



LAND USE PLAN BATTICALOA DISTRICT



2016

Land Use Policy Planning Department

No.31 Pathiba Road,

Colombo 05.

Tel.0112 500338,Fax: 0112368718

E-mail: landuse@slt.net.lk Secretary's Message

Lessons Learnt and Reconciliation Commission (LLRC) made several recommendations for the Northern and Eastern Provinces of Sri Lanka so as to address the issues faced by the people in those areas due to the civil war. The responsibility of implementing some of these recommendations was assigned to the different institutions coming under the purview of the Ministry of Lands i.e. Land Commissioner General Department, Land Settlement Department, Survey General Department and Land Use Policy Planning Department.

One of The recommendations made by the LLRC was to prepare Land Use Plans for the Districts in the Northern and Eastern Provinces. This responsibility assigned to the Land Use Policy Planning Department. The task was completed by May 2016. I would like to thank all the National Level Experts, District Secretary and Divisional Secretaries in Batticaloa District and Assistant Director (District Land Use.). Batticaloa and the district staff who assisted in preparing this plan. I also would like to thank Director General of the Land Use Policy Planning Department and the staff at the Head Office their continuous guiding given to complete this important task.

I have great pleasure in presenting the Land Use Plan for the Batticaloa district.

Dr. I.H.K. Mahanama

Secretary,

Ministry of Lands

Director General's Message

I have great pleasure in presenting the Land Use Plan for the Batticaloa District prepared by the officers of the Land Use Policy Planning Department. This task was commenced with limited resources in the Department, but subsequently, the much required resources for field work were provided by the Ministry of Lands.

I would like to take this opportunity to thank the many individuals who helped us in preparing the plan. I wish to thank in particular the Secretary, Ministry of Lands, the Government Agent/District Secretary and the Divisional Secretaries of the Batticaloa District; members of the National Expert Group (NEP); the District Expert Group (DEG); the Divisional Level Officers; the members of the farmer organizations.

Finally my thanks go to the staff at the Head Office of the Land Use Policy Planning Department and the, Assistant Director (District Land Use) and his staff for their commitment despite the many hardships faced by them, particularly in conducting the required field studies.

I trust this plan will be used as a decision making tool for promoting better land use in Batticaloa District.

P.M. Shanthi Fernando

Director General

ABBREVIATIONS

- CCB - Coconut Cultivation Board
- CCD - Coast Conservation Department
- CEA - Central Environmental Authority
- DAS - Department of Agrarian Services
- DEG - District Expert Group
- DSD - Divisional Secretary Division
- DWLC - Department of Wild Life Conservation
- FD - Forest Department
- GND - Grama Niladari Division
- LCGD - Land Commissioner General Department
- LLRC - Lessons Learnt and Reconciliation Commission
- LUPPD - Land Use Policy Planning Department
- NEG - National Expert Group
- NPPD - National Physical Planning Department
- NWRD - National Water Resource Development Board
- PDOA - Provincial Department of Agriculture
- PDOI - Provincial Department of Irrigation
- SLCC - Sri Lanka Cashew Corporation
- UDA - Urban Development Authority

MEMBERS OF THE FIELD TEAM

The Team was guided and coordinated by Mr. Najeeb, Assistant Director (District Land Use), District Land Use Planning Office, Batticaloa according to the directions given by the staff at the Head Office. Land Use Plan has been completed by Mrs. W.M.M. Priyanthi Assistant Director (Information Systems), Land Use Policy Planning Department, Head Office, Narahenpita, Colombo 05.

1. Mr. R. Ganesan, Land Use Planning Officer, District Office, Batticaloa
2. Mr. S. Arulrajah, Land Use Planning Officer, Poratheevupattu D.S.D.
3. Mrs. I. Arulanathan, Land Use Planning Officer, Manmunai D.S.D.
4. Mrs. S. Mohamed Navas, Land Use Planning Officer, Kattankudy D.S.D.
5. Mrs. M. Jeevanantha, Land Use Planning Officer, Koralaipattu South D.S.D.
6. Mr. S.L Safeek, Land Use Planning Officer, Koralaipattu Central D.S.D.
7. Mrs. Malliha Thahir, Land Use Planning Officer, Eravur Town D.S.D.
8. Mr. N. Kumarathas, Land Use Planning Officer, Manmunai South D.S.D.
9. Mrs. K. Suthakaran, Development Officer, District Office, Batticaloa
10. Ms. S. Shyamini, Development Officer, District Office, Batticaloa
11. Mrs. T. Kingsley, Development Officer, District Office, Batticaloa
12. Mr. K. Mohanathan, Development Officer, Manmunai North D.S.D.
13. Ms. S. Mohana, Development Officer, Manmunai North D.S.D.
14. Mr. S. Prasath, Development Officer, Manmunai South West D.S.D.
15. Ms. K. Sasitha, Development Officer, Manmunai South West D.S.D.
16. Mr. M. Prusothman, Development Officer, Eravurpattu D.S.D.
17. Mr. M.I.M Faisal, Development Officer, Eravurpattu D.S.D.
18. Mrs. S. Kartheepan, Development Officer, Manmunai South D.S.D.
19. Mrs. Y. Prinsley, Development Officer, Manmunai South D.S.D.
20. Mrs. T. Kalithasan, Development Officer, Koralaipattu D.S.D.
21. Mr. R. Pratheep, Development Officer, Koralaipattu North D.S.D.
22. Mr. S. Kalithasan, Development Officer, Koralaipattu West D.S.D.

Maps prepared and Compiled by;

Mrs. R.M.R.D. Karunaratne, Land Use Planning Officer, GIS Unit, Land

Use Policy Planning Department

	TABLE OF CONTENTS						PAGE
SECRETARY’S MESSAGE	I
DIRECTOR GENERAL’S MESSAGE	II
ABBREVIATIONS	III
MEMBERS OF THE FIELD TEAM	IV
TABLE OF COTENTS	V
LIST OF TABLES	IX
LIST OF FIGURES	X
LIST OF PHOTOGRAPHS	XI
 PART I – BACKGROUND							
1.INTRODUCTION	1
2.DISTRICT PROFILE	2
2.1 Introduction	2
2.2 Administrative Structure	2
2.3 Physical Environment...	4
2.3.1 Topology	4
2.3.2 Soils	4
2.3.3 Climate	6
2.3.4 Water	8

	PAGE
2.4 Demographic Structure	10
2.4.1 Population	10
2.4.2 Labour Force	12
2.4.3 Occupational Structure	12
2.5 Infrastructure	13
2.5.1 Road and Railways	13
2.5.2 Communication facilities	15
2.6 Land Use	15
2.7 Existing Spatial Plans	16
2.7.1 National Level Plans	16
2.7.2 Regional and Sub Regional Level Plans	17
2.7.3 Need for a Land Use Plan	17
 PART II – LAND USE PLAN	
3. PLANNING APPROACH	18
3.1 Study the Present Situation	19
3.2 Identification of Land Use Issues	20
3.3 Formulation and validation of recommendations to address the issues	20

3.4 Preparation of the land use plan ...	...	...	...	...	...	...	...	20
4. LAND USE / LAND COVER OF THE DISTRICT								
4.1 Introduction	...	...	...	...	...	...	...	21
4.2 Land Use / Land Cover	...	...	...	...	...	...	...	21
5. PRPOSED LAND USE PLAN								
5.1 Introduction	...	...	...	...	...	...	...	24
5.2 Major Land Use Issues	...	...	...	...	...	...	...	25
5.3 Recommendations	...	...	...	...	...	...	...	29
5.4 Other issues related to Land Use ...	...	...	...	...	...	...	...	55
6. SUGGESTED IMPLEMENTATION STRATEGY								
Annex I ...	....	...	...	...	...	...	...	58
Annex II ...	....	...	...	...	...	...	...	59
Annex III ...	....	...	...	...	...	...	...	69
Annex IV ...	....	...	...	...	...	...	...	70
Annex V ...	....	...	...	...	...	...	...	71
Annex VI ...	....	...	...	...	...	...	...	72
Annex VII	...	....	...	...	...	...	...	73

LIST OF TABLES

Table 1 -	D.S. Divisions and their extents in Batticaloa District...	...	2
Table 2 -	The Great Soil Groups and their extents as a percentage of the total land area of the District	... ..	4
Table 3 -	Agro Ecological regions and their extents(%) in the Batticaloa District	... ..	6
Table 4 -	Distribution of the water Bodies	... ..	8
Table 5 -	Population by religion and sex	... ..	10
Table 6 -	Population by ethnic group and sex	... ..	10
Table 7 -	Percentage distribution of employed population by employment status in Batticaloa District 2014	... ..	12
Table 8 -	Occupation Details in Batticaloa District – 2013/2014	...	13
Table 9 -	Shows the distribution of the connections provided By the Sri Lanka Telecom	... ..	15
Table 10 -	Land Use Extents – 2015	... ..	16
Table 11 -	Land Use Categories and with approximate extents	... ..	21
Table 12 -	Distribution of lands where changes / improvements are not required	... ..	30
Table 13 -	Approximate extents of the presently protected areas in the District	... ..	31
Table 14 -	Additional areas recommended for protection and their approximate extents in the District	... ..	33
Table 15 -	Major reasons for underutilization of home gardens and Proposed recommendations	... ..	35

Table 16 -	Underutilized Home gardens and their total extents in the District	...	...	...	...	36
Table 17 -	Major reasons for underutilization of paddy lands and proposed recommendations	...	...	...		39
Table 18 -	Underutilized paddy lands and their extents in the District	...	...	...		39
Table 19 -	Reasons for underutilization of other agricultural lands and the recommendations	...	...	...		43
Table 20 -	Underutilized lands devoted for Field crops Coconut and Cashew (Other Agricultural Lands) and their Extents in the District		...	...	...	46
Table 21-	Distribution of the abandoned settlements	...	...	...		47
Table 22-	Abandoned Paddy Lands and their extent in the District				...	49
Table 23-	Underutilized lands and their suitability for different uses		...	...	...	51
Table 24-	Other issues related to land use	...	...	...	...	55

LIST OF FIGURES

Figure 1 – Administrative Divisions - Batticaloa District	...	...	...	3
Figure 2 – Soil Map - Batticaloa District	...	...	...	5
Figure 3 – Agro Ecological Regions – Batticaloa District	...	...	...	7
Figure 4 – Water Bodies – Batticaloa District ...	...	...	...	9
Figure 5 – Population Density – Batticaloa District	...	...	...	11
Figure 6 – Road Network – Batticaloa District	...	...	...	14
Figure 7 - Land Use 2015 – Batticaloa District	...	...	...	23
Figure 8 – Presently Protected Area – Batticaloa District	...	...	...	32
Figure 9 – Additional Areas Recommended For Protection – Batticaloa District	...	...	...	34
Figure 10- Areas with High Propotion of Underutilized Home Gardens – Batticaloa District	...	...	...	41
Figure 11- Areas with High Propotion of Underutilized Paddy Lands – Batticaloa District	...	...	...	42
Figure 12 - Areas with High Propotion of Underutilized Lands Devoted to Field Crops – Batticaloa District	...	...	...	44
Figure 13 - Areas with High Propotion of Underutilized Lands Devoted to Plantation Crops – Batticaloa District	...	...	...	45
Figure 14 - Abandoned Settlement – Batticaloa District	...	...	...	48
Figure 15 – Abandoned Paddy Lands – Batticaloa District	...	...	...	50

Figure 16 - Unutilized Lands – Batticaloa District	...	...	...	...	53
Figure 17 – Proposed Land Use Plans – Batticaloa District	...	...	...	...	54

LIST OF PHOTOGRAPHS

Photograph 1 - Additional areas that need to be protected in the District(Kalkudah – Munaimurukan Kovil)					26
Photograph 2 - Low productivity paddy lands in the District (Porativu pattu- Kantipuram)					27
Photograph 3 - Low productivity Home Garden Areas in the District (Porativu pattu – Thumpalai)					27
Photograph 4 - Abandoned settlement in the District (KPS - Miyankalm)					28
Photograph 5 - Abandoned agricultural areas in the District (MN - Erumative)					28
Photograph 6 - Unutilized lands in the District (Koralai pattu North - Panisankeni)					29
Photograph 7 - Areas where the present use can be continued. (Manmunai West- Kannankuda)					30
Photograph 8 - Encroachments in reservation of the lagoon (Eravur Town – Eravur 6D)					55
Photograph 9 - Over extraction of sand (Koralai pattu north - Kathiraveli)					56
Photograph 10 - Unplanned garbage dumping (Koralai pattu North - Miyankulam)					56

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 plan is mainly divided into two parts. Part I provides the background for the plan. Part II gives the land use plan.

2. DISTRICT PROFILE

2.1 Introduction

Batticaloa District situated in the central part of the Eastern province in Sri Lanka is bounded at the North by Verugal Aru & Trincomalee District, at the West by Polonaruwa District at the south by Ampara District and at the East by Indian Ocean. (Figure 1). Batticaloa is the major city in the Eastern Province. The total land area of the District is approximately 2482 square kilometers. Pasikudha is popular tourist destination with a shallow calm sea and a beautiful beach.

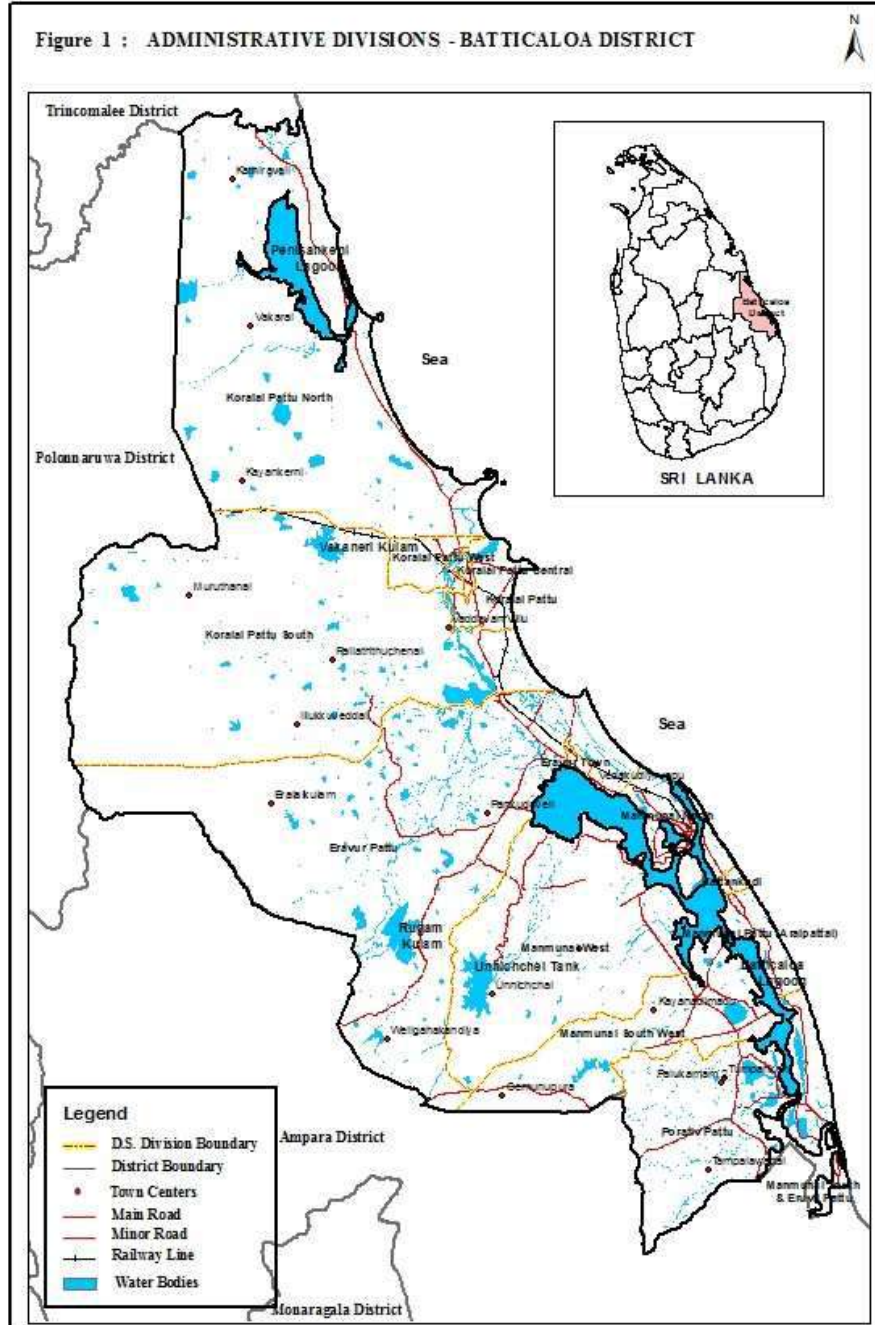
2.2 Administrative Structure

The district is subdivided into 14 Divisional Secretary Divisions (DSDs) (Figure 1 and Table 1). Each DSD is again subdivided into several Gram *Niladari* Divisions (GNDs). The total number of GNDs is 345 (see Annex II). Each GND consists of several villages. There are 965 villages in the district. The local authorities comprise one Municipal Councils in Manmunai North, two Urban Councils in Kattankudy and Eravur Town and eleven Pradeshiaya Sabas.

Table 1: DS Divisions and their extents in Batticola District.

	DS Divisions	Number of GND s	Extent(ha)
1	Eravur Pattu (EP)	39	60688
2	Eravur Town(ET)	15	324
3	Kattankudy(KK)	18	414
4	Koralai PattuWest (KPW)	08	2502
5	Koralai Pattu (Valach.)(KP)	12	3109
6	Koralai Pattu North (KPN)	16	50988
7	Koralai Pattu Central(KPC)	08	324
8	Koralai Pattu South(KPS)	18	59110
9	Manmunai South West(MSW)	24	14159
10	Manmunai West(MW)	24	28974
11	Manmunai South & Eruvilpattu(MS & EP)	45	4473
12	Manmunai North(MN)	48	4155
13	Manmunai Pattu (Araipattai)(MP)	27	2530
14	Porathivu Pattu(PP)	43	16492
	Total	345	248242

Figure 1 : ADMINISTRATIVE DIVISIONS - BATTICALOA DISTRICT



2.3 Physical Environment

2.3.1 Topography

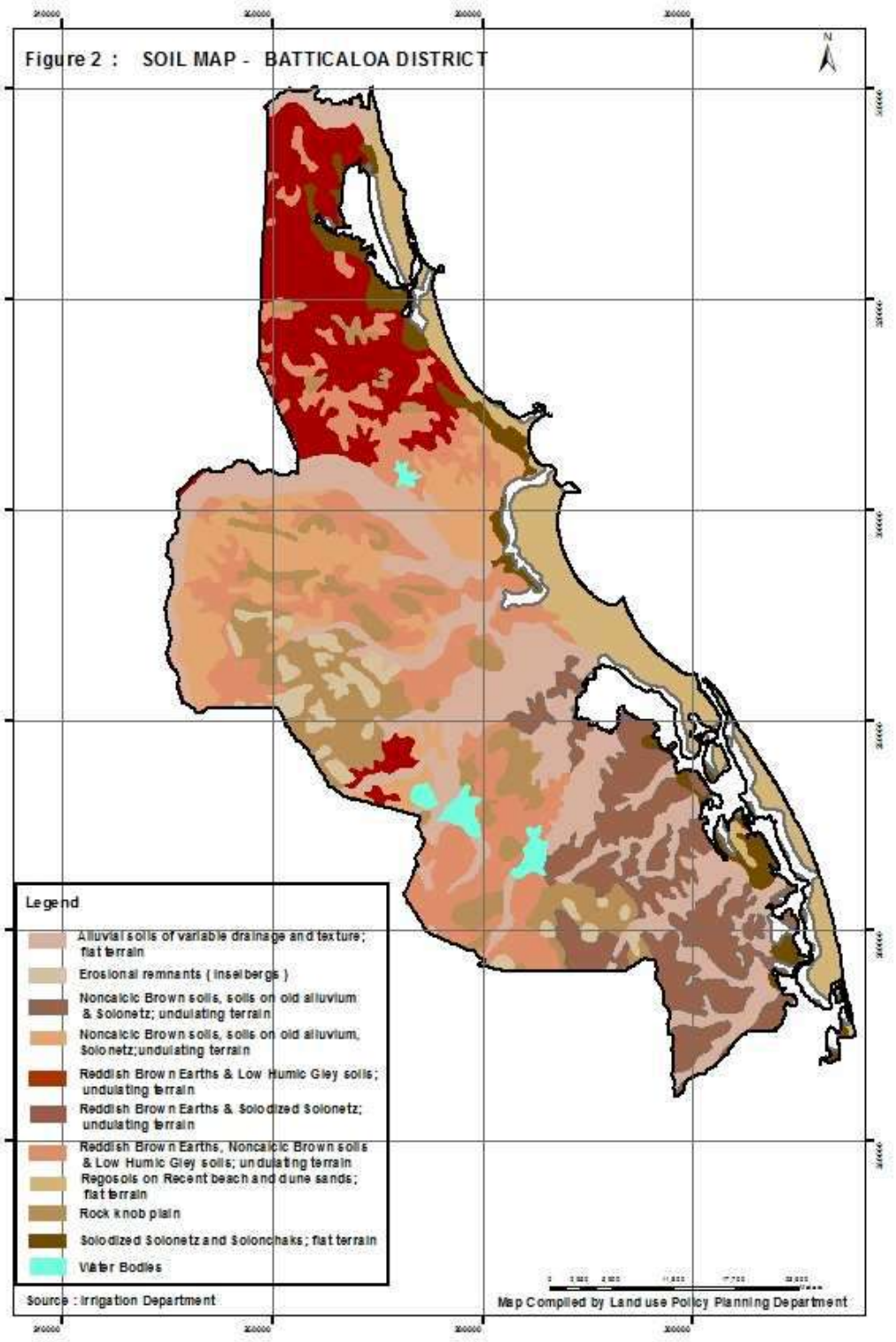
The topography of the district varies from flat to undulating. The elevation of the District is not exceeding 8 meters in height above the sea level. It consists of undulating plains and alluvial flats watered by rivers from the mountains of uva and central province.

2.3.2 Soils

The major soil types and their distribution in the District are shown in the Figure 2. The dominant soil group (approximately 21% of the total extent of land) in the District is the Alluvial soil in flat terrain. The next dominant soil group is Reddish Brown earths, Non calcic Brown soils & Low Humic Glay soils; it occupies about 18% of the total land area. Rest of the area covers with several soil groups. They are Non Calcic Brown soil & Low Humic Glay soil in undulating terrain, Non Calcic Brown soil on old alluviam & solonetz in undulating terrain, Reddish Brown earths & Low Humic Glay soil in undulating terrain, Regosols on recent beach and dune sands in flat terrain, Solodized Solonetz and Solonchaks in flat terrain. There are some erosional remnants and Rock Knob Plains in the area. It covers 03% and 11% respectively. The physical and chemical properties of these soils are suitable for agriculture. However, the major constraint to crop production is the low available water rather than the limitations of the soils. The great soil groups and their approximate extents as a percentage of the total land area of the District are given in the Table 2.

Table 2. The Great Soil Groups and their extents as a percentage of the total land area of the District. (Source : Soil Map published by the Irrigation Department)

Great Soil Group	Extents as a percentage (%)
Alluvial soils of variable drainage and texture; flat terrain	21
Non Calcic Brown soil & Low Humic Glay soil in undulating terrain	11
Non Calcic Brown soil on old alluviam & solonetz in undulating terrain	10
Reddish Brown earths & Low Humic Glay soil in undulating terrain	12
Reddish Brown earths, Non calcic Brown soils & Low Humic Glay soil in undulating terrain	18
Regosols on recent beach and dune sands in flat terrain	09
Rock Knob Plain	11
Solodized Solonetz and Solonchaks; flat terrain	05
Erosional remnants(Inselbergs)	03
Total	100



2.3.3 Climate

Rainfall

Batticaloa district which belongs to the Dry Zone receives mean annual rainfall of 1650.9 mm. The rainfall is not equally distributed throughout the year and has a bimodal pattern having heavy intensity in the months of October to March (“Maha” Season) with less shower in April to September (“Yala” season). The annual average rainfall varies from 864 mm to 3,081mm (50 years data). The North East Monsoon brings major part of the rainfall with little variation within the district.

Temperature

The mean annual temperature varies from 25⁰ C to 35⁰ C. The maximum temperature averages around 32 degrees Celsius. The warmest time period of the year is recorded from March to May and the minimum temperature is recorded in November/January.

Agro Ecology

Agro Ecological region represents the combinations of the characteristics of climate, soil and relief which basically determine the land use and management requirements of a given location. Batticaloa District is having one major agro-ecological region namely Low country Dry Zone (DL). DL region in the district is again sub divided into three sub regions. These Sub regions are DL2B, DL2 and DL4. The agro ecological regions and their extent as a percentage of the total land area of the district are given in the Table 3 and the regions are shown in the figure 3.

Table 3. Agro Ecological regions and their extents (%) in the Batticaloa District

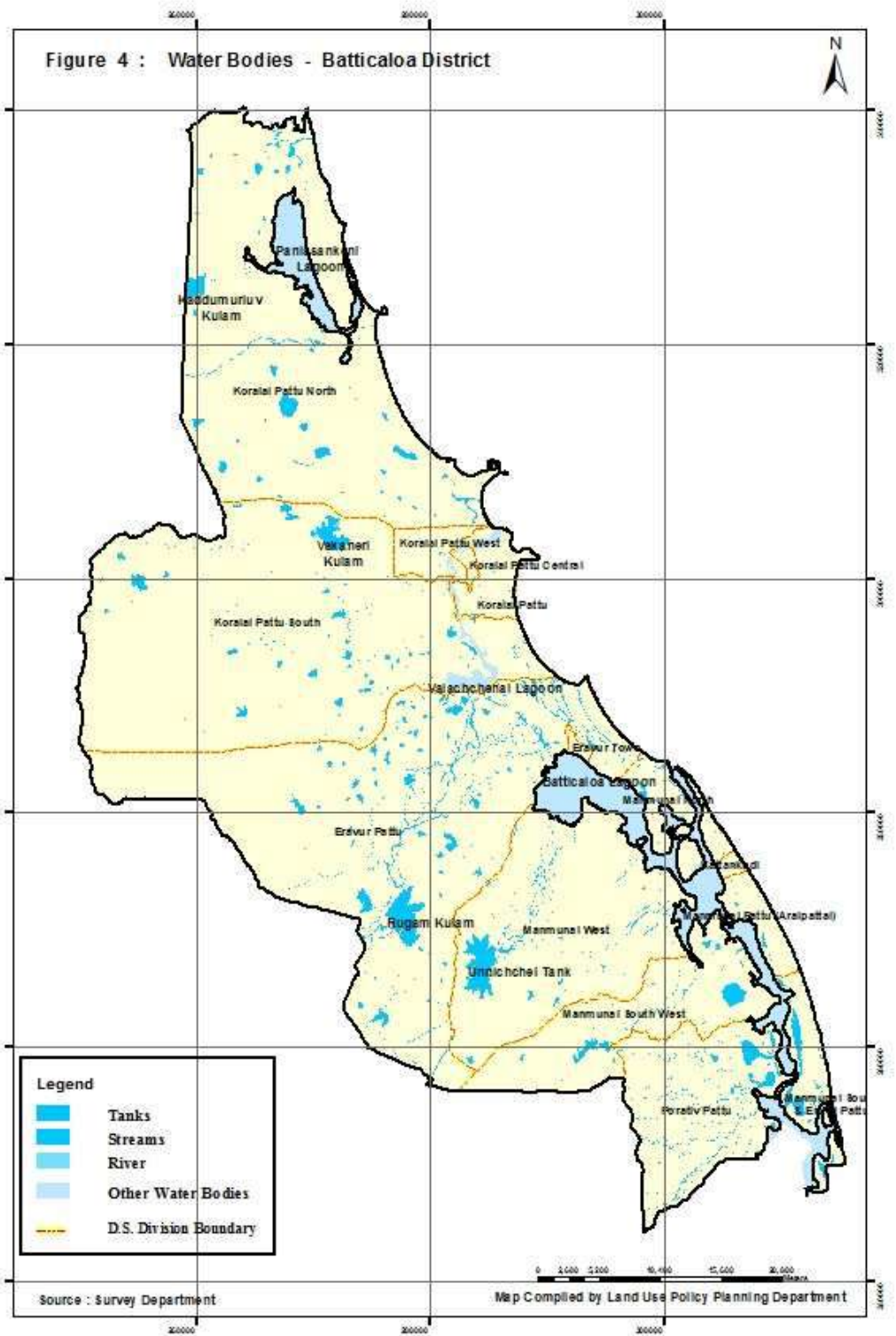
Agro Ecological Region	Extent as percentage(%) of the total land area
DL2 &DL4	2
DL2A	2
DL2B	96
Total	100

2.3.4 Water

There are several water bodies in the District including reservoirs, major and minor tanks, lagoons, rivers and streams. The distribution of the water bodies are shown in the Table 4 and Figure 4. Some of the water bodies are used for irrigation particularly for paddy cultivation.

Table 4: Distribution of the Water Bodies

	DS Division	Number of Tanks	Number of Rivers	Number of Channels	Number of Thoonas	Number of Ponds
1	Eravur Pattu	82	01		04	
2	Eravur Town		01	02	02	
3	Kattankudy		01		02	
4	Koralai Pattu West (Oddamavadi)	02	01	02		01
5	Koralai Pattu (Valachenai)	08	06	01	07	
6	Koralai Pattu North	87			12	
7	Koralai Pattu Central	03	01			
8	Koralai Pattu South	65	01			
9	Manmunai South West	18	02	02		15
10	Manmunai West	19				
11	Manmunai South & Eruvilpattu	28			01	14
12	Manmunai North	02			02	
13	Manmunai Pattu (Araipattai)	08			13	
14	Porathivu Pattu	20	06	04		05
	Total	342	20	11	43	35



2.4 Demographic structure

2.4.1 Population

The total population of the District is 526,567 (Male 250,676; Female 275,891) based on the Census of Population and Housing in 2012. Population by religion, sex and ethnic group are given in the Table 5 and 6. Density of the population is 202 persons per sq. km. However Kattankudy D.S. Division has the highest density and the Koraeipattu North D.S. Division has the lowest density (Figure 5).

Table 5: Population by religion and sex

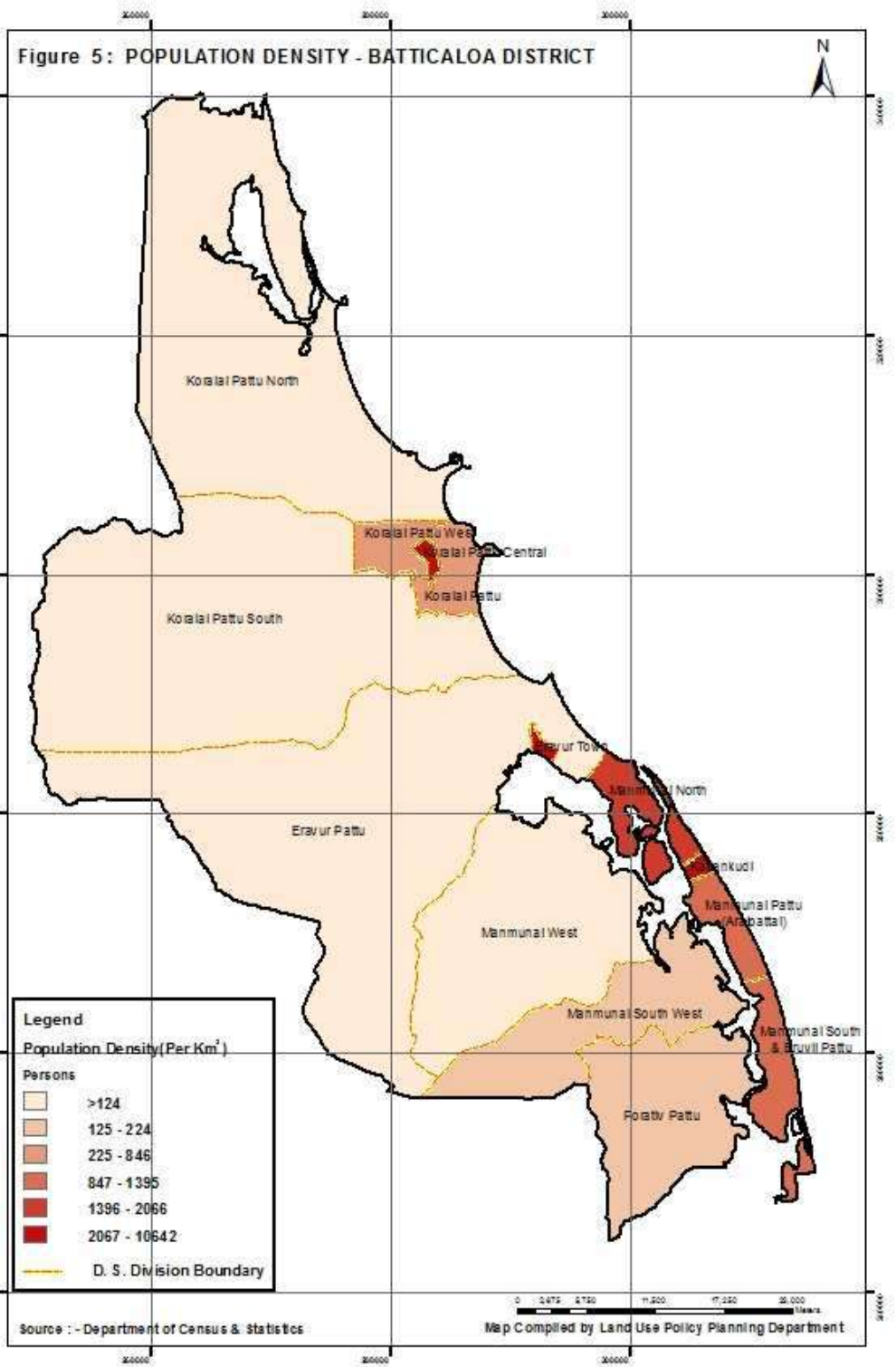
Sex	Buddhist	Hindu	Islam	Roman Catholic	Other Christian	Other	Total
Male	4234	161,172	63,633	11,225	10,382	30	250,676
Female	2047	177,710	70,432	13,229	12,451	22	275,891
Total	6281	338,882	134,065	24,454	22,383	52	526,567

Source: Census Report, 2012

Table 6: Population by ethnic group and sex

Sex	Sinhalese	Sri Lankan Tamil	Indian Tamil	Sri Lanka Moor	Burgher	Malay	Sri Lanka Chetty	Other
Male	2256	97,429	445	34,298	639	08	02	15
Female	1163	92,854	448	31,017	605	06	01	14
Total	3419	190,283	893	65,631	1,244	14	03	29

Source: Census Report, 2012



2.4.2 Labour Force

All persons age 15 years and above of either gender are identified as working age population by the Department of Census and Statistics (DCS). This population consists with two groups namely economically active and economically inactive. The economically active population called labour force comprises all persons of working age either employed or unemployed during the reference period.

The percentage of males and females under economically active population in the District are 75.1% and 24.9% respectively (Annual Bulletin 2014, Department of Census & Statistics). Unemployment rate of the District is 3.9%

2.4.3 Occupational Structure

Considering the distribution of employed population in the District, 25.8 % employee in the agricultural sector, 28.2% employee in the Industrial sector and 46.1% employee in the service sector. (Annual Bulletin 2014, Department of Census & Statistics) Percentage distribution of employed population by employment status is given in Table 7.

Table 7. Percentage distribution of employed population by employment status in Batticola District – 2014

Employee	Employer	Own Account Worker	Contributing family worker
62.2	2.1	34.1	1.6

The distribution of the major occupational types in the DS Divisions in the District are shown in Table 8.

Table 8. Occupation Details in Batticola District – 2013/2014

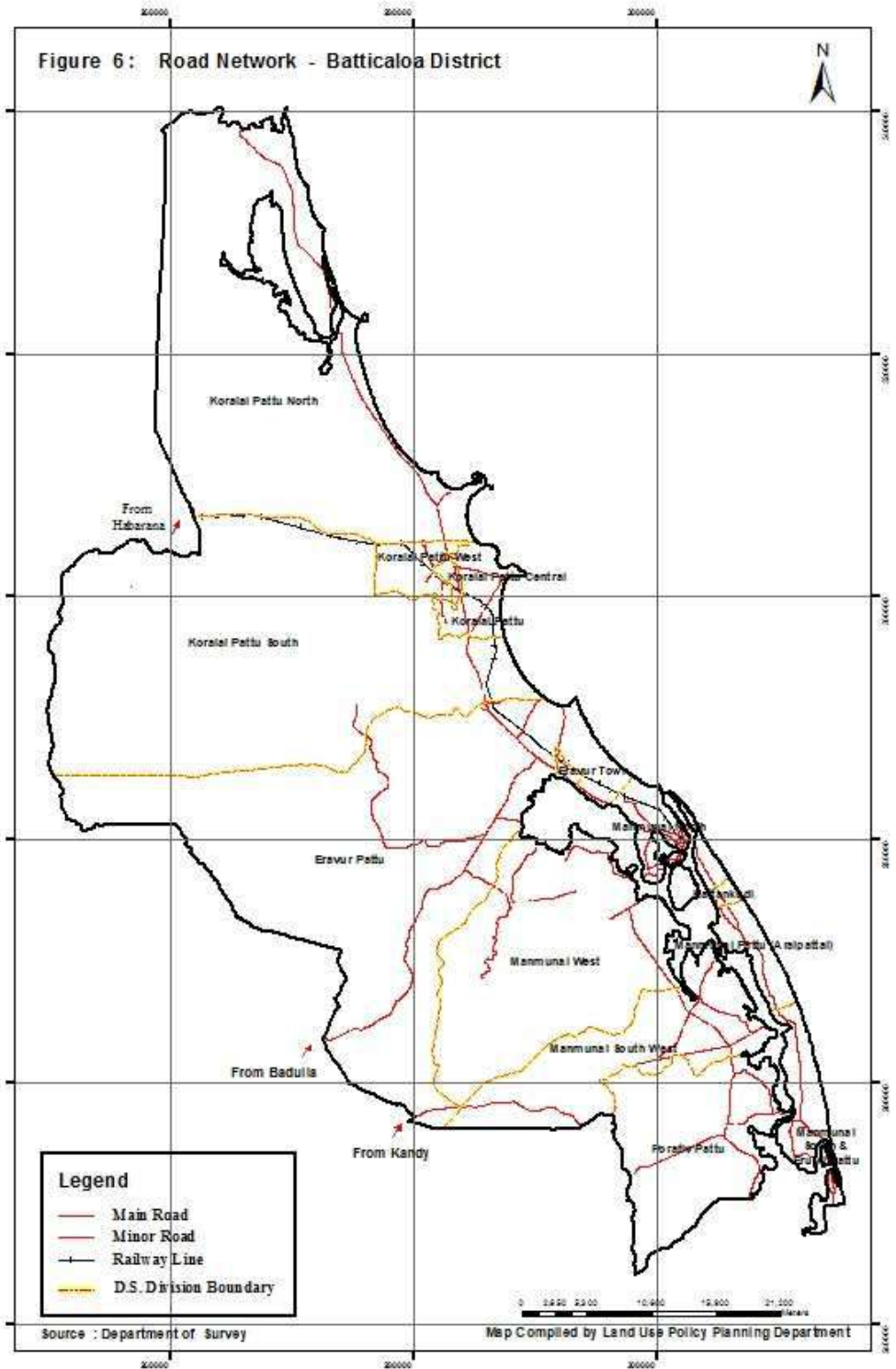
DS Division	Agriculture	Livestock	Fishing	Whole Sales & retails	Manufacturing & Handicraft	Govt. Employment	Private Sector	NGOs	Skill Labor	Daily Labor	Foreign Employment
EP	2072	341	1944	895	865	1576	627	116	739	9205	2557
ET	143	168	145	1903	1402	1095	226	23	284	3925	1471
MP	220	79	708	621	441	1647	397	48	432	3720	1184
KP	250	124	974	355	169	645	290	146	487	2851	850
KPC	257	158	1088	943	394	409	145	39	441	2823	562
PP	2063	280	235	334	305	684	81	49	230	4937	2523
MS & EP	2264	129	792	1014	277	4424	433	104	787	4827	2632
MSW	1382	112	232	355	231	472	90	61	227	2685	1215
KPS	2331	832	936	224	146	120	34	143	2474	448	663
KK	69	92	582	3424	1241	995	281	115	235	3861	598
MN	619	508	1825	1812	778	7124	3226	352	5444	5201	2318
MW	1135	209	950	213	122	179	66	24	180	4500	1294
KPN	2254	204	2943	169	104	87	50	54	65	1496	198
KPW	232	106	489	737	629	568	45	14	265	2119	982
TOTAL	15291	3342	13843	12999	7104	20025	5991	1288	12290	52598	19047

Source : Planning Branch, Kachcheri, Batticola

2.5 Infrastructure

2.5.1 Roads and Railways

The road network in the district had been developed during recent years. The figure 6 shows the road network of the district. Adjoining districts are connected by major roads and facilitate the transportation. There is a railway track in Batticaloa District. It crosses over Manmunai North, Eravur, Chenkalady, Kiran, Valachenai, Valachchenaicentral, Oddamavady and Vaharai D.S. Divisions. The roads have been classified mainly as A, B and C by the Road Development Authority (RDA). The figure shown below obtained from website of RDA that indicates the distribution of roads belongs to classes A and B. The total length of A-class roads in the District is 205.8 km and B class roads are 60.64 km.



2.5.2 Communication facilities

Communication facilities of the District have been developed well recently. Table 6 shows the distribution of telephone connections provided by the Sri Lanka Telecom. There is 47% of the people use PSTN (Public Switch Telephone Network), 37% of the people use CDMA (Code Division Multiple Access) and 17% of the people use ADSL (Asymmetric Digital Subscriber Line).

Table 9 shows the distribution of the connections provided by the Sri Lanka Telecom

Place	PSTN	CDMA	ADSL Lines
Batticola	15,705	11,870	5,766
Eravur			
Kattankudy			
Kaluwanchikudy			
Valachchenai			

2.6 Land Use

Major land uses and land cover in the District are forests, agriculture, home gardens and water bodies. Forest covers 41% of the total land area and the agricultural land covers 37% of the total land area in the District. The rest of the land covers by the home Garden, water bodies, wet lands and Non Agricultural lands. Table 10 shows the distribution of the Land Use. More details of the land use are given in the Part II.

Table 10 – Land Use Extents – 2015

Type	Extent (ha)	Percentage
Home Garden	12,251	5%
Agricultural Land	92,868	37%
Forest	1,01,459	40%
Water Bodies	11,325	5%
Wet Land	4,690	2%
Other Land (Vacant Lands, Unproductive Lands, Sandy Area, Rockout crops etc.)	14,364	6%
Non Agricultural Land	11,243	5%
TOTAL	2,48,200	100%

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 2050¹. 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 resources of the country including agriculture, realizing a higher living standard for the people and the establishment of an independence economic status internationally².

Major themes of the revised draft National Physical Plan – 2050 (Annex III) 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.

¹Anon, 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.

²www.nppd.gov.lk

2.7.2 Regional and Sub Regional Level Plans

Eastern Development Plan published by the Agriculture Department. This is a five year development plan of the Eastern Province. The aim of this report is to enhance sustainable income and better living standards of farmers. This report emphasis to protect and conserve natural resource to achieve sustainable development in the crop sector.

2.7.3 Need for a Land Use Plan

The existing National level and sub National level plans do not focus the Land Use Planning. Therefore it is necessary to have a Land Use Plan for decision makers to allocate land resource in rational manner for various development activities in the District. The Land Use plan can be used to identify the strategies to ensure the optimal utilization of underutilized lands in the District and it helps to identify the lands for future developments. The plan helps to minimize the impact of the land misuses and it can be used to maintain the environmental balance and biodiversity by implementing the given recommendations.

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 identified³. 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 country⁴.

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.

³EU 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

⁴Williamson, 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)⁵.

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 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 95 map sheets (Annex IV). 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 11.

⁵FAO, 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 V & VI). 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/LAND COVER 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 Cover

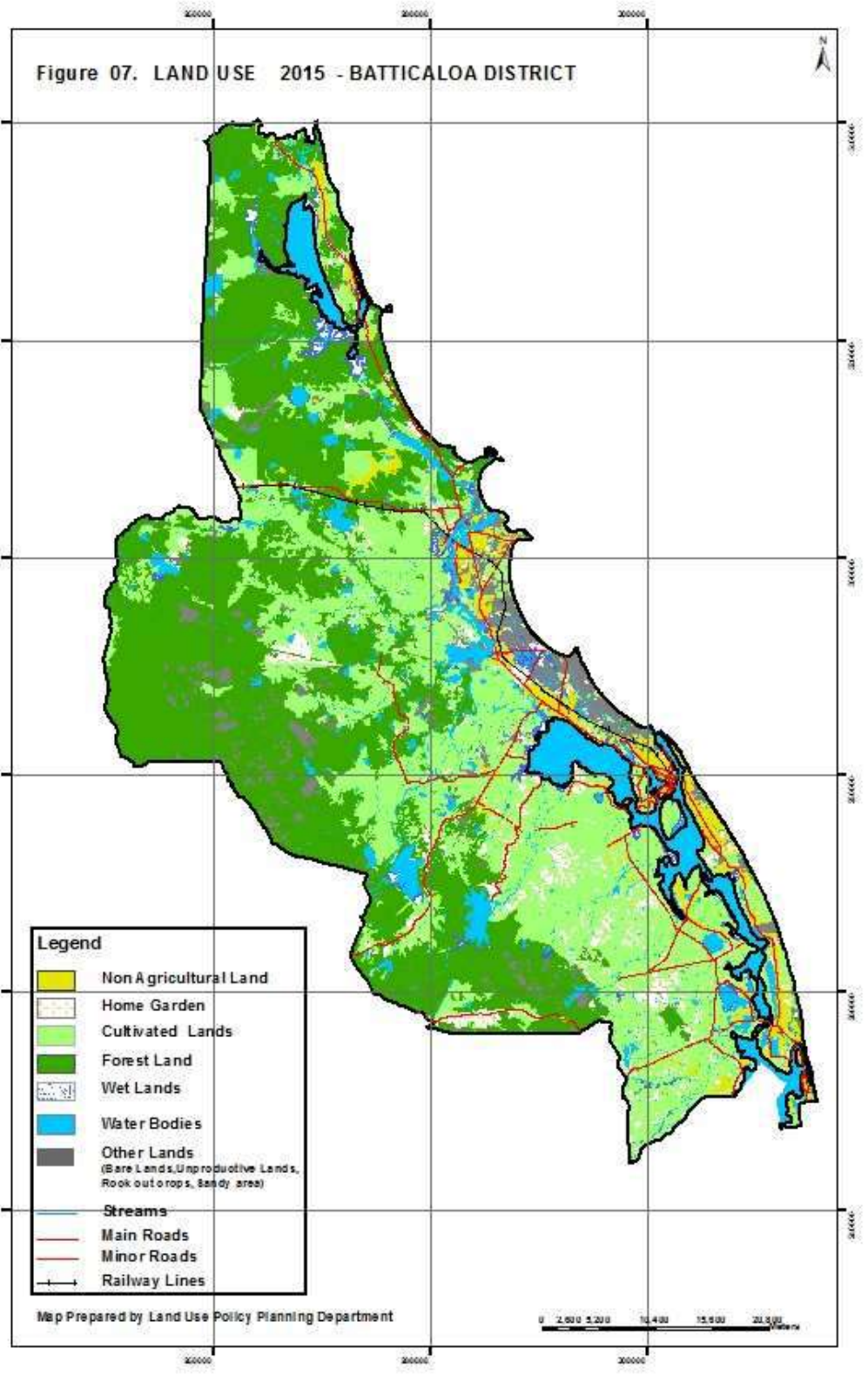
Land use of the District (2015) is shown in the figure 7 and approximate extents of different land use categories are given in the table 11. The home gardens are defined as houses with a garden and homesteads are defined as houses without a considerable extent of lands for cultivation. The areas identified as “aquaculture” is mainly used for shrimp/prawn farms. Unutilized lands 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 11: Land use categories and with approximate extents

Main category	Sub category I	Sub category II	Approx. Extent (ha)	Percentage
Home Garden			12,288	4.95
Agricultural Lands	Seasonal crops	Paddy	84317	33.97
		Field crops	5116	2.06
	Permanent crops	Coconut	1397	0.56
		Cashew	1071	0.43
		Palmyrah	80	0.03
		Other perennial crops	228	0.09
	Aquaculture	Aquaculture	416	0.17
	Homestead	Homestead	9474	3.82

Non-Agricultural lands	Industrial area	Industrial area	202	0.08
	Other Service Center	Service Center	261	0.11
	Recreational Area	Recreational Area	4	0.00
	Other	Other(Playground, Cemetery etc)	1269	0.51
Forest Reserves	Forest	Natural Forest	39499	15.91
		Forest Plantation	222	0.09
	Range Land	Scrub Land	54104	21.79
		Grass Land/Pasture Land	7247	2.92
Wet Lands	Marsh	Marsh	3680	1.48
	Mangrove	Mangrove	906	0.36
Other Lands	Unutilized lands	Bare Land	2137	0.86
	Unproductive Lands	Barren Land	6795	2.74
	Rock out crops	Rock out crops	4856	1.96
	Sandy area (beaches, sand dunes etc.)	Sandy Area	1231	0.50
Water bodies	Tanks	Major Tank	4145	1.67
		Minor Tank	1980	0.80
		Natural Ponds	2104	0.85
	Rivers and streams	Rivers and streams	3212	1.29
Total			248,242	100.000

Source: Updated Land Use Map



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. The possible recommendations for the abandoned lands are given in table 15.

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 needs to be protected is considered as one of the land use issues.



Photograph 1: Additional areas that need to be protected in the District
(Kalkudah – Munaimurukan Kovil)

b) Presence of low productivity agricultural lands

Low productivity agricultural lands (underutilized lands) include areas given over to highland crops (plantation crops and field crops) 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.



Photograph 2: Low productivity paddy lands in the District
(Porativu pattu- Kantipuram)

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.



Photograph 3: Low productivity Home Garden Areas in the District
(Porativu pattu – Thumpalai)

d) Presence of abandoned settlements

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



Photograph 4: Abandoned settlement in the District
(KPS - Miyankalm)

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 sea water intrusion.



Photograph 5: Abandoned agricultural areas in the District
(MN - Erumativu)

f) Presence of unutilized lands

These lands are idle state lands coming under the jurisdiction 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.



Photograph 6: Unutilized lands in the District
(Koralai pattu North - Panisankeni)

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

5.3 Recommendations

Basically there are two areas were identified and presented in the plan (see Figure 17).

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, 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. The distribution of these lands among the Divisional Secretary Divisions is given below.

Table 12: Distribution of lands where changes/improvements are not required.

D.S. Division	Lands where changes/improvements are not required*		
	Extent (ha)	Percentage (%) of the D.S.D	Percentage(%) of the District
Manmunai South & Eruvil Pattu	622.00	13.91	0.25
Porathivu Pattu	7,321.50	44.39	2.95
Manmunai South West	4,377.00	30.91	1.76
Manmunai Pattu	403.90	15.96	0.16
Kattankudy	0.00	0	0
Manmunai North	136.00	3.27	0.05
Manmunai West	5,313.00	18.34	2.14
Eravur Town	0.00	0	0
Eravur Pattu	5,065.14	8.34	2.04
Koralai Pattu South	6,524.17	11.04	2.63
Koralai Pattu	200.00	6.43	0.08
Koralai Pattu Central	0.00	0	0
Koralai Pattu West	1,590.99	63.59	0.64
Koralai Pattu North	3,434.99	6.73	1.38
Total	34,988.69		14.10

*excluding "Presently protected area".



Photograph 7: Areas where the present use can be continued.
(Manmunai West- Kannankuda)

a) Protected Areas

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 Figure 8 the land use plan without giving any recommendations for the management of such areas. Approximate extents of the presently protected areas are given in the table 13.

Additional areas recommended for protection comes under second category where changes or improvements are required.

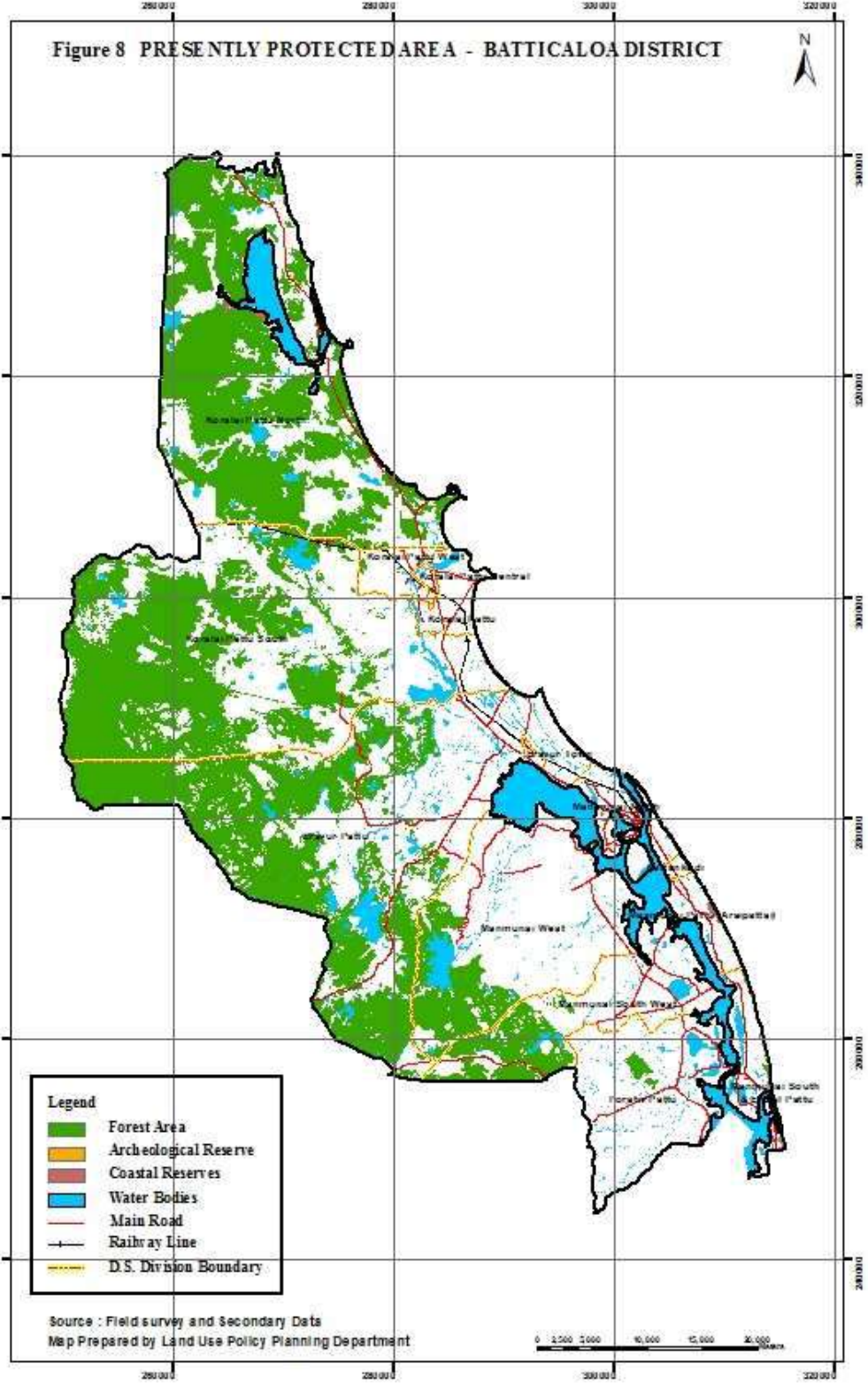
(b) Other areas/uses located outside of the protected areas that can be continued

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 14.10% (excluding the presently protected area) of the total land area of the District. Rest of the area needs some changes or improvements.

Table 13: Approximate extents of the presently protected areas in the District.

DS Division	Approximate Extents (ha)		
	Forest Area	Archeological Reserves	Coastal Reserves
Eravur Pattu	29389	n.a.	114.84
Eravur Town	n.a.	n.a.	n.a.
Kattankudy	n.a.	n.a.	13.33
Koralai Pattu West (Oddamavadi)	n.a.	n.a.	n.a.
Koralai Pattu (Valachenai)	n.a.	n.a.	40.8
Koralai Pattu North	30636	9.21	439.83
Koralai Pattu Central	30336	n.a.	n.a.
Koralai Pattu South	n.a.	n.a.	65.64
Manmunai South West	n.a.	n.a.	n.a.
Manmunai West	n.a.	n.a.	n.a.
Manmunai South & Eruvilpattu	n.a.	n.a.	279.51
Manmunai North	4495	n.a.	155.93
Manmunai Pattu (Araipattai)	5746	1.29	121.12
Porathivu Pattu	375	8	n.a.
Total	100977	18.5	1231

n.a. = not available



2. Areas where changes or improvements are required

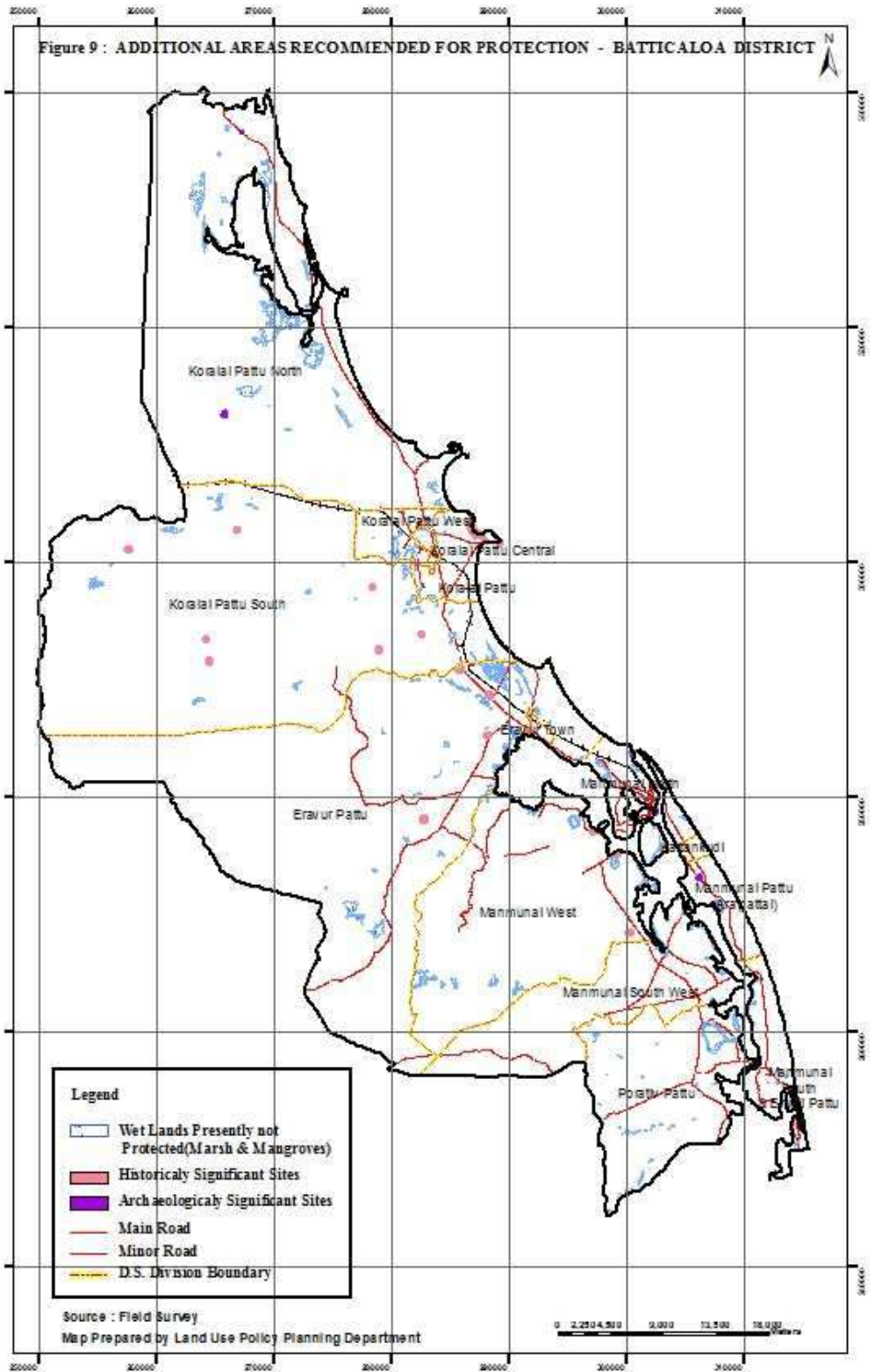
(a) Additional areas recommended for protection

There are other areas besides the currently protected areas that need to be protected. These areas have to be protected to ensure the protection of religious, cultural, archeological sites and the protection of environment. The relevant institutions need to confirm the recommendations given in this plan. The approximate extents of the additional areas that need to be protected are given in the Table 14 and their locations are given in the Figure 9.

Table 14: Additional areas recommended for protection and their approximate extents in the District.

DS Division	Archeologically significant sites Extents (ha)	Historical significant sites Extents (ha)	Wet Lands (Marsh & Mangroves) Extents (ha)
Eravur Pattu	n.a	2.67	708.03
Eravur Town	n.a	0.02	n.a.
Kattankudy	n.a	n.a	n.a.
Koralai Pattu West (Oddamavadi)	n.a	11.56	42.9
Koralaipattu (Valachenai)	9.21	01	74.03
Koralai Pattu North	01	n.a	68
Koralai Pattu Central	n.a	n.a	7.69
Koralai Pattu South	18.5	3.58	280.16
Manmunai South West	n.a	n.a	320.82
Manmunai West	n.a	0.28	604.11
Manmunai South & Eruvilpattu	n.a	n.a	71.73
Manmunai North	01	n.a	199.21
ManmunaiPattu (Araipattai)	1.29	n.a	73.06
Porathivu Pattu	8	4	307.04
Total	37	22.11	2756.78

n.a. Not Available



(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

In general, majority of the home gardens in the district are underutilized due to one or more of the above reasons. The recommendations for the above issues are given below.

Table 15: Major reasons for underutilization of home gardens and proposed recommendations

Major reasons for underutilization	Recommendations	Responsible Agency
Lack of capital	Awareness creations on agricultural loans or subsidy schemes	
Inadequate Technical know-how	Awareness creation and training	PDOA
Presence of degraded lands/areas	Introduction of conservation farming practices and provide necessary inputs	PDOA
Unavailability of water	Promote water conservation techniques	PDOA
Damage of crops from wild animals	Establish a new electric fence or extending the present fence	DWLC

The extents of the home gardens are varying from one area to other. The areas where the high proportion of underutilized home gardens is available were identified and mapped. The divisions in which these home gardens are found and total extents are given in the Table 16 and their distribution are given in the figure 10

Table 16 : Underutilized Home gardens and their total extents in the District

DS Division	GN Divisions	Total Extent (ha)
Manunai South & Eruvilpattu	Cheddipalayam North, Mankadu, Thethateevu South, Thethateevu South 2, Kaluthavalai 3, Kaluthavalai 4 Santhipuram, Kaluthavalai 1, Kaluthavalai 2, Kaluthavalai central, Mahiloor West, Mahiloor East, Mahiloor Munai, Mahiloor South West, Thuraineelavanai South, Kumanvely 11 West, Kaluwanchikudy north, Cheddipalayam South	43.72
Porativepattu	Mandur 3, Mandurktamunai, Mandur 1 & 2, Palamunai, Mandur South, Thampalawatta, Ranamadu, Sankarpuram, Kanesapuram, Vallaveli, Kakkachchivaddai, Palayadivaddai, Sinnawatha, Vilanthottam, Anaikattiyaveli, Nellikadu, Kannapuram, Malayakattu, palacholai, Vivekananthapuram, kannapuramEast, Palugamam, Thikkodai, Veeranchenai, Thumpankeni, Vanninagar, Suravaanaiyadiyoothu, Palugamam 1, Navagirinagar, Ganthipuram, Vammiyadiootu, Mavetkudah, Kalumunthanveli, Selvapuram, Vipulanandapuram, Thumpankerni Youth Scheme, PeriyaPorathivu, Munaithivu, Punnaikulam, Pattapuram, Kovilporathivu, Kovilporathivu South, Kovilporathivu West,	1739.7
Manmunai South West	Ampilanthurai North, Ampilanthurai West, Arasaditivu, Arasaditivu North, Kachchakodi Swami Malai, Kadukkamunai, Katchenai, Kuluvinamadu, Mahiladitivu, Mavadimunmaari, Munaikkadu East, Munaikkadu North, Munaikkadu South, Munaikkadu West, Muthalaikkudah, Panichchiyadimunmari, Thanthamalai	1149.17

Manmunai Pattu	Kirankulam south, Kirankulam central, Kirankulam North, Puthukudiyiruppu south, Puthukudiyiruppu North, Puthukudiyiruppu, Vedarkudiyiruppu, Palamunai , Selvanagar East, Arayampathy East, Thalankudah, Manmunai, Ollikulam, Mavilankanthurai, Kovilkulam, Kankayanodai south, Arayampathy 02, Arayampathy 03	212.5
Manmunai North	saththurukondan, Sinna Oorani, Kokkuvil, Thiruperunthurai, Nochchimunai, Oorani, Periya Uppodai, njanthoduvai South Amirthakali, Mamangam , Iruthayapuram West, Puthunagar,	139.84
Manmunai West	Illuppadiichchanai, Pavakkodichchanai, Panchanai, Ganthinagar, Kottiyapulai, Kannankudh, Karayakkanthivu, Kurinchamunai, Paruttichchanai, Puthumandapathady, Echchanthivu, Vavunathivu, Mankikaddu, Karaveddy, Vellavedduvan, Mahilavedduvan, Unnichchai, Aiyithiyamalai North, Aiyithiyamalai South, Narippulthoddam, Nadiyamadu, Navakkadu, Kanchirankudh, Mandapathady,	3114
Eravurpattu	Iyankerny (Muslim), Meerakerny, Mich Nagar, Savukkady, Vantharumoolai West, Kommathurai East, Kommathurai North, Vantharumoolai East, Kaluwankerny II, Kaluwankerny I, Palachchola, Mavadivembu I, Mavadivembu II, Sittandy II, Sittandy IV, Sittandy I, Sittandy III, Chenkalady I, Kommathurai West, Mylavaddavan, Periyapullumalai, Kithulwewa, Gemunupura, Koppavelly, Chenkalady I I, Thalavai, Veppavedduwan, Iralakulam, Marappalam, Rugam, Karadiyanaru, Pankudahvely, Koduwamadu, Kumaraveliar Kiramam, Arumugathan Kudiyiruppu I, Thannamunai, Mylampavelly, Iyankerny (Tamil), Arumugathan Kudiyiruppu II	1745.71
Koralai South	Murakoddanchenai, Devapuram, Santhiveli, Thikiliveddai, Palayadithona, Kiran East, Kiran West, Korakallimadu, Perilaveli, Muruthanai , Koraveli, Poolakadu, Kudumbimalai, Vahaneri, Vadamunai, Uthuchenai, Kallichchai, Punanai West	1137.71

Koralai pattu	Kinnaiyadi, Pethalai, Puthukudiyiruppu, Kannahipuram, Kalmadu, Karuvakerny, Sunkankerny, Kumburumoolai, Kalkudah	74.15
Koralai pattu Central	Punanai East, Branthuraichchenai South, 208 D Chemmanodai, 210C Thiyavedduwaan	31.96
Koralai pattu West	Mansolai, Meeravodai Muslim East, Meeravodai Muslim West, Paper Town	40.8
Koralai pattu North	Uriyankaddu, Kaddumurivu, Mathurankernikulam, Krimichchi, Kathiraveli, Paalchchenai, Ammanthanaveli, Kayankerni, Panichchankerni, Vattavan, Mankery South, Puchchankerny, Punanai East, Vakara North, Mankerny Central	900
Total		10327.83

(c) Underutilized Agricultural Lands

Some of the agricultural lands in the District are underutilized due to various reasons.

(d) Underutilized Paddy Lands

Underutilized paddy lands are cultivated only during one season. The divisions where the underutilized paddy lands are available and their total extents are given in the Table 18. Distribution of these lands is shown on the Figure 11. The reasons for underutilization and the recommendations are given in the Table 17. The reasons will vary from one land to another.

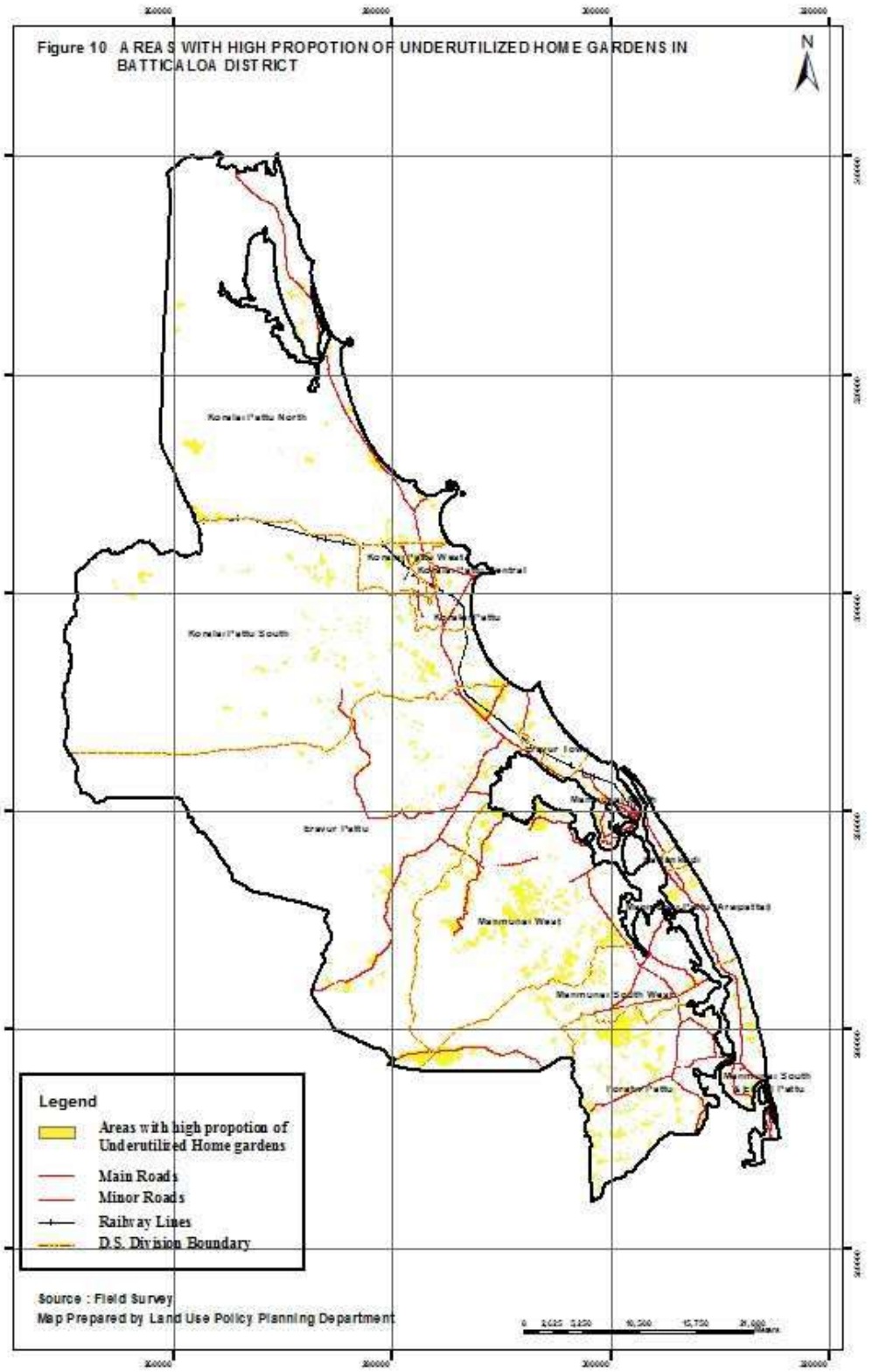
Table 17: Major reasons for underutilization of Paddy lands and proposed recommendations

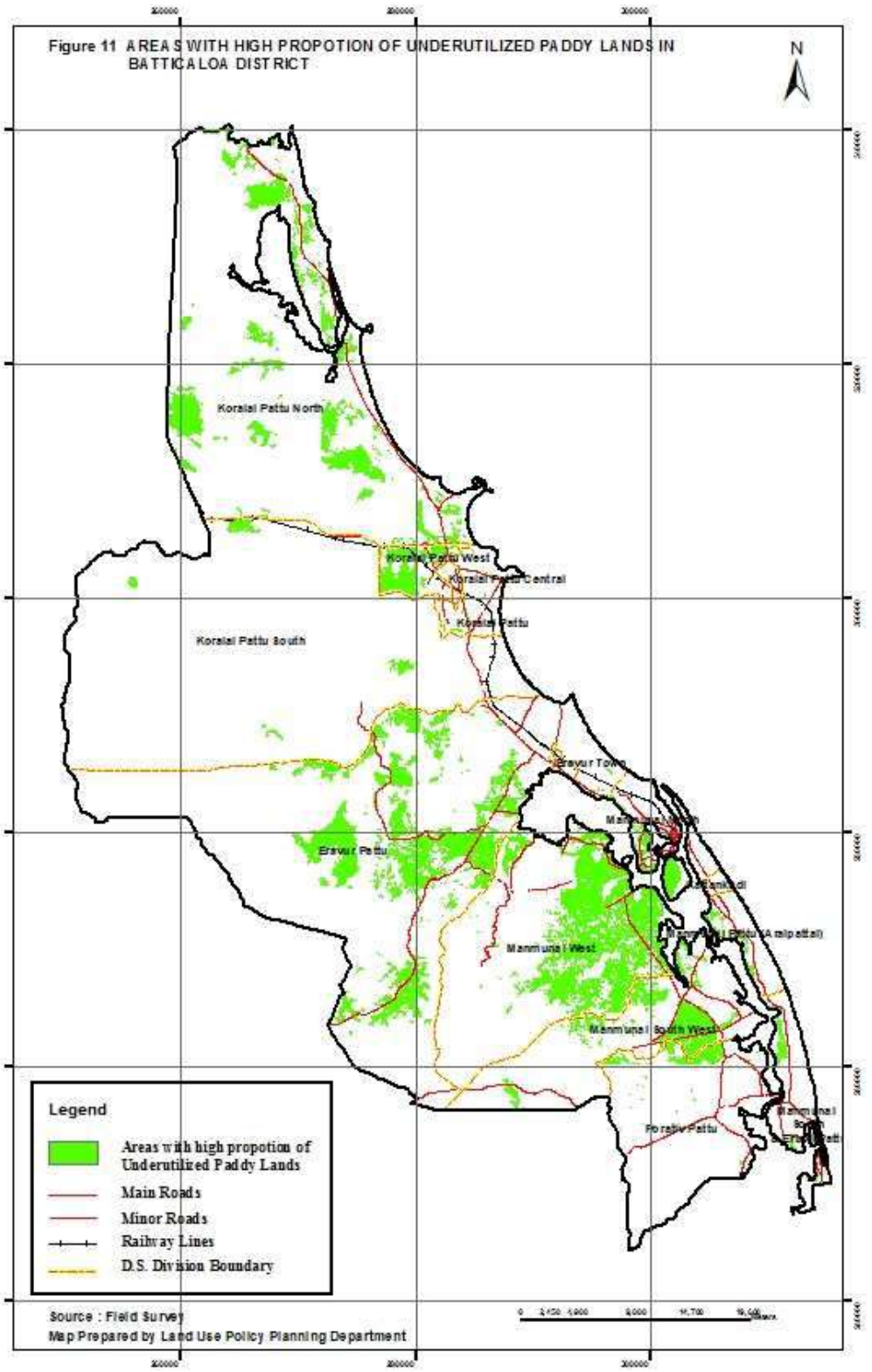
Major reasons for underutilization	Recommendations	Responsible Agency
Lack of capital	Awareness creations on agricultural loans or subsidy schemes	
Inadequate Technical know-how	Awareness creation and training	DAS
Salinity	Introduce salt tolerant varieties	PDOA,DAS
Unavailability of water	Promote water conservation techniques, attend the irrigation problems	ID
Excess Water	Improve Drainage	DAS
Tenure problems	Resolve the issues by studying the cases separately.	LCGD

Table 18: Underutilized paddy lands and their extents in the District

DS Division	GN Divisions	Approximate Extents(ha)
Manmunai South & Eruvilpattu	Cheddipalayam North, Cheddipalayam North, Cheddipalayam south, Mankadu, Thethateevu South, Thethateevu South 1, Thethateevu South 2, Thethateevu north, Kaluthavalai 1, Kaluthavalai 2, Kaluthavalai central, Mahiloor West, Mahiloor East, Mahiloor Munai, Mahiloor, Thuraineelavanai north, Periyakallar 3 south, Kurumanvely West, Kurumanvely 12, Kaluthavalai03, Kurukkalmadam North, Eruvel North, Eruvel South, Thurinilavanai South, Thurinilavanai South 01, Thurinilavanai North 01, Thurinilavanai North	965.78
Porative Pattu	Navakirinakar, Palaiyadivaddai, Thikkodai, Suravanaiyadiuttu, Nellikkadu, Thumpankeny, Punnakkulam, Vellaveli, Mandur South, Mandur-01&02	4748.8
Manmunai South West	Ampilanthurai West, Arasaditivu, Arasaditivu North, KachchakodiSwamiMalai, Thanthmalai, Kadukkamunai, Katchenai, Kuluvinamadu, Mahiladitivu , Mavadimunmaari, Munaikkadu East, Munaikkadu South, Muthalaikkudah, Kokkadichcholai, Muthalaikuda west, Paddipalai	2346

Manmunai Pattu	Kirankulam North, Puthukudiyiruppu south, Puthukudiyiruppu North, Puthukudiyiruppu, Vedarkudiyiruppu, Manmunai, Ollikulam, Mavilankanthurai , Kankayanodai south	258
Manmunai North	Puliyantiu East , Thimilaitivu, Veeshsukalmunai, Thiruperunthurai, Kokkuvil, Sathrukondan, Puliyantivu South	815
Manmunai West	Illuppadichchanai, Pavakkodichchanai, Panchanai, Ganthinagar, Kanchirankudh, Kottiyapulai, Kannankudh, Karayakkanthivu, Kurinchamunai, Nandapathady, Paruttichchanai, Puthumandapathadu, Echchanthivu, Vavunathivu, Navakkadu, Mankikaddu, Karaveddy, Vellavedduvan, Mahilavedduvan, Unnichchai, Aiyithiyamalai North, Aiyithiyamalai South, Narippulthoddam, Nadiyamadu	9222.6
Eravur Town	Eravur-01A, Eravur-6A, Eravur-06, Eravur-05	15.52
Eravur Pattu	Periyapulimalai, Kopaveli, Rugam, Kiththulwewa, Marappalam, Karadiyanaaru, Iralakulam, Veppavettavan, Pankudaveli , Koduvamadu, Siththandy 111, Mylavettaan, Mavaddi vembu, Umaraveliyar kiramam	13303.01
Koralai Pattu South	Kallichchai, Punanai West, Santhiveli, Thikiliveddai, Vadamunai, Uthuchenai, Kiran West, Vahaneri, Perilaveli, Muruthanai, Koraveli, Poolakadu, Kudumbimalai	13836
Koralai Pattu	Nasivanteevu, Pethalai, Kalkuda, Karuwakerni, Chunkankerni, Kinnaiyadi	110.46
Koralai Pattu Central	Punanai East 282, Thiyavedduwaan	0.21
Koralai Pattu West	Paper Town	145.36
Koralai Pattu North	Uriyankaddu, Kattumurivu, Mathurankernykulam, Kirimichchai, Kathiraveli, Paalchenai, Ammanthanaaveli, Kayankerni, Panichchankerni, Vattavan, Mankerny South, Puchchankerny, Punanai East, Vakara North, Mankerny Central	7008.52
Total		52774.66





(e) Underutilized other Agricultural Lands

The underutilized other agricultural Lands include lands devoted to field crops and plantation crops such as Coconut and Cashew. The reasons for underutilization and recommendations are given in the table 19. The underutilized other agricultural lands and their extents are given in the table 20 and their distribution are shown on the Figure 12 and Figure 13

Table 19: Reasons for underutilization of other agricultural lands and the recommendations.

Reasons	Recommendations	Responsible Agency
Lack of capital	- Awareness creation on loans and subsidy schemes	CCD,SLRC
Water Scarcity	- Carry out a feasibility study to use the ground water by constructing agricultural wells.	NWRDB
Wild life threat	- Extension of the existing electric fence or establishment of new fence to keep away wild animals.	DWLC
Presence of degraded lands	- Introduce conservation farming	CCD,SLCC,PDOA
Land tenure / ownership issues	- Resolve the issues by studying the cases separately.	LCGD

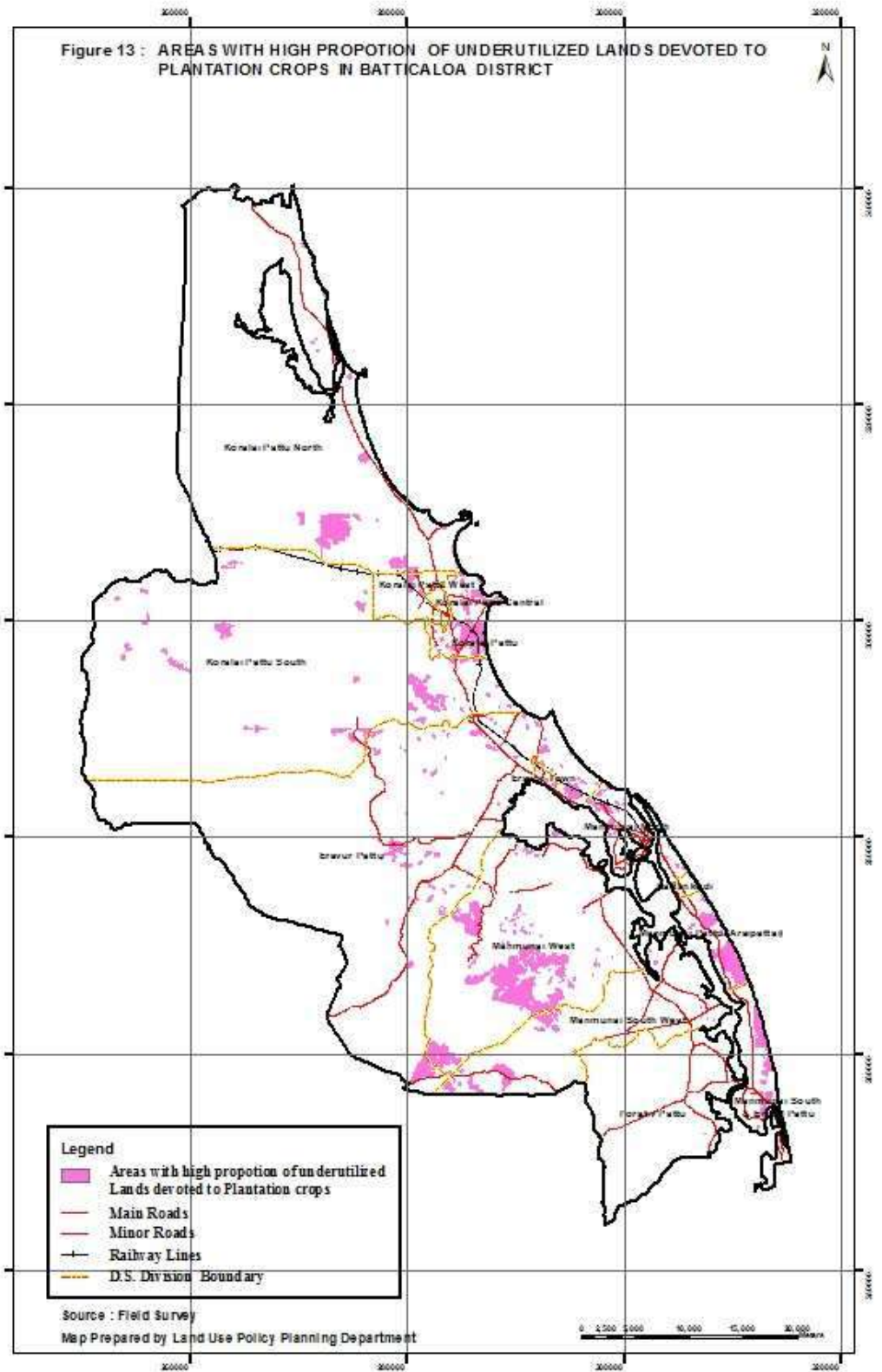


Table 20: Underutilized lands devoted for field crops, Coconut and cashew (Other agricultural lands) and their Extents in the District

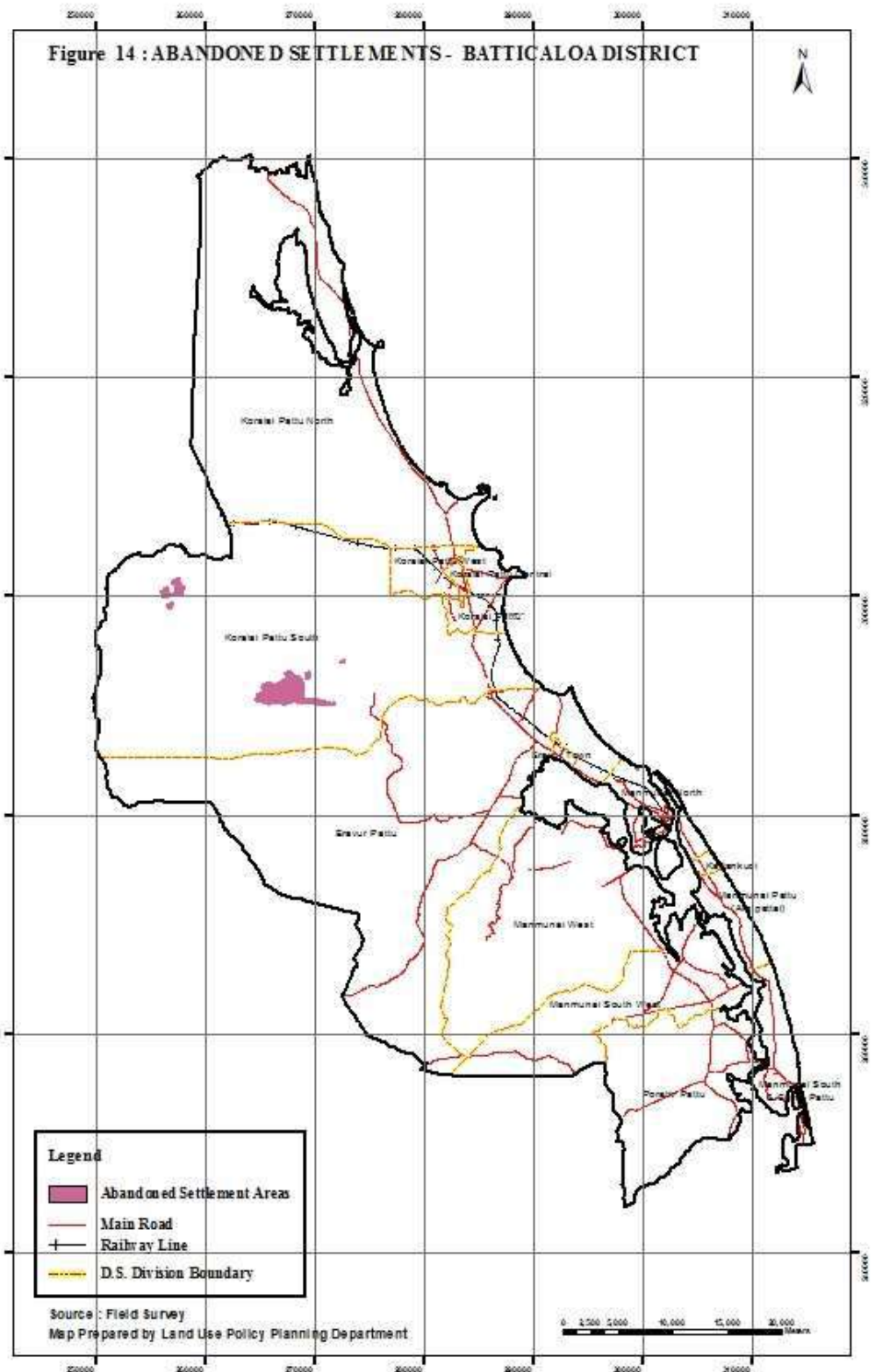
Type of Crop	D.S. Division	Extent(Ha.)
Field Crops	Manmunai South West	271.35
	Manmunai Pattu	175.84
	Manmunai West	2175.7
	Eravur Town	6.47
	Eravur Pattu	396
	Koralai Pattu South	733.43
	Koralai Pattu	20.68
	Koralai Pattu Central	1.14
	Koralai Pattu North	623.83
	Koralai Pattu West	8.4
Coconut	Porathivu Pattu	16
	Manmunai Pattu	70
	Kattankudy	7.11
	Manmunai North	28.25
	Manmunai West	87.83
	Eravur Town	13.98
	Eravur Pattu	130.9
	Koralai Pattu South	53.12
	Koralai Pattu	257
	Koralai Pattu Central	3.55
	Koralai Pattu West	2.62
	Koralai Pattu North	257.06
	Manmunai South West	8.46
Cashew	Manmunai Pattu	296
	Eravur Pattu	96.72
	Koralai Pattu South	95
	Koralai Pattu	214.17
	Koralai Pattu North	48.51
Total		6099.12

d) Presence of abandoned settlements

There are several settlements abandoned mainly due to conflict situation in the past. The extents of these home garden and number of families who have abandoned these home gardens are given in the Table 21 and their distribution are given in the Figure 14.

Table: 21 Distribution of the abandoned settlements

D.S.Division	Name of the village / Settlement	No. of families who have abandoned their homesteads	Approx. Extent(Ha.) abandoned	Proposed Recommendation
Koralai Pattu South	Aliyaodai	16	869.67	Elephant Fencing, Provide adequate infrastructure facilities, Housing Scheme(Re Settlement), Lively hood assistance, Food for Work
	Miyankal	94		
	PallathuChanai	113		
	Thadanai			
	Kallichchai	126		
	Mandoorveddai	225		
	Arakkalmalai			
	Mullivaddavan	81		
	Anaikaddu area	63		
	Vadamunai	132		
	Vaddavan	5		
Siruthenkal	13			
Koralai Pattu	Jayanthiyaya	70	51.69	
Total		938	921.36	

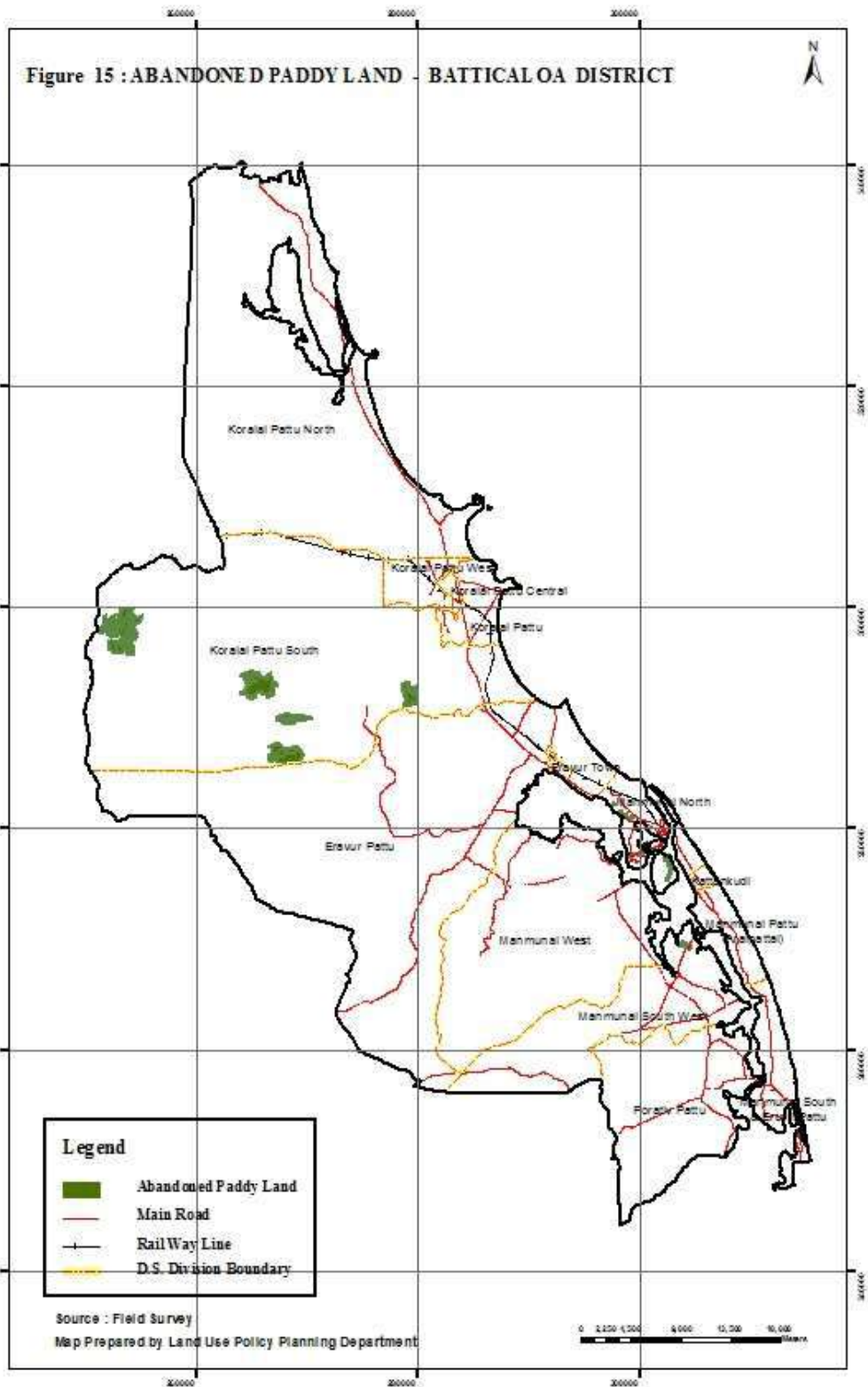


(e) Abandoned Agricultural Lands

Some of the paddy lands in the District have been abandoned due to the limitations like salinity, low yield and wild elephant threats. The approximate extents and reasons for abandonment are given in the Table 22 and their locations are shown in the Figure 15. To resolve the issue, further studies are needed. However, removal of stagnated water using water pumps was suggested at the stakeholder discussion but economic feasibility of this recommendation has to be studied. There are no other agricultural lands abandoned in the Batticaloa District.

Table: 22 Abandoned Paddy Lands and their extent in the District.

D.S. Division	Location	Extent(Ha.)	Reasons.
Manmunai South West	Mahiladithivu	35.63	Salinity Problem, Low yield
	Muthalaikudah		
	Munaikkadu West		
Manmunai North	Saththurukondan	114.4	Salinity Problem, Low yield
	Kokkuvil		
	Seththukkudah		
	Puthunagar		
	Thiuperunthurai		
	Puliyantheevu East		
	Puliyantheevu South		
Koralai Pattu South	Kudumpimalai	412.98	Drought, Elephant Problem
	Vadamunai		
	Muruthanai		
	Punanai		
Total		563.01	



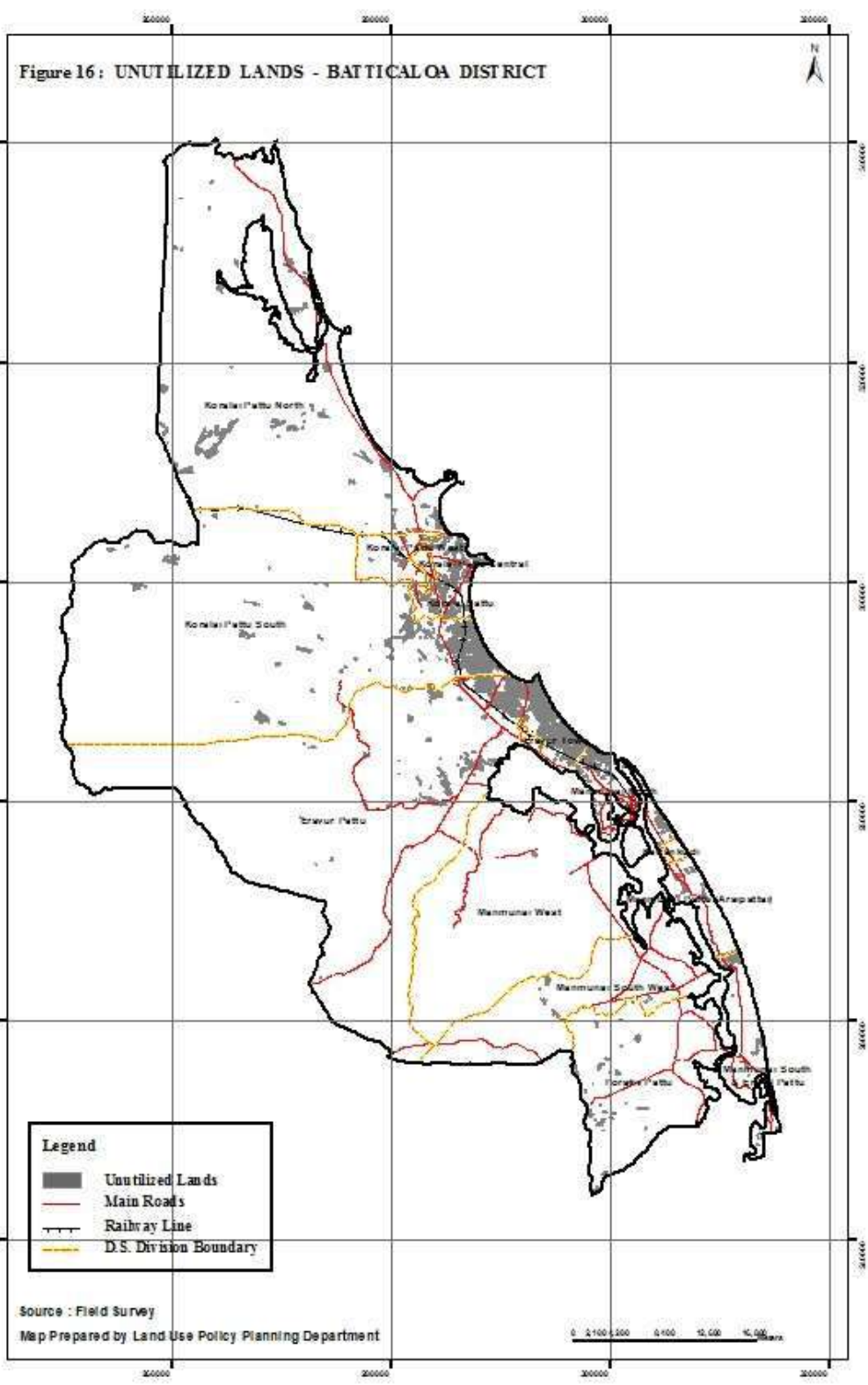
(f) Unutilized Lands

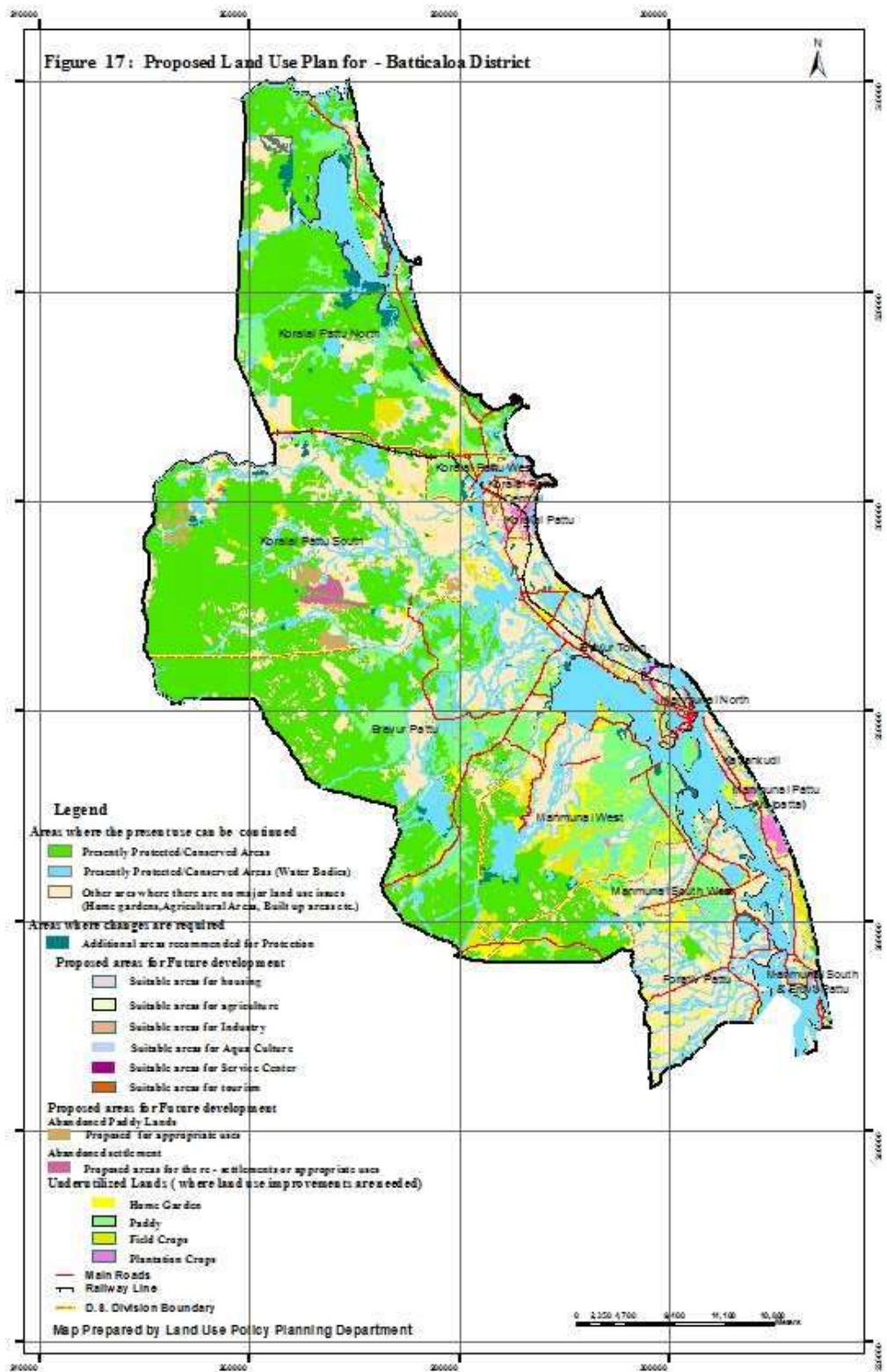
The unutilized state lands were identified and site assessment was done to determine their suitability for different purpose such as Settlement, Service Centers, Tourism, Agriculture, Industries and Aquaculture. The criteria used to determine the suitability for different uses are given in the Annex VII. The extents and their suitability for different uses are given in the Table 23 and their distribution shown in the Figure 16.

Table 23: Unutilized lands and their suitability for different uses

D.S.Division	G.N.Division	Total Extent (Ha.)	Agriculture	Settlement	Service Center	Tourism	Agro Farming	Industries	Aqua Culture
Eravur Pattu	Kaluwankerny - 1	28.34	√	√					
	Savukkady	4.04		√					
	Kiththul	80.97	√						
	Thalavai	36.43	√	√					
Manmunai West	Vavunathivu	11.21	√						
Manmunai North	Thiraimadu	14.97			√				
Manmunai Pattu	Selva Nager East	1.21		√	√				
	Kovil Kulam	0.61			√				
	Arayampathy East	0.4		√	√				
	Puthukkudiyiruppu	0.61	√		√				
	Puthukkudiyiruppu North	1.21		√	√				

D.S.Division	G.N.Division	Total Extent (Ha.)	Agriculture	Settlement	Service Center	Tourism	Agro Farming	Industries	Aqua Culture
Manmunai South & Eruvil Pattu	Thanthamalai	2.02				√			
	Paddipalai	1.21						√	
Koralai Pattu South	Theva Puram	37		√					
	Thikiliveddai	45							√
	Palayadi thoona	39	√	√				√	
	Kiran East	26	√	√				√	
	Kiran West	5	√					√	√
	Korakallimadu	55.75		√	√			√	
	Perillaveli	75	√				√		
	Muruththanai	75	√				√		
	Koraveli	40	√				√		
	Pulakkadu	30	√						√
	Kudumbimalai	165	√			√	√		
	Vakaneri	17	√				√		
	Vadmunai	150					√		
	Uoothuchenai	30	√				√		
	Punanai West	25	√						
Kallichchai	29	√				√			
Koralai Pattu	Kalkudah	2.82				√			
	Meeravodai Tamil	2.02		√					
	Naasivantheevu	1.21		√					
	Kumburumulai	2.02		√					
	Kalmadu	1.21		√					
Koralai Pattu Central	Thiyavedduvan	32.75		√					
Koralai Pattu North	Punanai East	452.95	√				√		
	Panichchankerny	599	√						√
	Uooriyankaddu	10	√				√		
Porativepattu	Kannapuram	0.2			√				
	Vivekananthapuram	6.07	√						
Total		2137.75							





5. 4 other issues related to Land Use

Unplanned garbage dumping in forest lands in Koralai Pattu North D.S. Division. Filling of Water bodies by garbage and sand for settlements in Kattankudy and Eravur Town D.S. Divisions. River bank erosion by removing sand in Koralaipattu North D.S. Division. These areas are located in several G.N. Divisions and information are given in the table 24.

Table 24 : Other issues related to land use

D.S.Division	G.N. Divisions	Issue	Recommendation
Koralaipattu North	Punanai East - Miyankulam	Encroached Forest and Unplanned garbage Dumping	Action should be taken to protect these areas by the responsible agency
Kattankudy	Kattankudy North,south and West	Filling water bodies for settlements by adding garbage and sand.	
Eravur Town	Eravur 6D		
Koralaipattu North	Kathiraveli Verukal Kalarippu	River bank erosion by removing sand	



Photograph 8: Encroachments in reservation of the lagoon

(Eravur Town – Eravur 6D)



Photograph 9: Over extraction of sand
(Koralai pattu north - Kathiraveli)



Photograph 10: Unplanned garbage dumping
(Koralai pattu North - Miyankulam)

6. PROPOSED IMPLEMENTATION STRATEGY

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

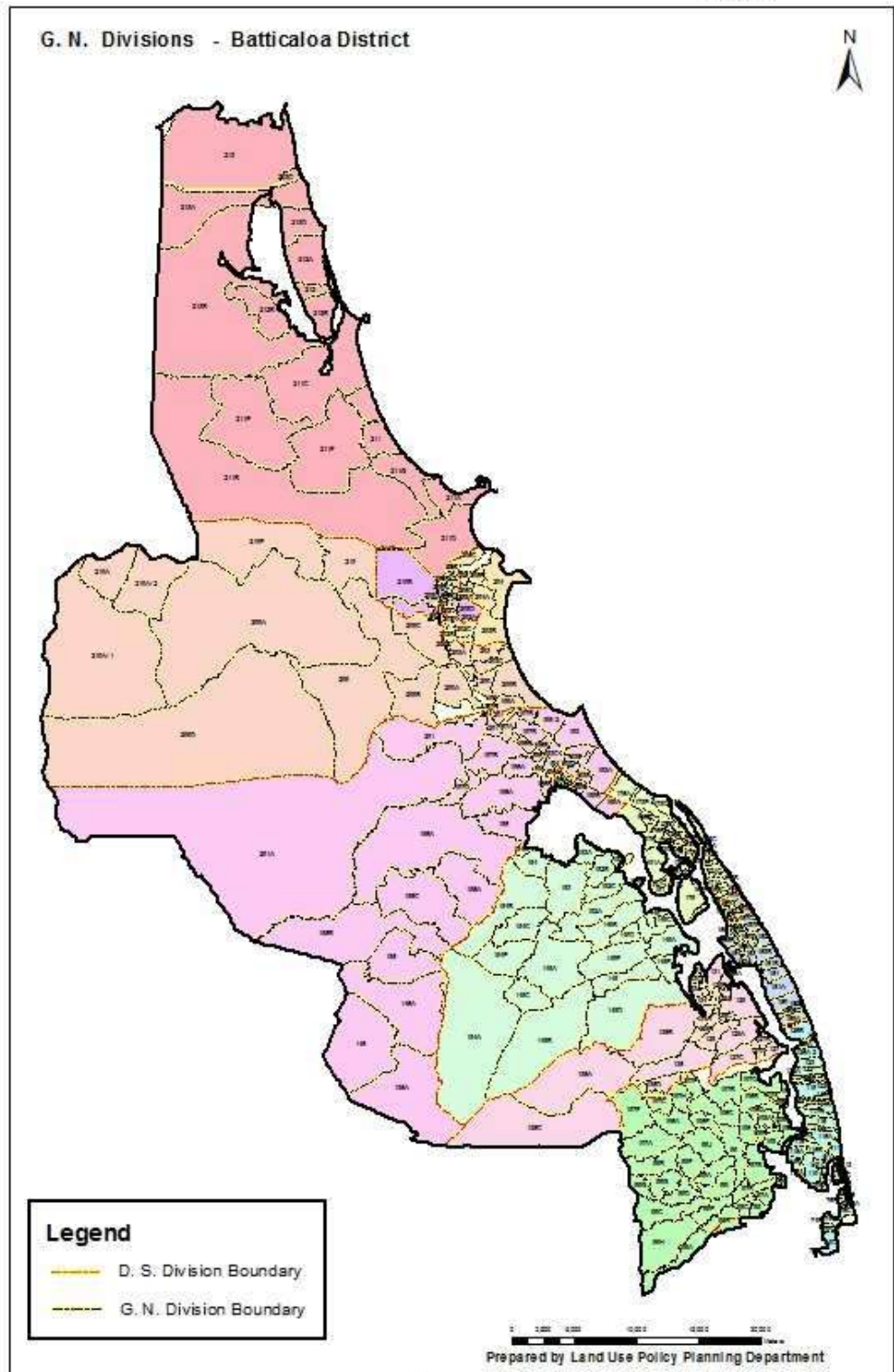
- (1) Parallel approach where all the issues could be addressed simultaneously.
- (2) Step wise approach based on the priorities.

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

At the district level there is no central agency that could undertake the implementation of the recommendation 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) some are medium term (one to two years) and some are short term (less than one year).



G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Manmunai North	176 C	Periya Urani
2		173	Amirthakali
3		177A	Ara sadi
4		173H	Barathypuram
5		172C	Dutchbar
6		173G	Ganagasooriyam sathurikkam
7		176HI	Iruthayapuram Central
8		173B	Iruthayapuram East
9		176E	Iruthayapuram West
10		176G	Jayanthipuram
11		171C	Kallady veloor
12		171A	Kallady Mukasthuvaram
13		171B	Kallady Uppodai
14		171	Kallady
15		176B	Karuva ppankeni
16		176	Kokkuvil
17		173I	Koolavadi East
18		173F	Koolavadi
19		178	Koddamunai
20		173A	Mamangam
21		168	Manchanthoduvai North
22		168A	Manchanthoduvai South
23		172	Navalady
24		168C	Navaikkuda East
25		168D	Navaikkuda South
26		168B	Navaikkuda
27		171A	Nochchumunai
28		171C	Palamimadu
29		176D	Panichchaya di
30		178A	Periya Uppodai
31		179B	Puliyantheevu Central
32		179	Puliyantheevu East
33		179C	Puliyantheevu South
34		179A	Puliyantheevu West
35		173D	Punna chchoai
36		181C	Puthunagar
37		176A	Saththurukondan
38		181D	Sethukkuda
39		176F	Sinna Urani
40		177B	Thamarakkeni
41		177	Thandavanveli
42		181	Thimilatheevu
43		173E	Thirimadu
44		172B	Thiruchchenthur
45		181A	Thirupperunthurai
46		173I	Thisaweeringam Sathukkam
47		181B	Veechukalmunai
48		173K	Veddukkadu

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1		193A	Soukkady
2		197B	Vantharumoolai West
3		196	Kommathurai East
4		196B	Kommathurai North
5		197	Vantharumoolai East
6		198A	Kaluvankeni II
7		198	Kaluvankeni I
8		197C	Palachcholai
9		197A	Maavadivempu I
10		197E	Maavadivempu II
11		201/2	Shittandi II
12		201/4	Shittandi IV
13		201/1	Shittandi I
14		201/3	Sittandi III
15		195	Chenkalady II
16		196A	Kommathurai West
17		197D	Mylavedduvan
18		146	Periya Pullumalai
19		185B	Kithul
20	Eravur Pattu - Chenkalady	135A	Gemunupura
21		146A	Koppaveli
22		195/1	Chenkalady I
23		193	Thalavai
24		186A	Veppavedduvan
25		201A	Eralakkulam
26		185C	Marappalam Eravur I
27		185	Rugam
28		185A	Karadiyana aru
29		186	Pankudaveli
30		195A	Koduvama du
31		195/B	Kumaraveliyakiramam
32		189C	Arumukaththan Kudiyiruppu II
33		189A	Thannamunai
34		189B	Mylampavali
35		193C	Iyanke ni tamil
36		189	Arumukaththan kudiyiruppu
37		194B	Ellai Nagar
38		194	Eravur 04
39		194/A	Eravur 05

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Eravur Town	190	Eravur 01
2		190A	Eravur 01A
3		190B	Eravur 01B
4		191	Eravur 02
5		191A	Eravur 02A
6		191B	Eravur 02B
7		191C	Eravur 02C
8		192	Eravur 03
9		192A	Eravur 03A
10		192B	Eravur 06
11		192C	Eravur 06A
12		192D	Eravur 06D
13		193D	Iyankeeni Muslim
14		193A	Meerakkeni
15		193B	Mechinagar

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Koralaipattu South - Kiran	210A	Kallichai
2		203	Kiran East
3		203A	Kiran West
4		200C	Korakkalimadu
5		209B	Koraveli
6		209C	Kudumbimalai
7		199	Morokoddansenai
8		209A	Muruththanai
9		200B	Palayadithona
10		209	Perilaveli
11		209C	Poolakkadu
12		210E	Punanai West
13		200	Santhiveli
14		199A	Thevapuram
15		200A	Thigilavaddai
16		210A/2	Uththuchchenai
17		210A/1	Vadamunai
18		210	Vahaneri

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Koralai Pattu Central	208D	Chemmanodai
2		208A	Mavadichenai
3		206C	Baranthurachchenai South
4		206A	Baranthuraichchenai North
5		206D	Valaichchenai 05
6		206B	Valaichchenai 05
7		206	Valaichchenai 04
8		210C	Thiyavedduvan

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Koralai Pattu - Valaichenai	202C	Sungankeni
2		204	Kalkuda
3		204A	Kalmadu
4		205D	Kannakipuram
5		202A	Karuvakkeni
6		202B	Kinnayadi
7		203B	Kumpurumoolai
8		202	Meeravodai Tamil
9		205C	Nasivantheevu
10		205B	Peththalai
11		205A	Puthukkudiyiruppu
12		205	Valaichchenai Tamil

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Koralai Pattu West - Oddamavadi	207A	Maancholai
2		207B	Meeravodai Muslim East
3		207	Meeravodai Muslim West
4		208B/2	Oddamavadi Ward 01 North
5		208B	Oddamavadi Ward 01 South
6		208C	Oddamavadi Ward 02
7		208	Oddamavadi Ward 03
8		210B	Paper Town

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Manmunai South West - Paddipalai	127	Ampilanthurai
2		127B	Ampilanthurai North
3		127A	Ampilanthurai West
4		128	Arasaditheevu
5		128C	Arasaditheevu North
6		135C	Kachchakkoddi Sowamimalai
7		128A	Kadukkamunai
8		127C	Katchenai
9		134	Kokkaddichchulai
10		134A	Kokkaddichchulai South
11		135B	Kuluvinamadu
12		129A	Makiladitheevu
13		129B	Makiladitheevu South
14		135	Maavadi Munmari
15		133	Munaikkadu East
16		133C	Munaikkadu North
17		133B	Munaikkadu South
18		133A	Munaikkadu West
19		131	Muthalakkuda
20		131A	Muthalakkuda West
21		128B	Paddipalai
22		129	Pandariyaveli
23		135D	Penichchayadi Munmari
24		135A	Thaanthamalai

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Mammunai West - Vavunathivu	148	Iluppadichenai
2		148A	Pavakodichenai
3		148B	Panchenai
4		148C	Kanthi nahar
5		148D	Kansirankudah
6		148E	Koththiyamalai
7		149	Kamankudah
8		149A	Karayakkantheevu
9		149B	Kurinsamunai
10		149C	Mandapattady
11		149D	Parithichenai
12		149E	Puthumandapattadi
13		182	Eachantheevu
14		182A	Vavunatheevu
15		182B	Navakkadu
16		182C	Mankikkaddu
17		183	Karaveddi
18		183A	Velaveduvan
19		184	Mahilavedduvan
20		184A	Unnichchai
21		184B	Ayithiyamalai North
22		184C	Ayithiyamalai South
23		184D	Naripputhoddam
24		184E	Nediyamadu

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Manmunai Pattu - Arayampathy	158	Arapaththai 01
2		157	Arapaththai 02
3		156	Arapaththai 03
4		156D	Arapaththai Central
5		157C	Arapaththai East
6		157D	Arapaththai North
7		156B	Arapaththai South
8		158A	Arapaththai West
9		155	Kankeyanodai
10		155B	Kankeyanodai South
11		150B	Kirankulam
12		150C	Kirankulam Central
13		150	Kirankulam North
14		150A	Kirankulam South
15		156C	Kovilkulam
16		153A	Manmunai
17		154	Maavilankuthurai
18		155A	Ollikulam
19		152	Paalamunai
20		151	Puthukkudiyiruppu
21		151B	Puthukkudiyiruppu North
22		151A	Puthukkudiyiruppu South
23		156A	Rajathurai Kiramam
24		157A	Selvanakar
25		157B	Selvanakar East
26		153	Thaalankuda
27		153B	Vedarkudiyiruppu

G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1		96	Mandur 03
2		96A	Mandur Koddamunai
3		97	Mandur 01& 02
4		97A	Palamunai
5		97B	Mandur South
6		98	Thampalavathai
7		98A	Raanamadu
8		98B	Sankapuram
9		98C	Kanesapuram
10		99	Vellaveli
11		99A	Kakkachchiveddai
12		99B	Palayadiveddi
13		99C	Sinnaveththai
14		99D	Vilaththoddam
15		99E	Aanaikaddiyaveli
16		99F	Nellikkadu
17		99G	Kannapuram
18		99H	Malayarkattu
19		99I	Palachchulai
20		99J	Vivekananthapuram
21		99K	Kannapuram East
22	Porathivu Pattu - Vellaveli	106	Palukamam
23		106A	Thikkodai
24		106B	Veeranchenai
25		106C	Thumpankeni
26		106D	Vanninakar
27		106E	Suravanayadiuttu
28		107	Palukamam 01
29		107A	Navagirinagar
30		107B	Karthipuram
31		107C	Vammiyadiuttu
32		107	Mavakkuda
33		107E	Kalumunthanveli
34		107F	Selvapuram
35		107G	Vipulananthapuram
36		107H	Thumpankeni YAS
37		108	Periyaporatheevu
38		108A	Munaitheevu
39		108B	Punnakkulam
40		108C	Paddapuram
41		109	Kovilporatheevu
42		109A	Kovilporatheevu South
43		109B	Kovilporatheevu West

G.N. Divisions - Batticaloa District

Annex - II

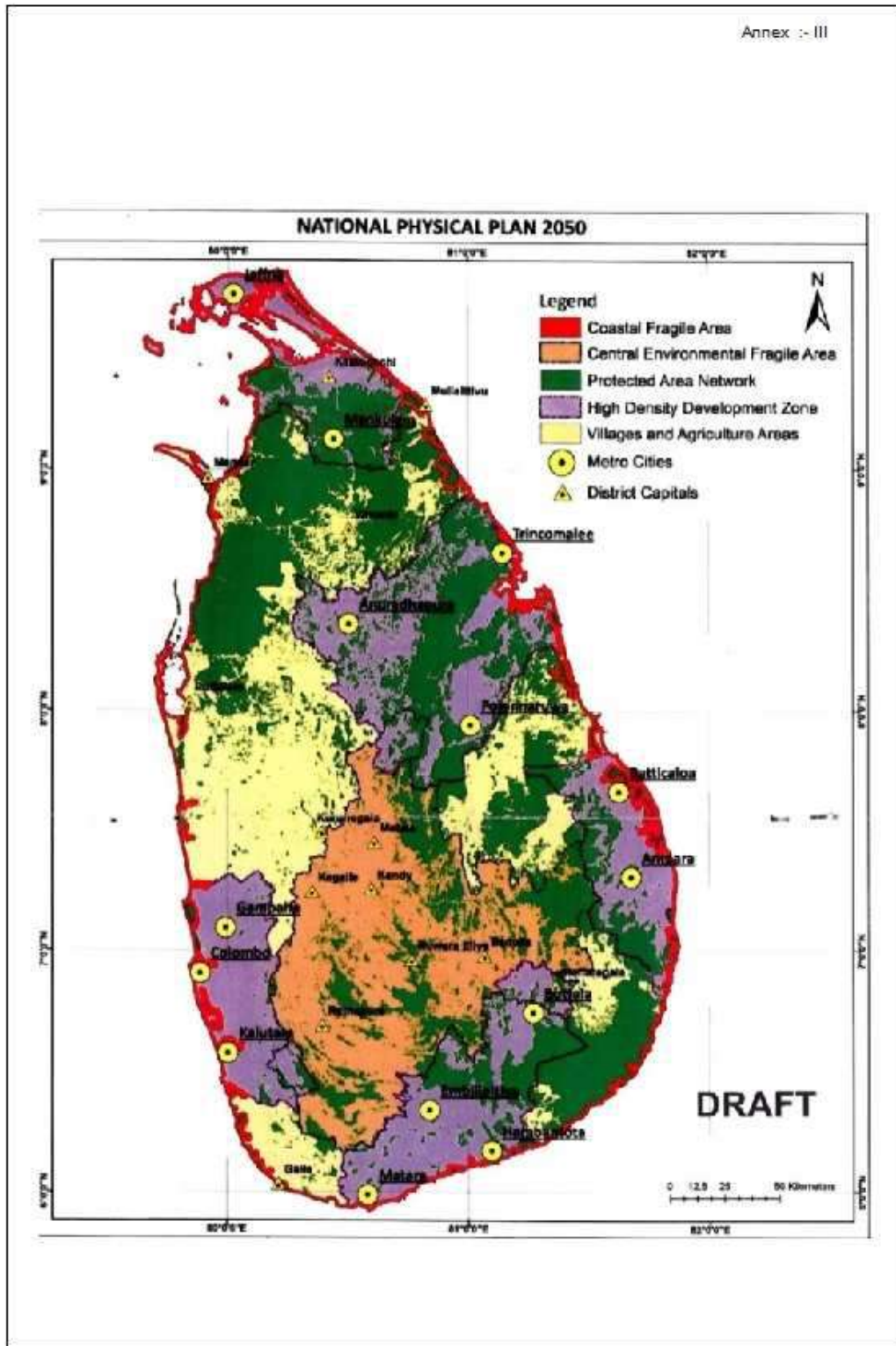
No	D.S. Division	G.N. Division Number	G.N. Division Name
1		126A1	Cheddipalaiyam North
2		126A2	Cheddipalaiyam South
3		115B	Eruvil East Barathipuram
4		115	Eruvil North
5		115A	Eruvil South
6		119	Kaluthavalai 01
7		119A	Kaluthavalai 02
8		117	Kaluthavalai 03
9		117A	Kaluthavalai 04
10		117B	Kaluthavalai Santhipuram
11		119B	Kaluthavalai Central
12		116	Kaluwanchikudy North
13		116B	Kaluwanchikudy North 1
14		116A	Kaluwanchikudy South
15		113B	Koddaikallar East
16		113	Koddaikallar North
17		113A	Koddaikallar South
18		113C	Koddaikallar West
19		126C	Kurukkalmadam North
20		126	Kurukkalmadam South
21		114	Kurumanveli East
22		114B	Kurumanveli 12 West
23	Manmunai South & Eruvil	114A	Kurumanveli 12
24	Patu - Kaluwanchikudy	110A	Mahilur East
25		110B	Mahilurmunai
26		110C	Mahilur South west
27		110	Mahilur West
28		123	Mankadu
29		111	Onthachimadam North
30		11A	Onthachimadam South
31		116C	Paddiruppu
32		76	Periya Kallar 1
33		76A	Periya Kallar 1 South
34		75	Periya Kallar 2
35		75B	Periya Kallar 2 West
36		75C	Periya Kallar 3
37		75A	Periya Kallar 3 South
38		122	The thathevu North
39		122A	The thathevu South
40		122B	The thathevu South 1
41		122C	The thathevu South 2
42		74	Thurainee lavanaai North
43		74C	Thurainee lavanaai North 1
44		74A	Thurainee lavanaai South
45		74B	Thurainee lavanaai South 1

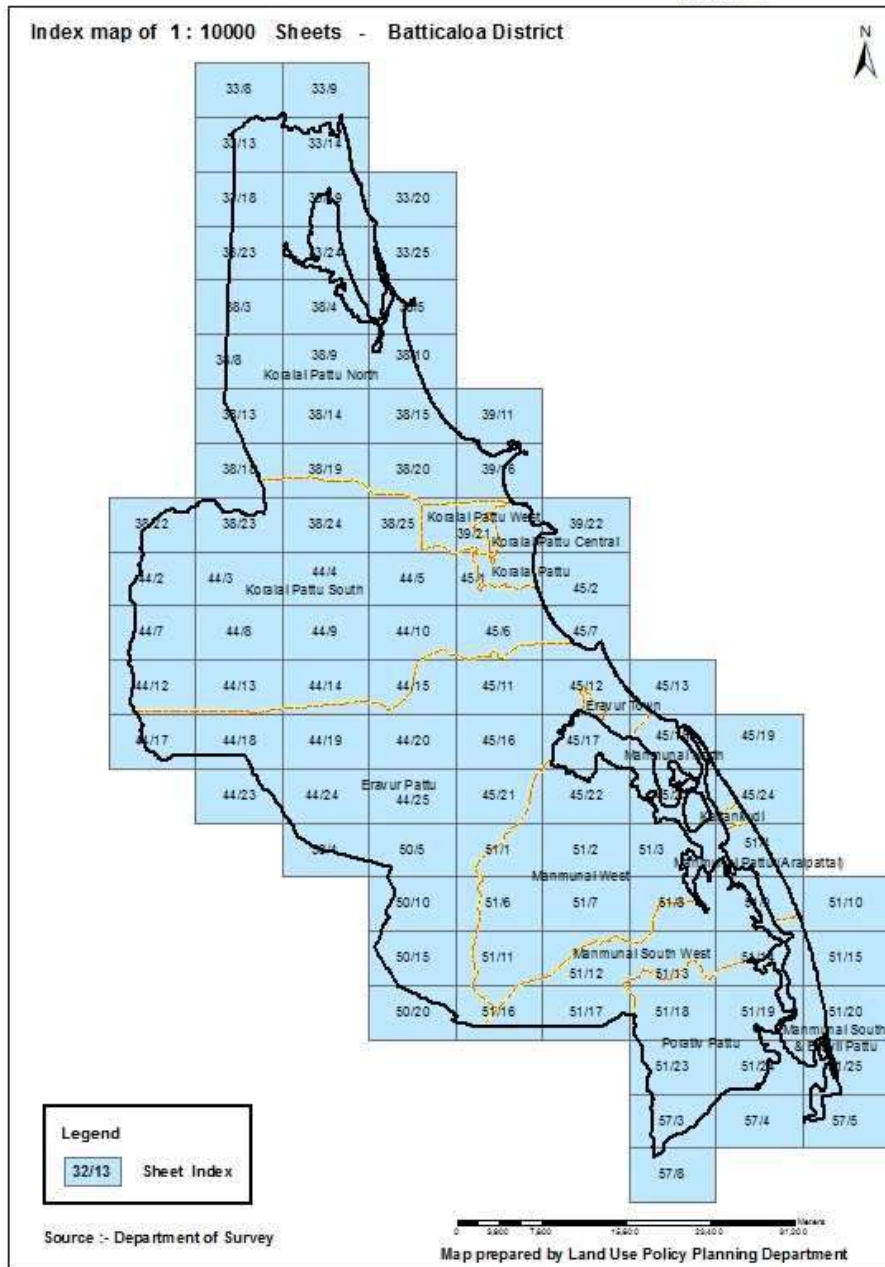
G.N. Divisions - Batticaloa District

Annex - II

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Kattankudy	167A	New Kattankudy Div. North
2		167C	New Kattankudy Div. South
3		166A	Kattankudy Div. 2 North
4		165B	Kattankudy Division 3 East
5		164	Kattankudy Division 4
6		162B	Kattankudy Div. 6 West
7		162A	Kattankudy Div. 6 South
8		162	Kattankudy Division 6
9		167B	Kattankudy Div. East
10		167D	Kattankudy Div. West
11		165	Kattankudy Division 3
12		166	Kattankudy Division 2
13		167	Kattankudy Division 1
14		164B	Kattankudy Div. 5 South
15		164C	Kattankudy Div. 4 West
16		164A	Kattankudy Division 5
17		167E	Kattankudy Div. 1 South
18		165A	Kattankudy Div. 3 West

No	D.S. Division	G.N. Division Number	G.N. Division Name
1	Koralai Pattu North - Vakara	213D	Ammanthnaveli
2		213B	Kaddumuru
3		213	Kathiraveli
4		211A	Kayankerni
5		211F	Kirumichai
6		211	Mankerni Central
7		211G	Mankerni South
8		211E	Mathurankerni kulam
9		213A	Paalchenai
10		211C	Panichankerni
11		213C	Puchchankerni
12		211B	Punanai East
13		212B	Uooriyankaddu
14		211D	Vaddavan
15		212	Vaharai Central
16		212A	Vaharai North





District Level Expert Group – Members List

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

National Level Expert Group – Members List

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
31. Commissioner, Department of Agrarian Services

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

Criteria used to determine the Land Suitability for different uses

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:

Criteria used to determine the Land Suitability for different uses

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		

Criteria used to determine the Land Suitability for different uses

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

