

# **LAND USE PLAN**

# **MULLAITIVU DISTRICT**

**Implementations of the Recommendations given by the  
Lessons Learnt and Reconciliation Commission  
(LLRC)**

**2016**

**Land Use Policy Planning Department**  
**Ministry of Lands**

## **PART I**

### **1. INTRODUCTION**

The Lessons Learnt and Reconciliation Commission (LLRC) of 2011 recommended that “a land use plan for each District in the North and East should be developed with the participation of District and national experts drawn from various relevant disciplines to guide the District administration in land conservation and alienation in order to ensure protection of environment and bio-diversity; sustainable economic development; leisure and recreational standards; religious, cultural and archeological sites with a view to improving the quality of life of the present and future generations”. The preparation of the plans was entrusted to the Land Use Policy Planning Department (LUPPD).

The LUPPD started the planning process by establishing two expert groups, one at the National Level and other at the District Level. Field work of the planning process was commenced in 2013. Initially the available land use maps were updated to study the current patterns of land use and subsequently major land use issues were identified based on the field investigations. Recommendations to address the land use issues were formulated and these were presented to the Expert Groups and stakeholders for their views and comments. The plan for the District has been prepared by incorporating the views and comments of the Expert Groups and the stakeholders.

The report is divided into two parts. The administrative structure, physical environment, demography, infrastructure, existing spatial plans of the District are presented in the part I. The methodology adapted, existing land use of the District, the issues pertaining to major land uses and the proposed land use plan including the recommendations to address the land use issues and the suggested implementation strategy are presented in the part II.

## 2. DISTRICT PROFILE

### 2.1 Introduction

Mullaitivu District was declared in 1979 and located in the Northern Province of Sri Lanka. The District is bounded by Jaffna and Killinochchi District from the North, Sea from the East, Trincomalee and Vavuniya Districts from the South, Mannar District from the West and small part of the South.

Absolute Location of the District is longitude 09<sup>0</sup>14' N & latitude 80<sup>0</sup>32' E. (Figure 2.1) the total land area of the District approximately 2616.9 sq. km (Weliyoa D.S Division Land area not include due to boundaries of Division is not declared). This District accounts 3.87% of the country's total land area.

### 2.2 Administrative Structure

The District has six Divisional Secretary Divisions namely Maritimepattu, Puthukkudiyiruppu, Oddusuddan, Thunukkai, Manthai East, Weliyoa. (Figure 01 – except Weliyoa D.S. Division) There are 127 Grama Niladari Divisions & 624 Villages. (Table 01) Administratively the District belongs to part of Vanni electoral District and having five Pradesia Saba's sub Office.

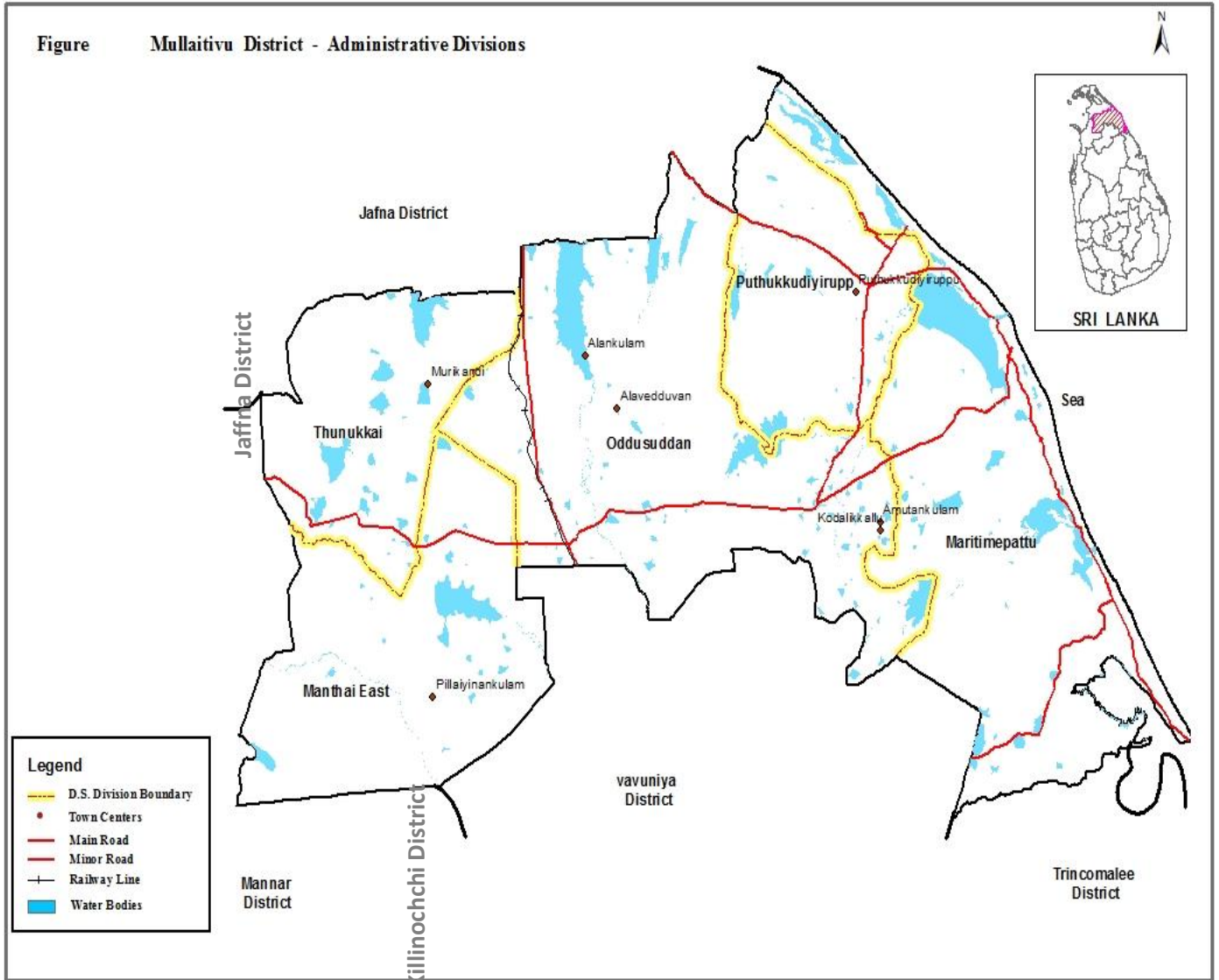
Table 01 – Land Area by D.S. Divisions – Mullaitivu District

Serial number	D.S Division	No. of G.N Divisions	Land area (ha)	Percentage %
01	Maritimepattu	46	74460	28.4
02	Puthukkudiyiruppu	19	37100	14.2
03	Oddusuddan	27	63900	24.4
04	Thunukkai	20	34730	13.3
05	Manthai East	15	51500	19.7
06	Weli Oya	N.A		
Total		127	261690	100

Source : Census and Statistical Department (2010)

N.A – Not Available

**Figure 1-LOCATION AND ADMINISTRATIVE BOUNDRIES OF MULATIV DISTRICT**



## **2.3 Physical Environment**

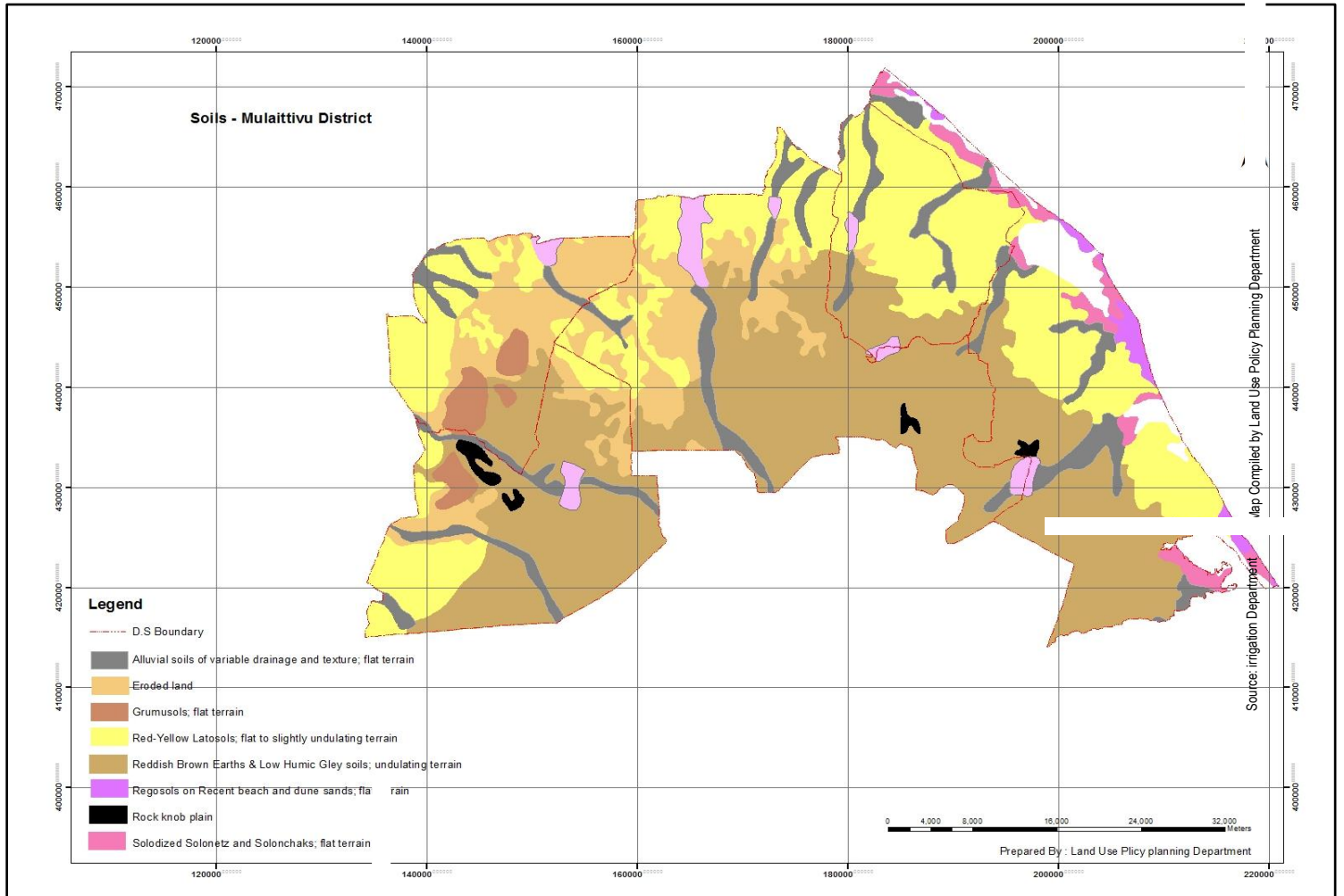
### **2.3.1 Topography**

The Topography of Mullaitivu District is flat land, gently sloping to the East and North and in the Western part the directed towards West and South. This District has 70km of coastal belt and four lagoons namely Kokkulai, Nayaru, Nanthikadal and Mathalan with high potentials for prawn culture. The elevation varies from sea level to 36.5 meters.

### **2.3.2 Soil**

The Major soil types and their distribution in the District are shown in figure 02 and table 02. Raddish Brown Earths & Red Yellow Latosols which are suitable for cultivation. Raddish Brown Earths covers 44% of the land area in the District. Other soil types namely Grumusols, Alluvial Soil, Regosols and solodized solonetz and solonchaks are scattered in the District. Some of the surfaces are eroded and it accounts about 12% of the total land area of the District.

**FIGURE 2- SOIL MAP –MULATIVE DISTRICT**



**Table 2 – The Great Soil Groups and their Extents – Mullaitivu District**

Se.No	Soil Type	Land extent (ha)	Percentage (%)
1	Reddish Brown Earth's and Low Humid Glay Soils	112550	44
2	Red- Yellow Latosols	60314	24
3	Alluvial Soils of Variable drainage and texture	24139	9
4	Grumosols	7014	3
5	Regosols on recent beach sand	6478	3
6	Solodized Solonetz and Solonchaks	11222	4
7	Eroded Lands	30779	12
8	Rock- Knob Plains	1569	1
<b>Total</b>		254065	100

### 2.3.3Climate

#### Rainfall & Temperature

The District is located in the dry Zone of Sri Lanka. Average annual rainfall of the District varies from 1200mm to 1900mm and having bimodal rainfall pattern. Mullaitivu District Temperature ranges from 23<sup>0</sup>C - 39<sup>0</sup>C. During North East Monsson from early October to January get high rain fall and annual temperature is low during this period.

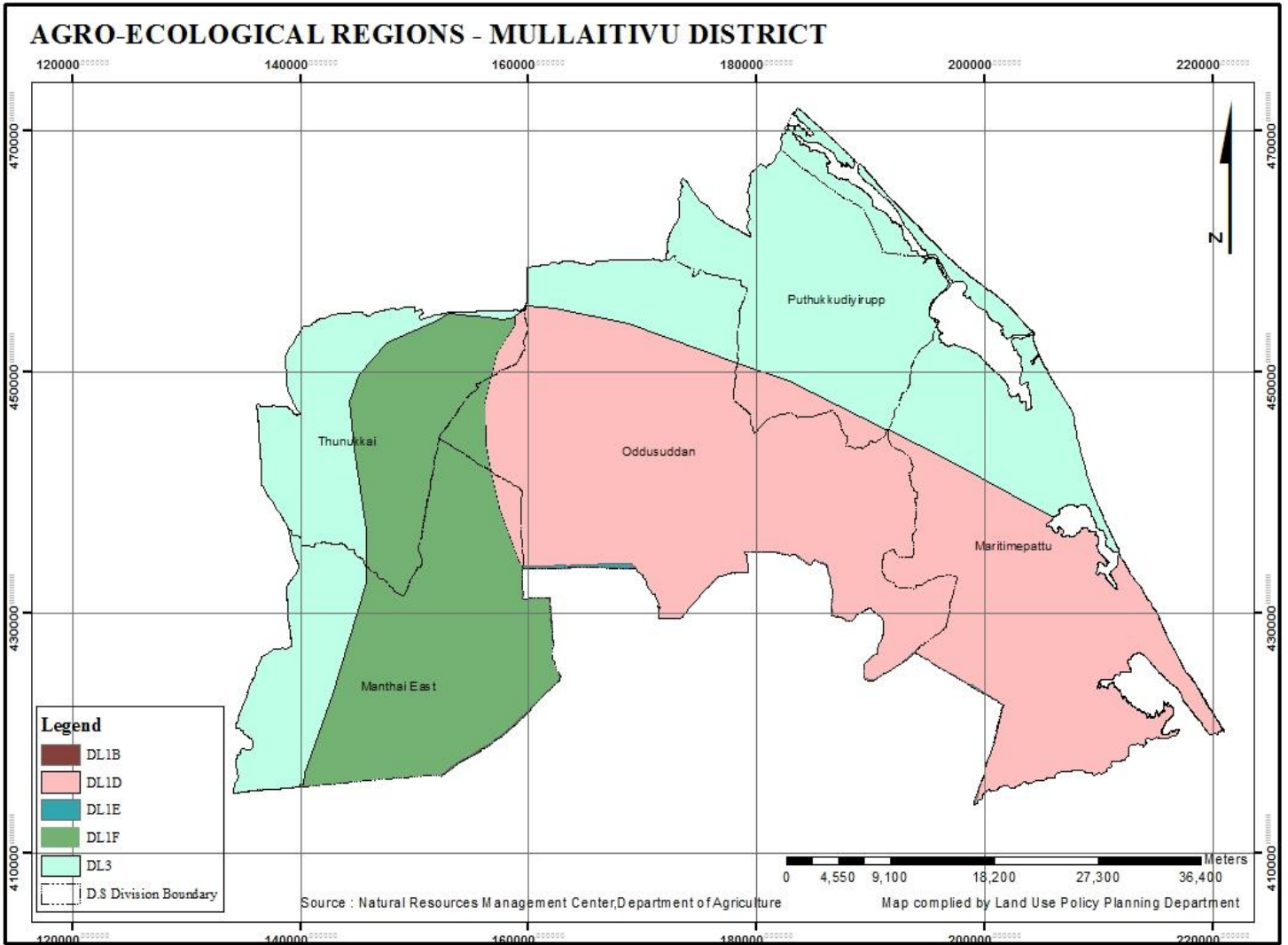
#### Agro-Ecology

Agro ecologically the District located in low country dry zone. There are two agro-ecological region namely DL1 and DL3. The DL 1 Region sub divided into 4 sub regions i.e DL1b, DL1e, DL1f and DL1d. The agro-ecological regions and their extents are given in the table 3 and regions are shown in the figure 03

**Table 03- Agro-Ecological Regions and their Extents – Mullaitivu District**

Agro Ecological Region	Land extent (ha)	Percentage (%)
DL1b	235	0.1
DL1e	524	0.2
DL1f	53160	21.0
DL1d	110808	43.6
DL3	89338	35.1
Total	254065	100

Source: Nature Resources Management center, Department of Agriculture





### 2.3.4 Water

The District is having 3 major tanks, 16 medium tanks and 208 minor tank with command area of 5791ha, 2794ha and 5098ha respectively. There are no major perennial rivers that could be tapped to provide irrigation for cultivation. The water bodies of the District is shown in Figure 4.

## 2.4 Demographic Structure

### 2.4.1 Population

The total population of the District is 92238 based on 2012 Mullaitivu District statistical hand book. There are 46036 male populations and 46202 female population. This accounts for 0.454% of the total population in the country.

Population density in the District 36.65 per Sq.km and Land man ratio is 2.73ha per person (2012). Mullaitivu District has the lowest population density and the highest land man ratio compared to the other Districts of the country.

The highest population density (above 45 sq.km) reported in Puthukkudiyiruppu D.S Division and the lowest population density (Below 14 sq.km) reported in Manthai East D.S Division. (Figure 05)

The composition of population according to Ethnic and religion groups are given in table 04 and 05

**Table 04 - Population by ethnic groups – Mullaitivu District**

Ethnic Group	Sinhala	Sri Lanka Tamil	Indian Tamil	Sri Lanka Moor	Burgher	Malay	Baratha	Other	Total
Population	8,927	79,107	2,281	1,821	49	11	01	41	92,238

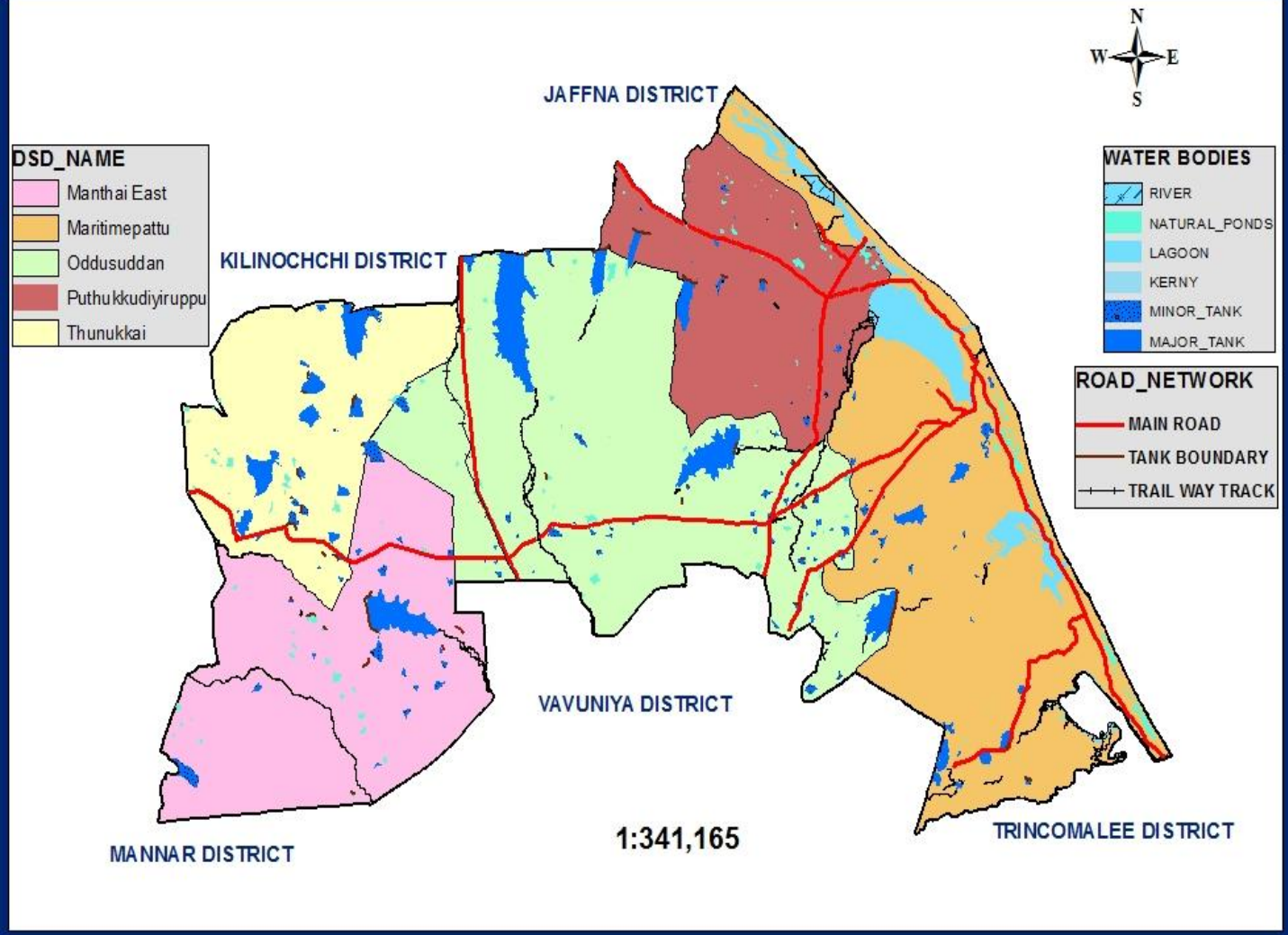
Source: Census & Statistic Department (2012)

**Table 05 - Population by Religion - Mullaitivu District**

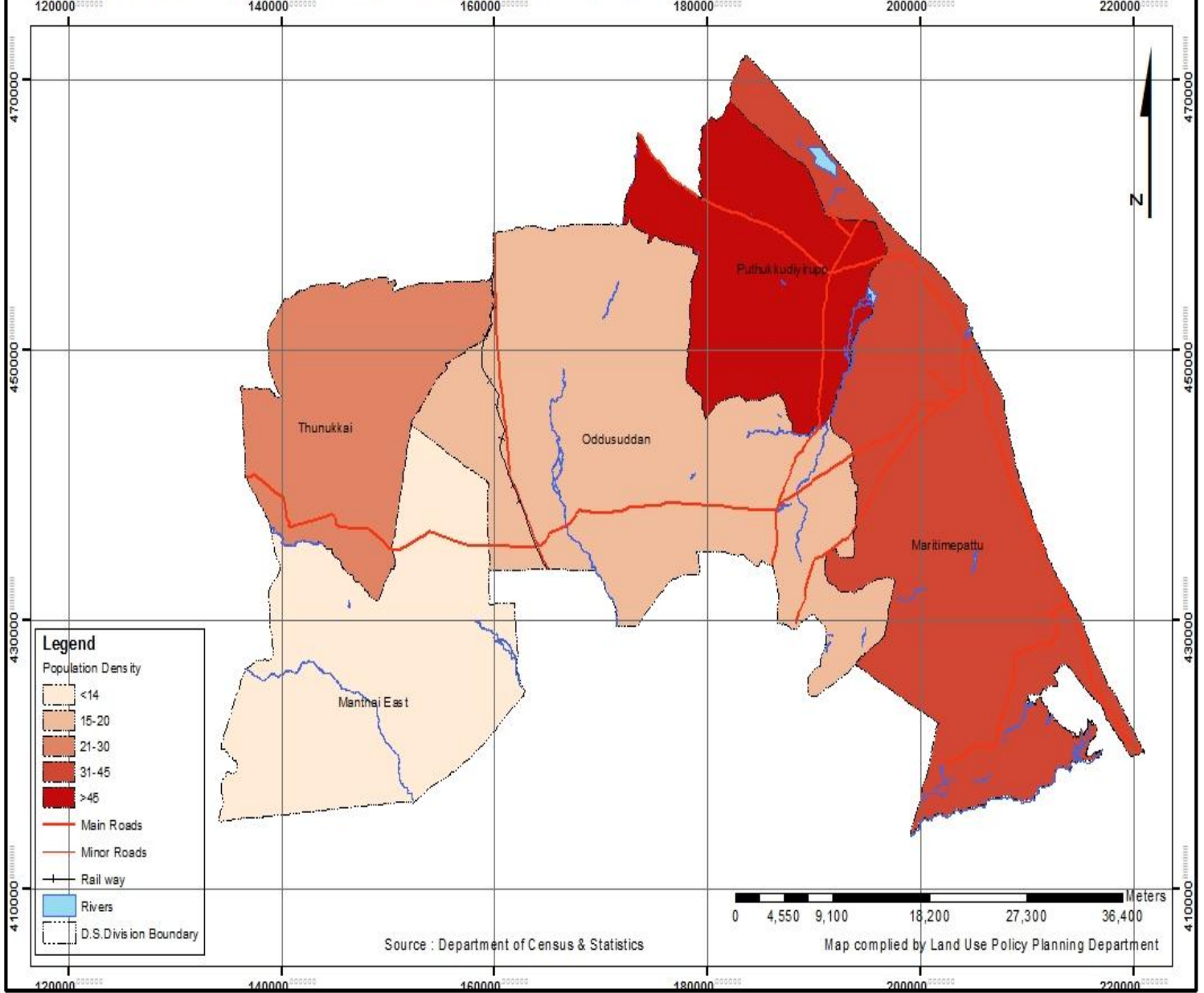
Religion	Buddhism	Hindu	Islam	Roman Catholic	Christian	Other	Total
Population	8185	69377	1880	9063	3664	69	92,238

Source: Census & Statistic Department (2012)

# WATER BODIES MAP- MULLAITIVU DISTRICT



# POPULATION DENSITY - MULLAITIVU DISTRICT



## 2.4.2 Labour Force

The District statistical hand book(2014) revealed that economically active group (Labor force) age 15-59 in the District is about 67% (83,852) and economically inactive person is age below 15 and above 60 is about 33% (41,328). Among this group 25.5% (31927 are children under 15 years.

## 2.4.3 Occupational Structure

Majority of the population is engaged in agriculture sector which include farming, fishing and livestock. About 23673 and 4210 member of families are engaged in agriculture and fishing sectors respectively.

**Table 06 - No. of Persons engaged in major occupational groups – Mullaitivu District**

Major Occupational Type	Agriculture	Fishery	Industrial & Trade Service	Government & Semi Government	Private Sector	Unemployed
No. of Person	24,861	3,548	7,986	19,207	890	14,600
Percentage %	26.95	3.85	8.66	20.82	0.96	15.83

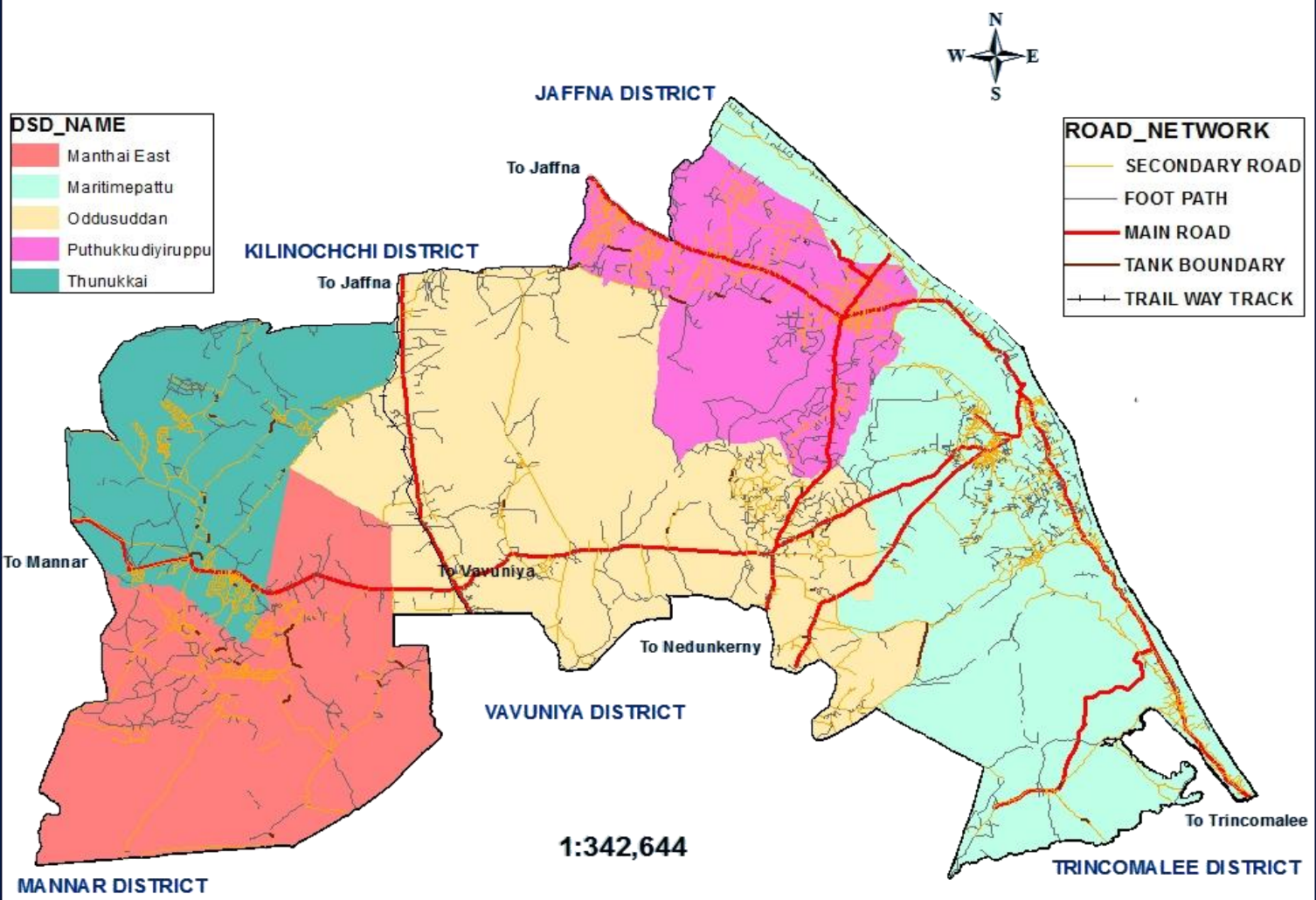
Source: Census & Statistics Department 2012

## 2.5 Infrastructure

### 2.5.1 Roads and Railways

The high way road network in the District had been developed during recent years. The figure 6 shows the road network of the District. Main roads link Manner, Kilinochchi, Jaffna, Vaunia and Trincomalee towns with Millaitivu.

# ROAD\_NETWORK MAP- MULLAITIVU DISTRICT



## 2.5.2 Communication facilities

The District has Sri Lanka Telecom network and several private communication networks. Fifty percent of the District is covered by Sri Lanka Telecom network. Mobile telephone and Postal facilities are available for entire district.

## 2.6 Land Use and Land Cover

The Land Use and Land Cover of the District mainly include Agricultural Lands, Home Gardens, Forest Lands and Water Bodies. The total land area of the District is 261,690ha. Approximately 33696ha which is 12.87% of the total land area consists of agriculture; Forest Lands cover nearly 179974ha (69%); Home Garden accounts for 16867 ha (6.4%). The figure 8 shows major Land Use and Land Cover categories and their approximate extents in Mullaitivu District.

Table 07 – Major Land Use – Mullaitivu District

Land Use	Land Extent (ha)	Percentage (%)
Home gardens/ Homesteads	16867	6.4
Agricultural Lands	33696	12.9
Non-Agricultural lands	350	0.1
Forest	179974	68.8
Wet Lands	1911	0.7
Other Lands	7493	2.9
Water bodies	21399	8.2
<b>Total</b>	<b>261690</b>	<b>100.0</b>

## 2.7 Existing Spatial Plans

### 2.7.1 National Level Plans

The National Physical Plan prepared by the National Physical Planning Department (NPPD) provides a broad framework for the national development of the country. It is also the strategic document that outlines the vision of Sri Lanka in 2050<sup>1</sup>. Its role is to promote and regulate the integrated planning of economic, social, physical and environmental aspects of land and territorial waters of Sri Lanka. The main objectives of the National Physical Planning Policy and the Plan are to achieve economic development through the use of available

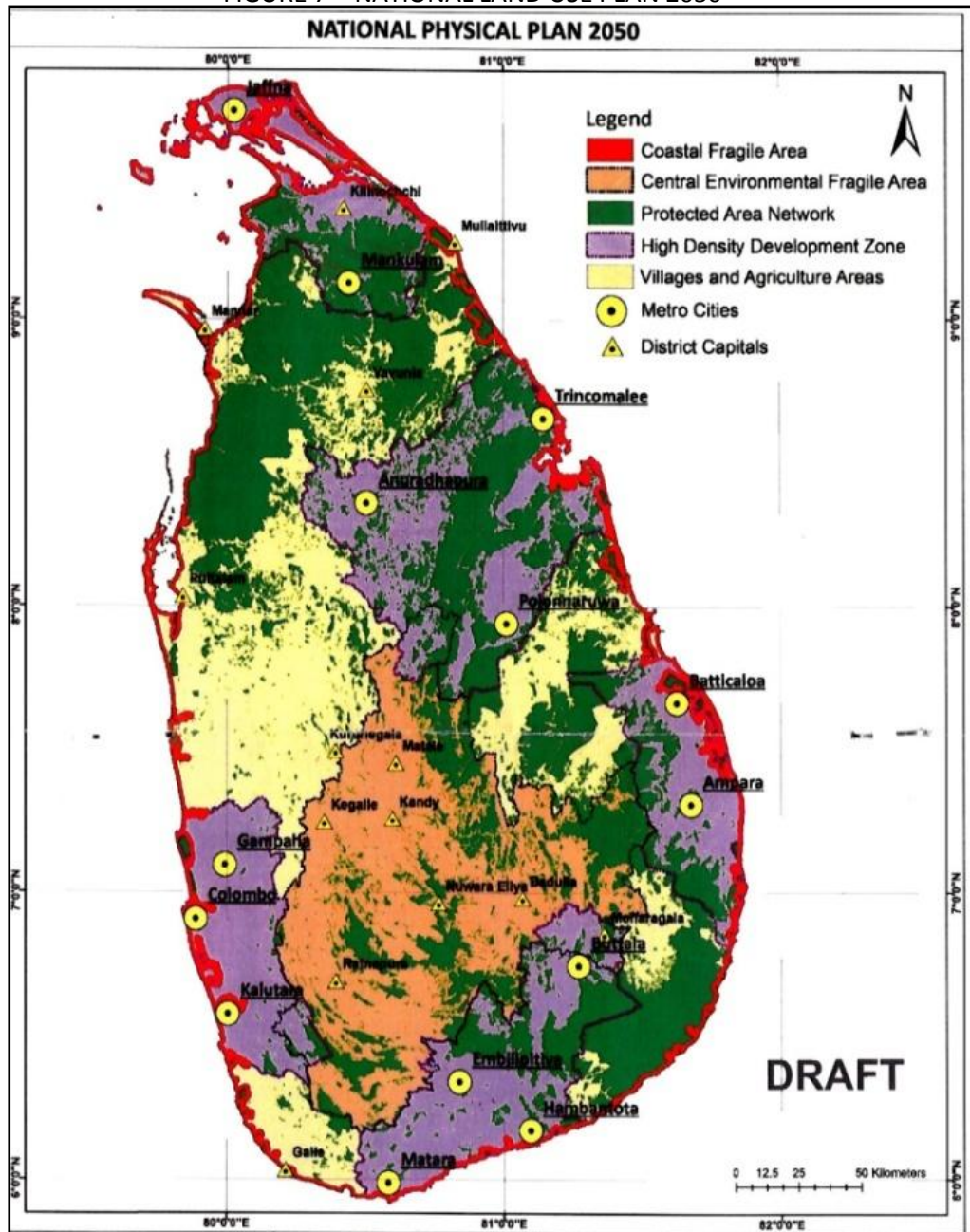
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<sup>1</sup>Anon, 2015. National Physical Plan as the Framework for City of Tomorrow. World Cities Day 2015, Consultative Forum, NPPD, Ministry of Mega polis and Western Development.

resources of the country including agriculture, realizing a higher living standard for the people and the establishment of an independence economic status internationally<sup>2</sup>.

Major themes of the revised draft National Physical Plan – 2050 (shown below) are; (1) Fragile areas, (2) Protected Areas, (3) High density development zones, (4) Metro cities and (5) Village and service center networks (NPPD, 2015). Since it is a National Plan it does not adequately address the land use issues at the grass root levels.

FIGURE 7 – NATIONAL LAND USE PLAN 2050



Source: Anon, 2015. National Physical Plan as the Framework for City of Tomorrow. World Cities Day 2015, Consultative Forum, NPPD, Ministry of Mega polis and Western Development

<sup>2</sup>www.nppd.gov.lk

## **2.7.2 Regional and sub regional level plan**

1.Environmental Management Assessment Framework, Water Supply & Sanitation improvement Project, Ministry of Urban Development, Water supply & Drainage

*Sri Lanka is poised to accelerate its social and economic development, ensure provision of better quality public goods and services, and develop conflict-affected and other economically lagging districts of the country.*

2.Disaster risk reduction & Preparedness plan, UN Habitat

*The Mullaitivu Disaster Risk Reduction and Preparedness Plan, themed Towards a Sustainable and Resilient City, was completed through the Disaster Resilient City Development Strategies for Sri Lanka Project. It assesses the current situation in Mullaitivu, provides detailed recommendations from a strategic planning perspective, and identifies projects that will assist in reducing risk and vulnerability, whilst enhancing resilience and preparedness of the citizens and the city.*

3.Identification of townships In Pradesiya Saba's, Urban Development Authority

## **2.7.3 Need for Land Use Plan**

The existing National Level Plans do not address local land use issues in a detailed manner. Furthermore the present regional level plans primarily concerned with infrastructure development and issues in urbanized areas. Therefore, it is crucial to prepare district land use plans to promote better land use especially in the war affected areas. This need was also recognized by the LLRC. The LLRC recommended that district land use plans has to be prepared as a decision making tool to ensure the protection of environment and bio-diversity, sustainable economic development, maintain the leisure and recreational standards, protection of cultural and archeological sites with a view to improving the quality of life of the present and future generations.



## PART II

### **3. Planning Approach**

Approaches to spatial planning vary considerably throughout the world, reflecting historical and cultural developments as well as geographical and economic conditions. There are four major approaches can be identified<sup>3</sup>. They are;

#### **a) Regional economic planning approach**

In this approach spatial planning is used as a policy tool to pursue wide social and economic objectives, especially in relation to disparities in wealth, employment and social conditions among different regions of the country<sup>4</sup>.

#### **b) Comprehensive integrated approach**

A comprehensive integrated approach, where spatial planning is conducted through a systematic and formal hierarchy of plans. In this approach plans at lower levels will not contradict with the planning decisions at higher levels.

#### **c) Land use management approach**

In this approach, planning is a more technical discipline in relation to the control of land use. The recommendations or regulations will ensure the sustainable development.

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<sup>3</sup>EU Commission 1997. The EU Compendium of Spatial Planning Systems and Policies. Brussels: European Union, Office for Official Publications of the European Communities.

[http://commin.org/upload/Glossaries/European\\_Glossary/EU\\_compendium\\_No\\_28\\_of\\_1997.pdf](http://commin.org/upload/Glossaries/European_Glossary/EU_compendium_No_28_of_1997.pdf)

<sup>4</sup>Williamson, I., S. Enemark, J. Wallace, A. Rajabifard. 2010. Managing the use of land. Land Administration for Sustainable Development. ESRI Press Academic, California.

#### **d) Urbanism approach**

In this approach key focus is on architectural and urban design through rigid zoning and land use codes and a wide range of laws and regulations.

In the preparation of District Land Use Plan, basically land use management approach was adopted using the guidelines developed for land use planning by Food and Agricultural Organization (FAO)<sup>5</sup>.

FAO has stated that Land use planning is the systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land-use options. Its purpose is to select and put into practice those land uses that will best meet the needs of the people while safeguarding resources for the future. The driving force in planning is the need for change, the need for improved management or the need for a quite different pattern of land use dictated changing circumstances.

FAO has indicated that several steps have to be followed in preparing a land use plan. The steps that are followed for the preparation of the plan are given below;

#### **3.1 4 Study the present situation**

The land use maps that were available have been prepared more than thirty years ago. In order to identify the changes that have taken place since then the existing land use maps were updated in 2015. Identification of land use issues was done simultaneously. Digital layers on the scale of 1:10,000 provided by the Survey Department were used as base maps. Entire District covers by 97 map sheets (Annex I). The new land use maps were prepared in two stages. In stage one existing land use maps were updated using recent satellite images. In stage two, these maps prepared were subjected to field verification. The classification followed in preparing the land use map is given in the table 8.

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<sup>5</sup>FAO, 1993. Guidelines for Land Use Planning. Food and Agricultural Organization of the United Nations. Rome.

### **3.2 identification of land use issues**

Field investigations revealed that the land uses could be divided into two broad categories i.e. (i) areas where changes are not required and existing land uses can be continued, (ii) areas where the land use changes or land use improvements are desirable. Plan mainly focuses on the second category. Areas where the land use changes or improvements are desirable because there are several land use issues pertaining to major land uses. These land use issues were identified and mapped by visual observations and by consulting land users. Land use issues are briefed in the section 5.2. The issues provide the basis for the preparation of the land use plan.

### **3.3 Formulation and validation of recommendations to address the issues**

The desirable land use changes or improvements that were identified were discussed with the divisional level stakeholders, District Level Expert Group (DEG) and the National Level Expert Group (NEG) (The composition of these expert groups is given in the annex III & IV). The recommendations for land use changes or improvements validated by the above groups.

### **3.4 Preparation of the Land Use Plan**

The land use plan was prepared based on the information and data gathered from the field and considering the views, comments and recommendations made by the divisional level stakeholders, DEG and NEG.

## **4. LAND USE OF THE DISTRICT**

### **4.1 Introduction**

Details of the present land use and land cover of the District are briefed in this section. In addition past situation of some of the major land use categories are given for more information. Present land use map were used to identify the land use issues and used as a base for the land use plan.

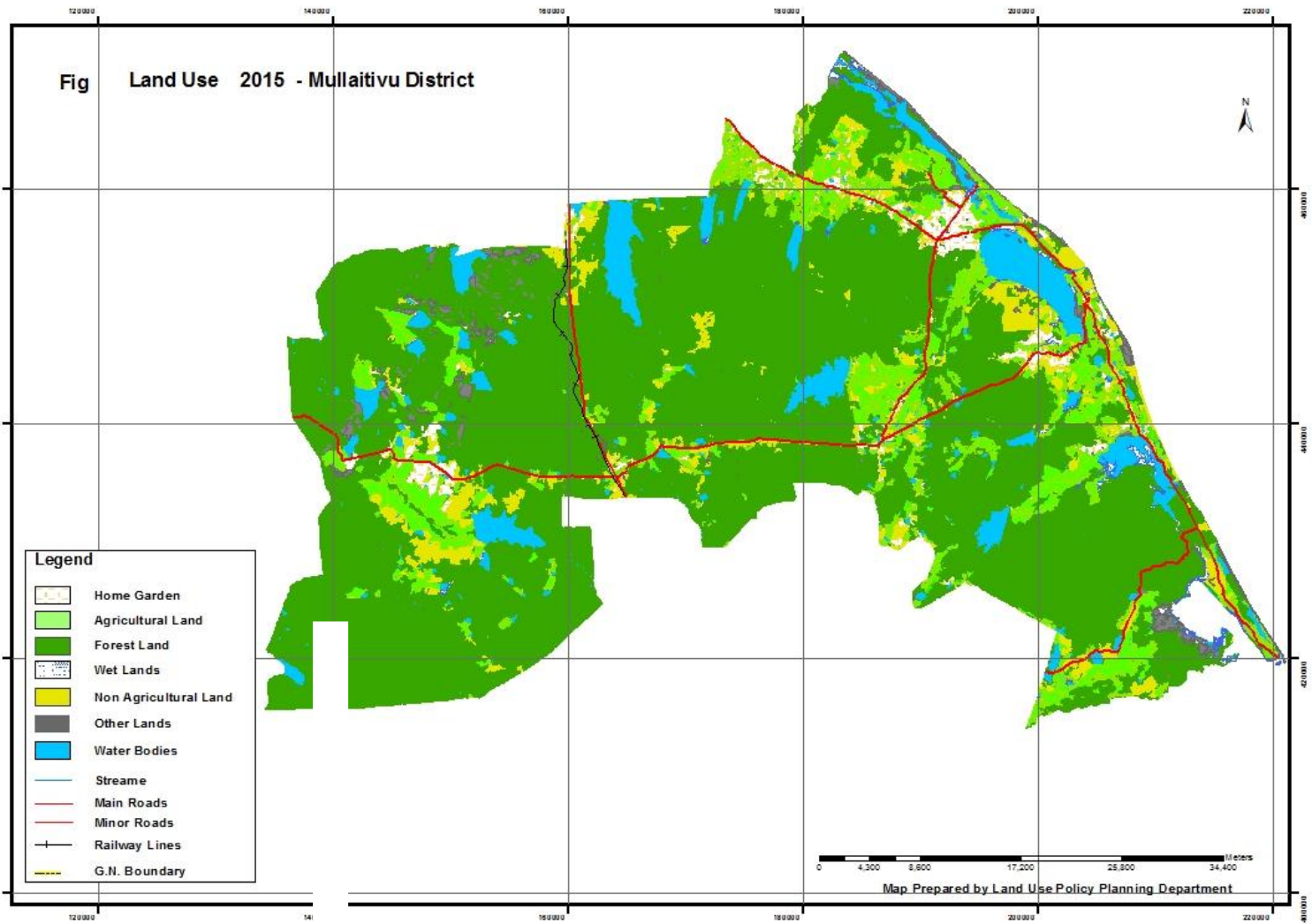
### **4.2 Land Use**

Land use of the District (2015) is shown in the figure 8 and approximate extents of different land use categories are given in the table 7. Home gardens are defined as houses with a garden and homesteads are defined as houses without a considerable extent of lands for cultivation. Unutilized lands that were identified belong to different Institutions and presently not used for any purpose. Sometime some of these lands have seasonally been cultivated by encroaches. Unproductive or barren lands are not suitable for cultivation due to either removal of top soil or other reasons like inundation by saline water.

**Table 08-Land use categories and their approximate extents**

Main category	Sub category I	Sub category II	Approx. Extent (ha)
Home gardens/ Homesteads			16867
Agricultural Lands	Seasonal crops	Paddy	23883
		Field crops	3273
	Permanent crops	Coconut	4824
		Cashew	187
		Palmyra	995
		Other perennial crops	534
Non-Agricultural lands	Service centers		184
	Industrial area		131
	Other		35
Forest	Natural Forest		145742
	Forest Plantation		2171
	Scrub Land		31768
	Grass Land		293
Wet Lands	Marsh		1422
	Mangrove		489
Other Lands	Unutilized lands		2707
	Unproductive/barren lands		3418
	Rock out crops		27
	Sandy area (beaches, sand dunes etc.)		1341
Water bodies	Lagoon		7625
	Tanks(major & minor tanks, natural ponds)		13299
	Rivers and streams		475
<b>Total</b>			<b>261690</b>

(Source: Land Use Map - 2015, Prepared by L.U.P.P.D)



## **5. PROPOSED LAND USE PLAN**

### **5.1 Introduction**

Proposed land use plan has two broad categories i.e. (i) areas where changes are not required and existing land uses can be continued because of these areas do not have major land use issues, (ii) areas where the changes or improvements are desirable. The proposed land use plan indicates the changes or improvements that are desirable. The major categories of the proposed plan are given below;

Areas where the present use can be continued

- Presently protected/conserved areas
- Other areas where there are no major land use issues (Home gardens, Agricultural Areas, Built-up areas etc.)

### **Areas where changes or improvements are required**

Additional areas recommended for protection

### **Unutilized lands (Proposed areas for future development)**

- Suitable lands for housing
- Suitable lands for agriculture
- Suitable lands for expansion of service areas
- Suitable lands for tourism

### **Abandoned Paddy Lands**

- Proposed for re-cultivation of paddy/appropriate uses

### **Abandoned settlements**

- Proposed for resettlements

### **Underutilized Lands (where land use improvements are needed)**

- Home garden
- Paddy
- Field crops
- Plantation crops

All abandoned lands shown in the proposed plan cannot be changed to previous use due to several reasons associated with these lands. These reasons may either be economic or social or environmental. However, some of the abandoned lands can be used to establish the previous use.

## 5.2 Major Land Use Issues

Number of land use issues mainly related to the protection of the environment and land productivity can be identified in the District.

Six major land use issues were identified. These issues are given below;

a) Presence of “additional areas that need to be protected”

Some areas in the District are protected by gazette notifications. The protected area network includes Forest, Wild life reserves and corridors, other state forest lands, Grass Lands, Archeologically and Historically significant places, Areas of natural beauty and natural features of exceptional value, Water bodies/Wet lands, Coastal Natural Habitats and Urban Forests/Urban Parks. However, there are areas or sites that are not presently protected in the District. They have to be protected in order to conserve the bio-diversity, environment and ensure the protection of the religious, cultural and archeological sites.

Therefore, presence of additional areas that need to be protected is considered as one of the land use issues.



Photograph 1: Bird Sanctuary



b) Presence of low productivity agricultural lands

Low productivity agricultural lands (underutilized lands) include areas given over to island crops (Plantation and field crop) and paddy. Underutilized lands devoted to plantation crops include (1) crop lands where the proportion of land used is 70% or less, (2) croplands where intercropping is not practiced, (3) croplands where animal husbandry is not practiced though this is possible and (4) croplands where yield is below the average yield recommended by the research institutions and other relevant agencies. Underutilized lands devoted to field crops include (1) crop land where the proportion of land used is 70% or less and (2) cropland where yield is below the average yield recommended by the research institutions and other relevant agencies.

Low productivity paddy lands are categorized as (1) Lands where the yield per hectare is below the average of the District, (2) Lands that are cultivated only during one season.



Photograph2: Low Productive Paddy Land - Puthukkudiyiruppu D.S. Division

c) Presence of low productivity home gardens

A home garden is the cultivated area surrounding the dwelling. The size of the home garden could vary from area to area and production is often for domestic consumption. The low productivity home gardens (underutilized) were identified using two criteria. (1) Home gardens where the proportion of land being used was 50% or less and (2) Home gardens where the Animal Husbandry is not practiced though this is possible.

d) Presence of abandoned settlements

There are settlements that were abandoned due to conflicts. These areas were identified and mapped.



Photograph3: Abandoned settlement

e) Presence of abandoned agricultural areas.

These lands were classified according to the previous use. This category includes both paddy and high land crops. However, in the District under the abandoned agricultural lands category only paddy lands were identified. These lands were abandoned mainly due to some physical limitation and socio economic reasons.



Photograph4: Abandoned agricultural areas (Paddy Lands)

f) Presence of unutilized lands

These lands are idle state lands coming under the justification of different institutions. e.g. Land Reform Commission, Forest Department and other government institutions. However, utilizing these lands for future development activities depends on the decision taken by the respective managing agencies to release these lands.

The details of the above issues are presented with the recommendations in the section below



Photograph 5: Unutilized lands

### 5.3 Recommendations

Basically there are two areas were identified and presented in the plan (see Figure 30). They are;

- 1.Areas where the present use can be continued
2. Areas where changes or improvements are required

#### 1. Areas where the present use can be continued

These lands include presently protected areas, productive home gardens, productive cultivated lands, and built-up areas etc. where land use changes or improvements are not required. Existing land use of these lands can be continued without major changes or improvements. (Table 9)

Table 9: Distribution of lands where changes/improvements are not required

Category	Land Area (ha)	Percentage (%)
Presently Protected Area	167219	94.96
Productive Cultivated Lands including productive Home Garden	8883	5.04
Total	176102	100.00



### (a) Protected Areas

Presently protected areas are gazetted by different government institutions using the legislative provisions. These areas are managed by respective institutions according to the management plan. Main aim of showing the protected area in the land use plan is to protect the area by not allowing the use for other purposes.

Basically two categories of protected areas were identified on the field. They are (1) Presently protected areas, (2) Additional areas recommended for protection. Presently protected areas are gazetted and managed by several agencies and the issues in these areas could be addressed by a “protected area management plan” prepared by the respective agencies. Therefore, the presently protected areas of the District are merely shown in the land use plan without giving any recommendations for the management of such areas. In addition to the type of protected areas, their approximate extents, location and respective managing agencies, some of the issues available in the presently protected area are also given in the Table 11-13 for the information. Their locations are shown in Figures 9-12

### Presently Protected Areas

Table 10 - Presently Protected Areas in Mullaitivu District

Category	Total Extent (ha)	Percentage (%)
Forest Reserves	145742	87.16
Historical Reserves	34	0.02
Archaeological site	44	0.02
Water bodies	21399	12.80
<b>Total</b>	<b>167219</b>	<b>100.00</b>

(Source: Land Use Planning Office, Mullaitivu)

**(b) Other areas/uses located outside of the protected areas that can be continued**

There are some other areas located outside the protected area network where the uses of those areas can also be continued without any changes or improvements. Because minimum land use issues are available in these areas. These uses include productive home gardens, productive agricultural lands, service areas etc. The percentage of the extent of these areas is 18% (excluding the presently protected area) of the total agricultural land area including home garden of the District. Rest of the areas needs some changes or improvements.

# RESERVE FOREST - MULLAITIVU DISTRICT

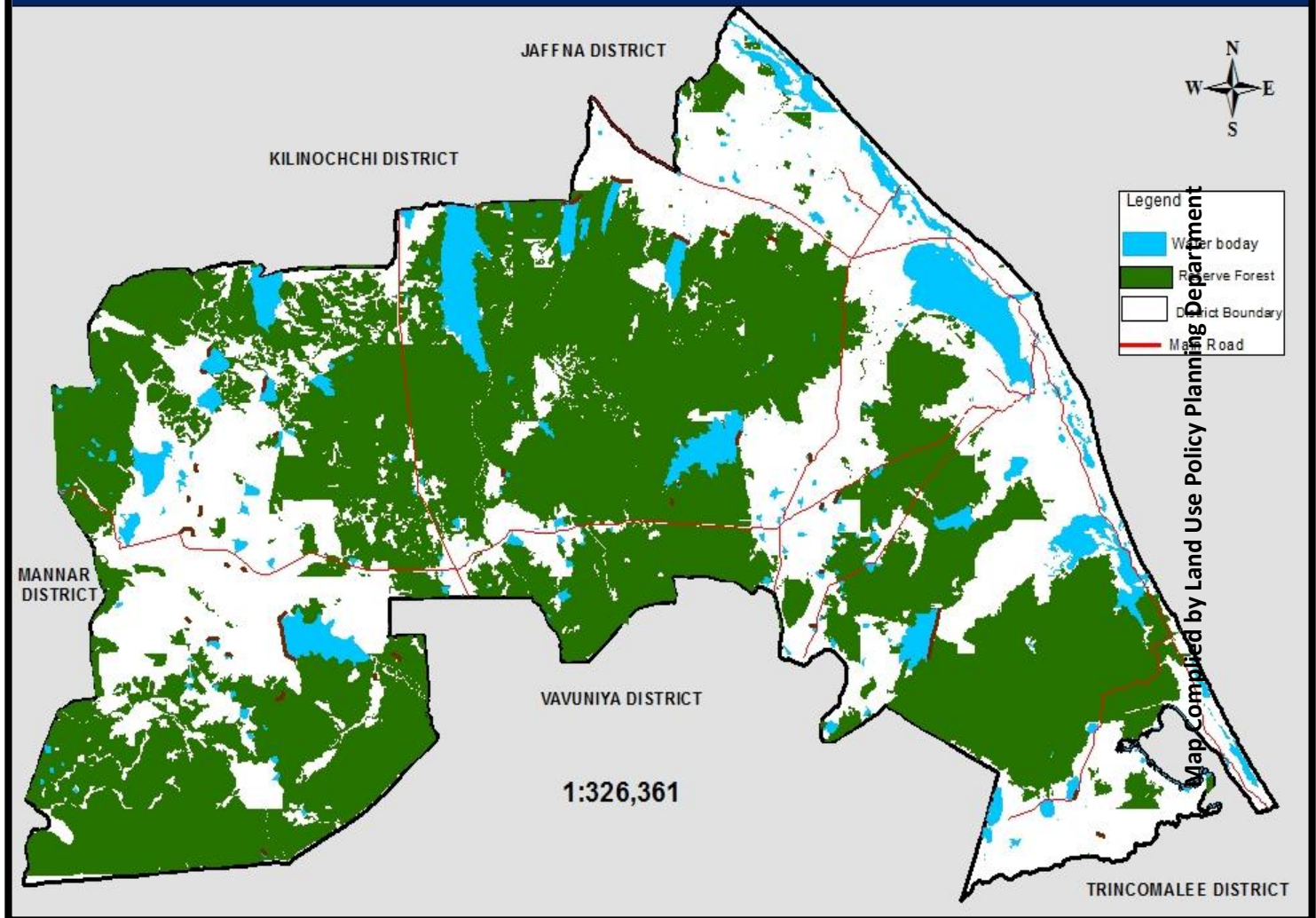


FIGURE 10 – HISTORICAL RESERVES – MULLAITIVU DISTRICT

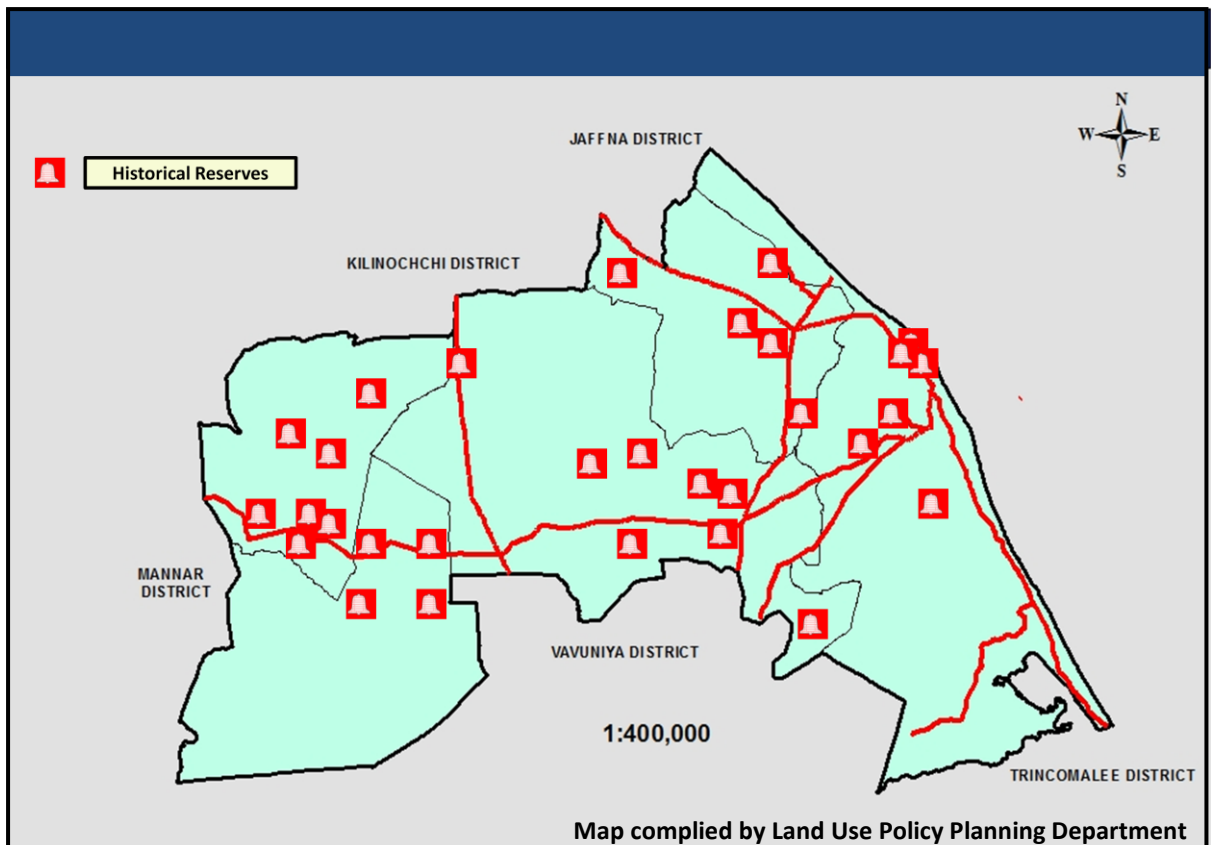


FIGURE 11 – ARCHEOLOGICAL RESERVES – MULLAITIVU DISTRICT

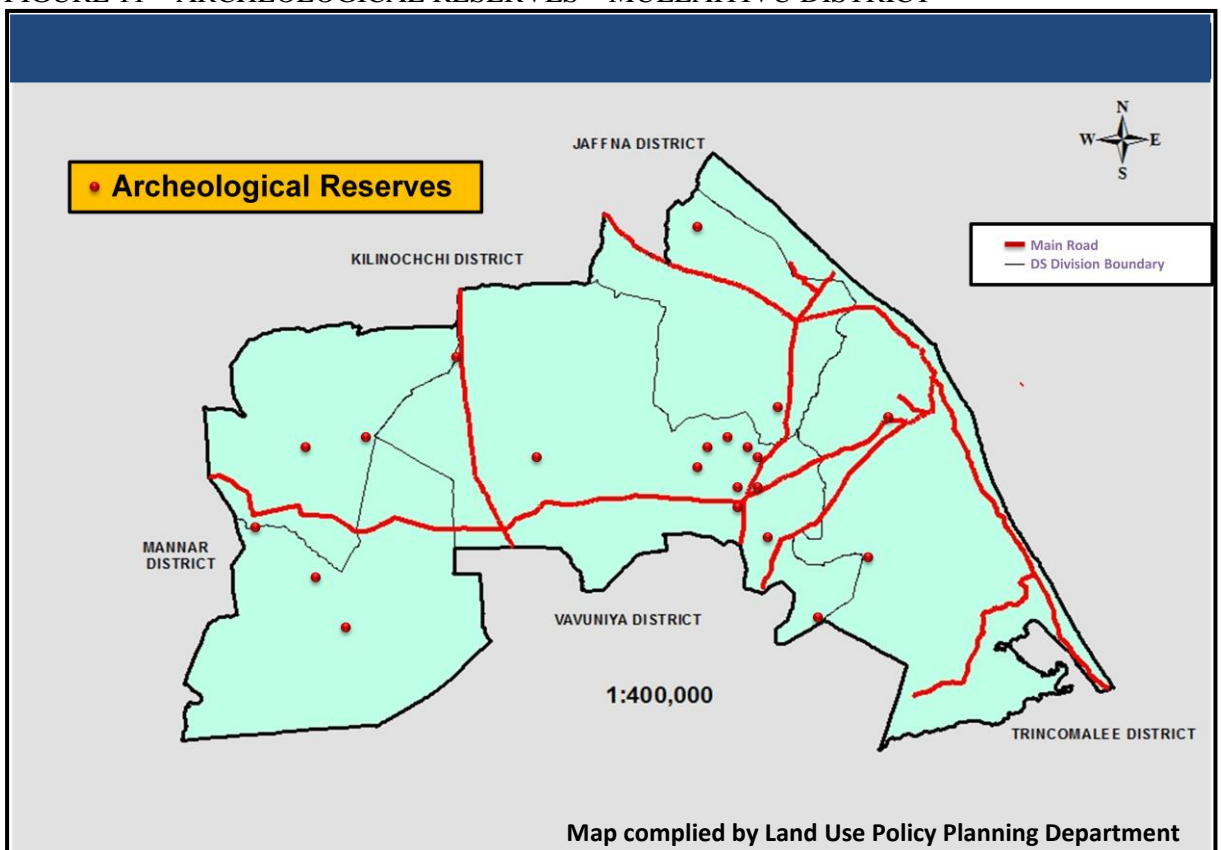




FIGURE 12 – SAND DUNES/SANDY AREA – MULLAITIVU DISTRICT



Map compiled by Land Use Policy Planning Department

## Presently Protected areas

**Table 11 - Forest Reserves**

Areas Presently protected and conserved	GNDs	Issues (if available)	Responsible Agencies	Remarks
(a)Oddusuddan				
•Koolamurippu(B)	Mu/68 - Koolamurippu	Encroachment Under utilized	DS, Forest department	Gazetted
•Thanduvan	Mu/125-Thanduvan			
•Iranaimadu	Mu/72 - Ampagamam			
•Mankulam	Mu/73 - Mankulam			
•Vddakachchi	Mu/75 - Thirumurukandy			
•Panikkankulam	Mu/74 - Panikkankulam			
•Sammalankulam	Mu/62- Kathaliyarsamanankulam			
•Aalavedduvan				
(b) Puthukkudiyiruppu				
	Mu/41-Puthukkudiyiruppu West	Encroachment Under utilized	DS, Forest department	Gazetted
• Vernavil	Mu/41-Puthukkudiyiruppu West			
• Kaiveli	Mu/45- Vallipunam,			
•Theravil	Mu/47-Udaiyarkaddu South			
•Puthukkudiyiruppu	Mu/36-Puthukkudiyiruppu East			
(c) Manthai East				
• Moonrumurippu	Moonrumurippu, Naddankandal, Siraddikulam	Misuse (Tree Cutting)	D.S,Forest Department	Gazetted
•Vannivilankulam	Vannivilankulam			
(d) Thunukkai				
•Akkarayan	Puththuvedduvan	Boundary Marking	D.S,Forest Department all Relative Department	Gazetted
•Thunukkai	Puththuvedduvan	Grazing land clear		
	Ampalaperumalkulam	Gravel mining		
	Thenniyankulam	Coconut Cultivation		
	Palayamurikandi			
	Koddaikaddiyakulam			
	Uyilankulam			
(e) Maritimepattu				
• Nagancholai	Kumulamunai west & Mathavalasingan kulam	Encroachment	DS, Forest Department	Gazetted
• Koolamurippu (A)	Mulliyawalai west & centre	Underutilized		
• Andankulam	Kumulamunai east	Gravel mining		
• Mulliyawalai	Mulliyawalai south			
• Veppankulam	Kokkuthoduwai north			
• Thannimurippu	Thannimurippu			

**Table 12 - Historical Reserves**

<b>Areas Presently protected and conserved</b>	<b>Extent (Ha)</b>	<b>GNDs</b>	<b>Current Status</b>
<b>(a) Oddusuddan</b>			
•Oddusuddan Thaanthonreswarar Sivan Temple	2	Mu/61- Oddusuddan	Gazetted
•Thirumurikandy Pillaiyar Temple	1	Mu/75 -Thirumurikandy	Gazetted
•Ampakamam Mammil pillaiyar Temple	1	Mu/72- Ampahamam	Regd
•Katchilaimadu Nagathampiran	2	Mu/59 - Katchilaimadu	Regd
•Ithimadu Nagathampiran	1	Mu/126 - Periyathimadu	Regd
•Othiyamalai Pillaiyar Kovil	0.5	Mu/ 123 - Othiyamalai	Regd
•Muthaiyan kaddu kulam Pillaiyar kovil	1	Mu/55- Muthaiyankaddu	Regd
•Panaiyandan Nagathampiran Kovil	1	Mu/62- Kathaliyarsamanankulam	Regd
<b>(b) Maritimepattu</b>			
•Vattapalai Amman Temple	7.89	Mu/101- Vattapalai	Gazetted
•Punitha Anthoniyar Temple	1.01	Mu/87- Alampil South	Gazetted
•Kaddavinayagar Temple	0.86	Mu/106- Mulliyawalai Center	Gazetted
•Kappal eanthiya madha Church	0.5	Mu/	
•Tsunami Memorial Place	0.99	Mu/	
•St.Joseph Church	0.6	Mu/	
<b>(c) Puthukkudiyiruppu</b>			
•Ulakalantha Pillaiyar Temple	0.5	Mu/41- Puthukkudiyiruppu West	Regd
•Kanthasamy Temple	0.5	Mu/41- Puthukkudiyiruppu West	Regd
•Mannakandal Kerudamadu Temple	1	Mu/54- Mannakandal	Regd
•Thevipuram Sri Nagathampiran Temple	0.5	Mu/44- Thevipuram	Regd
•Viswamadu Athisaya Vinayagar Temple	0.3	Mu/49- Viswamadu West	Regd
•St.Joseph Church	0.4	Mu/36- Puthukkudiyiruppu East	Regd
<b>(d) Manthai East</b>			
•Vannivilankulam Muththumari Amman	2.46	Mu/ 01 - Vannivilankulam	Gazetted
•Kollaiivilankulam Nagahampiran Kovil	1.5	MU/06 - Palinagar	Regd
•Sivapuram Sivan Kovil	1.6	Mu/05 - Sivapuram	Regd
•Kalliruppu Amman Kovil Vannivilankulam	1.5	Mu/01 - Vannivilankulam	Regd

Regd – Registered

**Table 12 - Historical Reserves**

<b>Areas Presently protected and conserved</b>	<b>Extent (Ha)</b>	<b>GNDs</b>	<b>Gazetted or not</b>
(e) Thunukkai			
•Aninsiyankulam Pillaiyar kovil	0.5	Mu/31- Aninsiyankulam	Regd
•Mallavi murukan kovil	0.5	Mu/41- Puthukkudiyiruppu West	Regd
•Mallavi sivan kovil	1	Mu/31- Aninsiyankulam	Regd
•Palayamurikandi pillaiyar kovil	0.5	Mu/44- Palayamurikandi	Regd
•Uyilankulam pillaiyar kovil	0.4	Mu/18- Uyilankulam	Regd
•Pandiveddi pillaiyar kovil	0.4	Mu/16- Thunukkai	Regd
•Kalvilan pillaiyar kovil		Mu/17- kalvilan	Regd

Regd – Registered

**Table 13 - Archeological Reserves**

<b>Areas Presently protected and conserved</b>	<b>EXTENT (Ha)</b>	<b>GNDs</b>	<b>Gazetted or not</b>
(a) Oddusuddan	0.5	Ampakamam	Gazetted
•Kulamottai Monument	-	Muththayankaddu	Gazetted
•Vaddakalikulam Lake	1	Muththayankaddu	Gazetted
Eastern Monument*			
•Muthaiyankaddukulam Monument	1	Thirumurikandy	Gazetted
•Kokkavil Monument	0.5	Katchilaimadu	Gazetted
•Karchchilaimadu (peraru) Monument	1	Thaddayamalai	Gazetted
•Thaddaiyamalai Monument			
	2.5	Pandarawanni	Gazetted
•Pandaravanni treasure ground Monument	0.5	Katchilaimadu	Gazetted
•Human statue & inscriptions land near Katchchilaimadu Lake	0.2	Katchilaimadu	Gazetted
R13 Channel			
•Stone Monument near Katchchilaimadu Kovil	2	Oddusuddan	Gazetted
•Oddusuddan			
Thanthonreeswaram Kovil	1	Kanagaraththinapuram	Gazetted
•Kanagarathnapuram Monument	1	Peraru	Gazetted
•Peraru Old Dam*			
•Tholichchimalai Archeology Monument	0.5	Thanduvan	Gazetted
•Othiyamalai archeology Monument		Othiyamalai	
(b) Puthukkudiyiruppu	2	Suthanthirapuram	Gazetted
•Suthanthirapuram	1	Mannakandal	Gazetted
•Mannakandal			
(c) Manthai East	7	Moonrumurippu	Gazetted
•Panankamam Sivan Kovil	1	Karumpulliyam	Gazetted
•Srigowry Amman kovil			
(d) Thunukkai	1	Kalvilan	Gazetted
•Sivapuram Sivan kovil area	5	Uyilankulam	Gazetted
•Neeravi mottai site area	1	Iyankankulam	Gazetted
•Iyankulam valathukarai area			
(e) Maritimpattu	10.02	Kumarapuram	Gazetted
•Kumarapuram Murukan Temple	1.12	Thannimurippu	Gazetted
•Kurunthormalai Aaiyan Temple	0.99	Vannankulam	Regd
•Tsunami Memorial Church	0.6	Vannankulam	Regd
•S.t Joseph's Church	1.2	Kovilkudiyiruppu	Regd
•Kappal enthija matha Church			

Regd – Registered

## 2. Areas where changes or improvements are required

### (a) Additional Areas Recommended For Protection

Field investigations revealed that there were other areas besides the currently protected areas that need to be protected. These areas have to be protected to ensure the sustainable existence of religious, cultural, archeological sites and the protection of environment and the bio-diversity. As shown in figure 13 Wetlands, Beach, Bird Sanctuary and Wild Life Reserves and Corridors are found as additional areas recommended for protection in the District.

Further field investigations by the relevant Institutions are needed to confirm the recommendations given in this plan. The information including the recommendations on additional areas that need to be protected are given in the Table 14 and their locations are given in the Figure 13-15

Central Environmental Authority and Forest Department has a major role in protecting these areas.

FIGURE 13 – PROPOSED AREA FOR PROTECTION/ CONSERVATION

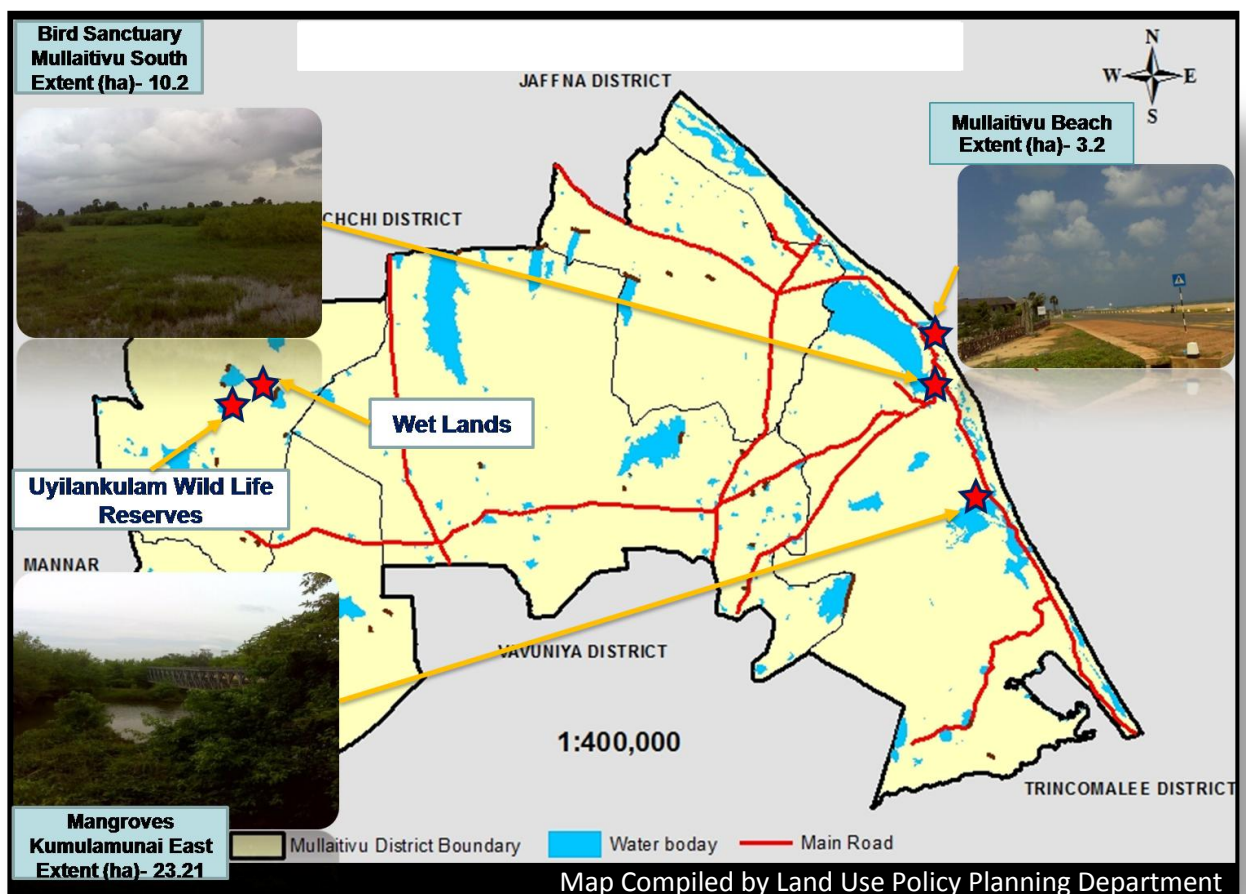


Table 14 - Additional areas for Protection - Mullaitivu District

<b>New areas proposed for protection / conservation</b>	<b>Extent (Ha)</b>	<b>GND</b>	<b>Ownership</b>	<b>Reasons for protection and conservation</b>	<b>Responsible Agency</b>
Wetlands (Marsh, Mangroves)  (MARITIMEPATTU DS)	1514	Mullivaikkal West Kumulamunai East Kokilai West Cemmalai West AmpalavanPokkanai	State owned (Presently under D.S.)	Wetland (Environmental Sensitive Area)	Central Environment Authority
Mullaitivu Beach  (MARITIMEPATTU DS)	3	Manalkudiyiruppu	State owned (Presently under D.S.)	Recreational Area	PS / Tourist Development Authority CCD
Bird Sanctuary (Najaru Lagoon sites)  (MARITIMEPATTU DS)	21 13 10 5 25	Kokkuthoduvai South Chemmalai West MullaitivuSouthKar unaddukerny Kokkilai West	State owned (Presently under D.S.)	Migratory visiting place	Wild life Department
Wild Life Reserves and Corridors  (THUNUKKAI DS)	50	Uyilankulam	State owned (Presently under D.S.)	Important area for Wild Life	Wild life Department
<b>Total</b>	<b>1641</b>				

FIGURE 14 – WILD LIFE RESERVES AND CORRIDORS

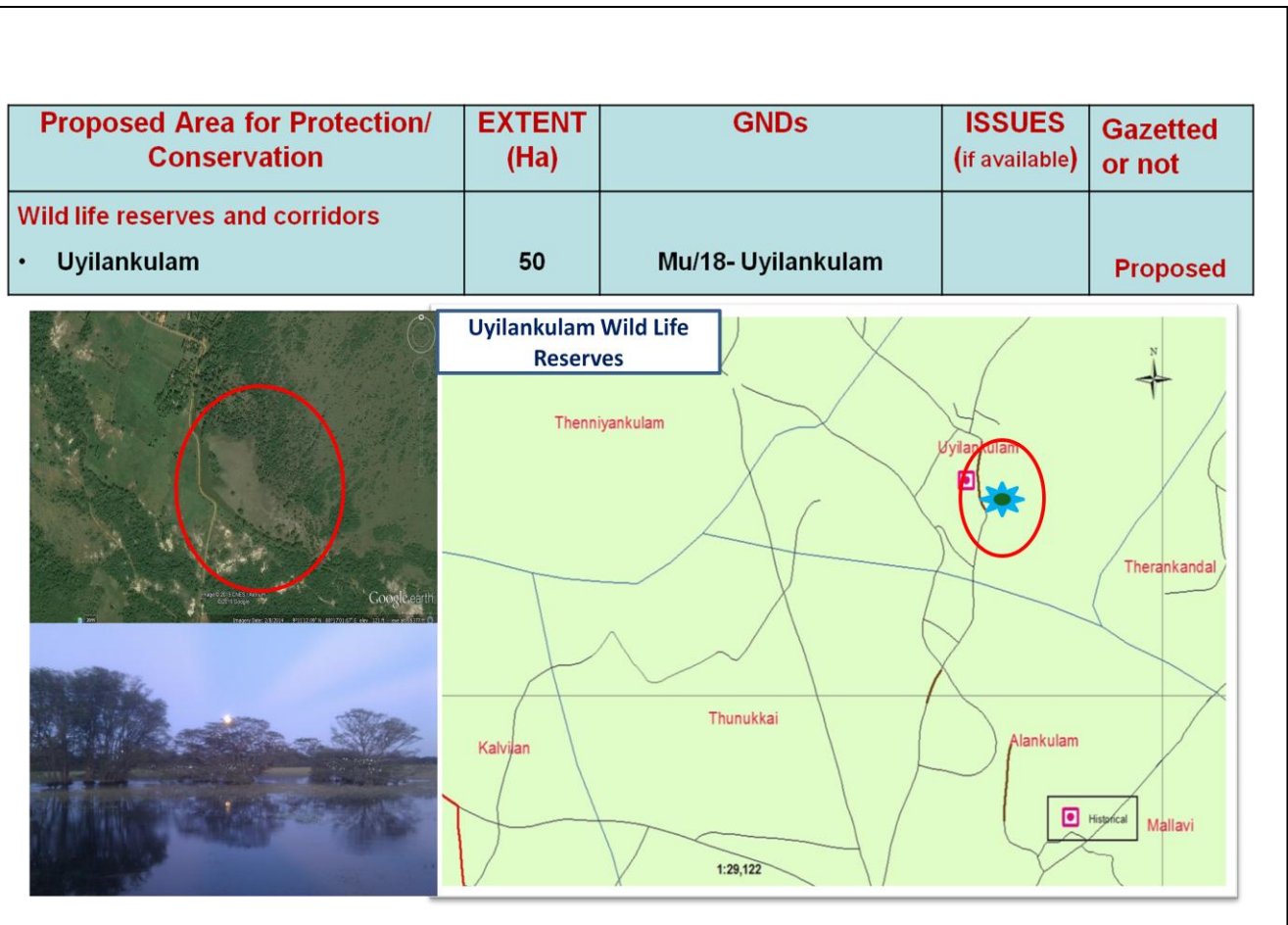
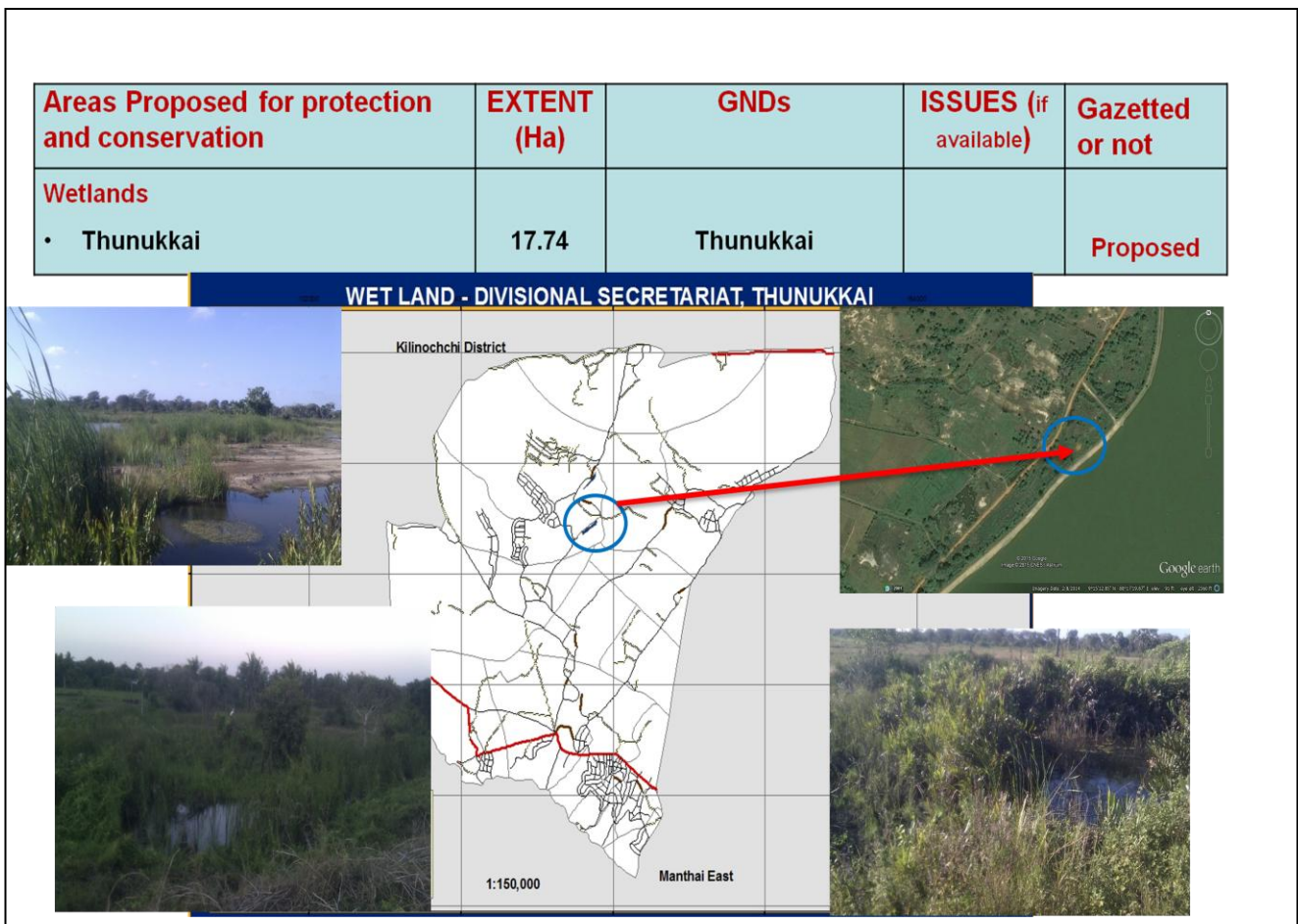


FIGURE 15 – WETLANDS





### (b) Underutilized Home Gardens

There are two types of home gardens available in the District i.e. (1) home gardens where the present status are satisfactory and can be continued the existing practice without much improvement, (2) home gardens that are underutilized due to various reasons and could be improved.

There are several major issues pertaining to the underutilized home gardens and contribute to low productivity. The common issues that were identified are;

- (a) Unavailability of water
- (b) Damage of crops from wild animals
- (c) Inadequate Technical know-how
- (d) Presence of degraded lands/areas
- (e) Lack of capital

The land use mapping study reviews that the total extent of the all home gardens in 16867ha. Due to above motioned reasons 84% (14199ha) of the home gardens are underutilized. The divisions in which these home gardens are found, total extent, reasons for underutilization and recommendations are given in the Table 15 and their locations are given in the Figure 16

FIGURE 16 - HOME GARDEN THAT NEED IMPROVEMENTS - MULLAITIVU DISTRICT

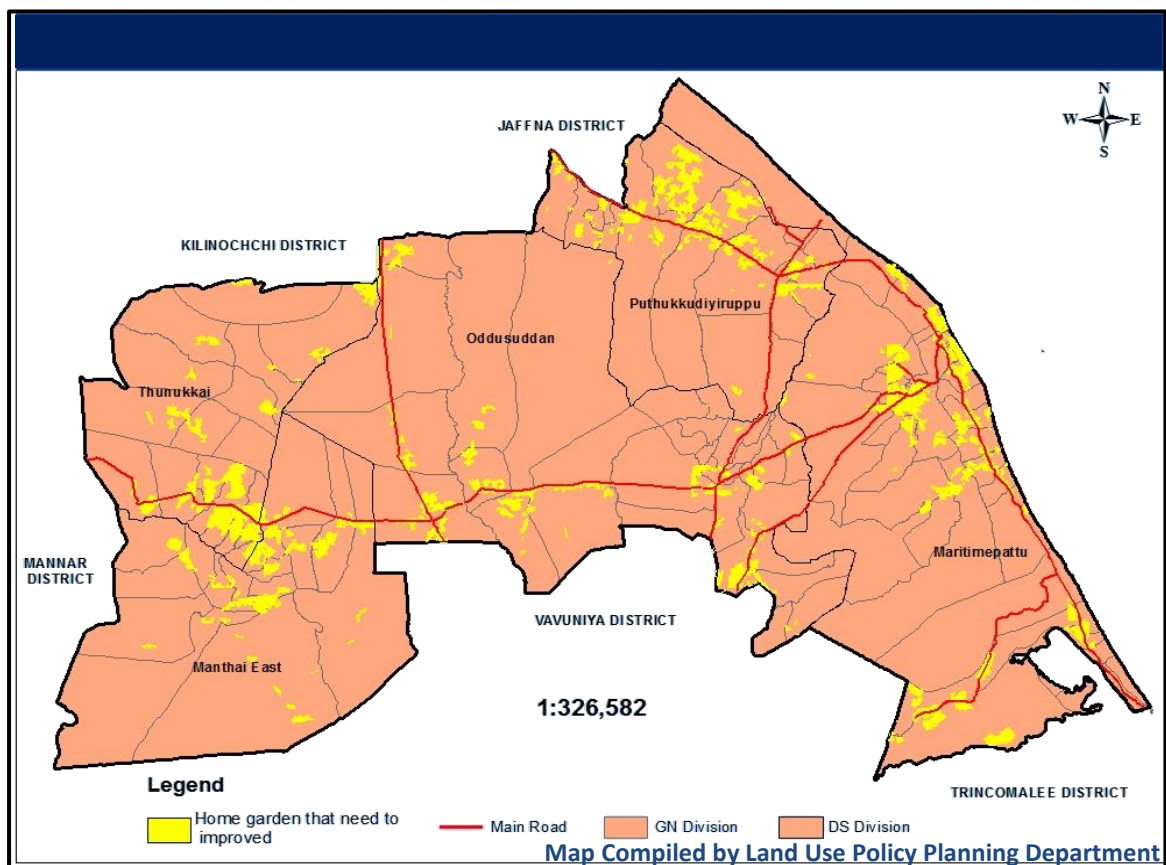


Table 15 - Home Gardens that need improvements -Mullaitivu District.

<b>D.S Division</b>	<b>Total extent (ha)</b>	<b>Reason for under utilization</b>	<b>Recommendations</b>
Maritimepattu	4153	Water Scarcity Poor drainage. Infertile soil Absentee landlord	<ul style="list-style-type: none"> <li>• Introduce micro irrigation systems</li> <li>• Improve the drainage system</li> <li>• Introduce good Agriculture practices(GAP)</li> <li>• Improve Infrastructure facility</li> <li>• Provide Marketing Facilities</li> </ul>
Puthukkudiyiruppu	3007		
Oddusuddan	2791		
Thunukkai	2354		
Manthai East	1894		
<b>Total</b>	<b>14199</b>		

Table 16 - Underutilized Home gardens their total extent, reasons for underutilization and recommendations for the improvement

<b>PUTHUKKUDIYIRUPPU D.S. DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under-utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
01	Ananthapuram Mu/40	42	Water Scarcity Absentee Landlord Socio Economic Problems Infertile soil Wild life animals Problems Poor Drainage system	Provide micro - irrigation Provide infrastructure facility Conduct further study Apply agronomic practices Establish permanent Fences Improve drainage system	Department of Agriculture Department of Agrarian Development PS Department of Irrigation Department of Wild Life DS
02	Kombavil Mu/42	145			
03	Malligaitheevu Mu/39	103			
04	Manikkapuram Mu/51	61			
05	Mannakandal Mu/54	27			
06	Manthuvil Mu/38	103			
07	Puthukkudiyiruppu East Mu/36	104			
08	Puthukkudiyiruppu West Mu/41	210			
09	Sivanagar Mu/37	124			
10	Suthanthirapuram Mu/48	855			
11	Theravil Mu/52	80			
12	Thevipuram Mu/44	490			
13	Udayarkaddu North Mu/46	144			
14	Udayarkaddu South Mu/47	206			
15	Vallipunam Mu/45	126			
16	Valluvarpuram Mu/53	31			
17	Visuvamadu East Mu/50	93			
18	Visuvamadu West Mu/49	63			
	<b>Total</b>	<b>3007</b>			

Table 16 - Underutilized Home gardens their total extent, reasons for underutilization and recommendations for the improvement

<b>ODDUSUDDAN D.S. DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under- utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
01	Ampakamam mu/72	122	Water Scarcity	Provide micro - irrigation	Department of Agriculture
02	Ganeshapuram Mu/64	32			
03	Idupuram Mu/76	262			
04	Kanagarathinapuram mu/56	0.5			
05	Karuvelankandal Mu/66	106			
06	Katchilaimadu Mu/59	6			
07	Kathliyarsamalankulam Mu/62	82	Absentee Landlord	Provide infrastructure facility	Department of Agrarian Development
08	Koolamurippu Mu/68	59	Socio Economic Problems	Conduct further study	PS
09	Manavalanpaddamurippu Mu/69	168			
10	Mankulam Mu/73	407			
11	Oddusuddan Mu/61	166	Infertile soil	Apply agronomic practices	Department of Irrigation
12	Olumadu Mu/71	212			
13	Othiyamalai Mu/123	12			
14	Palampasi Mu/127	217			
15	Panikkankulam Mu/74	128	Wild life animals Problems	Establish permanent Fences	Department of Wild Life
16	Periyaithimadu Mu/126	29			
17	Periyakulam Mu/124	7			
18	Puliyankulam Mu/67	75	Poor Drainage system	Improve drainage system	DS
19	Thadayadampan Mu/70	239			
20	Thanduwan Mu/125	287			
21	Thirumurukandy Mu/75	140			
22	Vithyapuram Mu/65	35			
	<b>Total</b>	<b>2791.5</b>			

Table 16 - Underutilized Home gardens their total extent, reasons for underutilization and recommendations for the improvement

<b>MANTHAI EAST D.S. DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under-utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
01	Ampaipuram	40	Lack of Water	Introduce micro - irrigation	DS LUPPD Department of Agriculture Department of Agrarian Development, Irrigation dept, Land Commissioner General Dept., Mediation board Local Govt.
02	Karumpuliyam	154			
03	Kollavilankulam	87			
04	Moonrumurippu	342			
05	Naddankandal	168	Lack of Capital	Provide financial assistance	
06	Oddaruttakulam	60			
07	Ponnagar	1	Low Yield	Improve Agronomic practices	
08	Poovarasankulam	422			
09	Selvapuram	26	Tennurial Problems	Provide legal advice	
10	Siraddikulam	103			
11	Vannivilankulam	198	damage from Stray animals	Enforce legal action	
12	Vinayakapuram	293			
			Abandoned due to conflict	Provide infrastructure facilities	
	<b>Total</b>	<b>1894</b>			

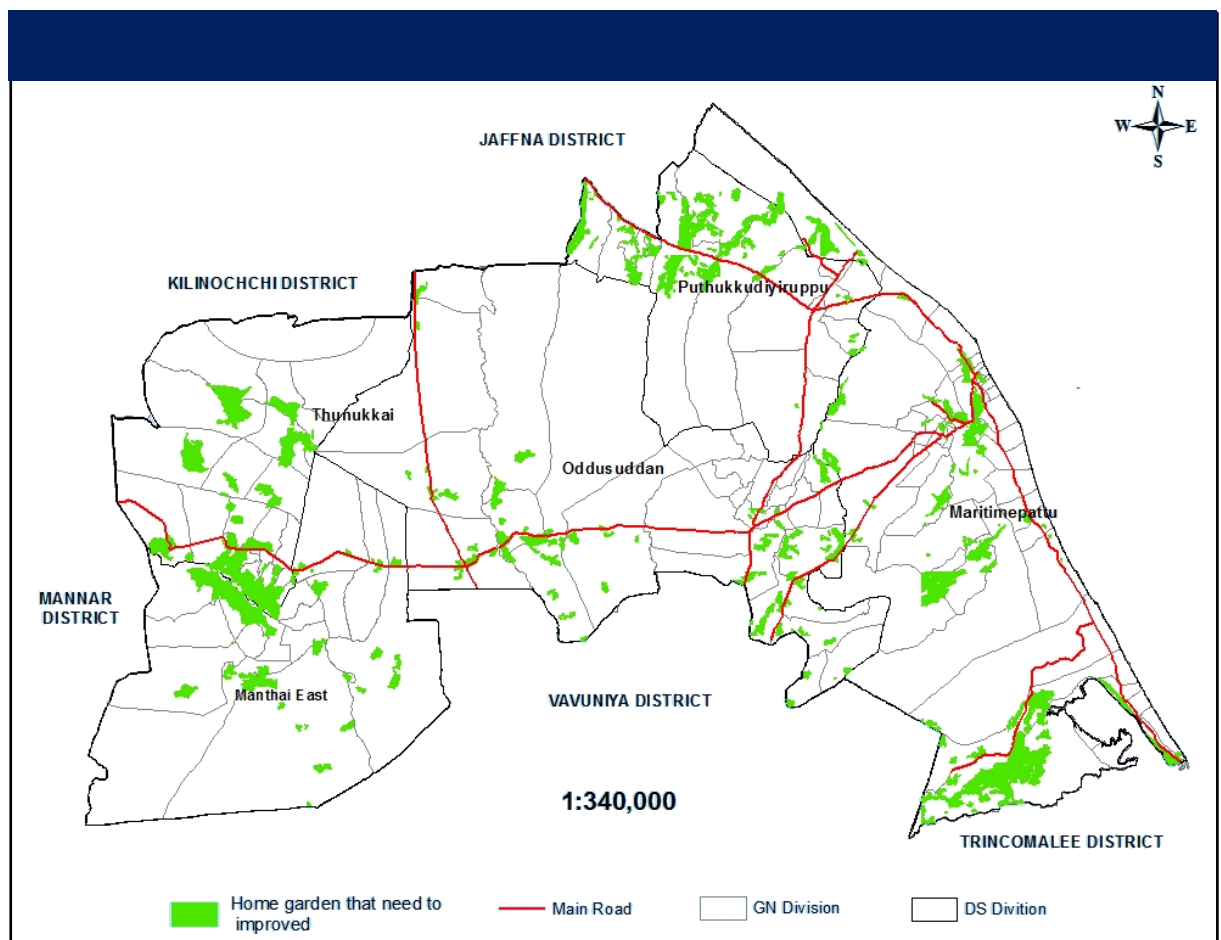
### (C) Underutilized Agricultural Lands

The issues of paddy lands, field crops and plantation crops are presented separately.

#### Underutilized Paddy Lands

Total extent of paddy lands in the District are 23883ha and there are 16605ha (69%) of paddy lands are underutilized. Most of the paddy lands are were cultivated only during one season due to either lack of water mainly due to the collapse of irrigation structures or excess water (inundation) due to located at the lower elevation and salt water intrusion. Some of the paddy lands may degraded resulting low yield. In addition there are several socio-economic reasons for low yield e.g. high labour costs, shortage of labour, high cost of inputs etc. These factors will vary from farmer to farmer. The information about the underutilized paddy lands are given in the Table 17 and their locations are shown on the Figure 17

FIGURE 17 – PADDY LANDS THAT NEED IMPROVEMENTS - MULLAITIVU DISTRICT



Map Compiled by Land Use Policy Planning Department

Table 17 -Underutilized Paddy lands - Mullaitivu District.

<b>D.S Division</b>	<b>Total extent (ha)</b>	<b>Reason for under utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies</b>
1.Maritimepattu	6599	<ul style="list-style-type: none"> <li>• Salinity</li> <li>• Inadequate water</li> <li>• Low yield</li> <li>• High cost for fencing</li> </ul>	<ul style="list-style-type: none"> <li>• Improve drainage system</li> <li>• Introduce salt tolerant</li> <li>• Introduce crop rotation</li> <li>• Promote use of Organic Fertilizer</li> <li>• Introduction of live fences to protect the crop damage by stray animals</li> </ul>	DS ADD Agriculture Department Irrigation Department
2.Puthukkudiyiruppu	1570			
3.Oddusuddan	2794			
4.Thunukkai	2540			
5.Manthai East	3102			
<b>Total</b>	<b>16605</b>			

Table 18 - Underutilized paddy lands and main reasons for underutilization (Rain Fed)

<b>PUTHUKKUDIYIRUPPU D.S. DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under-utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
01	Ananthapuram Mu/40	10	Inadequate water	Introduce drought resistance crop Promote water conservation techniques	Department of Agriculture,  Department of Agrarian Development ,  PS, DS, Department of Irrigation
02	Malligaitheevu Mu/39	42			
03	Kombavil Mu/42	24			
04	Suthanthirapuram Mu/48	41			
05	Manthuvil Mu/38	1	Damage by Wild life	Promote to establish permanent fences	
06	Sivanagar Mu/37	18	Damage by stray animal	Legal Assistance should be taken	
07	Manikkapuram Mu/51	42			
08	Valluvarpuram Mu/53	12	Low yield	Introduce high yield varieties Provide use of organic fertilizer Crop rotation	
09	Vallipunam Mu/45	49	High cost for fencing	Provide financial assistance	
10	Thevipuram Mu/44	220			
11	Thevipuram Mu/44	43			
12	Vallipunam Mu/45	103	Traditional varieties	Introduce new high yield varieties	
	<b>Total</b>	<b>605</b>			



Table 18 - Underutilized paddy lands and main reasons for underutilization (Rain Fed)

<b>ODDUSUDDAN D.S. DIVISION</b>					
No.	G.N. Division	Extent (ha)	Reasons for the under-utilization	Recommendations	Responsible Agencies for the implementation
01	Periyaithimadu Mu/126	333			
02	Thirumurukanndy Mu/75	21			
	Total	354			
<b>MANTHAI EAST D.S. DIVISION</b>					
01	Ampalpuram	231	Inadequate water	Introduce drought resistance crop Promote water conservation techniques	
02	Karumpuliyam	72			
03	Kollavilankulam	192			
04	Moonrumurippu	213			
05	Naddankandal	319			
06	Oddaruttakulam	234	Absentee landlord	Provide infrastructure facilities	Department of Agriculture,
07	Palinagar	286			
08	Pandiyankulam	64			
09	Vinayakapuram	149	Damage by Wild life	Promote to establish permanent fences	Department of Agrarian Development ,
	Total	1760			
<b>MARITIMEPATTU D.S DIVISION</b>					
01	Kokkilai east	1	Damage by stray animal	Legal Assistance should be taken	PS,
02	Karunaddukerny	1			
03	Kokkthoduvai south	841	Low yield	Introduce high yield varieties Provide use of organic fertilizer Crop rotation	DS, Department of Irrigation
04	Kokkuthoduvai north	26			
05	Kokkuthoduvai center	567			
06	Shemmalai east	29	High cost for fencing	Provide financial assistance	
07	Shemmalai	31			
08	Uppumaveli	148			
09	Alampil north	117	Traditional varieties	Introduce new high yield varieties	
10	Alampil south	131			
11	Silawaththai	207	Socio Economic problems	Conduct Socio Economic Survey	
12	Silawaththai south	11			
13	Kallapadu south	82			
14	Kallapadu North	51			
15	vannankulam	16			
16	Mullaitivu south	32			
17	selvapuram	105			
18	Kovilkudiyiruppu	20			
19	Manalkudiyiruppu	4			
20	Mullaitivu town	6			

Table 18 - Underutilized paddy lands and main reasons for underutilization (Rain Fed)

<b>MARITIMEPATTU D.S DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under-utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
21	Mullivaikkai east	130	Inadequate water	Introduce drought resistance crop Promote water conservation techniques	Department of Agriculture, Department of Agrarian Development , PS, DS, Department of Irrigation
22	Mullivaikkai west	92			
23	Ampelavan pokkanai	3			
24	vattapalai	191			
25	Keppapilavu	129			
26	Mulliyawalai west	28			
27	Mulliyawalai north	30	Absentee landlord	Provide infrastructure facilities	
28	Putharikuda	46	Damage by Wild life	Promote to establish permanent fences	
29	Mulliyawalai center	32			
30	Mulliyawalai south	36	Damage by stray animal	Legal Assistance should be taken	
31	Mulliyawalai east	50			
32	Thanniyootu west	73			
33	Mamoolai	111	Low yield	Introduce high yield varieties Provide use of organic fertilizer Crop rotation with OFC	
34	Mathavalasingankulam	107			
35	Neeravipiddi east	16			
36	Higrapuram	37			
37	Kanukerni east	49	High cost for fencing	Provide financial assistance	
38	Kanukerni west	51			
39	Kumarapuram	202			
40	Kumulamunai west	75			
41	Kumulamunai east	109			
42	Kumulamunai center	47	Traditional varieties	Introduce new high yield varieties	
			Socio Economic problems	Conduct Socio Economic Survey	
	<b>Total</b>	<b>4070</b>			

Table 19 -Underutilized paddy lands and main reasons for underutilization (Irrigated)

<b>PUTHUKKUDIYIRUPPU D.S. DIVISION</b>					
No.	G.N. Division	Extent (ha)	Reasons for the under-utilization	Recommendations	Responsible Agencies for the implementation
01	Mannakandal Mu/54	5			
02	Puthukkudiyiruppu West Mu/41	11			
03	Theravil Mu/52	94			
04	Udayarkaddu North Mu/46	302			
05	Udayarkaddu South Mu/47	449			
06	Visuvamadu East Mu/50	104			
	Total	965			
<b>ODDUSUDDAN D.S. DIVISION</b>					
01	Ampakamam Mu/72	240	Abandoned due to conflict	Provide Infrastructure	D.S.,
02	Karuvellankandal Mu/66	27			
03	Kathaliyarsamalankulam Mu/62	161	Lack of water	Cultivate droughts resistance crops	LUPPD
04	Koolamurippu Mu/68	73			
05	Manavalanpaddamurippu Mu/69	156	Absentee landlord	provide financial assistance	Department of Agriculture ,
06	Mankulam Mu/73	137			
07	Olumadu Mu/71	510	Lack of capital	Introduce high yield varieties	Department of Agrarian Development,
08	Othiyamalai Mu/123	22			
09	Palampasi Mu/127	139	Low yield	Provide organic fertilizer	Irrigation dept,
10	Periyakulam Mu/124	44			
11	Puliyankulam Mu/67	36		Crop rotation	Land Commissioner General Dept.,
12	Thadayadampan Mu/70	595			
13	Thanduvan Mu/125	254			
14	Vithyapuram Mu/65	46			
	Total	2440			
<b>MANTHAI EAST D.S. DIVISION</b>					
01	Ampalpuram	40	Tennurial problems	Provide legal assistance	Local Govt.
02	Karumpuliyam	154			
03	Kollavilankulam	86	Stray animals problem	Legal action should be taken	
04	Moonrumurippu	342			
05	Naddankandal	168			
06	Oddaruttakulam	60			
07	Palinagar	1			
08	Pandiyankulam	43			
09	Ponnagar	1			
10	Poovarasankulam	421			
11	Selvapuram	26			
	Total	1342			

Table 19 -Underutilized paddy lands and main reasons for underutilization (Irrigated)

<b>MARITIMEPATTU D.S DIVISION</b>					
<b>No.</b>	<b>G.N. Division</b>	<b>Extent (ha)</b>	<b>Reasons for the under-utilization</b>	<b>Recommendations</b>	<b>Responsible Agencies for the implementation</b>
01	Siraddikulam	103			
02	Vannivilankulam	198			
03	Vinayakapuram	293	Abandoned due to conflict	Provide Infrastructure	D.S., LUPPD
04	Ampalpuram	40			
05	Karumpuliyam	154			
06	Kollavilankulam	86			
07	Moonrumurippu	342	Lack of water	Cultivate other seasonal crops	Department of Agriculture ,
08	Naddankandal	168			
09	Oddaruttakulam	59	Absentee landlord	Provide Infrastructure facilities	Department of Agrarian Development,
10	Palinagar	1			
11	Pandiyankulam	43	Lack of capital	provide financial assistance	Irrigation dept,
12	Ponnagar	1			
13	Poovarasankulam	421	Low yield	Introduce high yield varieties Provide organic fertilizer Crop rotation	Land Commissioner General Dept.,
14	Selvapuram	26			
15	Siraddikulam	103	Tennurial problems	Provide legal assistance	Local Govt.
16	Vannivilankulam	198			
17	Vinayakapuram	293	Stray animals problem	Legal action should be taken	
	<b>Total</b>	<b>2529</b>			

## Underutilized other Agricultural Lands

### Underutilized Field Crops

The other agricultural lands include lands devoted to field crops and plantation crops. Major Field crops cultivated in the District vegetable, Green Gram, Groundnuts and black grams. The study revealed that there are 1348ha of field crops are underutilized in the District. The reasons for underutilization are mainly water scarcity low marketing facilities and damage by stray animals. Figure 18 & Table 19 shows the type of field crops to be improved and their locations.

FIGURE 18 – FIELD CROP THAT NEED TO IMPROVEMENTS - MULLAITIVU DISTRICT

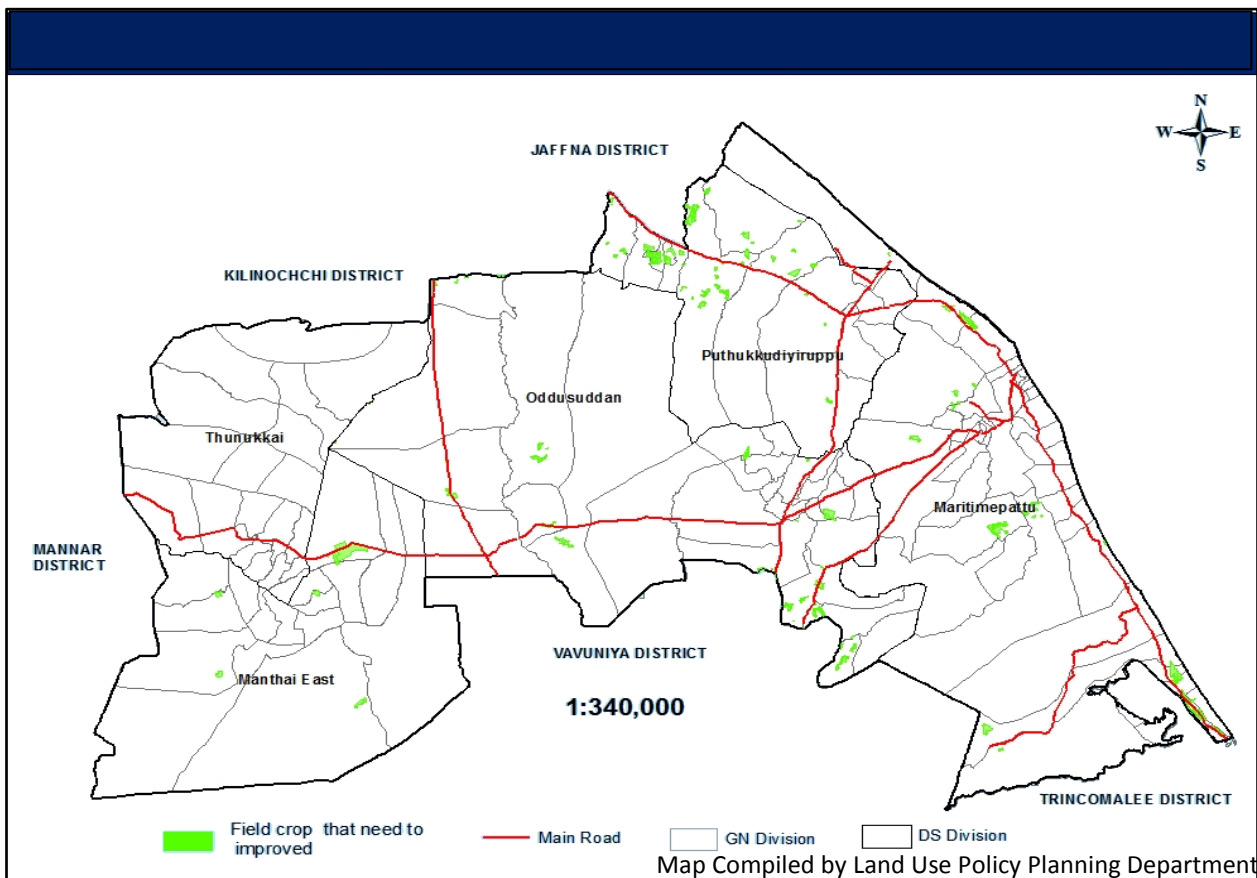


Table 20 - Field crop that need to improved in Mullaitivu District

DSD	Extent (ha)	Major crop	Reason for underutilization	Recommendation	Responsible Agencies
Maritimpeattu	456	Vegetable Green Gram Ground Nut Black Gram	1. Inadequate water 2. Lack of marketing facilities 3. Damage by Stray animals 4. Absentee landlord	-Rain water harvesting Practicing	DS ADD Agriculture Department
Puthukkudiyiruppu	497			-Proper agronomic practices	
Oddusuddan	358			- Provide Infrastructure facility	
Thunukkai	38			Paddocking	
Manthai East				1349	

### Underutilized Plantation Crops

There are considerable amount of plantation crops are underutilized. Coconut and Cashew plantation underutilized areas 3948ha and 164ha respectively. Study revealed that reasons for underutilization of these plantation crops are mainly lack of capital and low agronomic practices. Underutilized plantation crops, their locations, extent and reasons for underutilizations is given in Table 21 & Figure 19 & 20

Table 21 - Underutilized Plantation Crops (Coconut) -Mullaitivu District

DSD	Extent (ha.)	Reason for underutilization	Recommendations suggested by LUPPD	Responsible Agency/s
<ul style="list-style-type: none"> <li>• Maritimepattu</li> <li>• Puthukkudiyiruppu</li> <li>• Oddusuddan</li> <li>• Thunukkai</li> <li>• Manthsi East</li> </ul>	<ul style="list-style-type: none"> <li>1612</li> <li>2227</li> <li>12</li> <li>-</li> <li>95</li> </ul>	<ul style="list-style-type: none"> <li>• overage</li> <li>• Poor agronomic practices</li> <li>• Insect &amp; pest attack</li> <li>• Low cropping intensity</li> <li>• Lack of capital</li> </ul>	<ul style="list-style-type: none"> <li>• Re plantation</li> <li>• Introduce proper agronomic practices</li> <li>• Introduce proper pest control method</li> <li>• Inter cropping</li> <li>• Provide financial assistance</li> </ul>	<ul style="list-style-type: none"> <li>• Coconut cultivation board</li> <li>• Coconut development board</li> <li>• Agriculture Department</li> <li>• DS</li> </ul>
Total	3946			

Table 21 - Underutilized Plantation Crops (Cashew) -Mullaitivu District

DSD	Extent (ha.)	Reason for underutilization	Recommendations suggested by LUPPD	Responsible Agency/s
<ul style="list-style-type: none"> <li>• Maritimepattu</li> <li>• Oddusuddan</li> </ul>	<ul style="list-style-type: none"> <li>162</li> <li>1</li> </ul>	<ul style="list-style-type: none"> <li>• Low agronomic practices</li> <li>• Insect &amp; pest attack</li> <li>• Low cropping intensity</li> <li>• Absentee landlord</li> <li>• Lack of capital</li> </ul>	<ul style="list-style-type: none"> <li>• Re plantation</li> <li>• Introduce proper agronomic practices</li> <li>• Introduce proper pest control method</li> <li>• Inter cropping</li> <li>• Provide financial assistance</li> </ul>	<ul style="list-style-type: none"> <li>• DS</li> <li>• Cashew cultivation board</li> <li>• Agriculture Department</li> </ul>
Total	163			

FIGURE 19 – COCONUT LANDS THAT NEED IMPROVEMENTS - MULLAITIVU DISTRICT

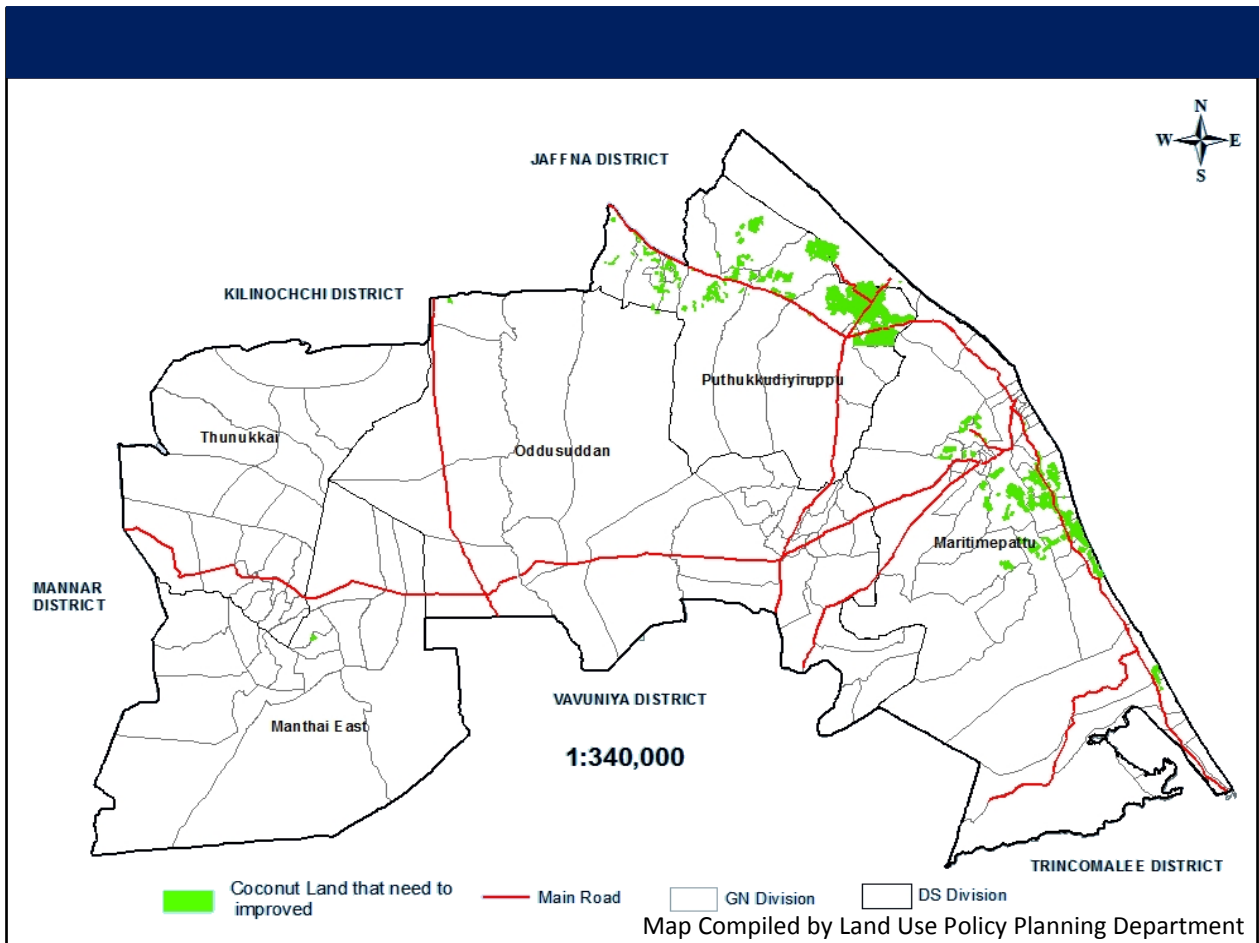
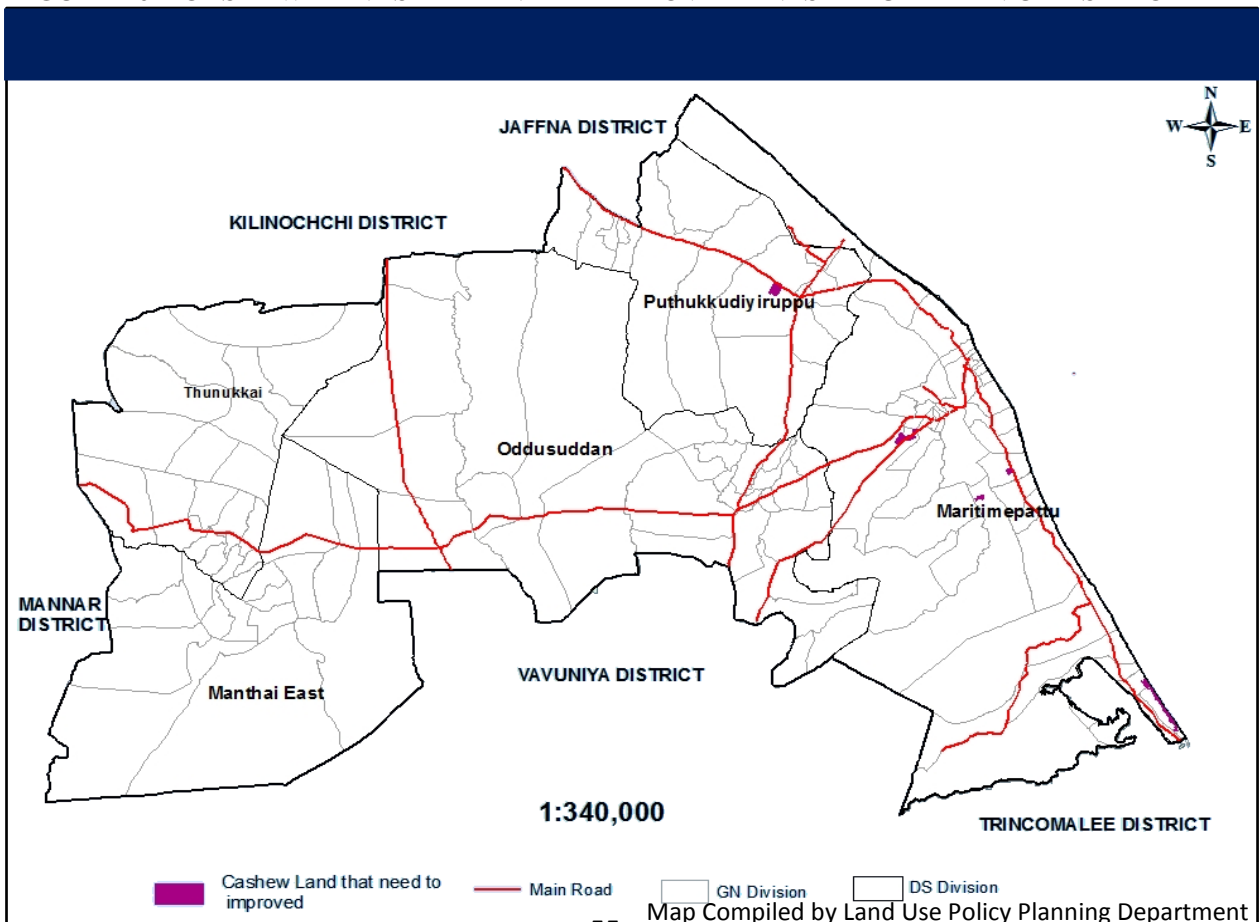


FIGURE 20 – CASHEW LANDS THAT NEED IMPROVEMENTS - MULLAITIVU DISTRICT



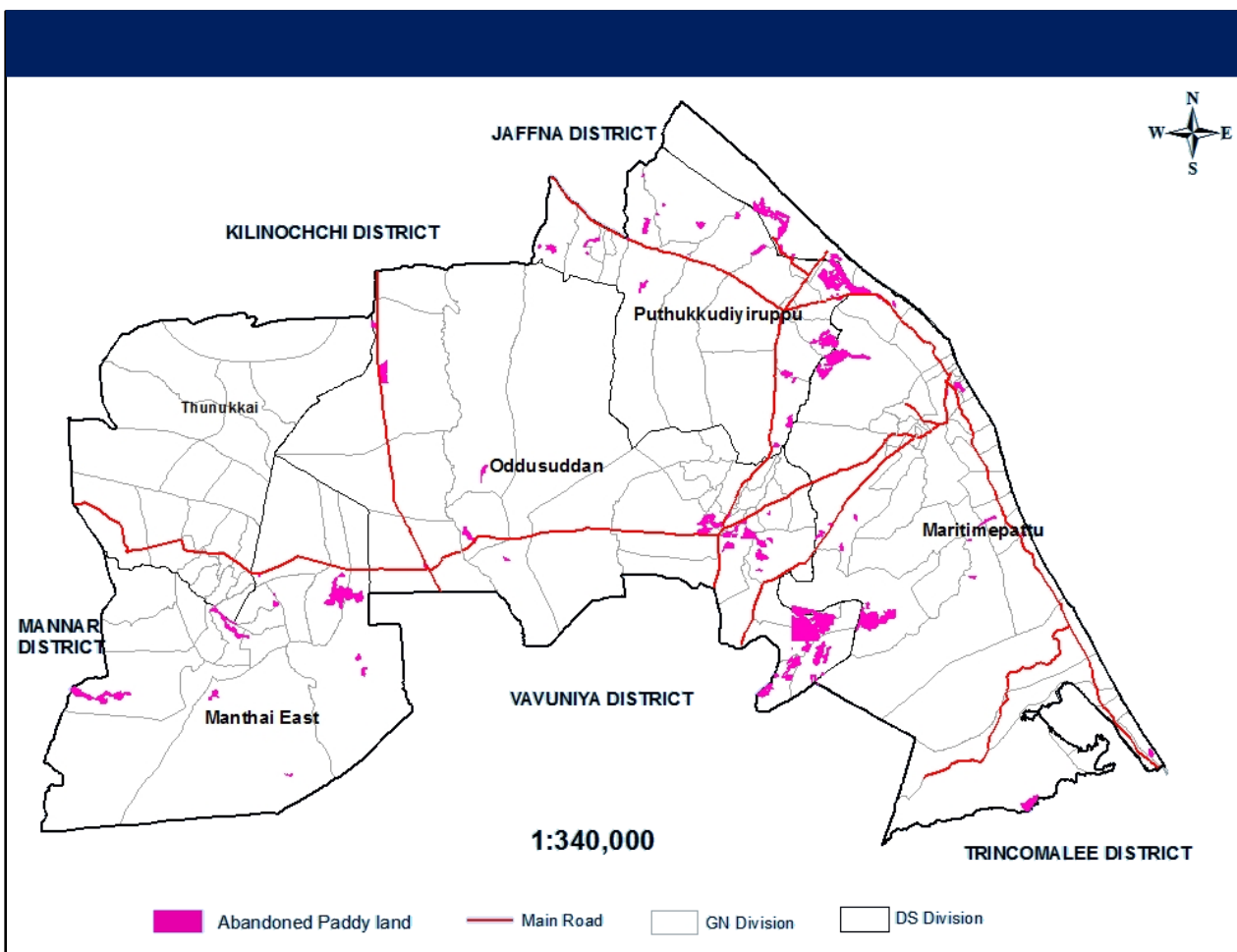
**(d) Abandoned agricultural Lands**

**Abandoned Paddy Lands**

There are 3159 ha of paddy lands are abandoned in the District which account 13 % of total paddy lands.

Some of the paddy lands in the District were abandoned due to physical limitations. The approximate extents and reasons for abandonment are given in the Table 22 and 23, their locations are shown in the Figure 21

FIGURE 21 – ABOUNDONED PADDY LANDS - MULLAITIVU DISTRICT



Map Compiled by Land Use Policy Planning Department



**Table 22 - Abandoned Paddy areas in Mullaitive district.**

<b>DS Division</b>	<b>Extent</b>
Maritimepattu	170
Puthukkudiyiruppu	571
Oddusuddan	1375
Thunukkai	577
Manthai East	466
	3159

**Table 23 - Abandoned paddy lands, their extents, reasons for abandonment and recommendations**

<b>No.</b>	<b>Reason for abandoned</b>	<b>Recommendations *</b>	<b>Proposed implementing agencies</b>
1.	Abandoned due to conflict	Conduct Awareness, Resettlement	D.S., ACAD
2.	Lack of water	Promote water conservation and attend to irrigation problems.	Department of Agriculture , Department of Agrarian Development, ADD
3.	Salinity problem	Improve the land / Introduce salinity resistant paddy varieties	Department of Agriculture
4.	Absentee Landlord	with the concern of land owner , see the possibility to give the land on lease for cultivation	D.S.
5.	Lack of capital	Awareness creation on agric. loans/subsidy systems.	Department of Agriculture , Department of Agrarian Development,
7.	Low yield	Introducing high yielding varieties, proper agronomic practices	Department of Agriculture , Department of Agrarian Development,
8.	Tennurial problems	Stay the case and solve the issue	Land Commissioner General Dept., D.S, Mediation board
9.	Stray animal problem	Legal actions should be taken by PS and FO's Low enforcement	Local Govt., Dept. Of Agrarian Development

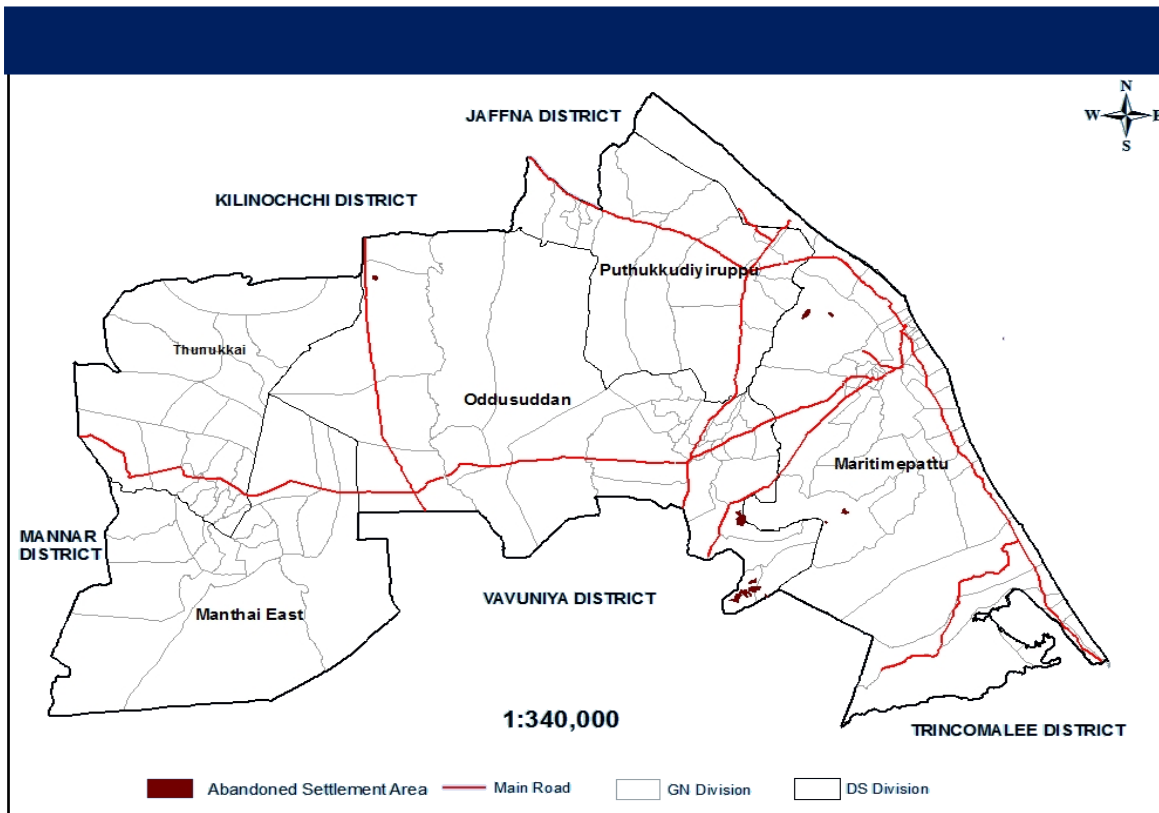
**(e) Abandoned Settlements**

There are several settlements abandoned mainly due to conflict situation in the past. Information about these settlements are given in the Table 24 and their locations are given in the Figure 22

Table 24 - Information about the abandoned settlements

GND	Extent (Ha.)	No of Families	Reasons for abandonment	Recommendation	Responsible Agencies
Maritimepattu (Aandankulam Thannimurippu)	99	72	Wild Life threats Displacement	- Establish electric fence	D.S Wild Life Department
Oddusuddan	183	168	Low rate of resettlement Low level of infrastructure	Provide water - storage facilities Provide proper infrastructure facilities	
Total	282	240	structure		

FIGURE 22 – ABANDED SETTLEMENT AREA - MULLAITIVU DISTRICT



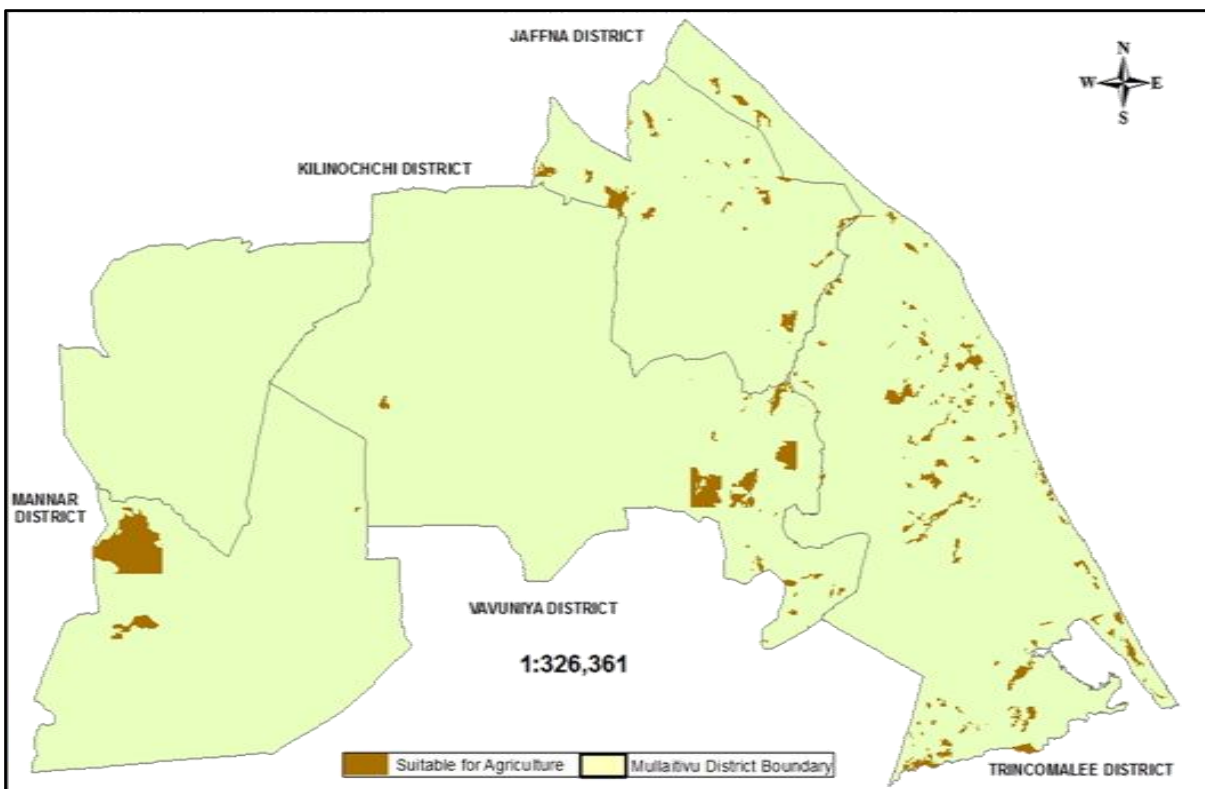
**(f) Unutilized Lands**

The unused state lands were identified and site assessments were done to determine their suitability for different purposes such as housing, agriculture, tourism and service centers. The extents and their suitability is given in the Table 25 and their locations are shown in the Figure 23

Table 25 – Unutilized Lands and their suitability for different Uses

G.N Division	Suitable for agriculture	Suitable for settlement	Suitable for forest plantation	Suitable for industry	Suitable for tourism	Suitable for Grazing	Total
Puthukkudiyiruppu	784		151	10	29	239	1213
Oddusudan	844	18		38		364	1264
Maritimepathttu	3286	117	272		48	127	3850
Manthai East	1628	39	38			485	2190
Thunukkai	366	70				350	786
Total	6908	244	461	48	77	1565	9303

FIGURE 23 – SUITABLE LANDS FOR AGRICULTURE



Map Compiled by Land Use Policy Planning Department

**Table 26 - Suitable land for Agriculture**

DS	GND	Geo-Coordinates	Extent (ha)	Ownership	present land use	Land Suitability Recommendation	
Manthai East	Vinayakapuram	141675, 432071	1038	State	scrub	paddy cultivation	
	Ponnagar	143161, 430693	590	State	scrub	Grazing livestock	
Puthukkudiyiruppu	Mannakandal	191531, 449411	96	state	scrub	paddy / Grazing livestock	
		194531, 454180	33	State	scrub	paddy cultivation	
	Kompavil	189756, 458308	88	State	scrub	Field crop	
		195951, 456760	48	State	scrub	Paddy	
	Udaiyarkaddu North	180765, 464546	67	State	scrub	Field crop	
		186641, 460805	27	State	scrub	Coconut	
	Theravil	178144, 458155	136	State	scrub	Field crop	
		179206, 458174	134	State	scrub	Field crop	
	Mallikaitheevu	193800, 453707	33	State	scrub	Field crop	
		173241, 460577	88	State	scrub	Field crop	
	Visuvamadu west	176321, 460350	34	State	scrub	Paddy	
		160544, 443067	4	State	scrub	Paddy	
	Oddusuddan	Kathaliyar samalankulam	184684, 435582	498	State	Natural Forest	Field crop
		Oddusuddan	185660, 437150	258	State	Natural Forest	Field crop
Keppapilavu		194611, 451681	41	State	scrub	Ground nuts	
		201761.9, 454864.6	37	Alienation	Scrub land	Coconut	
Maritempattu	Mullivaikkal East	200237.2, 454943.8	44	Private	Scrub land	Paddy	
	Mulliyawalai Center	198875.7, 443824.6	15	Alienation	Scrub land	Cashew	
	Mulliyawalai South	199282.9, 443573.2	81	Other state land	Scrub land	Cashew	
	Mulliyawalai West	200211.9, 444084.2	25	Alienation	Scrub land	High Land Crops	
	Shemmalai East	212205.5, 434007.5	75	Alienation	Scrub land	High Land Crops	
	Silawaththai	208675.1, 439297.6	62	Alienation	Scrub land	Coconut	
	Silawaththai South	206286.9, 445940.3	104	Private	Scrub land	Coconut	
	Thannimurippu	201391.3, 432874.5	80	Other state land	Scrub land	Paddy	
	Thanniyootu West	201317.9, 446449.9	56	Private	Scrub land	Coconut	

**Table 26.1 - Suitable land for Agriculture**

DSD	GND	Geo-Coordinates	Extent (ha)	Ownership	present land use	Land Suitability Recommendation
Maritemepattu	Uppumaveli	205207.6, 444224.3	59	Alienation	Scrub land	Coconut
	Alampil North	206483.6, 440795.0	192	Other state land	Scrub land	High Land Crops
	Chemmalai East	212538.8, 433701.5	220	Other state land	Scrub land	Already Alienated for Coconut or cashew
	Thannimurippu	198789.0, 434488.4	335	Other state land	Scrub land	Grazing
	Vattapalai	201638.9, 447590.7	45.	Private	Scrub land	Coconut
Thunukkai			366	State		Wood apple
Maritemepattu	Alampil North	208442.8, 441551.9	54.	Private	Scrub land	Cashew
	Alampil South	208628.6, 441057.3	23.	Private	Scrub land	Cashew
	Ampelavan Pokkanai	189096.8, 464567.6	148	Other state land	Scrub land	Coconut
	Karunaddukerny	217050.2, 424861.9	52.	Alienation	Scrub land	Cashew
	Keppapilavu	200106.0, 450478.9	90.	Alienation	Scrub land	High Land Crops
	Kokkilai East	219905.6, 421380.7	39	Alienation	Scrub land	Cashew
	Kokkilai West	219098.2, 421073.3	16	Alienation	Scrub land	High Land Crops
	Kokkuthoduvai Center	214910.6, 426897.6	110.	Alienation	Scrub land	High Land Crops
	Kokkuthoduvai North	214574.5, 429714.8	62.	Private	Scrub land	Coconut
	Kokkuthoduvai South	204605.1, 418247.9	623	Private	Scrub land	Paddy and Groundnut
	Kumarapuram	204368.7, 442639.4	139.	Alienation	Scrub land	Coconut
	Kumulamunai Center	205222.3, 435732.7	129.	Other state land	Scrub land	Paddy
	Kumulamunai East	204107.4, 432300.7	107.	Alienation	Scrub land	Paddy
	Kumulamunai West	202812.2, 438372.3	150.	Alienation	Scrub land	Cashew
	Mamoolai	201463.4, 444207.2	114.	Alienation	Scrub land	Coconut
	Mathavalasingankulam	201588.0, 440175.7	51.	Alienation	Scrub land	Paddy

FIGURE 24 – SUITABLE LANDS FOR SETTLEMENT - MULLAITIVU DISTRICT

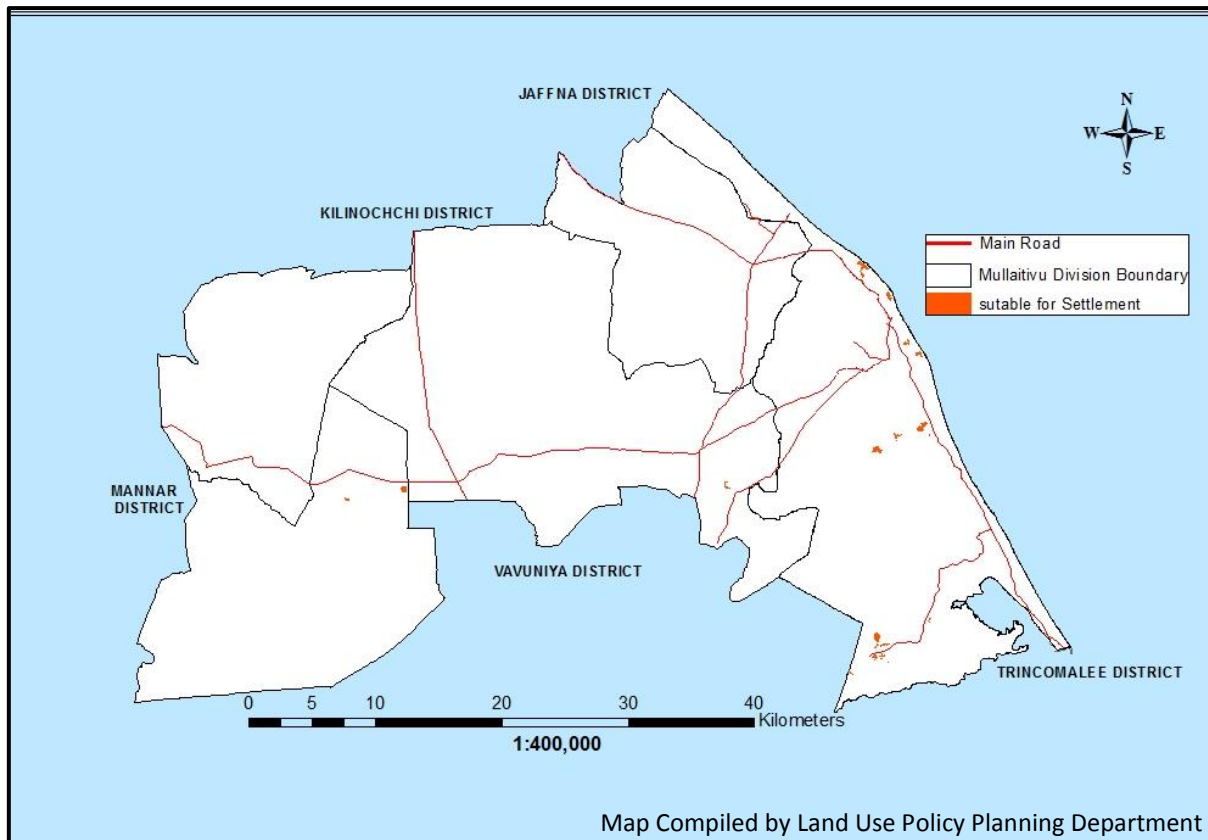


Table 27 – Suitable Lands for Settlements

DSD	GND	Geo-Coordinates	Extent (ha)	Ownership	present land use	Land Suitability Recommendation
Manthai East	Vannivilankulam	159084, 435020	26	state	scrub	Suitable for Settlement
	Kollavilankulam	153819, 433618	13	state	scrub	Suitable for Settlement
Maritimepattu	Kumulamunai West	203356, 438408	42	state	scrub	Suitable for Settlement
	Kumulamunai East	204628, 439615	15	state	scrub	Suitable for Settlement
	Silawaththai	206614, 447445	18	state	scrub	Suitable for Settlement
	Mullivaikkal East	201718, 454599	42	state	scrub	Suitable for Settlement
Oddusuddan	Petiyaiththimadu	189038, 434797	18	state	scrub	Suitable for Settlement
Thunukkai			70	state	scrub	Suitable for Settlement
Total			174			

FIGURE 25 - SUITABLE LANDS FOR FOREST PLANTATION

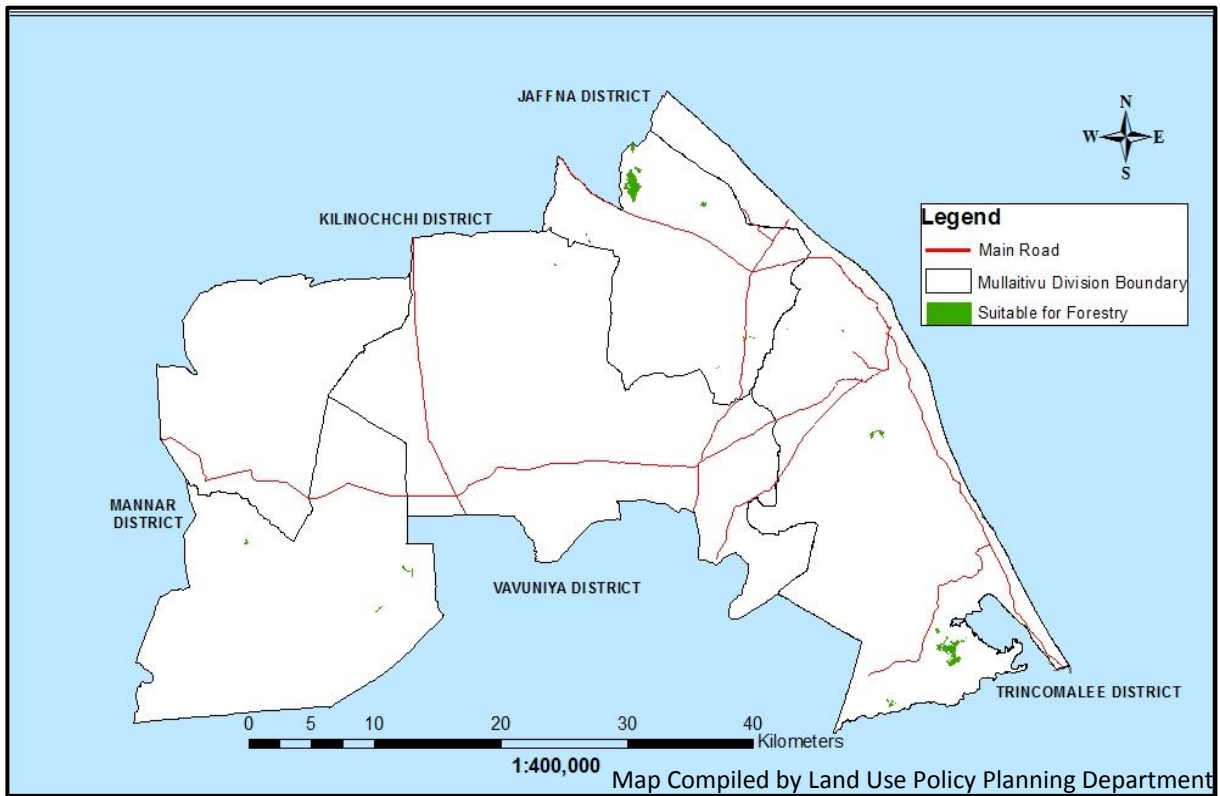


Table 28 – Suitable Lands for Forestry

DSD	GND_NAME	Geo-Coordinates	Extent (ha)	Ownership	Present land use	Land Suitability Recommendation
Maritimepattu	Kumarapuram	202742, 441278	37	Forest Dept.	Scrub	Suitable For Forest plantation
	Kokkuthoduvai North	208140, 421927	217	state	Scrub	
	Kokkuthoduvai South	208428, 423256	18	state	Scrub	
Puthukkudiyiruppu	Udaiyarkaddu North	179723, 463943	97	state	Scrub	
	Thevipuram	187149, 461724	18	state	Scrub	
	Puthukkudiyiruppu East	191159, 454720	14	state	Scrub	
	Viswamadu East	176345, 457973	7	state	Scrub	
	Mannakandal	190863, 449597	15	state	Scrub	
Manthai East	Vannivilankulam	158695, 428652	22	state	Scrub	
	Moondrumurippu	151414, 425430	5	state	Scrub	
	Ponnagar	144420, 431429	11	state	Scrub	

Table 29 - Suitable Lands for Industry

DSD	GND_NAME	Geo-Coordinates	Extent (ha)	Ownership	Present land use	Land Suitability Recommendation
Oddusuddan	Petiyakulam	192058,426446	18	State	scrub	Dairy Farm
	Panikkankulam	161497,441986	10	State	scrub	.....
	Mankulam	162638,435395	10	State	scrub	.....
Puthukkudiyiruppu	Puthukkudiyiruppu East	191166,454473	6	State	scrub	Expanded of Garment Factory
	Kompavil	190371,456425	4	State	scrub	Industrial Garden
Total			48			

FIGURE 26 –SUITABLE LANDS FOR INDUSTRY

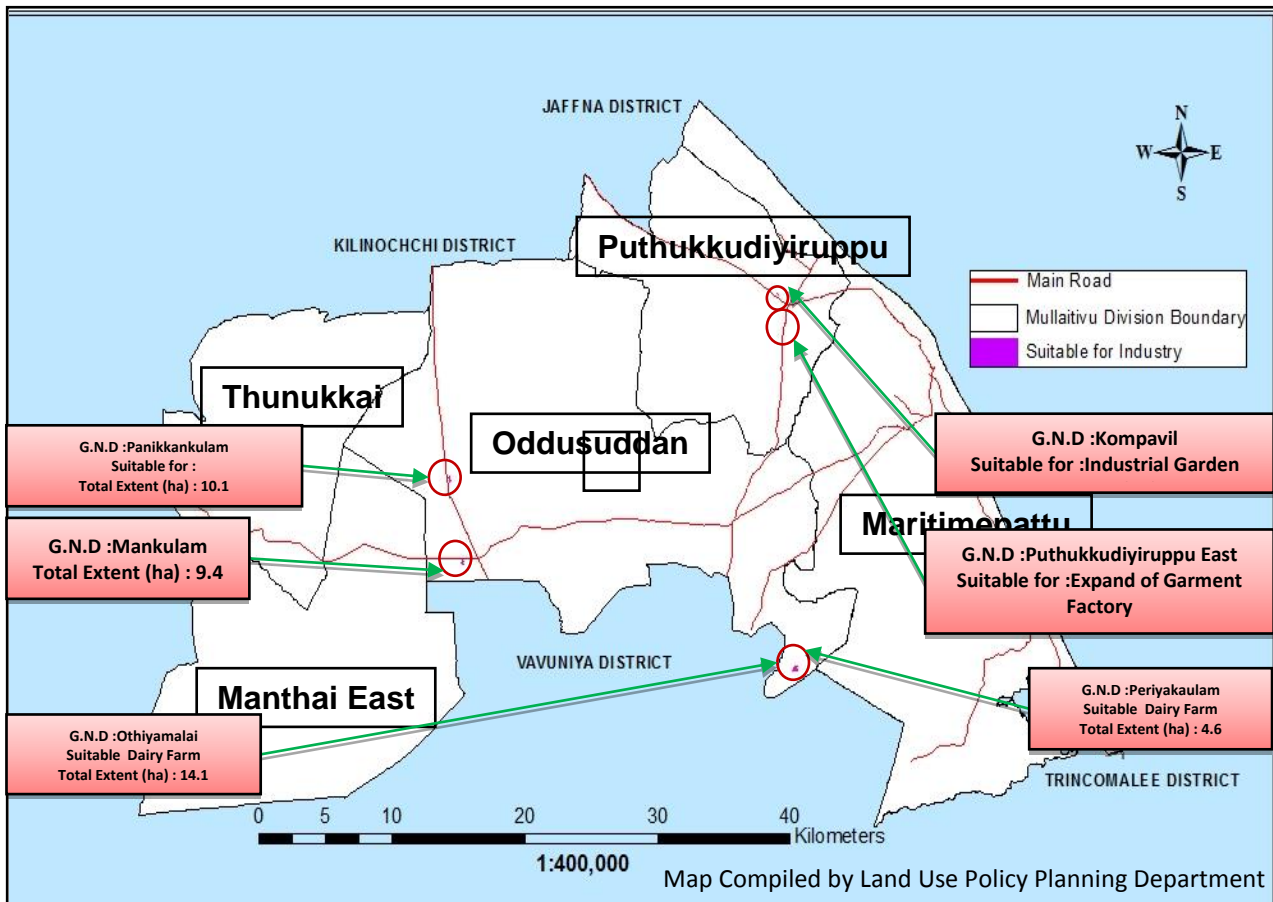
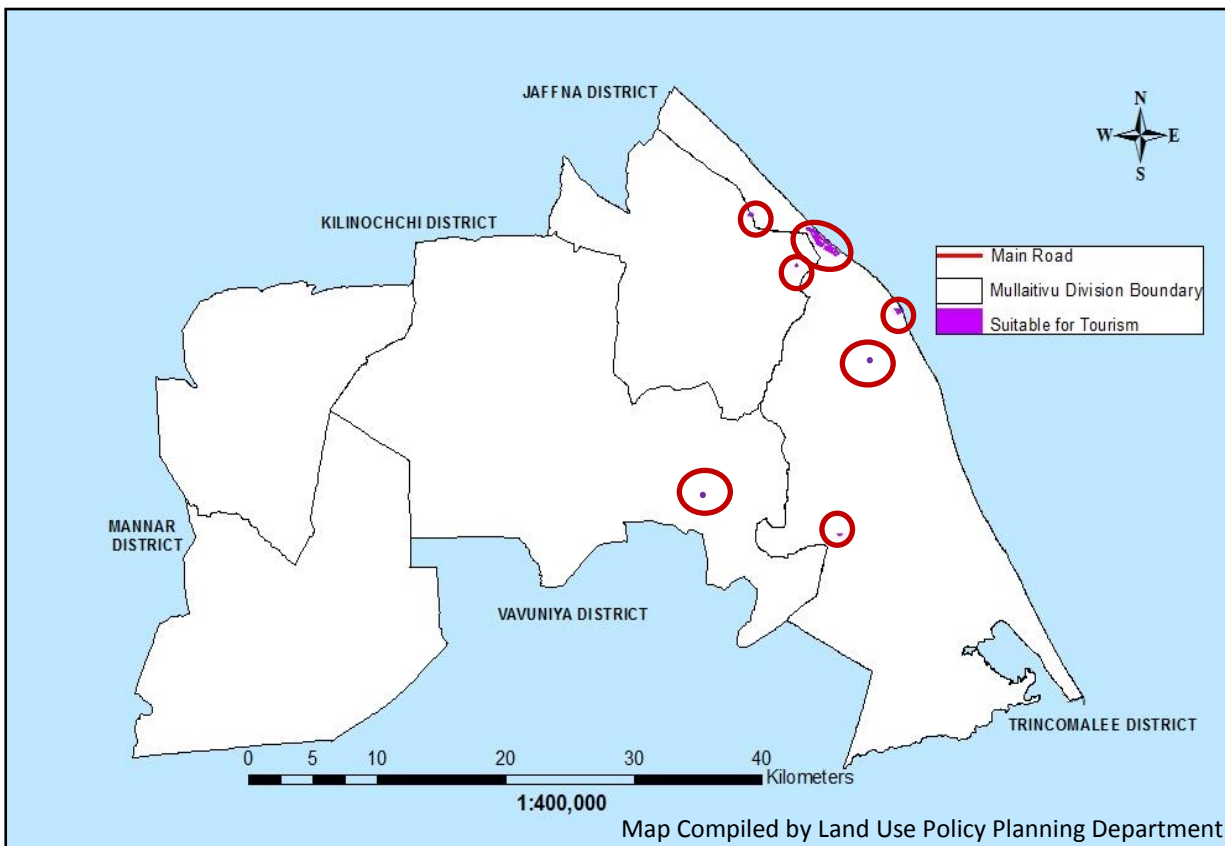




Table 30 - Suitable Lands for Tourism

DSD	GND	Geo-Coordinates	Extent (ha)	Ownership	Present land use	Land Suitability Recommendation
Maritimepattu	Mullivaikkal West	198502, 457738	5	State	scrub	Tourism
	Mullivaikkal East	201888, 455712	1	State	scrub	Tourism
	Mullivaikkal East	204058, 452867	31	State	scrub	Tourism
	Thannimurippu	198671, 433900	11	State	scrub	Tourism
Puthukkudiyiruppu	Ananthapuram	194701, 466736	9	State	scrub	Tourism
	Thevipuram	190441, 461058	20	State	scrub	Tourism
Total			77			

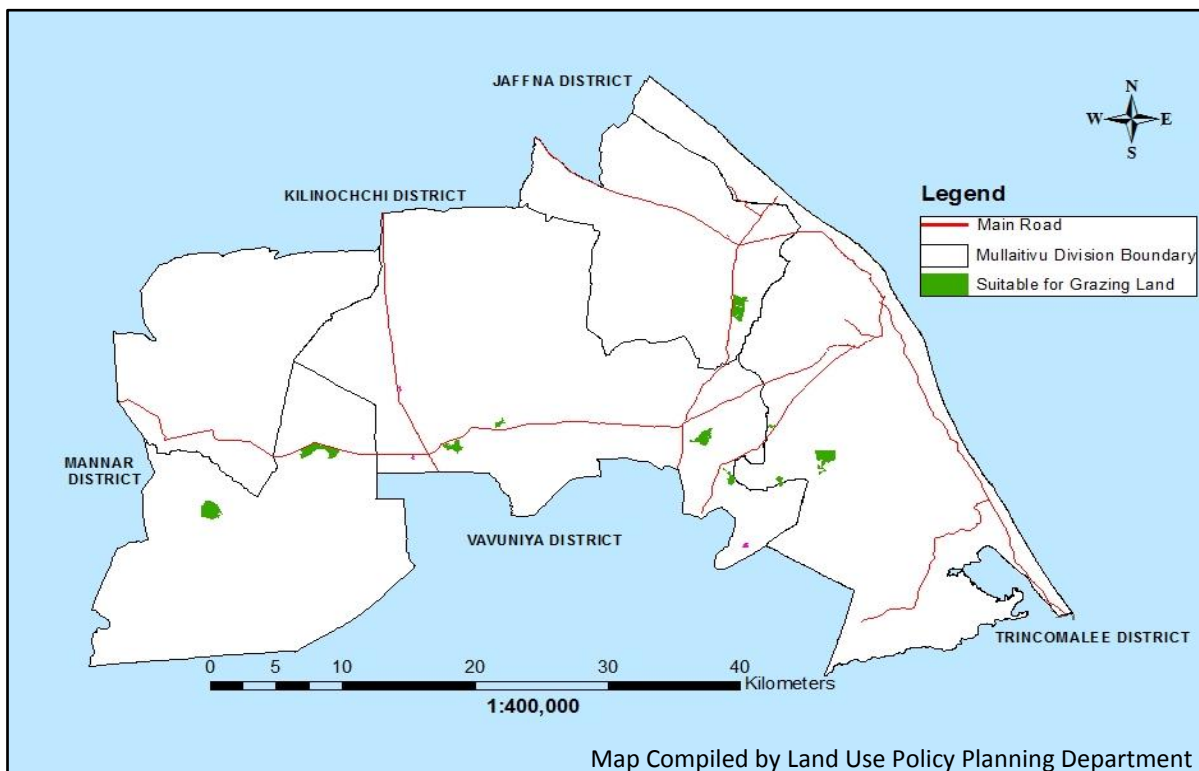
FIGURE 27 –SUITABLE LANDS FOR TOURISM



**Table 31 - Suitable Lands for Grazing Land**

DSD	GND	Geo-Coordinates	Extent (ha)	Ownership	Present land use	Land Suitability Recommendation
Maritimepattu	Thannimurippu (kurunthukulam)	199636, 434802	80	State	scrub	Grazing
	Thannimurippu (Veemankamam)	195071, 432773	47	State	scrub	Grazing
Oddusuddan	Samalankulam	188216, 436261	156	State	scrub	Grazing
	Thanduwan (AC Farm)	190853, 432926	63	State	scrub	Grazing
	Ktippaddamuripu	170090, 437910	39	State	scrub	Grazing
	Mankulam	165641, 436563	106	State	scrub	Grazing
Manthai East	Oddaruttatukulam	154046, 436539	164	State	scrub	Grazing
	Vadakadu	155637, 436075	82	State	scrub	Grazing
	Naddankandal	145517, 430155	239	State	scrub	Grazing
Puthukkudiyiruppu	Mannakandal	190905, 449655	239	State	scrub	Grazing
Thunukkai	AninchiyanKulam		200	State	Scrub	Grazing
	Thunukkai		150	State	Scrub	Grazing
Total			1565			

**FIGURE 28 - SUITABLE LANDS FOR GRAZING LAND**



Map Compiled by Land Use Policy Planning Department

FIGURE 29 - SUITABLE LANDS FOR SERVICE EXPANSION

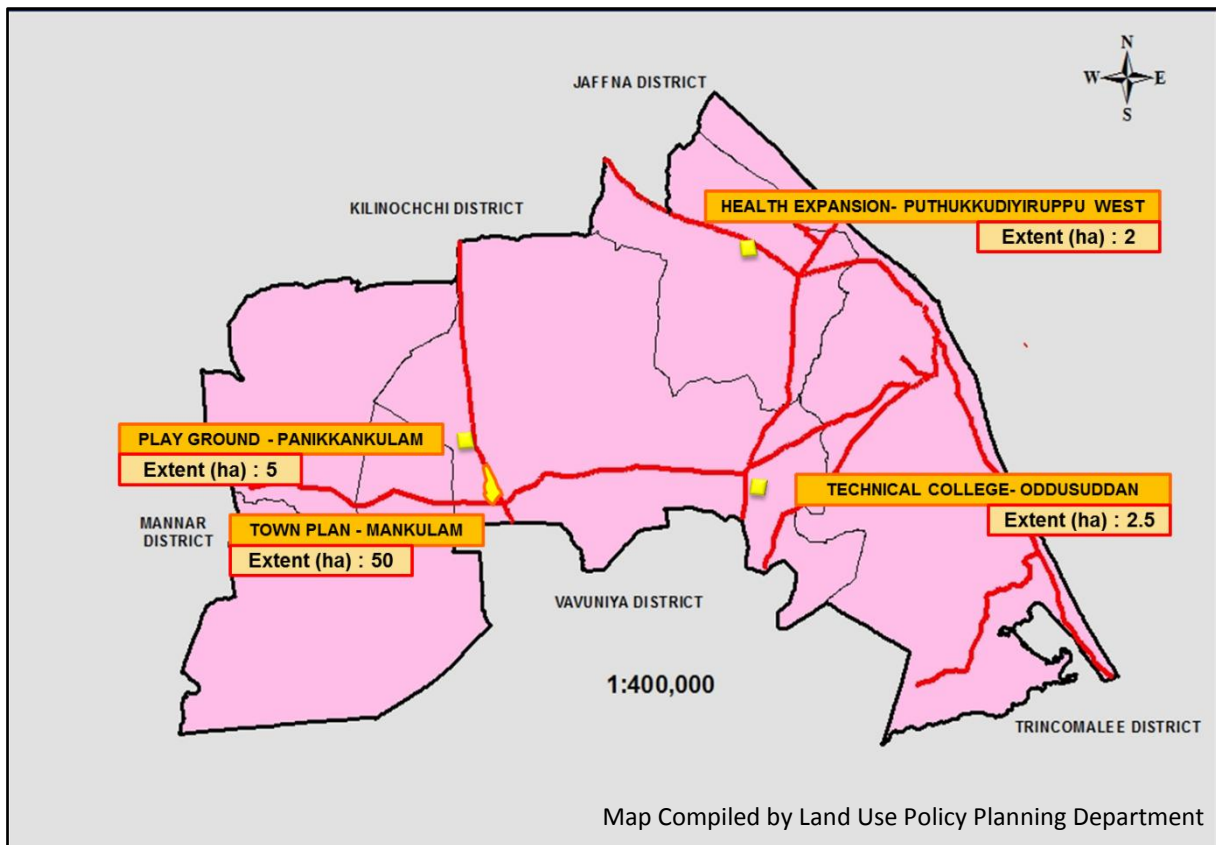
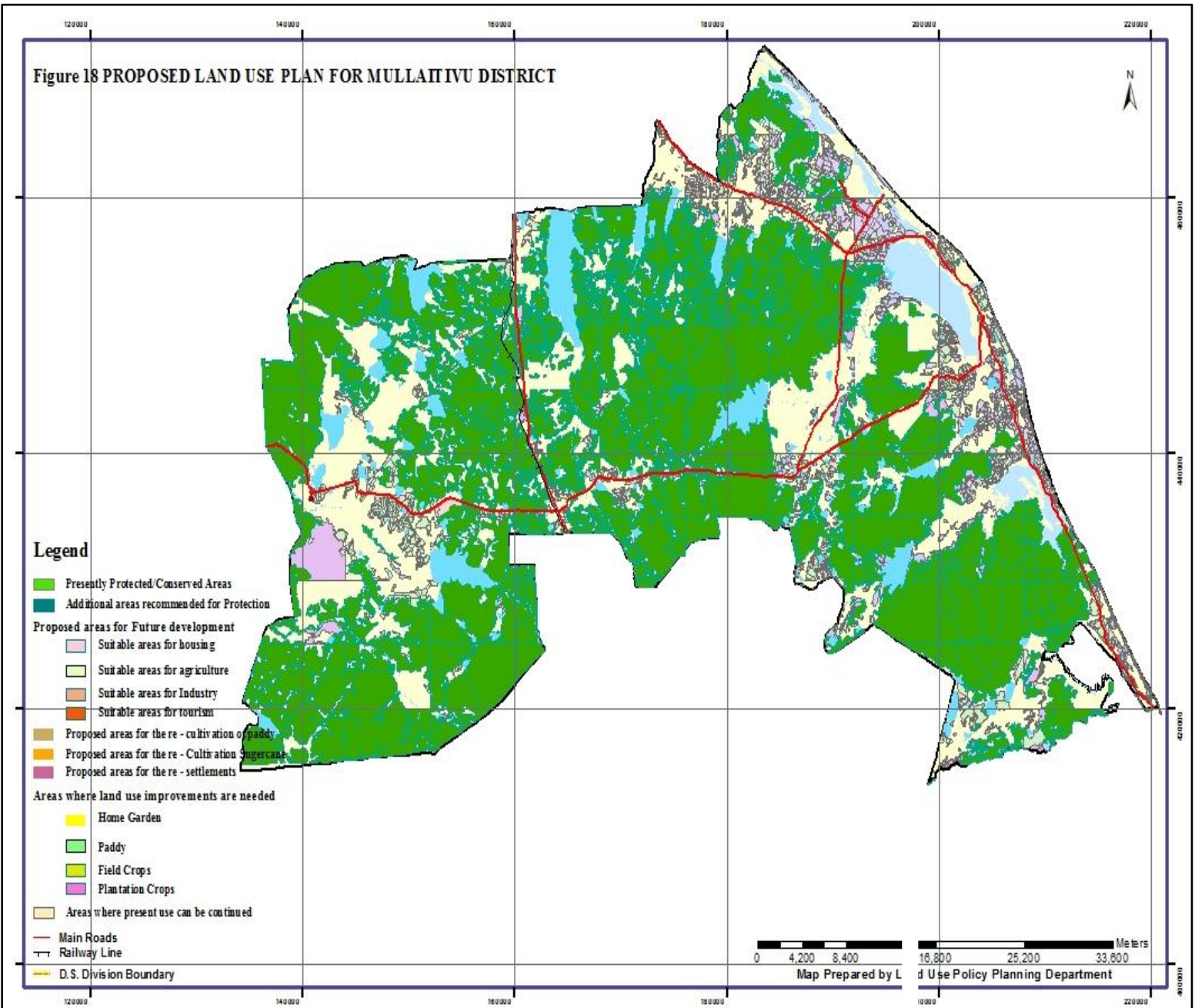


Figure 18 PROPOSED LAND USE PLAN FOR MULLAITIVU DISTRICT



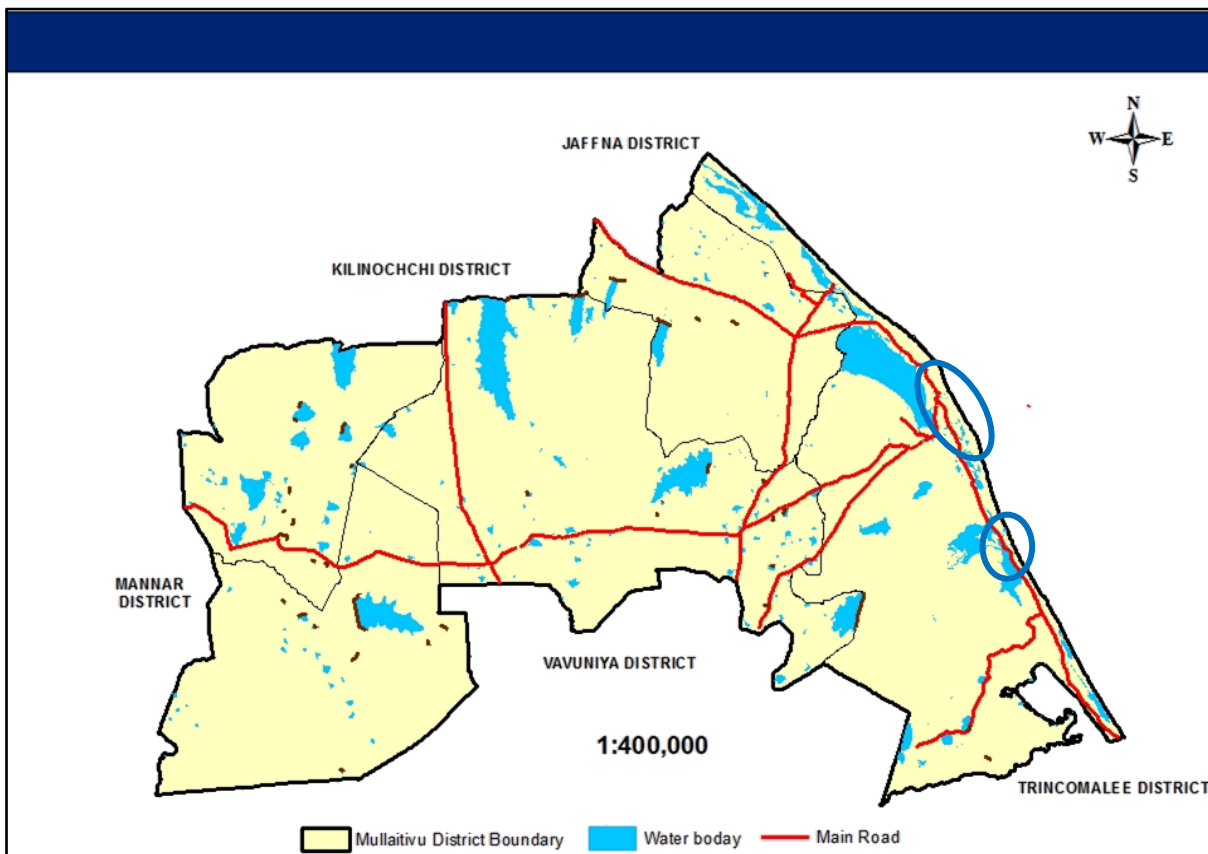
**Other issues related to land use**

Study revealed that there are other issues related to land use namely salt water intrusion and Gravel mining activity is remarkably increasing during recent past years as road constructions were taken place removal of top soil leads to degrade the lands and also create the environmental problems in the area.

Table 32 - Salt water intrusion

DS Division	GN Division	Issues	Recommendation	Responsible Agencies
Maritimepattu	Semmalai East Mu/93 Mullaitivu South Mu/83	Sea water intrusion to the paddy land.	Establish bund to prevent the sea water intrusion.	GA, DS Department of Agrarian Development Irrigation Department

FIGURE 31 – SALT WATER INTRUSION

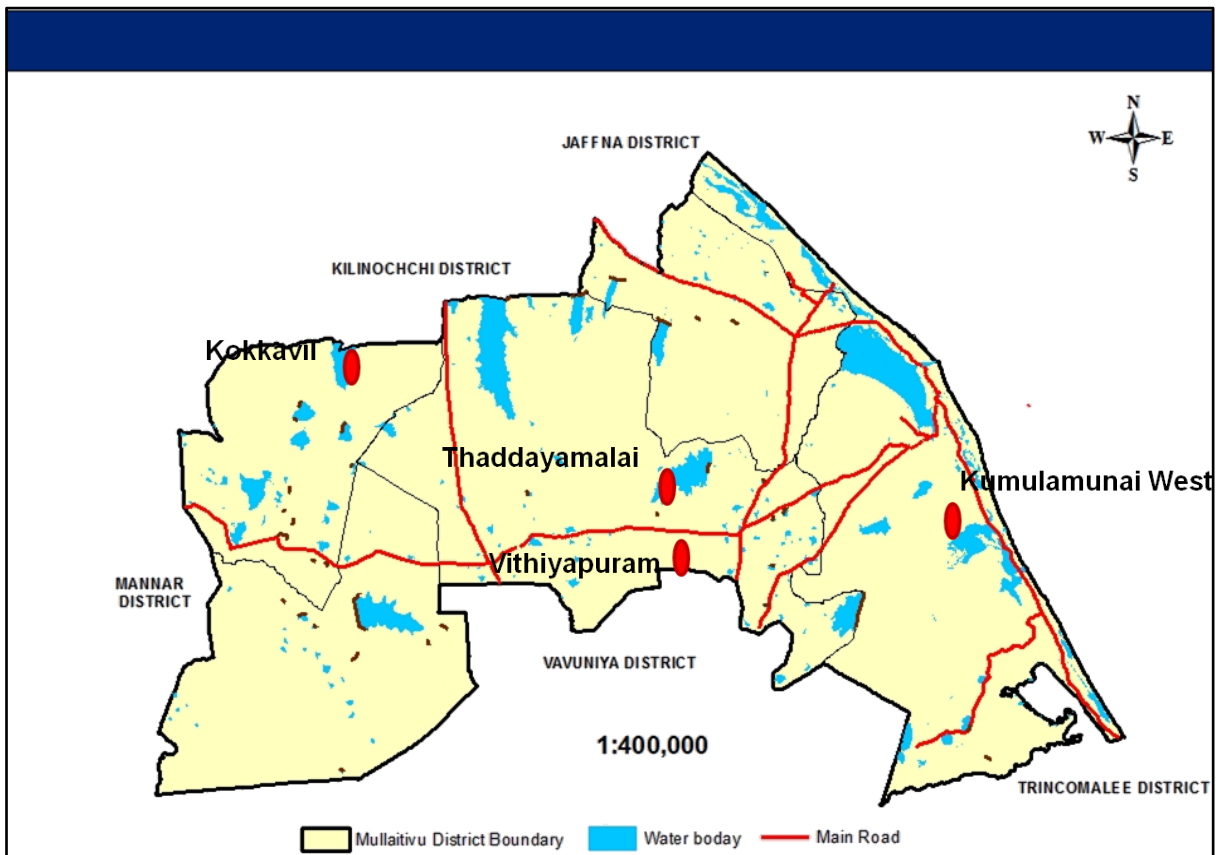


Map Compiled by Land Use Policy Planning Department

**Table 33 - Gravel Mining**

DS DIVISION	GN DIVISION	Extent (Ha.)	Issues	Recommendation	Responsible Agencies
Oddusuddan	Oddusuddan Mu/61	31	Environmental problems	Refilling Re plantation	GA, DS Forest Department Geological survey and mines bureau
	Thaddayamalai Mu/63	13			
	Thirumurikandy Mu/75	30			
Maritimepattu	Kumulamunai West Mu/119	12			
Total		86			

**FIGURE 32 – GRAVEL MINING**



Map Compiled by Land Use Policy Planning Department

## **6. SUGGESTED IMPLEMENTATION STRATEGY**

In implementing the recommendations given in the plan to address the issues two approaches could be adopted.

- (1) Parallel approach where all the issues could be addressed simultaneously.
- (2) Step wise approach based on the priorities.

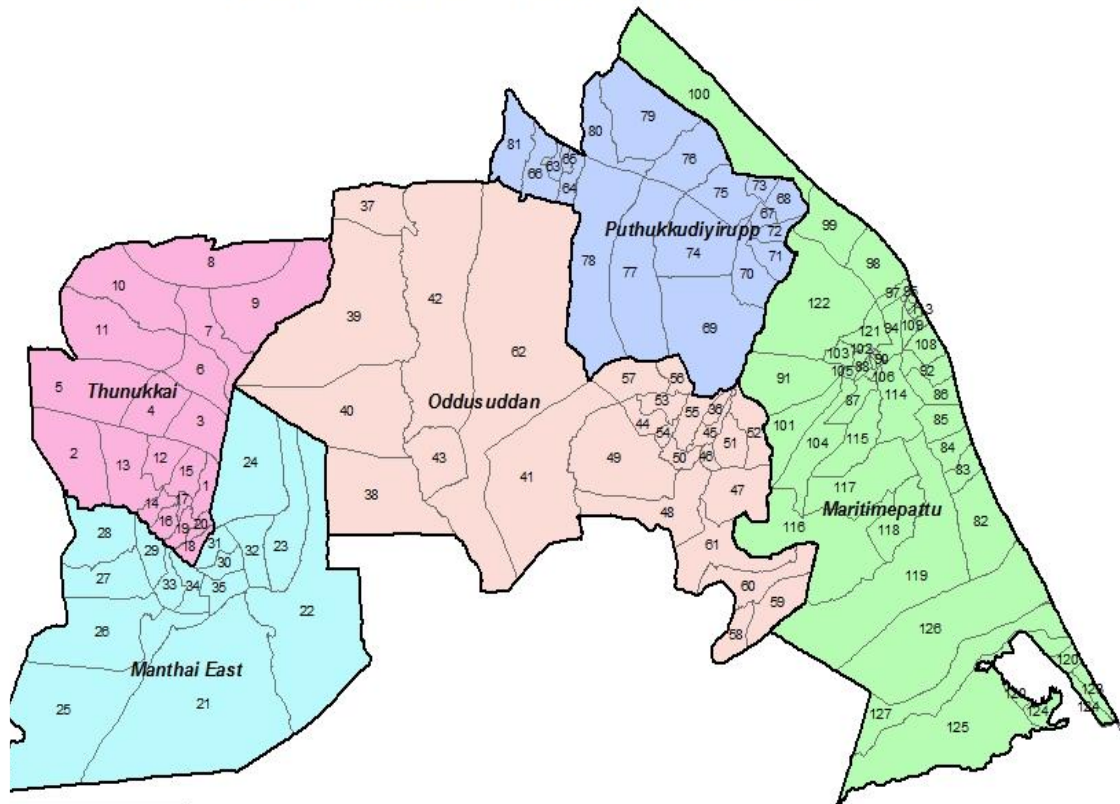
The approach to be adopted would of cause depend on the available financial and other resources.

At the District level there is no central agency that could undertake the implementation of the recommendations of the plan. Hence, the implementation of the recommendations will have to be shared by several agencies. These agencies could be categorized as main responsible agencies and as supportive agencies. Each agency should incorporate the implementation activities in their annual action plans. The funds to implement these activities should be obtained either from routing government funds or from other external sources.

Implementation programme for the entire District will be monitored by the different level committees such as District Coordinating Committee (DCC), District Agricultural Committee (DAC), and District Land Use Planning Committee (DLUPC). Entire implementation programme will be coordinated by Government Agent/District Secretary.

The time frame for the implementation of each recommendation will vary depending on the nature of the activity. Some activities are long term (more than two years).

### G.N.D BOUNDARY MAP - MULLAITIVU DISTRICT



#### Legend

- D.S Division Boundary
- G.N Division Boundary



Map Prepared by Land Use Policy Planning Department



## ANNEX 01 – G.N DIVISION NAMES

Se. No	D.S Division	G.N Division
01	Thunukkai	Anichchiyankulam
02	Thunukkai	Kalvilan
03	Thunukkai	Therankandal
04	Thunukkai	Uyilankulam
05	Thunukkai	Thenniyankulam
06	Thunukkai	Iyankankulam
07	Thunukkai	Palayamurukandy
08	Thunukkai	Amaithypuram
09	Thunukkai	Puththuvedduvan
10	Thunukkai	Ampalaperumalkulam
11	Thunukkai	Koddaikaddiyakulam
12	Thunukkai	Alankulam
13	Thunukkai	Thunukkai
14	Thunukkai	Yogapuram
15	Thunukkai	Mallavi
16	Thunukkai	Thirunagar
17	Thunukkai	Yogapuram Center
18	Thunukkai	Yogapuram East
19	Thunukkai	Parathinagar
20	Thunukkai	Pugalenthinagar
21	Manthai East	Moonrumurippu
22	Manthai East	Vannivilankulam
23	Manthai East	Ampalpuram
24	Manthai East	Oddaruththakulam
25	Manthai East	Naddankandal
26	Manthai East	Siraddikulam
27	Manthai East	Ponnagar
28	Manthai East	Vinayagapuram
29	Manthai East	Poovarasankulam
30	Manthai East	Sivapuram
31	Manthai East	Palinagar
32	Manthai East	Kollavilankulam
33	Manthai East	Karumpulliyar
34	Manthai East	Pandiyankulam
35	Manthai East	Selvapuram
36	Oddusuddan	Peraru
37	Oddusuddan	Inthupuram
38	Oddusuddan	Mankulam
39	Oddusuddan	Thirumurukandy
40	Oddusuddan	Panikkankulam
41	Oddusuddan	Manavalanpaddamurippu

Se. No	D.S Division	G.N Division
42	Oddusuddan	Ampakamam
43	Oddusuddan	Olumadu
44	Oddusuddan	Thaddayamalai
45	Oddusuddan	Pandaravanny
46	Oddusuddan	Puliyankulam
47	Oddusuddan	Periyaitthimadu
48	Oddusuddan	Kathaliyarsamalkulam
49	Oddusuddan	Oddusuddan
50	Oddusuddan	Viththiyapuram
51	Oddusuddan	Karuvelankandal
52	Oddusuddan	Koolamurippu
53	Oddusuddan	Muthuvinayagapuram
54	Oddusuddan	Kanesapuram
55	Oddusuddan	Kachchilaimadu
56	Oddusuddan	Kanagarathinapuram
57	Oddusuddan	Muthuyankaddukulam
58	Oddusuddan	Periyakulam
59	Oddusuddan	Othiyamalai
60	Oddusuddan	Palampasi
61	Oddusuddan	Thanduvan
62	Oddusuddan	Thachchadampam
63	Puthukkudiyiruppu	Manikkapuram
64	Puthukkudiyiruppu	Theravil
65	Puthukkudiyiruppu	Valluvarpuram
66	Puthukkudiyiruppu	Visuvamadu East
67	Puthukkudiyiruppu	Sivanagar
68	Puthukkudiyiruppu	Ananthapuram
69	Puthukkudiyiruppu	Mannakandal
70	Puthukkudiyiruppu	Puthukkudiyiruppu East
71	Puthukkudiyiruppu	Malligaitheevu
72	Puthukkudiyiruppu	Manthuvil
73	Puthukkudiyiruppu	Iranaipalai
74	Puthukkudiyiruppu	Puthukkudiyiruppu West
75	Puthukkudiyiruppu	Kombavil
76	Puthukkudiyiruppu	Thevipuram
77	Puthukkudiyiruppu	Vallipunam
78	Puthukkudiyiruppu	Udayarkaddu South
79	Puthukkudiyiruppu	Suthanthirapuram
80	Puthukkudiyiruppu	Udayarkaddu North
81	Puthukkudiyiruppu	Visuvamadu West

**ANNEX 01 – G.N DIVISION NAMES**

<b>Se. No</b>	<b>D.S Division</b>	<b>G.N Division</b>
82	Maritimepattu	Chemmalai West
83	Maritimepattu	Chemmalai
84	Maritimepattu	Alampil South
85	Maritimepattu	Alampil North
86	Maritimepattu	Uppumaveli
87	Maritimepattu	Mamoolai
88	Maritimepattu	Thanniyootu West
89	Maritimepattu	Thanniyootu East
90	Maritimepattu	Neeravipiddi West
91	Maritimepattu	Mulliyawalai West
92	Maritimepattu	Silawaththai South
93	Maritimepattu	Neeravipiddi East
94	Maritimepattu	Gigrapuram
95	Maritimepattu	Manalkudiyiruppu
96	Maritimepattu	Kovilkudiyiruppu
97	Maritimepattu	Selvapuram
98	Maritimepattu	Mullivaikkal East
99	Maritimepattu	Mullivaikkal West
100	Maritimepattu	Ampelavanpokkanai
101	Maritimepattu	Mulliyawalai Center
102	Maritimepattu	Putharikuda
103	Maritimepattu	Mulliyawalai North
104	Maritimepattu	Mulliyawalai South
105	Maritimepattu	Mulliyawalai East
106	Maritimepattu	Kanukerni West
107	Maritimepattu	Kanukerni East
108	Maritimepattu	Silawaththai
109	Maritimepattu	Mullaitivu South
110	Maritimepattu	Vannankulam
111	Maritimepattu	Mullaitivu Town
112	Maritimepattu	Kallapadu North
113	Maritimepattu	Kallapadu South
114	Maritimepattu	Kumarapuram
115	Maritimepattu	Mathavalasingankulam
116	Maritimepattu	Thannimurippu
117	Maritimepattu	Kumulamunai East
118	Maritimepattu	Kumulamunai Center
119	Maritimepattu	Kumulamunai West

<b>Se. No</b>	<b>D.S Division</b>	<b>G.N Division</b>
120	Maritimepattu	Karunaddukerny
121	Maritimepattu	Vattapalai
122	Maritimepattu	Keppapilavu
123	Maritimepattu	Kokkilai East
124	Maritimepattu	Kokkilai West
125	Maritimepattu	Kokkuthoduvai West
126	Maritimepattu	Kokkuthoduvai North
127	Maritimepattu	Kokkuthoduvai Center



## **ANNEX 03 – NATIONAL LEVEL EXPERT GROUP**

1. Secretary, Ministry of Lands (Chair Person)
2. Director General, Land Use Policy Planning Department (Coordinator)
3. Secretary, Ministry of Economic Development
4. Secretary, Ministry of Religious and Cultural Affairs
5. Secretary, Ministry of Defense
6. Secretary, Ministry of Tourism
7. Secretary, Ministry of Environment
8. Government Agent/ District Secretary, Jaffna District
9. Government Agent/ District Secretary, Mannar District
10. Government Agent/ District Secretary, Vavuniya District
11. Government Agent/ District Secretary, Mullativu District
12. Government Agent/ District Secretary, Kilinochchi District
13. Government Agent/ District Secretary, Batticaloa District
14. Government Agent/ District Secretary, Ampara District
15. Government Agent/ District Secretary, Trincomalee District
16. Conservator General, Department of Forest Conservation
17. Commissioner General, Land Commissioner General's Department
18. Director General, Department of Agriculture
19. Director General, Coast Conservation Department
20. Commissioner General, Department of Archeology
21. Director General, Department of Wild Life Conservation
22. Survey General, Survey Department
23. Director General, National Physical Planning Department
24. Director General, Department of Irrigation.
25. Commissioner General, Land Settlement Department
26. Director General, Central Environmental Authority
27. Director General, Disaster Management Center
28. Director General, Geological Survey and Mines Bureau
29. Director General, Urban Development Authority
30. Director General, Road Development Authority
32. Commissioner, Department of Agrarian Services

## **ANNEX 04 – DISTRICT LEVEL EXPERT GROUP**

1. Government Agent/District Secretary (Chair Person)
2. Assistant Director (District Land Use) (Secretary)
3. Provincial Land Commissioner
4. Divisional Secretaries
5. Director of Irrigation, Department of Irrigation
6. Director, Urban Development Authority
7. Deputy Director Agriculture, Provincial Department of Agriculture
8. District Forest Officer, Department of Forest Conservation
9. Senior Superintendent of Survey, Survey Department
10. District Engineer, Road Development Authority
11. District Engineer, Water Supply and Drainage Board
12. District Manager, Water Resource Board
13. District Manager, National Housing Development Authority
14. General Manager, Palmyrah Development Board
15. Deputy General Manager, Ceylon Electricity Board
16. Deputy Director, Industrial Development Board
17. Deputy Director, Board of Investment
18. Deputy Director, Rubber Development Department
19. Assistant Commissioner, Department of Agrarian Development
20. Assistant Commissioner, Local Government
21. District Archeological Officer, Department of Archeology
22. Regional Manager, Coconut Cultivation Board
23. Assistant Director, Central Environmental Authority
24. Regional Mining Engineer, Geological Survey and Mines Bureau
25. Assistant Director, Coast Conservation Department
26. Assistant Director, Department of Wild Life Conservation

## **ANNEX 05 – DIVISIONAL LEVEL LAND USE PLANNING COMMITTEE**

1. Divisional Secretary (Chair Person)
2. Land Use Planning Officer/Development Officer (Secretary)
3. Land Officer/Colonization Officer
4. Agriculture Instructor
5. Agrarian Development Officer
6. Range Officer
7. Assistant Superintendent of Survey
8. Extension Officer (Coconut, Palmyrah, Rubber)
9. Veterinary Surgeon
10. Environmental Officer
11. Representative from Estate and Plantation Sector
12. Representatives from land related NGOs
13. Representatives from Farmer Organizations

**ANNEX 06 – CRITERIA USED TO DETERMINE THE LAND SUITABILITY FOR DIFFERENT USES**

**1. The Factors that were considered to assess the lands for Agriculture**

Parameter	Level -1	Level -2	Level -3	Level -4
1. Slope	0-30%	30-40%	40-60%	>60 %
2. Soil depth	Very deep > 120 cm	Deep (120 – 60) cm	Moderately deep (60 – 30 ) cm	Shallow < 30cm
3. Soil erosion hazard	Nil	Slight	Moderate	High
4. Soil texture	Loam	Sandy loam	Sand	Sand with stones
5. Drainage	Well drained	Moderately well Drained	Manageable	Poorly Drained
6. Rockiness	Nil	Few	Significant	High
7. Water availability for cultivation	Water sources available within the land	Sources available close to the land	Sources available within manageable distance	Difficult to obtain water supply
8. Road Accessibility	Available to the land	Available close to the land	Available within manageable distance	Difficult to get

Based on the above parameters matrix, the land should be evaluated based for its suitability for

Agriculture under appropriate category as follows:

Symbol	Category	Parameters
S1	Highly Suitable	If 1-6 parameters are at level - 1, 7-8 parameters are at level - 3 or below
S2	Suitable	If 1-6 parameters are at level -2 or below and 7 -8 parameters at level -3 or below
S3	Moderately Suitable	If 1-8 parameters are at level -3 or below
N	Not suitable	If any of the parameters are at level -4

## 2. The Factors that were considered to assess the lands for Housing

Parameter	Level -1	Level -2	Level -3	Level -4
1. Water availability	Water sources available within the land	Sources available close to the land	Sources available within manageable distance	Difficult to obtain water supply
2. Electricity	Electricity available	Electricity about to be supplied	Possible to get electricity	Difficult to get electricity supply
3. Telephone	Facilities are available	Facilities about to be supplied	Only Mobile coverage available	No coverage area
4. Transport facilities	Transport available to the land	Available closer to the land	Not available but can be developed	Very difficult to obtain transport
5. Environmental impact	Not significant	Mild problem could be expected	Could be overcome by planning	Very sensitive environmental issues will arise
6. Social impact	Very slight	Slight	Moderate	High
7. Drainage	Manageable	Unmanageable		
8. Rockiness	Possible to construct building	Impossible to construct building		
9. Slope	<45%	> 45%		

Based on the above parameters matrix, the land should be evaluated based for its suitability for

Housing under appropriate category as follows:

Symbol	Category	Parameters
S1	Highly Suitable	If all (1-9) Parameters are at level -1
S2	Suitable	If 1-7 parameters are at level -2 or below and 8-9 parameters at level -1
S3	Moderately Suitable	If 1-7 parameters are at level -3 or below and 8-9 parameters at level -1
N	Not Suitable	If any of 1-7 parameters are at level -4 or any 8-9 at level -2



### 3. The Factors that were considered to assess the lands for Industry

Parameter	Level -1	Level -2	Level -3	Level -4
1. Water availability	Water sources available within the land	Sources available close to the land	Sources available within manageable distance	Difficult to obtain water supply
2. Electricity	3 phase electricity available	3 phase electricity about to be supplied	Possible to get electricity	Difficult to get electricity supply
3. Telephone	Facilities are available	Facilities about to be supplied	Only Mobile coverage available	No coverage area
4. Transport facilities	Transport available to the land	Available closer by area	Not available But can be developed	Very difficult to obtain transport
5. Environmental impact	Not significant	Mild problem could be expected	Problem could be expected, but Could be overcome by planning	Very sensitive environmental issues will arise
6. Population in surrounding area	Surrounding area is not populated	Surrounding area is slightly populated	Surrounding area is Moderately populated	Heavily populated
7. Availability of urban facilities for employees	Available within 1 Km	Available within 5 Km	Available within 15 Km	Available > 15 Km
8. Slope	<45%	> 45%		
9. Drainage	Manageable	Unsatisfactory		
10. Rockiness	Possible to construct building	Impossible to construct building		

Based on the above parameters matrix, the land should be evaluated based for its suitability for

Industry under appropriate category as follows:

Symbol	Category	Parameters
S1	Highly Suitable	If all (1-10) Parameters are at level -1
S2	Suitable	If 1-7 parameters are at level -2 or below and 8-10 parameters at level -1
S3	Moderately Suitable	If 1-7 parameters are at level -3 or below and 8-10 parameters at level -1
N	Not suitable	If any of 1-7 parameters are at level -4 or any 8-10 at level -2

#### **4. Factors considered in assessing the lands for Tourism development**

- 1) Quality of beach /Beauty of the View
- 2) Condition for Swimming
- 3) Condition for Surfing
- 4) Proximity to Historical or Archeological Sites
- 5) Availability of infrastructure facilities
- 6) Social acceptance
- 7) Possible Environmental impact (Low, Moderate, High)
- 8) Closeness to the natural habitats