RAMANATHAPURAM DISTRICT

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1. Introduction

i) Geographical location of the district

Ramanathapuram is one of the coastal districts bounded on the north by Sivagangai and Pudukottai districts, on the east and south by the Bay of Bengal, and on the west by Thoothukudi and Virudhunagar districts. The district headquarters is located at Ramanathapuram. The district lies between 9° 05 and 9° 5' North Latitude and 78° 1' and 79° 27' East Longitude. The general geographical information of the

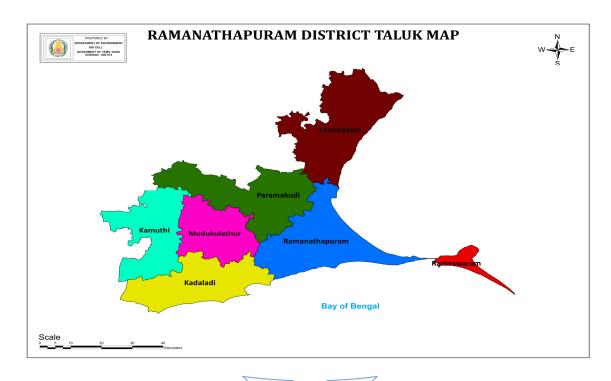
district is simple and flat. Vaigai river and Gundar river are flowing in the district and they will be dry during the summer season. The total geographical area of the district is 4,175 sq.km

ii) Administrative profile

Ramanathapuram district comprises 7 taluks, 11 blocks and 2362 villages. With repaid to the hierarchy of administrative arrangement, there are 2 municipalities, 7 town panchayats and 429 village panchayats in the district.

Revenue divisions and taluk

Name of the division	Taluks comprised in the division	Total no. of firkas	Total no. of revenue villages	Total no. of hamelet villages
Ramanathapuram	Ramanathapuram	7	67	529
	Tiruvadanai	7	98	635
	Rameswaram	1	2	31
Paramakudi	Paramakudi	6	93	367
	Mudukulathur	6	46	207
	Kamuthi	5	49	352
	Kadaladi	6	45	241
Total		38	400	2362



Blocks and Panchayats

Sl. No.	Block name	No. of panchayats	No. of hamlets
1	Tiruvadanai	47	310
2	R.S.Mangalam	35	325
3	Paramakkudi	39	163
4	Bogalur	26	91
5	Nainarkoil	37	113
6	Kamudi	53	346
7	Mudukulathur	46	169
8	Kadaladi	60	285
9	Ramanathapuram	25	120
10	Tiruppullani	33	240
11	Mandapam	28	200
	Total	429	2362

iii) Meteorological information

The climate of this district in the inland plains is generally hot and dry with a low degree of humidity except within a radius of about 20 km from the coast, where the temperature is tolerable and cool on account of the sea breeze. The district has a hot tropical climate with temperature ranging from 22.3° C (min) to 37.8° C (max) and the relative humidity is high at 79% on an average and it ranges between 80 and 90% in coastal areas. Though the average rainfall is 827 mm per annum most of the rain fall occurs within a span of 45 days. March to May is the summer season, June to September is south-west monsoon and October to December is north east monsoon. Most of the precipitation occurs during North east monsoon.

2. Resources availability

i) Land resources (soil types)

Most of the soil type is clay (45%) followed by coastal alluvial soil (17%) and sandy loam (15%). There is no scope for large scale mining in the district.

Mineral production	2005-2006	
Crude oil	4,548.358 MT.	
Natural gas	226742372 cum	
Gravel	25,974 cum	
Earth	14,294 cum	

ii) Agriculture and horticulture

Ramanathapuram district is deficient in rainfall. There are no major rivers providing perennial water supply for cultivation. Though a dry district, agriculture is extensively undertaken by irrigating the land from tanks and wells. The rainfall during the Southwest monsoon is rather poor. The rain during Northeast monsoon season is the major one but is not steady. Whatever rainfall occurs, it is utilised to the best advantage through a large number of tanks and wells in the district. Paddy is the most important food crop of the district.

Paddy

In Ramanathapuram district, paddy is main the food crop cultivated in more than 63% of the net area sown. It is cultivated both as irrigated and rainfed. Rainfed sowing generally commences from August and will extend upto October. In early sown area, farmers used to raise medium and long duration varieties of paddy. There is no marked area for late sowing, but when the monsoon rains are delayed, the sowing will be also taken up late. In the late sown areas medium and short duration paddy varieties are sown. Farmers are having 10 local paddy varieties in addition to high yielding varieties with the duration ranging from 105-130 days and they will choose varieties according to the need. Red gram is sown as a mixed crop with rainfed areas and also grown in garden lands to a limited extent. In tankfed ayacut area irrigated paddy is sown generally during August to November. Sometimes sowing will be further extended upto December according to the filling of rainwater in the tanks and also release of water from Vaigai dam to the Vaigai fed system tanks.

Cholam

Rainfed cholam sowing is taken up in dry lands between July and September. Beyond September there would not be any sowing of cholam crop and cumbu crop will be sown as alternate crop in these areas. A lablab pulse is also sown as mixed crop.

Cumbu

Rainfed Cumbu sowing is generally taken up between September to November. Only in Ramanathapuram Taluk the sowing will be extended upto December. Irrigated cumbu is taken up from February, March to June, July.

Ragi

Rainfed ragi sowing is taken up during September and October. Irrigated ragi is mainly sown in September to October in East Ramanathapuram where the crop is sown in tankfed ayacut.

Minor millets

Minor millets are generally sown between July and November and the area is spread over whole of the district.

Cotton

Rainfed cotton sowing is taken up during September-October. The sowing will be extended sometimes upto December depending upon rainfall. Rice fallow cotton is generally sown in Paramakudi and Kamuthi taluks during January-February months.

Pulses

Red gram is sown during June to August. Black gram, green gram and cowpea are sown as rainfed crop in September, October months. Red gram is sown as mixed crop with millets and groundnut. Black gram and green gram are sown as pure crop as well as mixed crop in cotton and sugarcane. The cowpea is sown as pure crop and also in some places as mixed crop with millets.

	Normal area productivity and production of major crops						
Sl. No.	Crop	Aarea in ha	Productivity per ha in kgs.	Production in metric tones			
1	Paddy	1,28,000	2,552	3,27,859			
2	Cholam	2,117	862	1,825			
3	Cumbu	889	1,123	998			
4	Ragi	1,448	1,331	1,927			
5	Minor Millets	404	448	181			
7	Pulses	3,362	491	1,651			
8	Cotton	2,733	2.40(Bales)	6,559			
9	Groundnut	6,112	88.5	5,409			
10	Sunflower	145	351	51			
11	Gingelly	1,636	404	661			
12	Chillies	16,292	808	13,164			
13	Coriander	1,748	254	443			
14	Coconut	7,942	14,000	1,112 lakh nuts			
15	Sugarcane	231	124	28,644			

Groundnut and gingely

Groundnut and gingely are cultivated mostly in rainfed condition, during the months of December-January and April – May.

Chillies

Chillies are cultivated in both rainfed and irrigated condition. Chillies are directly sown in the month of September. The transplanted chillies will be taken in the fortnight of November.

iii) Forest resources

Forest Area

There are 18 forest areas in Ramanathapuram district constituting a total area of 5,356.85 ha 13 forest areas fall under the Reserve land category with 4,139.39 ha (41.39 sq.km) and category of reserve forest areas is 702.46 ha. Unclassified forest is available in 515 ha in the district. The district total area of forest under green cover classification is 22,149 ha Dense and sparse forest spread over an area of 742 ha and 538 ha respectively. There is no grass land and degraded forest area covering this region. The forest area has not shown much fluctuation over the years. The Forest Plantations have been restricted to the existing forest areas in Ramanathapuram district. About 2,562.65 ha of manmade forest area is available in the district. Fuel wood is the only manmade forest plantation in the district. The villages located in the taluks of Thiruvadanai, Muthukulathur and Rameswaram abut forest areas in the district. Out of these taluks, Thiruvadanai has more number of villages abutting the forest area.

Gulf of Mannar Marine Biosphere Reserve

Designated as a Biosphere Reserve, the Gulf of Mannar is one of the biologically

richest coastal regions in all of mainland of India. Some of the islands are veritable 'biologist's paradise' It holds within high genetic diversity. It is equally rich in algae, seagrasses, coral reefs, pearl banks, sacred chank bed, fin & shell fish resources, mangroves, endemic and endangered species. The seagrass beds form an important habitat for the highly endangered sea mammal, the *Dugong dugon* commonly called as sea cow.



Coral reefs of Gulf of Mannar

Gulf of Mannar Biosphere Reserve (GOMBR) was declared in 1989 as the first Marine Biosphere Reserve in the country. It encompasses the entire extreme south eastern Indian part of sea extending between Rameswaram and Kanyakumari to an extent of 10,500 sq.km including the Gulf of Mannar Marine National Park of 560 sq.km (the core zone of biosphere reserve), which islands includes 21 uninhabited and shallow surrounding coastal Considering the necessity for participatory co- management in the lines of Ecodevelopment, Government of India with Government of Tamil Nadu introduced a **GEF-UNDP** funded project "Conservation and sustainable use of Gulf of Mannar Biosphere Reserve's coastal biodiversity" to address the threat issues of Gulf of Mannar. Gulf of Mannar Biosphere Reserve Trust, a special body of the Government of Tamil Nadu was also formed in 2002.

The Trust is implementing various activities to bring in participatory Ecomanagement in the lines of development. It encourages basic inventory and management oriented research activities. It facilitates awareness and capacity building among various stakeholders of the area. It promotes alternative livelihood and vocation diversification through skill up-gradation and multi employment. The dimensional approach of the Trust in simultaneously addressing the variety of threat issues of Gulf of Mannar has taken nearly five years to percolate down and reach up to the bottom of the fishery system in the area by 2008.

iv) Mineral resources

The eastern portion of the district consists of rocks formed in beds of shallow lakes and coastal backwaters where the salt and mud brought by the rivers are deposited. The sedimentary rocks extend into the whole of Tiruvadanai. Ramanathapuram and Mudukulattur taluks. These sediments, mostly of clay and sandstone, have been deposited for several million years from what is known in types of clays geological parlance as Gondwana age, to the present day. They contain limestones. Limestone of different grades, euchres, gypsum, graphite and limonite sands are the minerals of economic value found in the district.

Clav:

China clay with an average thickness of 0.91 mm. occurs over an area of 2.59 sq.km in Sivaganga area. The total estimated reserve area of the order of 4.06 million tonnes upto a depth of 3.05 mm.

Garnet and ilemenite sands

The beach sands along the coast of Ramanathapuram district carry small quantities of garnet and ilmenite ranging in length from a few meters to 8 km and in thickness from 0.6 to 2.5 cm. The total

reserves of ilmenite and garnet are 4,165 and 1,219 tonnes respectively.

Graphite

Graphite bearing zones have been met between 3 m and 32 m at several horizons in the boreholes. The percentage of graphite in the rock varies from 18% to 23%. The graphite bearing zone has been proved along the strike direction for a distance of 2000 m. The total preliminary estimated reserves are of the order of 1,80,000 tonnes of graphite bearing rock.

Gypsym

The total reserves of this area are estimated to be of 33,500 tonnes of which about 10,000 tonnes have already been mined.

Limeshell

Sub-recent shell limestone occurs at about 0.8 km north of Ramanathapuram. The total reserves are of the order of 81,300 tonnes.

Limestone

Three bands of good quality crystalline limestone occur in the vicinity of (1) Pandalkudi, (2) Palavanattam and (3) Chinnayyapuram.

v) Water resources

The district has 2 rivers viz Vaigai and Gundar, but they are not perennial. Vaigai river starts in Gandamanaickanur hills of Theni district traverse through Paramakkudi and Ramanathapuram taluks in a South-Easterly direction feeding a large number of tanks. It joins the sea near Attangarai. The Gundar river from the Eastern slopes of the Varushanadu and Andipatty ranges above Watrap flows through Aruppukkottai and empties into the Gulf of Mannar. Vaigai river basin, Pambar & Kottakaraiyar and Gundar, are the three

catchment areas of river basin in the district. The existence of over 5,000 number of tanks in the district makes it known as the Lake District of the State.

vi) Fisheries production

The Ramanathapuram district has 271 km of coast line of which 130 km is in Palk bay and 140 km in Gulf of Mannar. Ramanathapuram coast is well known for pearl fishing. The Pandya kings who ruled over this district exploited the pearl fisheries of the east coast. The Cholas who succeeded Pandyas not only patronized pearl fishing but also developed it with great care in the Palk bay and Gulf of Mannar. Marco Polo (1260-1300) who traveled here during this period says in his account that the pearl fishing was monopolised by Pandyas. The large quantity of pearls collected from the pearl beds were exported to Mediterranean countries.

The Regional center of the Central Marine Fisheries Research Institute Mandapam which was established in 1947 has developed proven technology for the culture of pearls, edible oyster, clam mussel and seaweed. Commercial pearl farming has come up near Kurusadai island and the Tamil Nadu Fisheries Development Corporation Limited maintains it.

Ramanathapuram district has distinct chank fishery. Jadhi Chanks are abundant in the Palk Bay and Gulf of Mannar. More than 2000 fishermen are engaged in active chank diving and sacred chank collected by divers are marketed in West Bengal for making ornaments. This contributes significantly to the development of fisheries.

About 160 prawn farms are operating in the district which follows intensive type of prawn culture. Prawns harvested from these farms are exported to Japan, USA and European countries, which earn sizable foreign exchange for the country.

In Ramanathapuram district 7 fish processing factories are functioning in Tondi and Mandapam. Prawn, squids, cuttle fish, crabs and fish are processed and exported to foreign countries. Many small entrepreneurs are involved in fish drying and dried fish is used in poultry and cattle feed manufacturing.

vii) Heritage resources

Rameswaram

The holy abode of the hindu god, Rama is a virtual paradise for the devout. No hindu's journey is complete without a pilgrimage to both Varanasi and Rameswaram for the culmination of his quest for salvation and is hallowed by the epic 'Ramayana'. Folklore mentions about god Ram's presence in this land, after his 14 year exile.

Local legend has it that Rama was back into Rameswaram into India by his brother Lakshman and Hanuman along with his band of thousands of monkeys, after finally emerging victorious against the demon - Ravana. They helped build a bridge with rocks from the sea and shores to cross the 'Sethu canal' and reach India. Lord Rama is also believed to have sanctified this place by worshipping and glorifying Lord Shiva and hence marks the confluence of Shaivism and Vaishnavism and is thus revered by both Shaivites and Vaishnavites alike and thus there is a strong belief that bathing in the 22 'Theerthams' or natural springs is a step forward in enlightenment. Therefore, Rameswaram has rightly been declared as one of the National Pilgrim Centres in the country.

Further down, the geographical terrain and landscape naturally tapers slowly but sharply toward the end, converging and gently sinking into the sea at Dhanushkodi – the country's tip in this part of the peninsular. This natural phenomenon has a

lot of significance and most people revere the thought and hope to attain salvation as a culmination of their prayer, sacrifice and penance in this holy place. With this backdrop, it is proposed to construct a yogacum-meditation centre at Rameswaram which any tourist can use to attain solace and discover oneself through the Vedic science of yoga and meditation. This could also pave the way for the establishment of a Vedic College where all students could be imparted with knowledge and inputs on Hindu religion and mythology, the Vedas, Upanishads and the teachings of the Bhagavad Gita.

Ramanathaswamy Temple

The legend says that Hunuman was sent by Lord Rama to bring a Lingam to worship at an appointed auspicious hour. As Hunuman arrival was delayed, Sita moulded a lingam for Rama's timely worship. It is the main deity being worshiped as Ramanathaswamy. Disappointed Hunuman was later consoled by Rama by installing the Lingam which was brought by him a little north of Ramanatha, and decreed that the Hunuman's lingam should have precedence over the Ramanatha in all honours.

Agni Theertham

The calm shallow water-spread of the sea, present hardly 100 meters in front of the temple gopuram is considered as sacred. A dip in the Agnitheertham is considered to remove the sins of the pilgrims. The other theerthams (holy water tanks) in and around the temple are also important for pilgrims.

Jadayu Theertham

Jadayu, king of the birds, who fought in vain with Ravana, the demon to save Sita, is said to have fallen down here as his wings were severed. Sand dunes surround the temple and the pond. The water in the pond is as sweet as that of a tender coconut.

Villoondi Theertham

Villoondi literally translated stands for 'buried bow'. It is quite well known that Lord Rama always carried a bow. According to legend, at this sacred spot, located around 7 km from the main temple on the way to Pamban, is this puranic place, significant because it was at this place where Lord Ram is said to have quenched the thirst of Sita by dipping the bow into the sea water. Even to this day, tourists throng this place to see where potable water is available within the vicinity of sea water.

Badrakali Amman Temple

A kilometer away from the main sanctum sanctorum is the Badrakali Amman Temple with Devi Durga as its chief deity. It is very popular among Devi Durga's worshippers hailing mainly from West Bengal. This temple is en-route to the Gandhamathana Parvatham.

Gandhamathana Parvatham

A hillock situated 3 km to the north of the temple is the highest point in the island. There is a two storeyed mandapam, where Rama's feet. (padam) is found as an imprint on a chakra. Pilgrims throng in thousands to worship Gandhamathana Parvatham. Sukreevar temple and Theertham are situated on the way to Gandhamadana Parvatham.

Dhanushkodi

The Southernmost tip of the island is called Dhanushkodi. It was completely washed away by a cyclone in 1964. But the Kothandaramasamy Temple here remains intact. It is 18 km away from Rameswaram and can be reached by road. A popular belief is that, it is where Vibishana a brother of Ravana surrendered before Rama. Dhanush-kodi has a fine beach, where sea surfing is possible.



Dhanushkodi

Kurusadai Island

This Island lies to the west of the Pamban Bridge between the mainland and the island. It is a Marine Biosphere, a paradise for the marine biologists and nature lovers. Marine wealth abounds here attracting many a scholars and researchers to this Island. It is about 4 km from Mandapam. One should approach fisheries department for permission to visit this island. Off Kurusadai Island one could see plenty of coral-reef, fish. Dolphins and seacows (*Dugong dugon*) are also often witnessed.

Ramanathapuram

An ancient town, and is now the head quarters of the district. It was from here the Sethupathis (Chieftains) ruled this territory. Ramalingavilasam Palace with good painting and tomb of Thayumana Swamigal, are the places worth visiting. A museum is functioning here.

Uthirakosamangai

It is situated at a distance of 72 km from Rameswaram is Uthirakosamangai There is an ancient Siva temple, where the presiding deity is carved in Emerald. Annual

'Arudhra' festival in December attracts a large number of devotees.

Erwadi

The tomb of Sultan Ibrahim Syed Aulia, who came from Arabia via Cannanore is about 800 years old. Pilgrims from far off countries like Sri Lanka, Malaysia and Singapore are visiting this tomb. Santhanakoodu Festival is celebrated in February-March and it attracts thousands of pilgrims.

Satchi Hanuman temple

This is where Hanuman is said to have delivered the good news of Sita's well being to Rama with an evidence choodamanai (Jewel) of Sita.

Oriyur

Oriyur is one of the most revered pilgrim centers for Christians the world over as it is home to the martyrdom of St. John De Britto, a Portugese Jesuit better known as 'Arulanandar'. It was in this place that the saint was beheaded in 1693 and the sand dune is said to have turned red, believed to be stained by the blood of the saint. Here, one can see a magnificent shrine with its Portugese façade that contains a captivating statue of Arulanandar offering his neck in humble submission to the executioner.

Annai Indira Gandhi Bridge

The 2.2 km long length bridge connecting the Rameswaram island and the mainland is the longest bridge in India constructed over a bay. It is also called as Pamban Bridge. Similarly the railway bridge connecting the island is noted for its unique opening mechanism to pass the ships through the sea.



Pamban bridge

viii) Biodiversity

The diverse nature of ecosystems in the Gulf of Mannar entire stretch from Ramanathapuram through Tuticorin and Tirunelveli to Kanyakumari supports a wide variety of significant species including 117 species of corals, 13 species of seagrasses, 641 species of crustaceans, 731 species of molluscs, 441 species of finfishes and 147 species of seaweeds apart from the seasonally migrating marine mammals like whales, dolphins, porpoises and turtles. A unique endemic species of Balanoglossus – Ptychodera fluva, a living fossil that links invertebrates and vertebrates, has been recorded only at Kurusadai. The coral reef resources of the Gulf of Mannar are unique. They grow surrounding all the 21 islands. They offer shelter to a variety of organisms and protect the mainland from storms, currents and shore erosion.

In view of the sensitive nature of the Gulf of Mannar Marine Biosphere Ecosystem and the threats faced by it due to

multifarious anthropogenic activities in recent years, the Government and other national and international organizations evinced great interest to protect and conserve this ecosystem. Towards this, the Global Environment Facility (GEF) through United Nations Development Programme (UNDP) has facilitated the project on "Conservation and Sustainable Use of Gulf of Mannar Biosphere Reserve's Coastal biodiversity" which is being carried out by the Gulf of Mannar Marine Biosphere Reserve Trust (GOMBRT). Coral reefs in the Palk Bay region are distributed on the Northern side from Rameswaram island to Vedhaalai, covering a distance of about 25km In the Palk Bay, corals were found to be disturbed by human impacts through oil pollution, waste discharge from processing units and discharge of domestic household wastes from the nearby Mandapam town.

The Gulf of Mannar harbours mangroves of considerable diversity which support a variety of biological organisms. It is believed that the region was once covered with thick mangrove forests. There are indications that there was over-exploitation that led to vanishing of mangroves species. As a result, species such as *Bruguiera gymnorrizha* and *Acanthus ilicifolius* could not be collected earlier in Rameswaram in recent years, and similar are the cases with *Pemphis acidula* in Pamban and *Acanthus ilicifolius* on Krusadai Island.

3. Impacts

i) Urbanization

Surface water and ground water are the major sources for protected water supply municipalities system in and town panchayats respectively. The estimated sewage generation is 56 lakh litres among municipalities and 72.80 lakh litres among town panchayats. Nature of disposal through river is 56 lakh litres in municipalities and 25.9 lakh litres in town panchayats, with the direct disposal to sea is 46.90 lakh litres. The town panchayats have complete open drainage system and the municipalities have partial underground pipe system. The solid waste generation from the municipalities and town panchayats are 15 tonnes and 21.75 tonnes, respectively. The solid collection in municipalities and town panchayats is 15 tonnes and 20.3 tonnes. Overall the solid waste generated adds up to 36.75 tonnes with a collection efficiency of 96.05%. It was observed that about 86% of the solid wastes are compostable on wet basis 14% of rag, wood matter, glasses, brick and stone, etc, are non-compostable in the district.

ii) Industrial development (effluent discharge / pollution – air water land etc.)

The district is considered as an industrially backward area and the Government is giving incentives like allotment of sites at cheaper rates, adequate power supply and loans on low rates of interest to entrepreneurs for setting up

industries. The Government on with its part also has set up few establishments in the public / co-operative sectors for providing employment to local population. The chief industries found in the district are handloom weaving of textiles, spinning and weaving of textiles in factories, salt and chemical industries, cement, matches, crackers and fireworks and printing and allied industries.

Handloom weaving of cotton textiles is an ancient occupation followed in this district. The important handloom centres are situated in Paramakkudi taluk. Silk weaving, using China Silk as raw material, is practised in Ramanathapuram and Paramakkudi. Textile mills are functioning in the district, which produce a variety of yarns. weaving is followed in the vicinity of Ilaiyankudi. Boxes and other articles from palmyrah leaves are being manufactured in a number of places in Ramanathapuram taluk. Coconut coir fibre making is followed in the district. the important centre being Periyapattinam There has been no discharge of industrial effluents in river basin/other water bodies in Ramanathapuram district.

iii) Natural hazards

No data available regarding the natural hazards in the coastal areas of this district. However, it obvious that erosion, accretion, sea level rise and the impacts of climate change are no different from other districts.

iv) Natural disaster prone areas

Ramanathapuram district is highly drought prone because of the lack of rain and rivers. Floods and cyclones are rare in this district. During 1964 cyclone the Southernmost tip Dhanushkodi was washed away with much causality. Dhanushkodi town went under the sea water during that time. Since most of the district lies along the coast, the district is always prone to tsunami.

4. Government initiatives

i) Initiatives to improve fisher folk livelihood

Following are the schemes from Tamil Nadu Government to improve fisher folk livelihood

- National Savings- cum- Relief scheme for Marine Fishermen
- Savings- cum- Relief scheme for Marine Fisherwomen
- Enhanced Financial Assistance of Rs.2000/- to Marine Fishermen Families during Fishing Ban period.
- Special Allowance of Rs.4000/- for fishermen families during Non-fishing period.
- Group accident insurance scheme for fisher-folk.
- Fishermen personal accident insurance scheme.
- Motorisation of traditional Crafts.
- Cash awards to 10th and 12th students belonging to fishermen community.
- Payment of daily relief to the missing fishermen family while conducting fishing in the sea.
- Fishermen Welfare Board schemes.
- Scheme of creating employment opportunities to educated fishermen youth through up gradation of skills in Maritime Education and Nautical Sciences.

ii) Coastal protection initiatives

The island of Sri Lanka act as a huge barrier even in the case of future tsunami and damage to this coast was minimum during the earler tsunami. Further, the stretch of the coast is in a bay formation with not much littoral drift activity. Moreover islands of the Gulf of Mannar, dynamic resources like coral reefs, mangroves and seagrasses of both Gulf of Mannar and Palk Bay act as bioshield to protect the coast of this district.

Stretch from Devipattinam to Nambuthalai

This stretch of the coast covers Devipattinam, Thirupalakudi, Morpannai, Mullimanai and Nambuthalai. For all the above stretches, the details of the shoreline changes are not clearly evident. From local public, it was heard that there is continuous erosion but not alarming. Only during damages have taken place. cyclones, Tsunami did not affect this area. For Nambuhalai, between the shoreline and an existing road there are number of hutments which are not permanent type may be relocated. No hard measures are suggested for this location as the sediment transport is almost nil and the shoreline oscillations are just temporary. Enormous amount of sea is available. **Plantations** grass recommended.

iii) Awareness initiatives

Various awareness creation activities have been made among the fisher folk on tsunami and CRZ issues by different Government and Non Government organizations.

iv) Bio diversity

Coral and seagrass restoration has been done by Suganthi Deavadason Marine Research Institute in Gulf of Mannar coast of the district. Mangrove restoration has been done by the Forest Department.

5. Summary / Conclusion

- Ramanathapuram is one of the coastal districts bounded on the north by Sivagangai and Pudukottai districts, on the east and south by the Bay of Bengal, and on the west by Thoothukudi and Virudhunagar districts with an area of 4,175 sq.km
- Ramanathapuram district comprises of 7 taluks, 11 blocks and 2362 villages. With regards to the hierarchy of administrative arrangement, there are 2 municipalities, 7 town panchayats and 429 village panchayats in the district.
- Most of the soil type is clay (45%) followed by coastal alluvial soil (17%) and sandy loam (15%) and there is no scope for large scale mining in the district.
- Ramanathapuram district is deficient in rainfall. There are no major rivers providing perennial water supply for cultivation.
- In Ramanathapuram District, paddy is main food crop cultivated in more than 63% of the net area sown.
- There are 18 forest areas in Ramanathapuram district constituting a total area of 5,356.85 ha

- Designated a Biosphere Reserve, The Gulf of Mannar is one of the biologically richest coastal regions in all of mainland of India with corals, seagrasses, mangroves and other important flora and fauna.
- Gulf of Mannar Biosphere Reserve (GOMBR) was declared in 1989 as the first marine Biosphere Reserve in the country.
- The district has 2 rivers viz. Vaigai and Gundar, but they are not perennial.
- Ramanathapuram district has 271 km of coastal line of which 130 km in Palk bay and 140 km in Gulf of Mannar.
- The district is considered as an industrially backward area as there are no major industries in the district.
- Ramanathapuram district is highly drought prone because of the lack of rain and rivers.
- The island of Sri Lanka acted as a huge barrier during tsunami along with coral reefs, mangroves and seagrasses of both Gulf of Mannar and Palk Bay. Coral and seagrass restoration has been done by Suganthi Deavadason Marine Research Institute in Gulf of Mannar coast of the district.
- Mangrove restoration has been done by the Forest Department.