Gill net, Hook and Line, Squid net, Shrimp net, Lobster net, Fish cage, Flyingfish nets for capturing fishes.

The study unveiled that a variety of fishes such as Ribbonfish, Whiting, Mojarras, Goatfishes, Grouper, Rabbitfish, Snappers, Parrotfish, Seerfish, Yellowfin Tuna, Mackerel, Carangids, Oil Sardine, Rayfish, Catfish, Emperor Bream, Lesser Sardine, Garfish, Silverbellies, Leather Skinfish, Barracuda, Anchovies, Blue Spot Mullet and Pomfrets are primarily available and captured by the fisher folk in Gulf of Manner and near by areas of Ramanathapuram district across different seasons.

It has been identified through fisher folk that shoal fishes are dominant in both monsoon and post monsoon seasons. The seasonality map also revealed that fishes in shoals such as Seerfish, Mackerel, Barracuda, Carangids, Oil Sardine, Rayfish, Garfish, Lesser Sardine, Silver bellies, Leather Skinfish, Blue Spot Mullet, Pomfret, Catfish and Emperor Bream are available during the aforementioned seasons. The fishermen expressed that the Mackerel fishes are available as shoals throughout the year along with other species, however during the period in between June and August, only Mackerels are available as shoals. More juveniles are caught by the fisher folks during the summer, pre and post monsoon seasons. Altogether three types of juvenile fishes are available such as Seerfish, Catfish and Lesser Sardine.

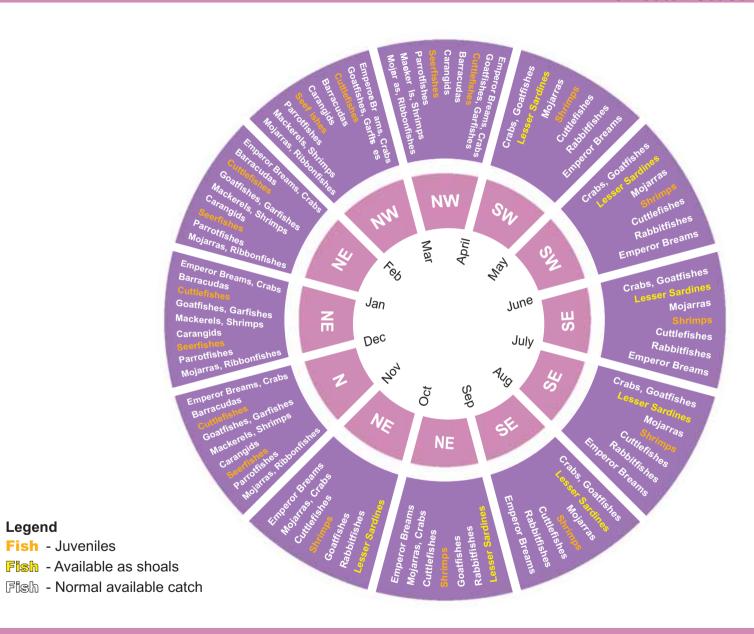
Keelakkarai



Latitude : 9.230105° N Longitude: 78.785469° E

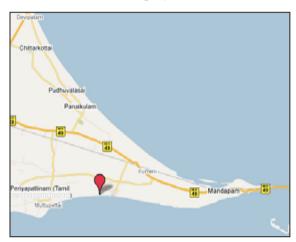


Village Name	Kilakarai
Panchayat	Kilakarai
Name of Block and District	Thiruppullani, Ramanathapuram District
Population	70,000
Number of households	52,000
Number of people involved in fishing	20,000
Total number of fishing vessels	270
Trawler / Fibre boat / Vallams	70 (Trawler) 135 (Fibre boat or Vallam)
Catamarans	65
Types of gears	Gill nets of different Mesh Sizes, Prawn net,Trawl net, Pair Trawling



Legend

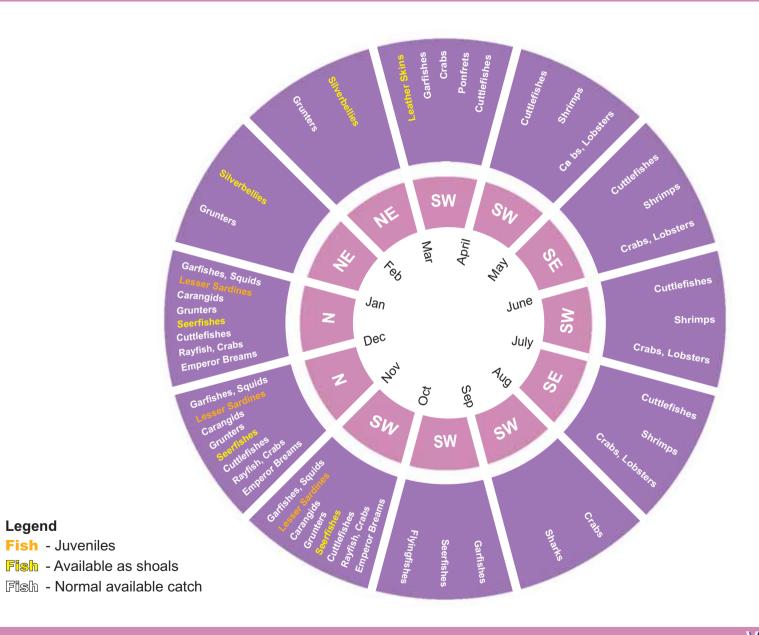
Valangapuri



Latitude : 9.273380° N Longitude: 78.970733° E



Village Name	Valangapuri
Panchayat	Thamaraikulam
Name of Block and District	Mandapam, Ramanathapuram District
Population	1200
Number of households	300
Number of people involved in fishing	80%
Total number of fishing vessels	210
Trawler / Fibre boat / Vallams	10 (Trawler) 150 (Fibre boat or Vallam)
Catamarans	50
Types of gears	Gills net with different mesh size Hook fishing (Lobster),Crab net, Rayfish net, Shore seine



Legend

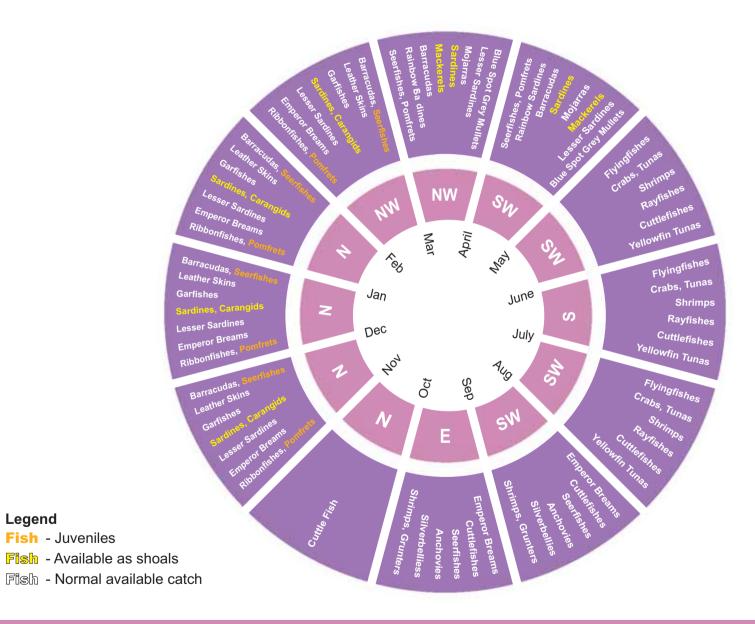
Pamban



Latitude : 9.284766° N Longitude: 79.225383° E



Village Name	Pamban
Panchayat	Pamban
Name of Block and District	Mandapam, Ramanathapuram District
Population	20,000
Number of households	5000
Number of people involved in fishing	18,000
Total number of fishing vessels	270
Trawler / Fibre boat / Vallams	110
Catamarans	700
Types of gears	Seerfish net, Lesser Sardine net, Crab net, Fish net, Rayfish net, Pomfret net, Barracuda net, Trawler net



Legend

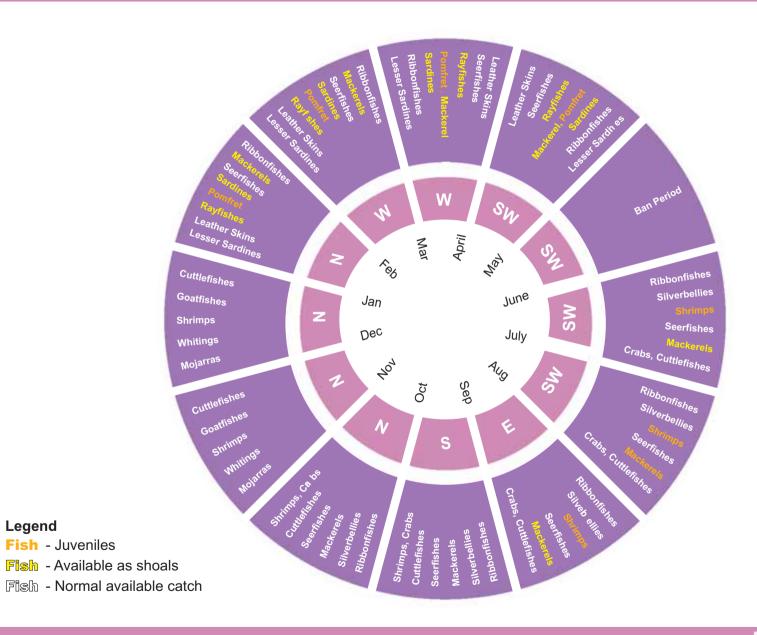
Mandapam



Latitude : 9.284010° N Longitude: 79.165017° E



Village Name	Mandapam
Panchayat	Mandapam
Name of Block and District	Mandapam, Ramanathapuram District
Population	20,000
Number of households	6000
Number of people involved in fishing	4000
Total number of fishing vessels	650
Trawler / Fibre boat / Vallams	500
Catamarans	150
Types of gears	Trawl net, Fish net



Legend

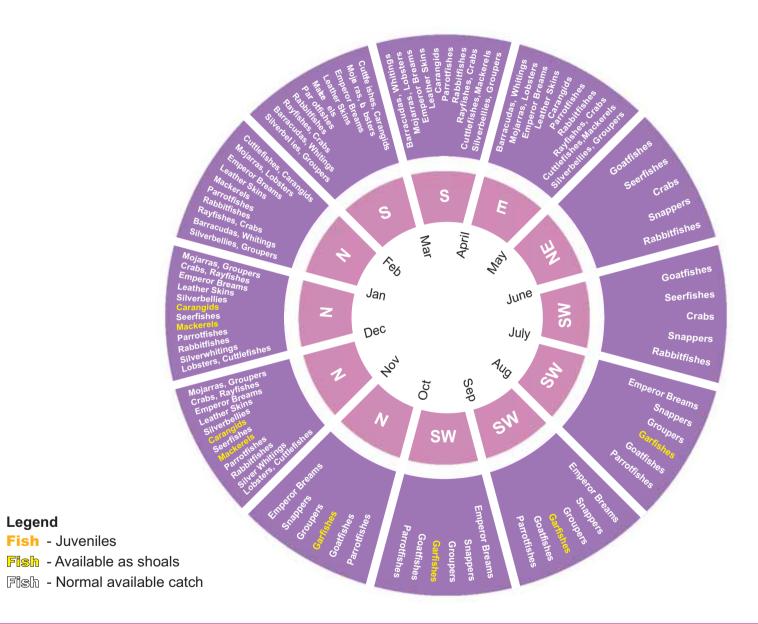
Olaikuda



Latitude : 9.266476° N Longitude: 79.326850° E



Village Name	Olaikuda
Panchayat	Rameshwaram (Municipality)
Name of Block and District	Mandapam, Ramanathapuram District
Population	1300
Number of households	300
Number of people involved in fishing	95%
Total number of fishing vessels	405
Trawler / Fibre boat / Vallams	300 (Catamaran) 35 (Fibre boat or Vallam)
Catamarans	70
Types of gears	Gill net, Crab net, Prawn net, Lobster net, Fish cages, Rayfish net



Legend

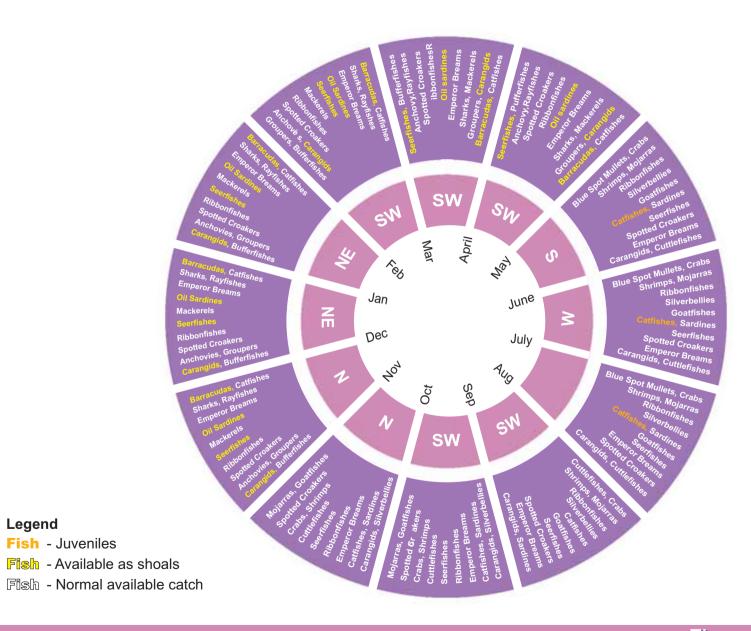
Thangachimadam



Latitude : 9.284600° N Longitude: 79.258367° E



Village Name	Thangachimadam
Panchayat	Thangachimadam
Name of Block and District	Mandapam, Ramanathapuram District
Population	18,000
Number of households	3,000
Number of people involved in fishing	10,000
Total number of fishing vessels	750
Trawler / Fibre boat / Vallams	600 (Trawler) 120 (Fibre boat or Vallam)
Catamarans	30
Types of gears	Gill net (Vidu net, Veechu net, Pachu net), Shore Seine, Purse Seine, Lobster net, Garfish net, Crab net, Rayfish net, Disco net (Prawn), Trawl net, Pair Trawling



Legend

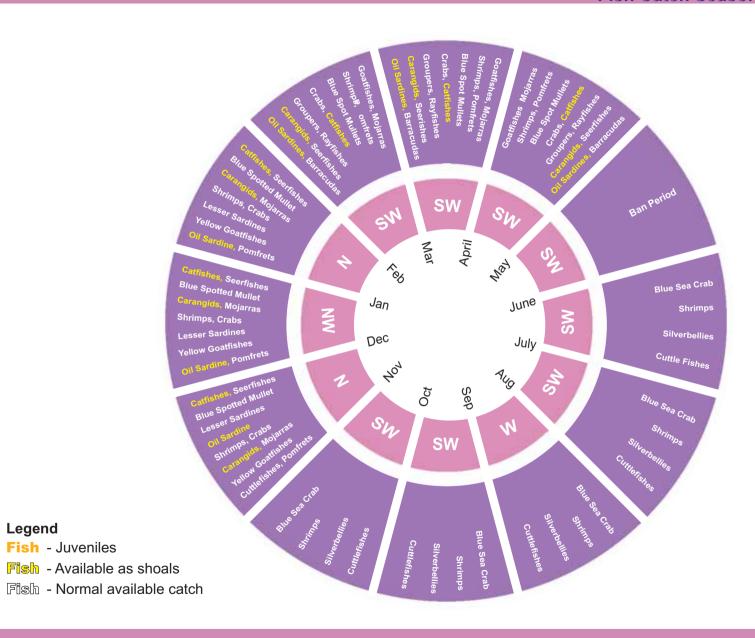
Verkodu



Latitude : 9.277802° N Longitude: 79.312792° E



Village Name	Kilakarai
Panchayat	Kilakarai
Name of Block and District	Thiruppullani, Ramanathapuram District
Population	70,000
Number of households	52,000
Number of people involved in fishing	20,000
Total number of fishing vessels	270
Trawler / Fibre boat / Vallams	70 (Trawler) 135 (Fibre boat or Vallam)
Catamarans	65
Types of gears	Gill nets of different mesh sizes, Prawn net, Trawl net, Pair Trawling



Legend

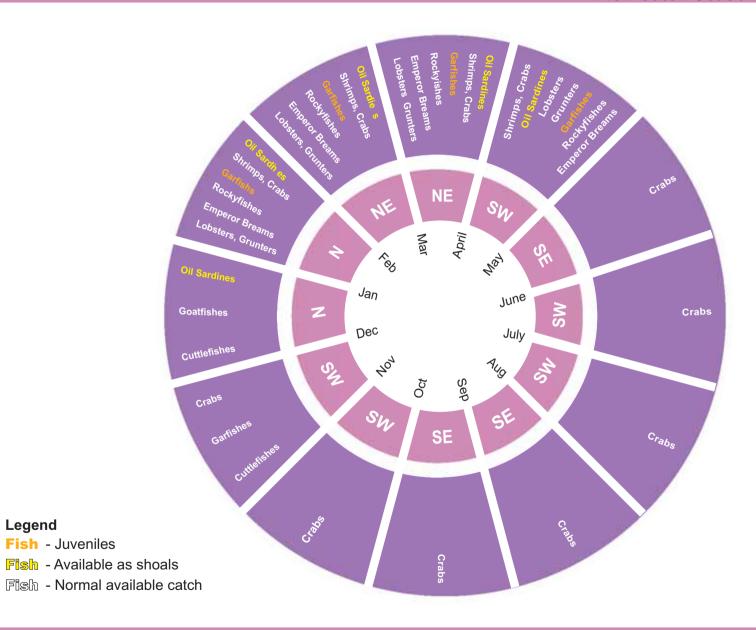
Seeniyappa Dharga



Latitude : 9.261500° N Longitude: 79.068700° E



Village Name	Seeniyappa Dharga
Panchayat	Sathakonvalasai
Name of Block and District	Mandapam, Ramanathapuram District
Population	300
Number of households	150
Number of people involved in fishing	250
Total number of fishing vessels	0
Trawler / Fibre boat / Vallams	30
Catamarans	0
Types of gears	Lobster net, Gill net, Crab net, Rayfish net, Disco net



Legend

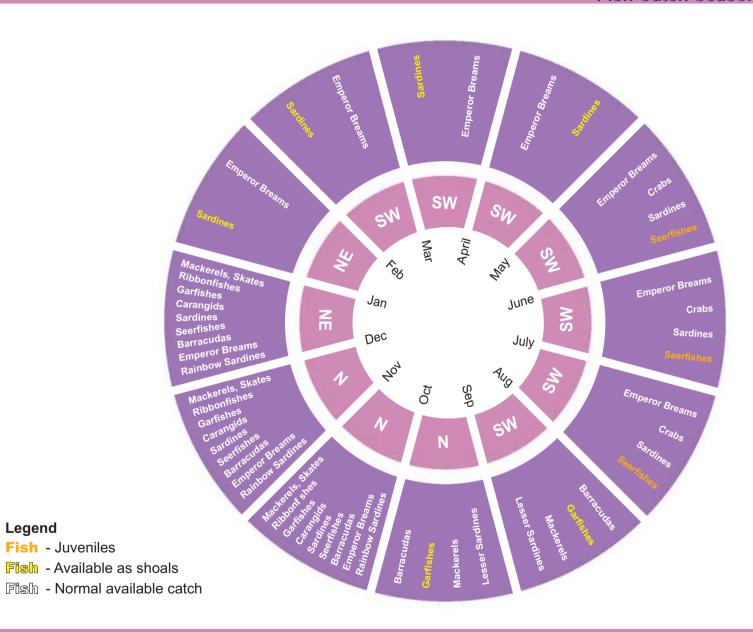
Mangaleswari Nagar



Latitude : 9.219400° N Longitude: 78.739064° E



Village Name	Mangaleshwari Nagar
Panchayat	Mayakulam
Name of Block and District	Thirupulani, Ramanathapuram District
Population	549
Number of households	140
Number of people involved in fishing	148
Total number of fishing vessels	27
Trawler, Fibre boat or Vallams	25
Catamarans	2
Types of gears	Gill net, Crab net, Shore Seine, Hook and Lines



Legend

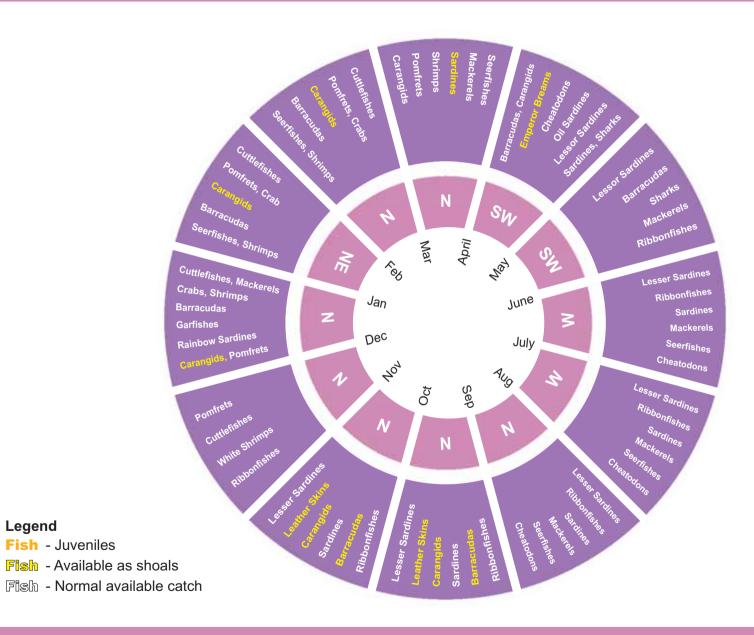
Vembar



Latitude : 9.082250° N Longitude: 78.363639° E

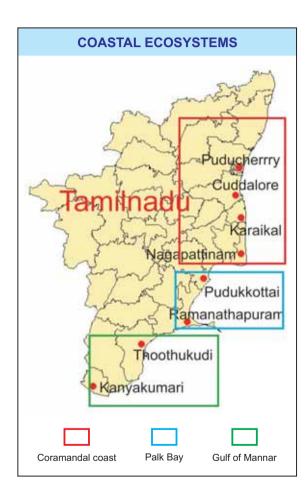


Village Name	Vembar
Panchayat	Vembar
Name of Block and District	Vilathikulam, Tuticorin District
Population	7401
Number of households	1799
Number of people involved in fishing	948
Total number of fishing vessels	129
Trawler, Fibre boat or Vallams	34 (Trawler), 53 (Fibre Boat or Vallam)
Catamarans	14 (Catamaran) 27 (Vathai)
Types of gears	Gill net, Shore Seine, Crab net, Prawn net, Hook and Line, Trawl net



Legend

Summary



The season-based fish catch calendar exercise was carried out in 39 coastal villages of Tamilnadu and Puducherry with the generous support of INCOIS. The coastal villages cover four major coastal ecosystems namely, Coramandal Coast, Palk Bay, Gulf of Mannar and West Coast. The exercise provides clear picture of the fish catch pattern during various seasons. It is observed that the availability of juveniles as well as shoals of major fish species vary across coastal systems and seasons.

For example, species such as Mackerel, Silverbellies, Seerfish and Carangids are caught as juveniles all throughout the different seasons across the Coramandal Coast. Fish species such as Flying fish and Sailfish are captured as shoals during the summer season and Tuna is captured as shoals across summer, pre monsoon and monsoon seasons in the Coramandal coast.

In Palk Bay area juveniles of Mullet are caught during the pre monsoon and monsoon seasons, while Rabbit fish is caught only during pre monsoon and Sea Bream and Catfish are caught only during the monsoon season. Snapper is captured as shoal during summer and pre monsoon seasons.

In the Gulf of Mannar area juveniles of Seerfish are captured during the post monsoon and summer seasons. Barracuda, Gar fish and Pomfret are caught as shoals in all seasons.

In the West Coast area, species such as Wolf Herring is available as juveniles during the post monsoon and summer seasons, while Sawfish and Garfish are captured as juveniles during the monsoon seasons.

Throughout the post monsoon and summer seasons, species such as Sardines, Mackerel, Carangids are captured as juveniles across the Tamil Nadu and Pudhucherry coasts.

Based on the available data, it is clear that fish species such as Anchovies, Mackerel, Oil Sardine, Croakers, Silverbellies and Carangids are captured across all coastal regions and seasons.

Fisher folk are deeply concerned that the fish stock has dwindled over the years and they have to venture further than before to seek their catch. The study also indicated that majority of the fish catch of fisher folk are in juvenile stages. The study and the results are as yet in exploratory stage and more studies are needed in order to derive a more precise understanding of fish catch pattern and trend over a period of time.





For further information, contact us at

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