

# REPORT ON THE AVAILABILITY OF LANDS FOR SUGARCANE CULTIVATION IN SRI LANKA



**Sugarcane Research Institute of Sri Lanka**

**2010**



## **Report on the Availability of Lands for Sugarcane Cultivation in Sri Lanka**

**Sugarcane Research Institute**

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## **1. Introduction**

An investigation was undertaken by the Sugarcane Research Institute (SRI), during September 2010 to identify the areas suitable for the cultivation of sugarcane in eight districts namely, Anuradhapura, Moneragala, Badulla, Trincomalee, Ampara, Killinochchi, Vavuniya and Kurunegala located in the dry and intermediate zones of Sri Lanka where sugarcane can be commercially grown to expand the sugarcane industry to contribute to the government target of achieving 50 % self sufficiency in sugar. This report presents the findings of this study.

The report is organised into five sections. Section two describes the methods used in the study. The third section contains the total availability of lands for sugarcane cultivation in the eight districts. The availability of lands and water in each district are presented in detail, in the fourth section. The final section includes a conclusion.

## **2. Methods**

### **2.1 Study area**

The study was conducted in eight districts in the dry and intermediate zones of Sri Lanka where suitable soil and climatic conditions are available for commercial production of sugarcane. The eight districts include, Anuradhapura in the North Central Province, Moneragala and Badulla in the Uva Province, Trincomalee and Ampara in the Eastern Province, Killinochchi and Vavuniya in the Northern Province and Kurunegala district in the North-Western Province (Figure 1).

### **2.2 Data and data sources**

Data related to the availability of lands and their present usage was collected from respective District Secretariats and Land Use Policy Planning Department (LUPPD) of each district. The capacities of major tanks and their command areas in each district were collected from respective offices of the Regional Director/Deputy Director of Irrigation.

### **2.3 Identification of potential areas**

Since the areas under forests, paddy fields, plantation crops and other perennial crops and the areas used for other crops cannot be acquired for sugarcane cultivation, barren lands, shrub lands and chena or sparsely-used lands were identified as potential lands for sugarcane cultivation. It was not possible to carryout a field verification of these lands to identify exactly their availability and suitability due to the time constraint. The sugarcane

growing lands at Sevanagala, Pelwatte and Hingurana were not considered as the potential area category, since they are already under sugarcane.

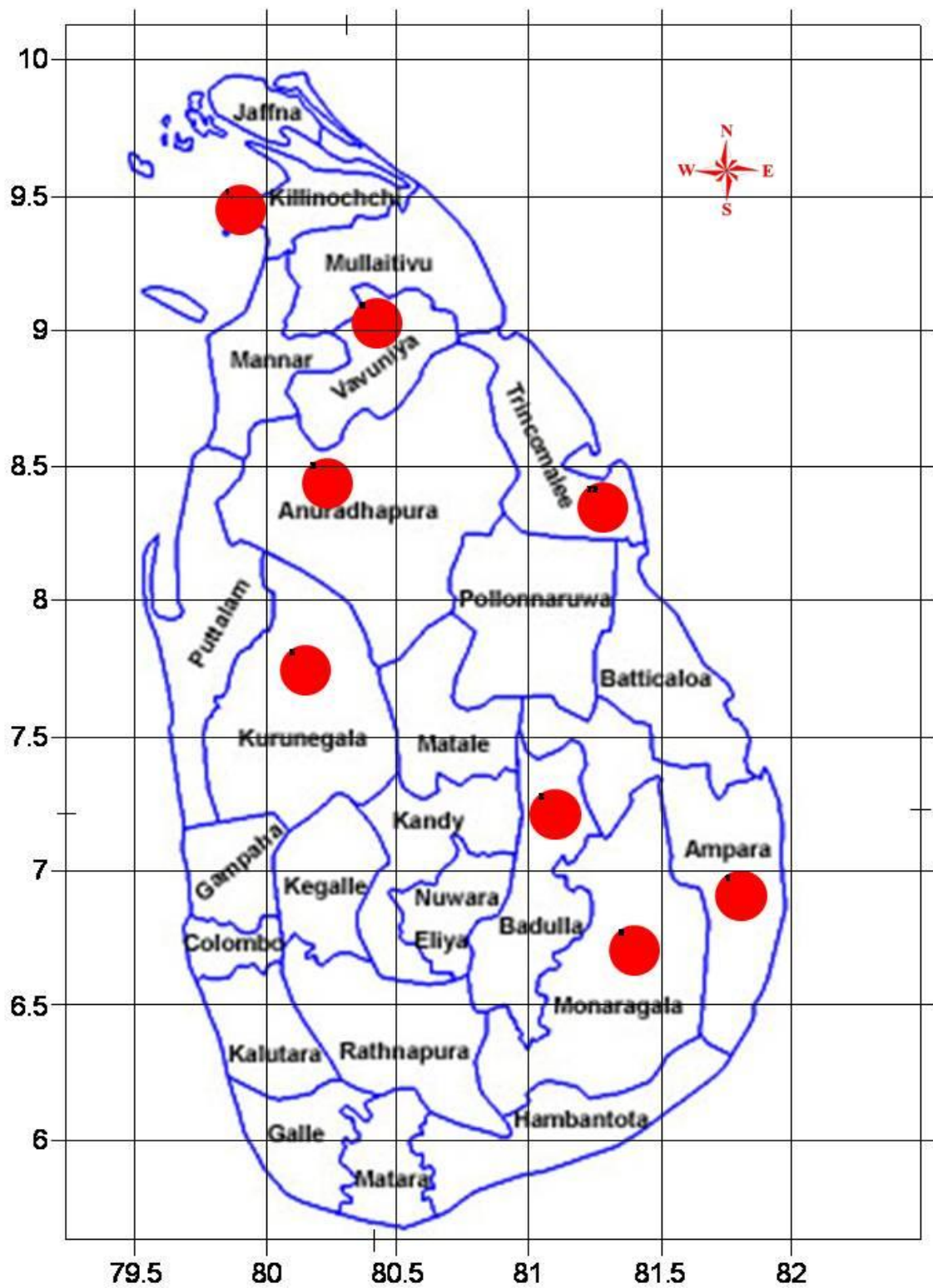


Figure 1 Map of Sri Lanka showing the districts selected for the study

### **3. The Existing Land Use Pattern and the Availability of Lands for Sugarcane Cultivation**

This section presents the total extents of lands in each district and their present use and the availability of water.

#### **3.1 The existing land use pattern and the availability of lands**

The selected districts are some of the larger districts of Sri Lanka which accounts to a total land area of around 3 million hectares (Table 1). The total extent of land available for sugarcane cultivation in the eight districts is around 669000 ha. The details of availability of these lands in each district are presented in the next section of this report. Anuradhapura district has the highest extent of potential lands for sugarcane cultivation, i.e., nearly 213000 ha. Badulla (nearly 96000 ha) and Moneragala (nearly 94000 ha) rank the second and third highest respectively. Trincomalee, the district in the fourth rank, has an available extent of nearly 81000 ha. The remaining four districts also have a considerable extent of lands (nearly 185000 ha) for sugarcane cultivation as shown in Table 1.

Table 1 Land use pattern and potential land areas for sugarcane cultivation in the eight selected districts

District	Extent (ha)								Total	Available for sugarcane cultivation *
	Barren lands	Forests/ Grasslands	Paddy	Plantation crops	Other crops	Shrubs	Chena/ Sparsely-used land	Other used land area		
Anuradhapura	72	211560	134233	2177	9749	134528	78472	147109	717900	213072
Badulla	DNA	42196	27990	45154	14167	79728	16612	61269	244920	96340
Moneragala	3704	317410	17136	17105	6880	66248	23788	113659	565930	93740
Trincomalee	1690	93310	45680	8690	DNA	33230	46000	44100	272700	80920
Ampara	DNA	154350	58498	8298	56441	47765		57025	382377	47765
Vavuniya	90	89171	21010	DNA	840	17750	40150	27689	196700	57990
Killinochchi	5800	36140	27910	3080	700	10230	16300	27770	127930	32330
Kurunegala	1131	17664	105908	113619	4741	31421	13890	197142	485516	46442
Total	12487	961801	438365	198123	93518	420900	235212	675763	2993973	668599

\* Barren lands + Shrubs + Chena/sparsely-used lands

DNA – Data not available

Source: Land use policy planning department (LUPPD) of each District Secretariat.

### **3.2 Irrigation water availability**

A large number of major and minor tanks are found in the eight districts. Anuradhapura district has the highest number of tanks. According to the Regional and Deputy Directors of Irrigation, total available water in these tanks has been allocated for paddy and hence, possibility of sugarcane cultivation under irrigation is limited.

## **4. District-Wise Land and Irrigation Water Availability for Sugarcane Cultivation**

### **4.1 Anuradhapura district**

Anuradhapura district occupies 69 % (7179 km<sup>2</sup>) of the total land area of the North-Central Province and consists of 22 Divisional Secretariat (DS) divisions (Figure 2). It is situated 60 meters above the mean sea level and sloped from east to west. Most of the area of the district belongs to the dry zone and main soil type is reddish brown earths (District statistics division, Anuradhapura).



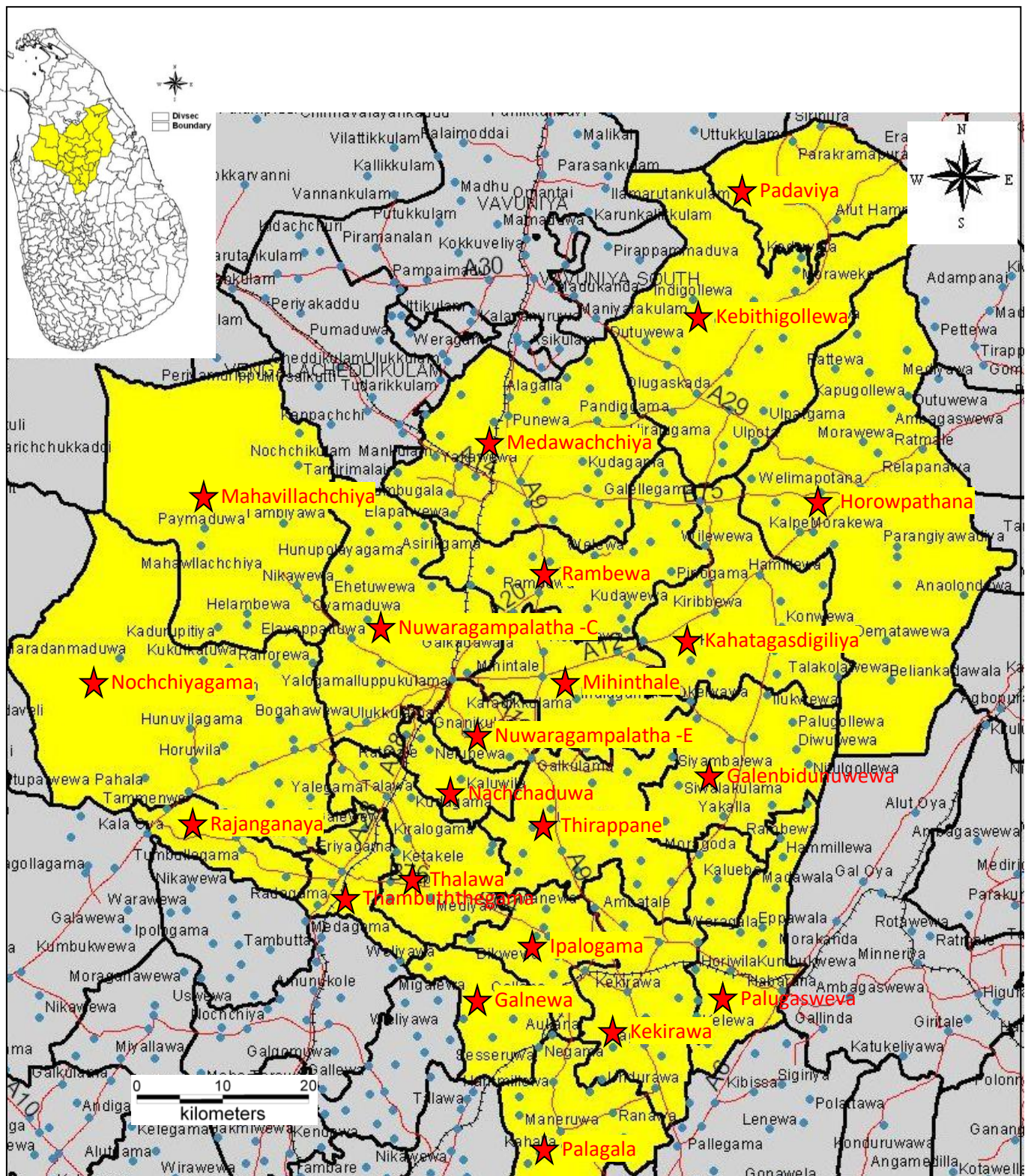


Figure 2 Divisional Secretariat divisions in Anuradhapura district

#### **4.1.1 Land use pattern and potential availability of lands for sugarcane cultivation**

According to the land use pattern, 211560 ha (40.57 %) is covered with forests. Paddy lands and water tanks occupy second and third place respectively (Table 2 and Figure 3). Anuradhapura district has the highest extent of potential lands for sugarcane cultivation, especially in the DS divisions of Nochchiyagama, Medawachchiya and Horowpathana where about 24400 ha, 23000 ha and 18600 ha of lands respectively are available for sugarcane cultivation.

#### **4.1.2 Irrigation water availability**

Anuradhapura district has the highest area covered with water tanks in Sri Lanka. There are about 14 large tanks, 79 medium-sized tanks and 2600 small tanks in the district and Kala oya, Mee oya, Yan oya and Malwathu oya are the main water streams (Figure 4). Total area fed by the major tanks is 34615 ha (Table 3). But at present, irrigation department is supplying water only for paddy cultivation.

Table 2 Land use pattern and potential land areas for sugarcane cultivation in Anuradhapura district

DS Division	Extent (ha)										Potential lands for sugarcane
	Barren lands	Homesteads	Forest/Grassland	Paddy	Plantation crops	Other crops	Scrub land	Chena	Other used land area	Total	
Padaviya	DNA	4591	7657	3540	59	1424	2409	718	2721	23119	3127
Kebithigollewa	DNA	3741	27339	6558	60	85	9603	6476	2200	56062	16079
Mahavillachchiya	DNA	3862	43679	2200	0	128	6811	3470	3338	63488	10281
Medawachchiya	55	8986	6430	8275	12	345	6353	16641	3633	50730	23049
Nuwaragampalatha East	DNA	4157	38	625	10	131	3730	1237	688	10616	4967
Rambewa	DNA	4237	2182	9442	0	276	3698	3118	2556	25509	6816
Kahatagasdigiliya	DNA	5429	3457	7160	0	539	7358	5224	3974	33141	12582
Horowpathana	DNA	5383	44970	11118	0	277	16383	2269	5087	85487	18652
Galenbidunuwewa	DNA	4909	951	8279	0	300	6684	2282	4294	27699	8966
Mihinthale	DNA	3501	4712	4171	355	1867	4621	3679	2317	25223	8300
Nuwaragampalatha central	DNA	4587	10143	4662	91	883	8476	5171	3827	37840	13647
Nachchaduwa	DNA	2924	154	2940	31	128	350	543	1130	8200	893
Nochchiyagama	DNA	2373	41366	10081	0	342	20130	4288	8321	86901	24418
Rajanganaya	DNA	2263	0	3856	76	352	596	456	1350	8949	1052
Thambuttegama	DNA	2802	143	6519	25	14	637	92	947	11179	729
Thalawa	DNA	2748	1141	10567	679	333	1330	5498	2424	24720	6828
Tirappanae	DNA	3509	3109	6370	28	215	7938	5187	4444	30800	13125
Kekirawa	DNA	3530	4027	7860	0	942	10320	5056	3127	34862	15376
Palugaswewa	DNA	1161	2013	2329	0	180	9896	2908	1253	19740	12804
Ipalogama	DNA	3832	97	3386	123	333	2204	1543	1852	13370	3747
Galnewa	DNA	2196	749	6901	92	172	1447	1148	1746	14451	2595
Palagala	17	3964	7203	7394	536	483	3554	1468	1195	25814	5022
Total	72	84685	211560	134233	2177	9749	134528	78472	62424	717900	213085

DNA – Data not available, Source: LUPPD, Anuradhapura.



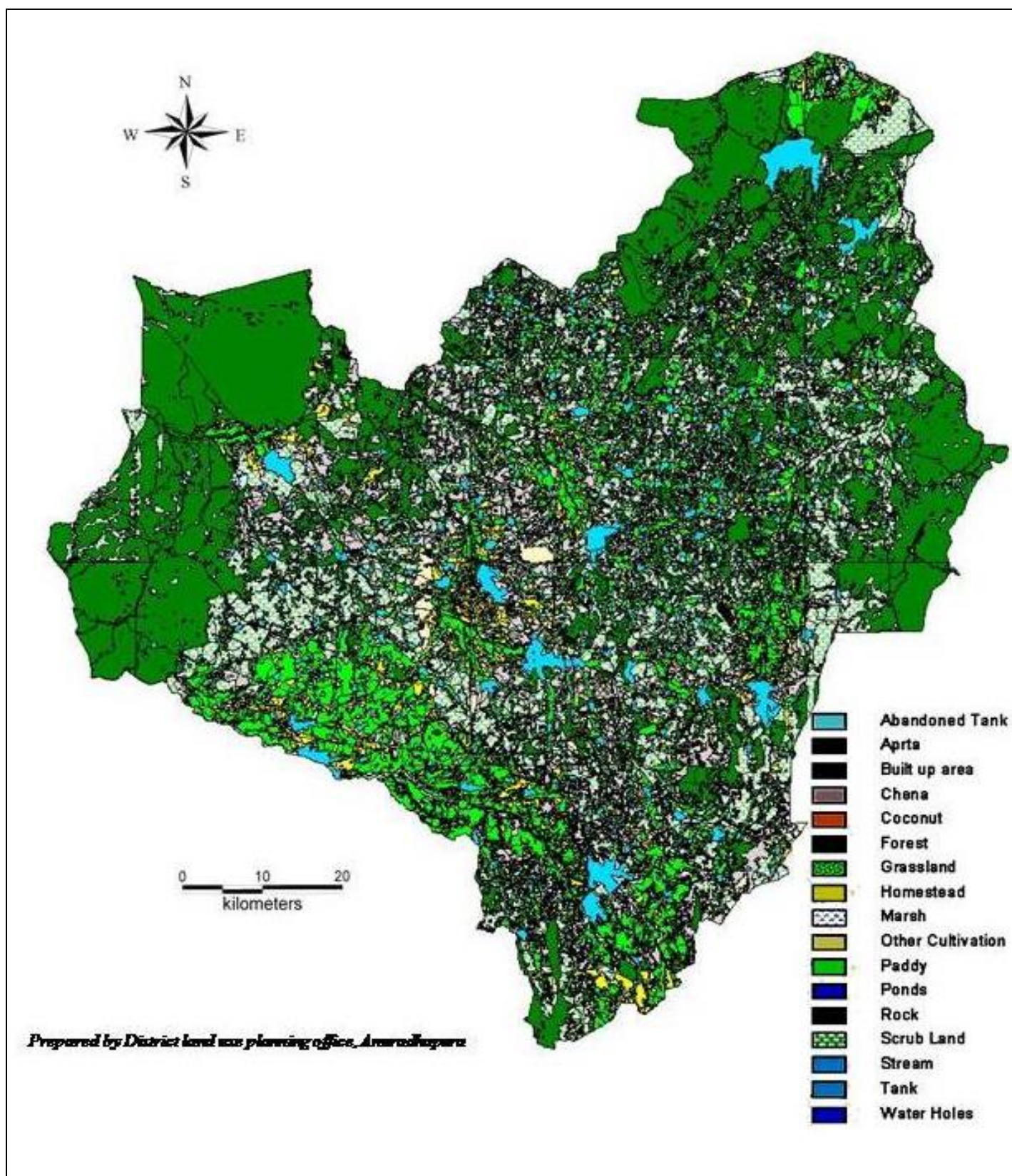


Figure 3 Land use pattern in Anuradhapura district



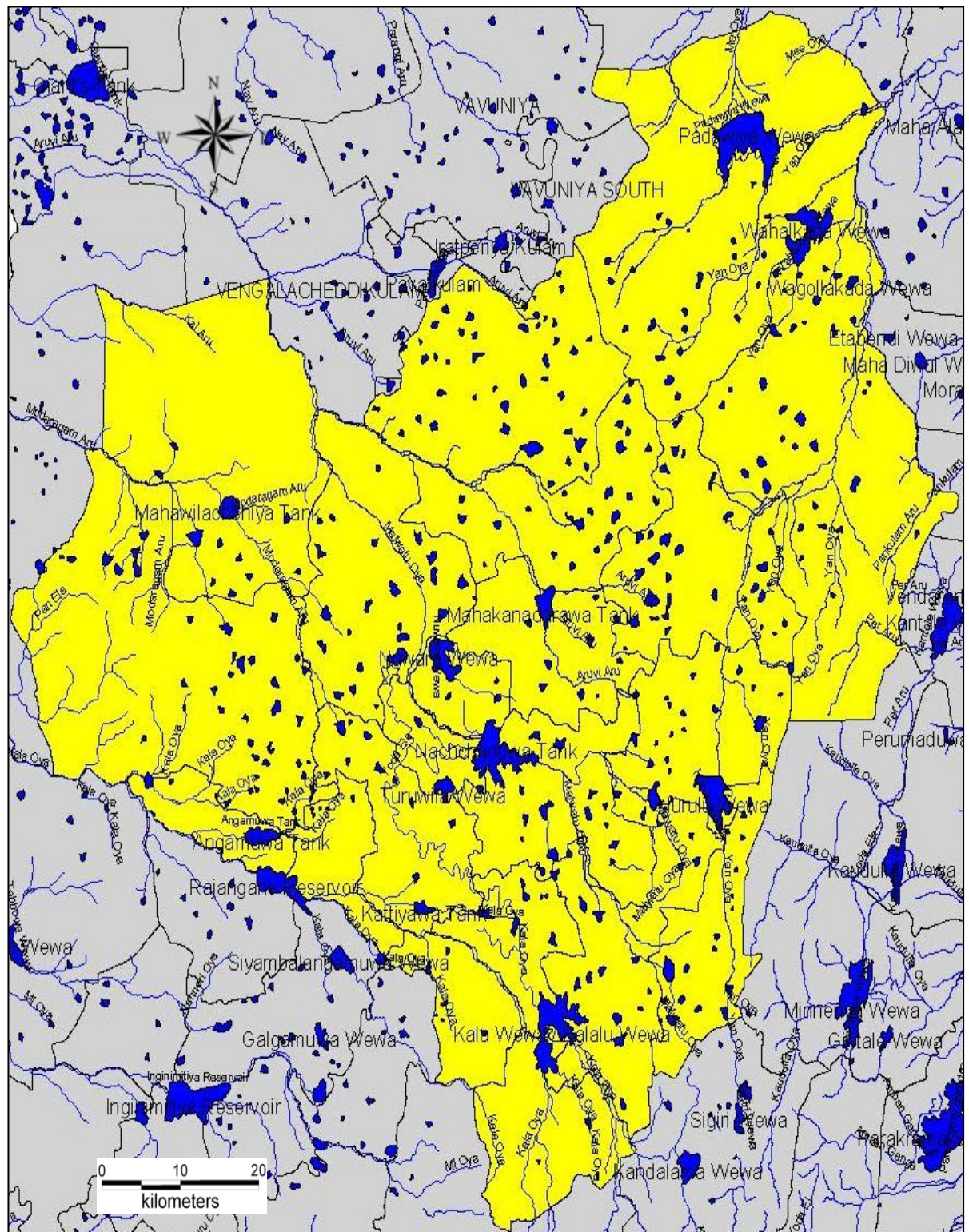


Figure 4 Tanks and streams in Anuradhapura district

Table 3 Major irrigation tanks, their capacity and command areas in Anuradhapura district

Division	Tank	Capacity (ac. ft)	Command area (ha)
Padaviya	Rajanganaya wewa	85000	5587
Kekirawa	Kalawewa	72678	5523
Galenbidunuwewa	Huruluwewa	55000	3867
Nachchaduwa	Nachchaduwwewa	45150	2540
Horowpathana	Wahalkadawewa	43000	810
Mihinthale	Mahakanadarawawewa	36250	2471
Nuwaragampalatha East	Nuwarawewa	36050	1012
Nuwaragampalatha central	Tissawewa	32015	365
Mahavillachchiya	Mahwillachchiyawewa	32500	1079
Nuwaragampalatha central	Basawakkulamawewa	1910	156
Nachchaduwa	Thuruwilawewa	5190	187
Rajanganaya	Angamuwwewa	14400	5523
Galenbidunuwewa	Manankattiyawewa	7000	607

Source: Regional Director of Irrigation, Anuradhapura.

## **4.2 Moneragala District**

Moneragala, consist 11 District Secretariat divisions and is the largest district in Uva Province with an area of 7133 km<sup>2</sup> (Figure 5). The main occupation of the people is farming.

### **4.2.1 Land use pattern and potential availability of lands for sugarcane cultivation**

Moneragala district is mainly made up of forest, homestead and shrub lands (Table 4 and Figure 6). Total estimated extent of lands available for sugarcane cultivation is 93740 ha, of which Siyambalanduwa and Madulla DS divisions have 23060 ha and 17222 ha respectively.

### **4.2.2 Irrigation water availability**

Moneragala district has about 31 major irrigation schemes with a total command area of 7736 ha (Table 5 and Figure 7). Since water is not adequate even for paddy, irrigation water is not available for sugarcane cultivation.



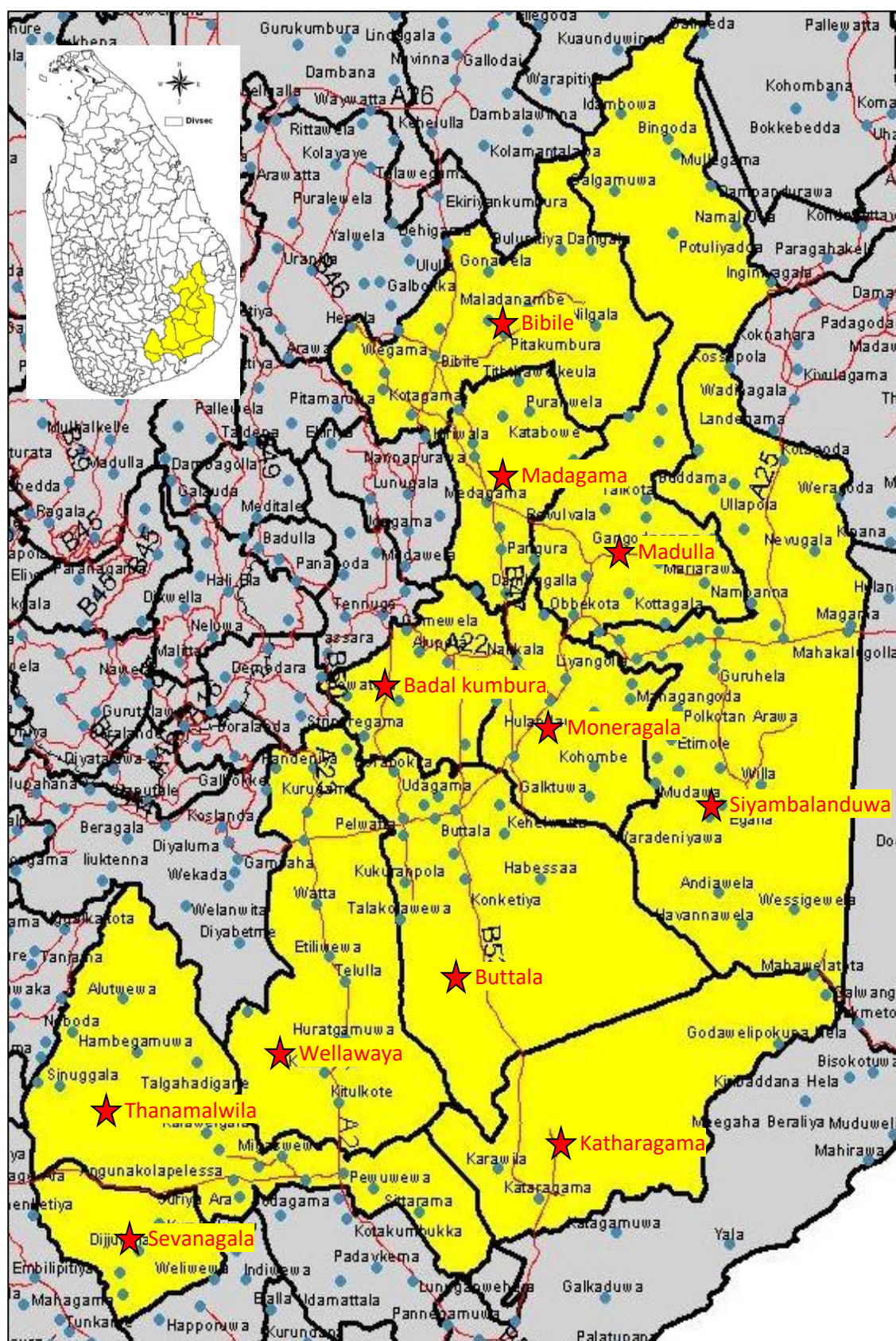


Figure 5 Divisional Secretariat divisions in Moneragala district



Table 4 Land availability and their usage in Moneragala district

DS Division	Extent (ha)										
	Barren lands	Homesteads	Forest/Grassland	Paddy	Plantation crops	Other crops	Shrub land	Chena	Other used land area	Total	Sugarcane cultivable lands *
Badal kumbura	20	6319	13928	1181	1189	681	610	105	1447	25480	735
Bibile	DNA	5782	29793	1486	472	940	4277	3833	1777	48360	8110
Buttala	342	7309	41083	2618	8055	1677	5204	DNA	2232	68520	5546
Katharagama	99	1302	54103	406	0	19	3519		1323	60771	3618
Madulla	27	8687	35313	1029	0	1151	9077	8119	8937	72340	17223
Medagama	DNA	6635	8653	1699	32	DNA	2573	5411	347	25351	7984
Moneragala	432	8037	11541	691	1102	1141	1328	511	726	25510	2271
Sevanagala	76	4789	3655	1952	4899	86	1887	160	1395	18899	2123
Siyambalanduwa	255	16129	58819	2105	0	481	17190	5615	4340	104934	23060
Thanamalwila	1494	4866	33003	1844	173	56	10036		4508	55979	11530
Wellawaya	957	14447	27518	2125	1184	649	10547	34	2330	59790	11537
Total	3704	84295	317410	17136	17105	6880	66248	23788	29364	565930	93740

\* Barren lands + Shrub lands + Chena/sparsely used lands

DNA – Data not available

Source: LUPPD, Moneragala.

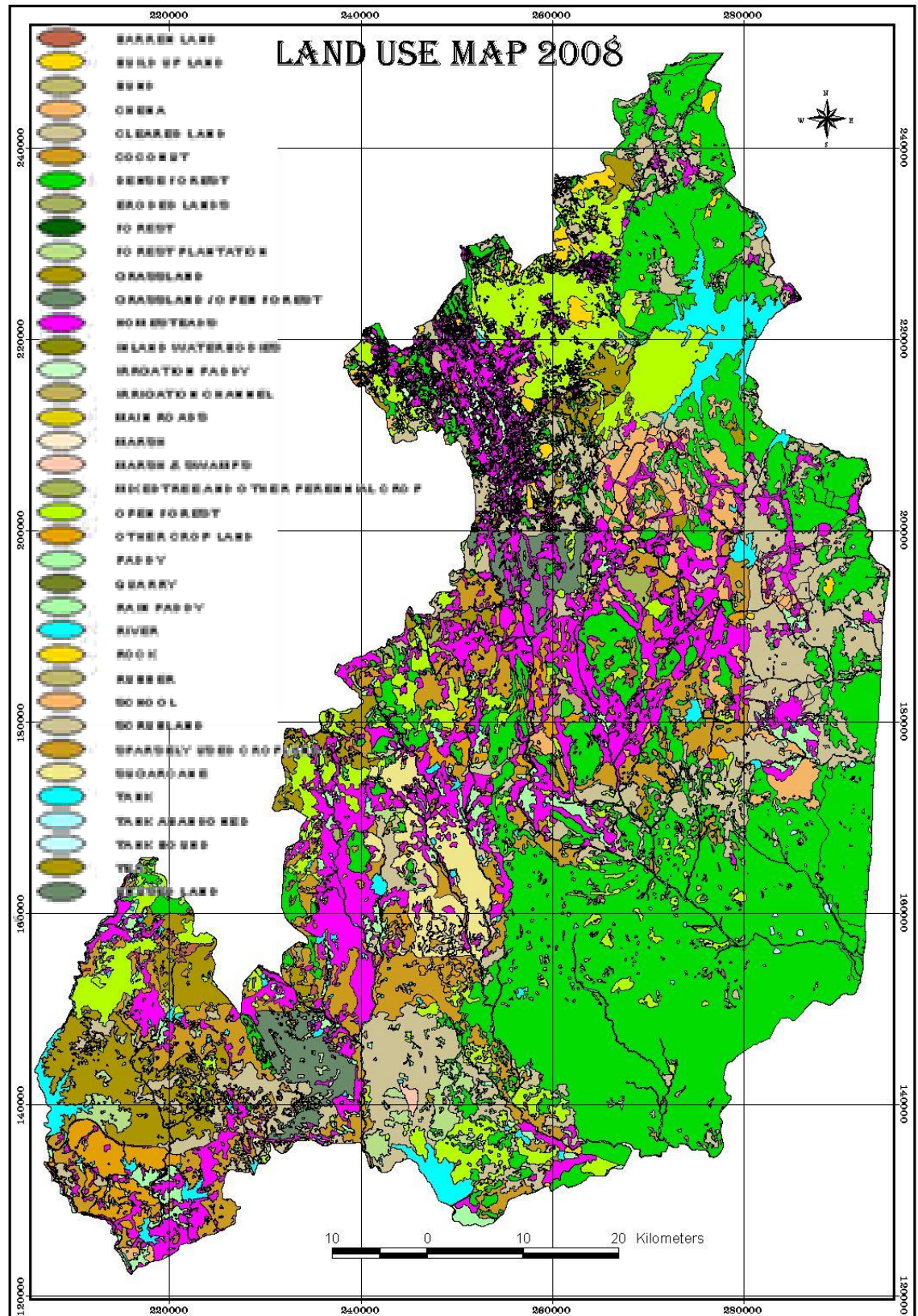


Figure 6 Land use pattern in Moneragala district

Table 5 Major irrigation tanks and their command areas in Moneragala district

Division	Scheme	Capacity (ac. ft)	Command area (ha)
Moneragala	Muthukandiya	24602	800
	Hulandawa oya annicut	DNA	90
	Ethimale Wewa	5510	400
	Kumbukkan oya Annicut	DNA	673
	Udaganawa wewa	789	180
	Kotiyagala wewa	2117	180
	Saddatissa wewa	1138	168
	Buttala annicut	DNA	640
Bibile	Dehiattawela annicut	DNA	296
	Monaerawana Annicut	DNA	92
	Magandana oya Annicut	DNA	80
	Baduluoya tank	808	212
Wellawaya	Sudupanawala annicut	DNA	240
	Halmillapyllewa wewa	1215	106
	Radapola annicut	DNA	120
	Kukuranpola annicut	DNA	146
	Kandiyapita wewa	850	144
	Handapanagala wewa	5808	400
	Dambewewa	1171	92
	Balaharuwawewa	630	85
	Hambegamuwawewa	3375	270
	Kahakurullanpelessawewa	306	100
	Debararawewa	973	96
	Karawilamilagama and Detagemunuwa	910	160
	Mahawewa	620	100
	Pelwatte annicut	DNA	120
	Horabokka annicut	DNA	100
	Gal amuna annicut	DNA	180
	Alugillawewa	570	166
	Welioya annicut	DNA	1300
	Total	51392	7736

DNA – Data not available

Source: Deputy Director's Office of Irrigation, Moneragala District.



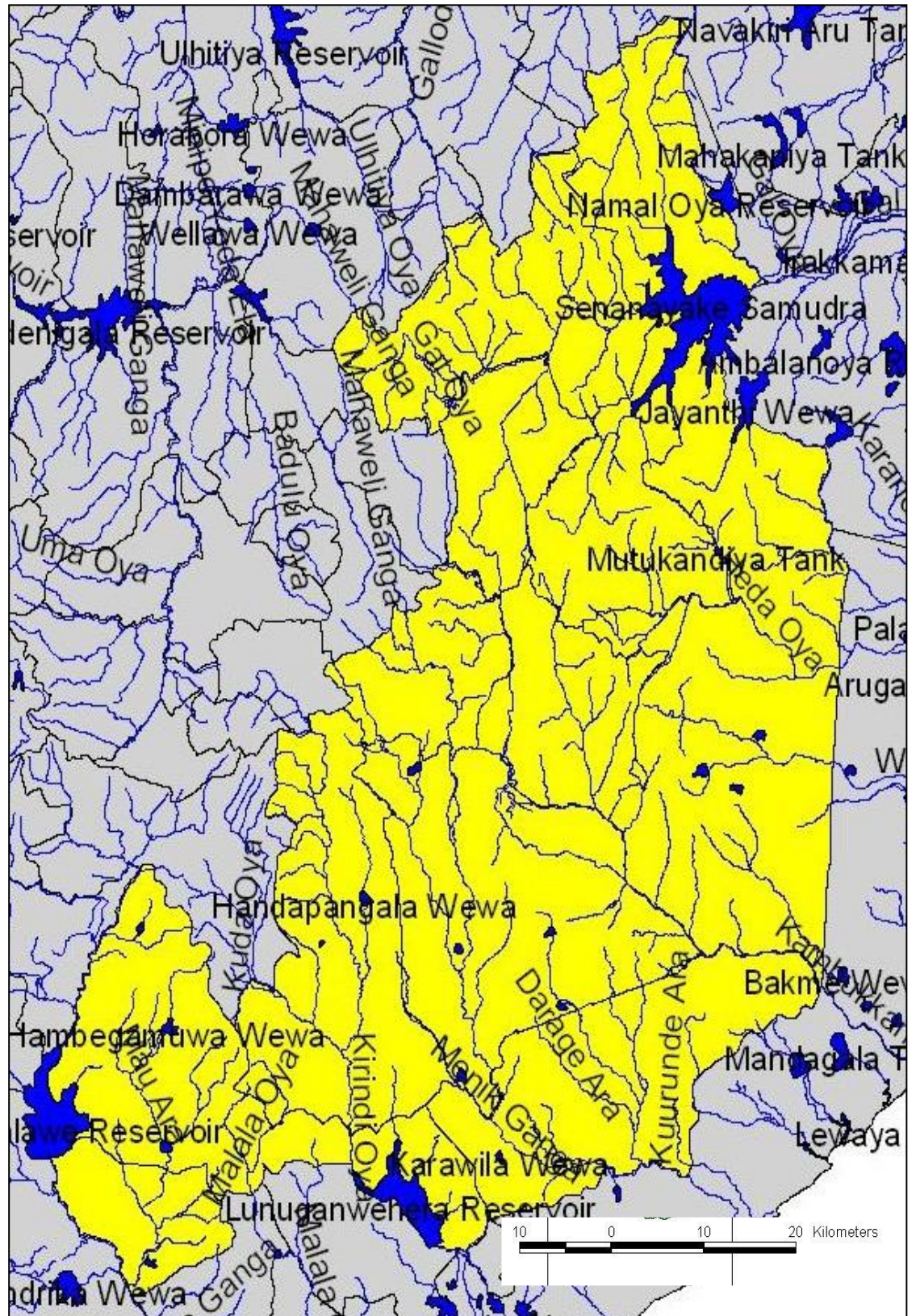


Figure 7 Tanks and streams in Moneragala district

### 4.3 Badulla district

Badulla district situated in Uva Province has a total land area of 2861 km<sup>2</sup> and it consists of 16 District Secretariat divisions (Figure 8).

#### 4.3.1 Land use pattern and potential availability of lands for sugarcane cultivation

Tea, vegetables and paddy are the main crops cultivated in Badulla District. A considerable extent of land area is covered with forest and scrub lands (Table 1 and Figure 9). According to the climatic and geographical characteristics, the district is divided into two main portions, namely, Upper division and Lower division. The upper division of the district is famous for tea and vegetable cultivation, while the lower division is for paddy cultivation (Land use planning division, Badulla). There are about 96,000 ha of lands available for sugarcane cultivation.

#### 4.3.2 Irrigation water availability

Badulla district has 17 irrigation schemes, and the total irrigable area is 9232.4 ha (Table 6 and Figure 10). Most of the irrigation systems are annicuts, and the lands get flooded during rainy season. Therefore, sugarcane cannot be cultivated under irrigated conditions.

Table 6 Major irrigation schemes and their command areas in Badulla district

Division	Scheme	Command area (ha)
Welimada	Ambewela	445
Welimada	Dambawinna	133
Welimada	Kande Ela	972
Welimada	Maha Eliya	219
Haliela	Mahathotilla	202
Soranathota	Thaldena	142
Uva-Paranagama	Uma Ela	812
Mahiyanganaya	Dambarawa	607
Redimaliyadda	Dehigama	97
Redimaliyadda	Demodara	182
Redimaliyadda	Mapakada	607
Redimaliyadda	Nagadeepa	1700
Mahiyanganaya	Soraborawewa	810
Mahiyanganaya	Diyabana Oya	287
Kandaketiya	Badulu Oya	680
Kandaketiya	Bathmedilla	567
Meegahakula	Komarika Ela	769
Total		9231

Source: Regional Director's Office of Irrigation, Badulla District



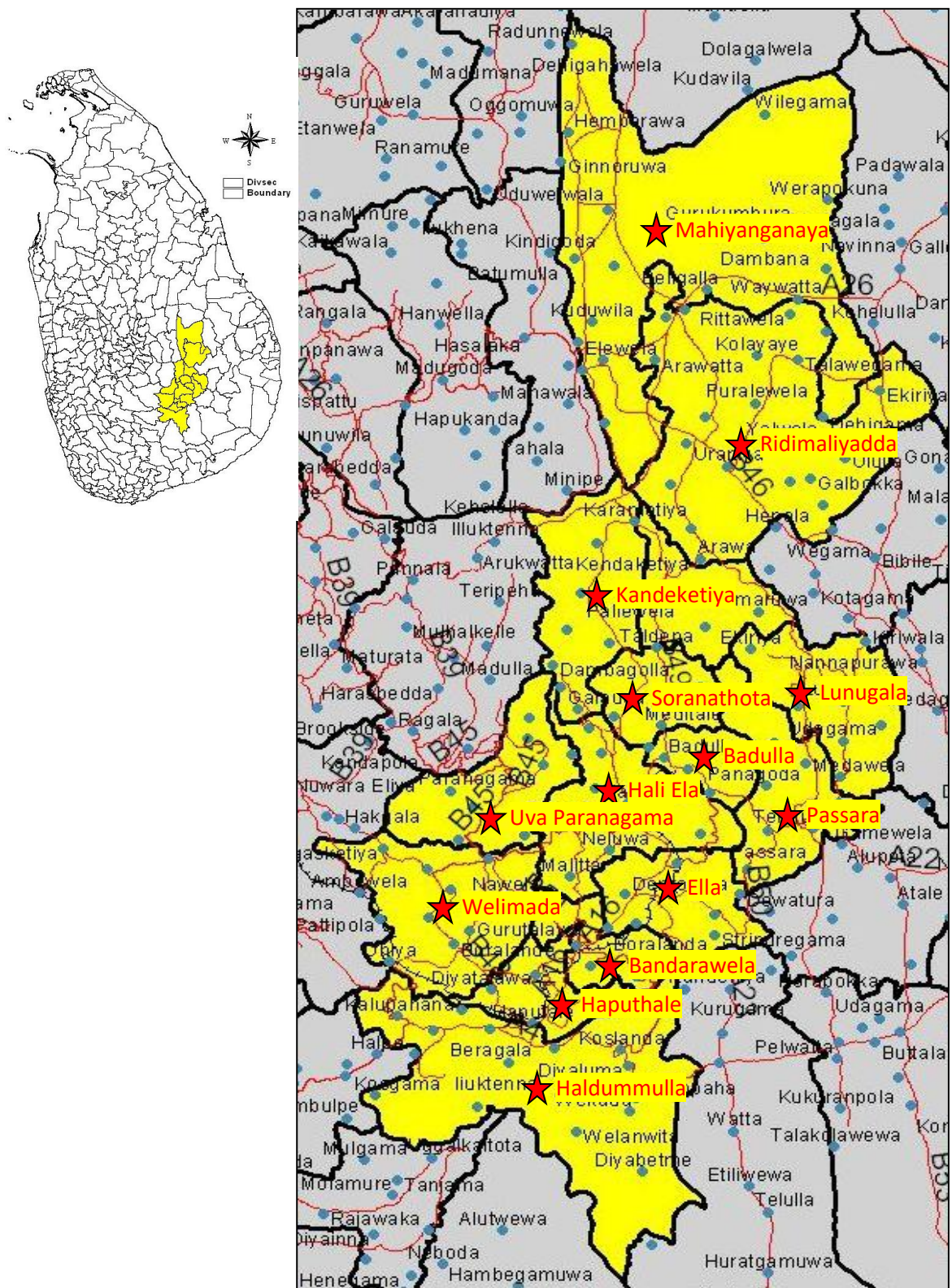


Figure 8 Divisional Secretariat divisions in Badulla district

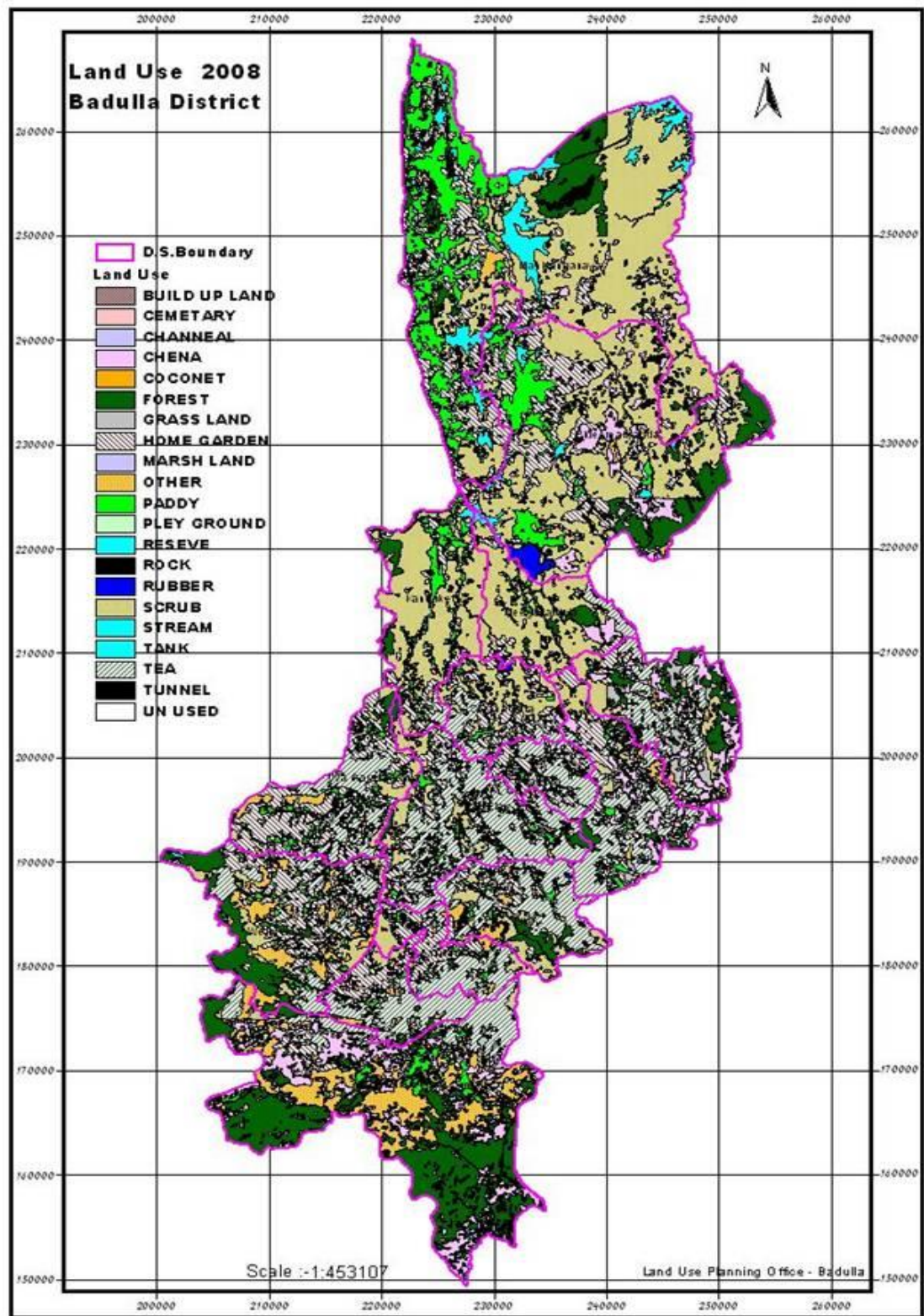


Figure 9 Land use pattern in Badulla district



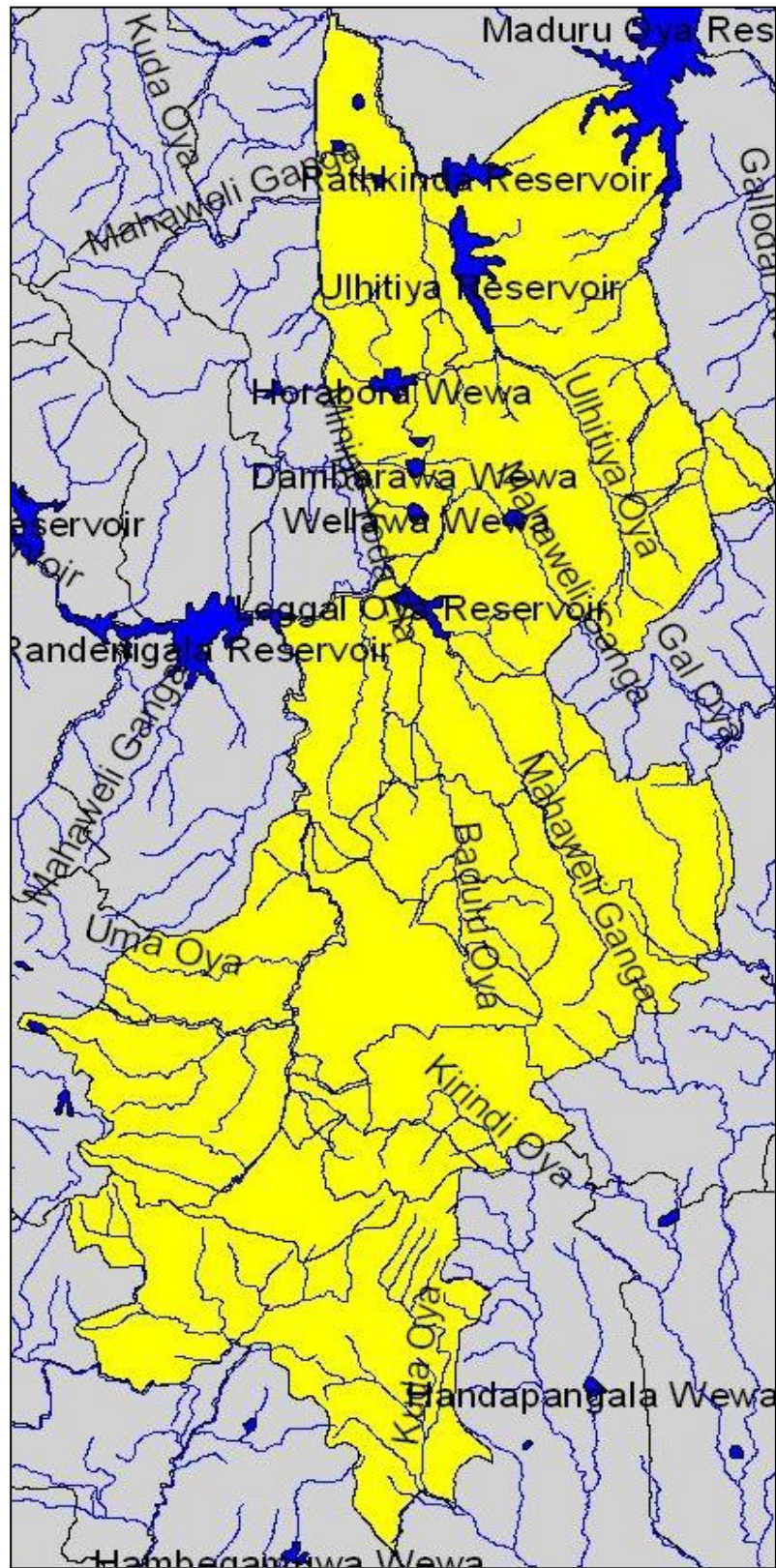


Figure 10 Tanks and streams in Badulla district



#### 4.4 Trincomalee district

Trincomalee district situated in the eastern coast of Sri Lanka has 11 DS divisions (Table 7 and Figure 11). The total area of the district is 2630 km, with inland water coverage of 96.7 km<sup>2</sup>. The district consists mainly of an undulating plain along the coastal belt and has a peculiar topography forming 10 bays and 15 lagoons.

Table 7 Divisional Secretariats and their extents in Trincomalee district

DS Division	Area (sq. km)	No. of GN Divisions
Gomarankadawala	285	10
Kantale	397	23
Kinniya	147	31
Kuchchaveli	313	24
Morawewa	322	10
Muthur	179	42
Padavi Siripura	217	10
Seruwila	377	17
Thampalakamam	244	12
Town & Gravets	148	42
Eachchalampaththu	98	09
Total	2728	230

Source: District planning division, Trincomalee District Secretariat.

##### 4.4.1 Land use pattern and potential availability of lands for sugarcane cultivation

The land use pattern of the district indicates that a major portion of the land has been utilised for agriculture, especially for paddy (45615 ha) and homestead crops (918 830 ha). An extent of about 46600 ha in the highland has been sparsely used for other perennial crops (Table 1). Total lands available for sugarcane is 80920 ha, mainly in Kantale and Morawewa DS divisions.

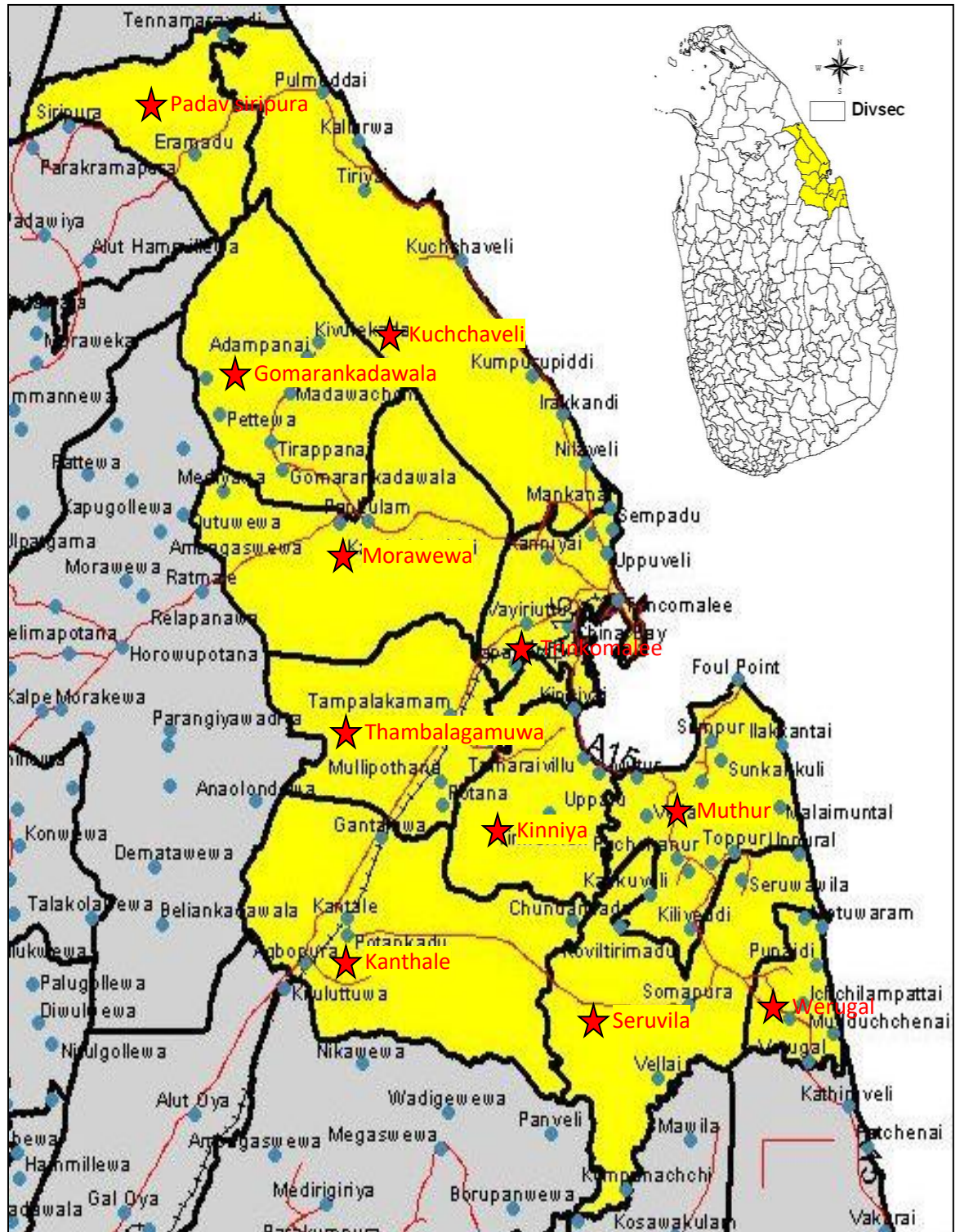


Figure 11 Divisional Secretariat divisions in Trincomalee district

#### 4.4.2 Irrigation water availability

The main occupation of the majority of people in this district is agriculture. There are eight major tanks, out of which, Kantale tank is the biggest with a capacity of 141 million cube metres and command area of 7513 ha (Table 8 and Figure 12). A special scheme called Alle-irrigation scheme had been developed by the British in 1890, and its command area is 7047 ha. Total irrigation water is distributed for paddy cultivation. However, in Kantale area, excess water is available for sugarcane, as sugarcane was cultivated earlier under irrigation (Regional Director of Irrigation, Trincomalee).

Table 8 Major irrigation tanks and their command areas in Trincomalee district

Division	Scheme	Capacity (million cubic metres)	Commanding area (ha)
Kantale	Kantale tank	141	7513
Kantale	Vendrasan tank	25	708
Kantale	Wan Ela tank	3	656
Seruvila	Peramaduwa tank	3	263
Morawewa	Morawewa tank	38	1635
Morawewa	Mahadevulwewa tank	20	563
Padavisripura	Yanoya tank	DNA	589
Seruvila	Alle Extension scheme	DNA	7047
Total		229	18974

DNA – Data not available

Source: Regional Director's Office of Irrigation, Trincomalee District.



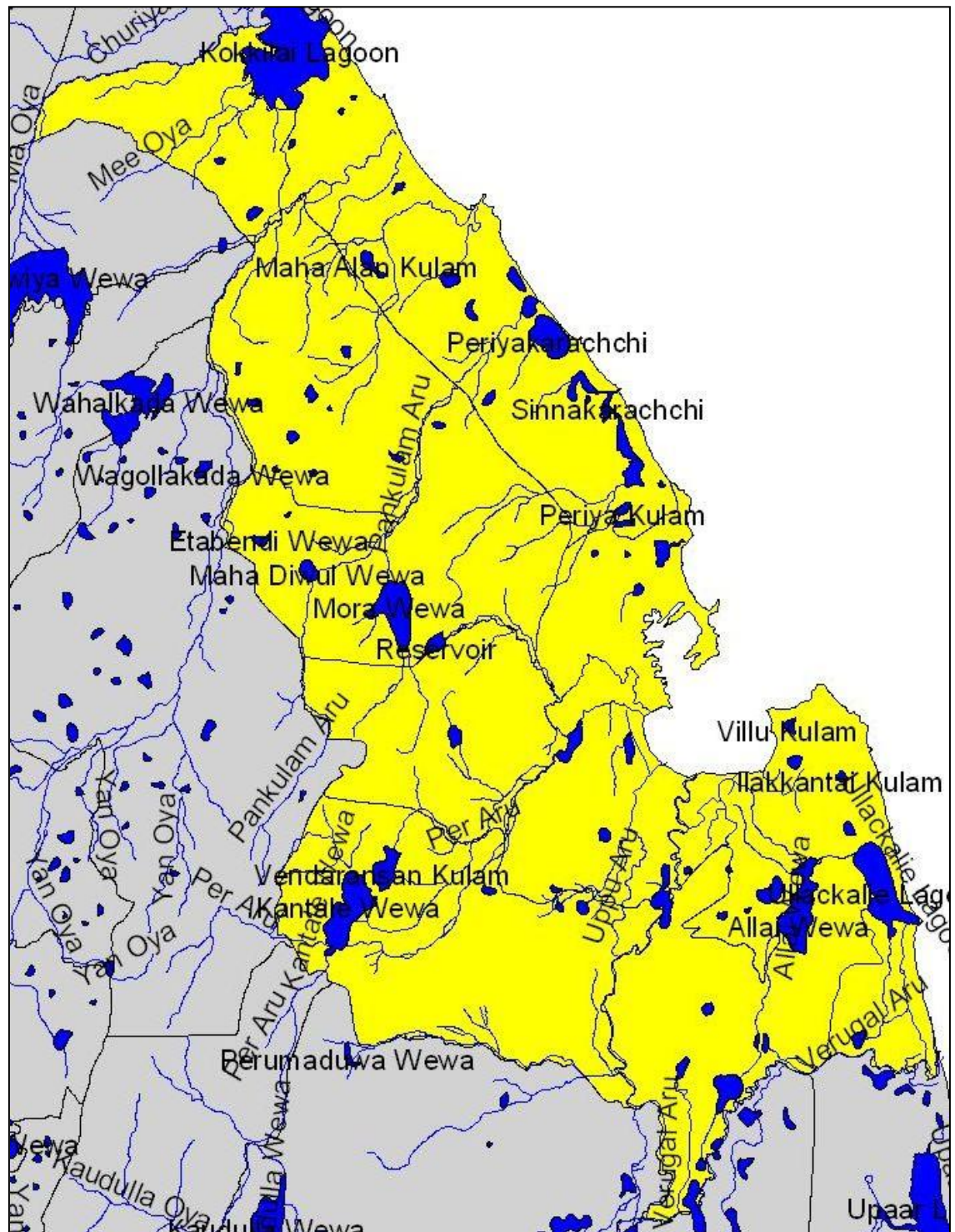


Figure 12 Tanks and streams in Trincomalee district



#### 4.5 Ampara district

Ampara district located in the eastern province of Sri Lanka has an area of 382377 ha. The district is divided into 20 DS divisions (Figure 13) and 507 *Grama Niladhari* (GN) divisions.

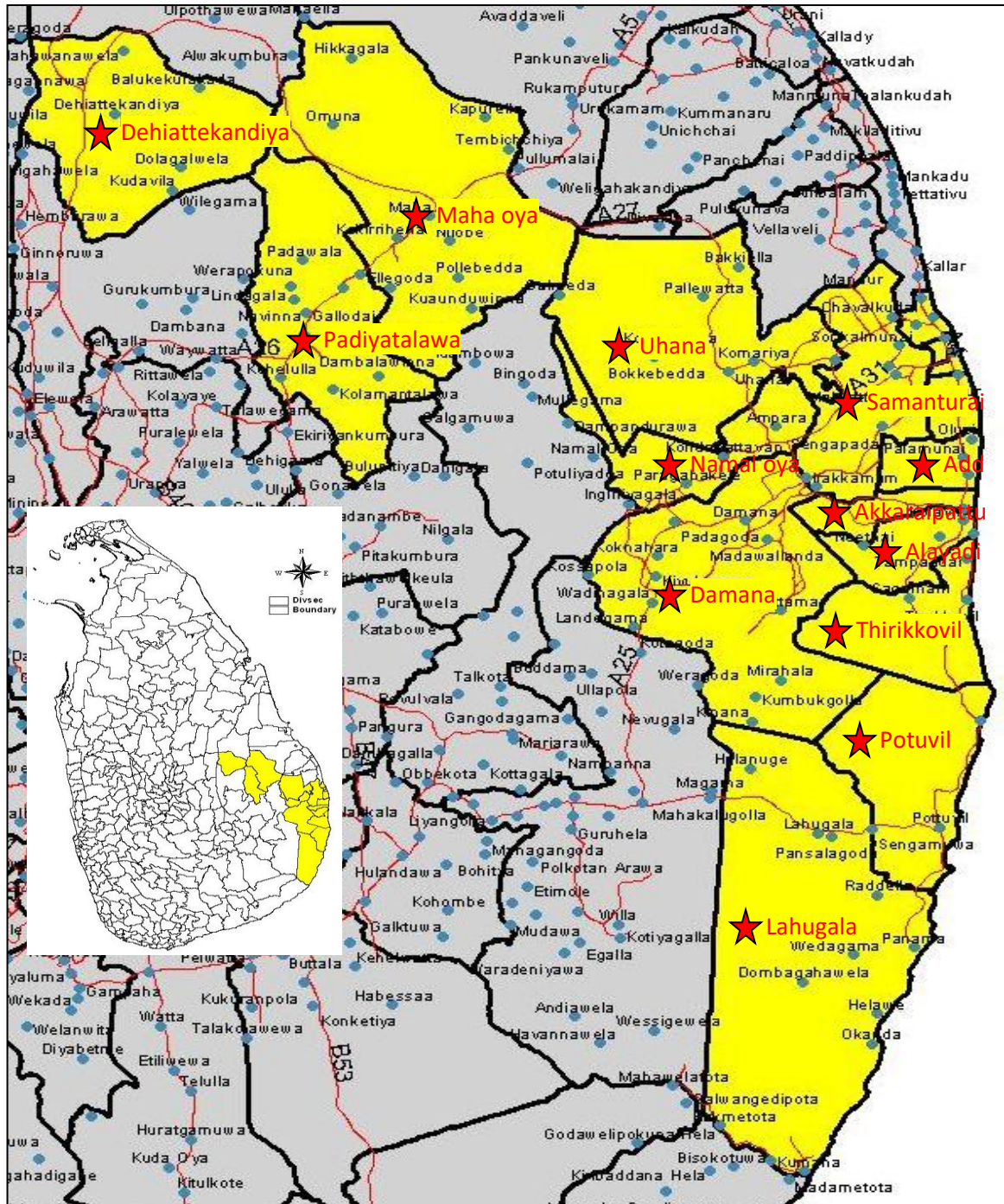


Figure 13 Divisional Secretariat divisions in Ampara district

#### **4.5.1 Land use pattern and potential availability of lands for sugarcane cultivation**

About half of the land area is under forests and paddy cultivation which is the main livelihood of the people in the district (Table 1). There are about 48000 ha of lands available for sugarcane cultivation. Availability of these lands in each DS division is not available with district land use planning division. However, according to the land use planning division, most of the potential lands for sugarcane cultivation are found in Mahaoya and Padiyatalawa DS divisions.

#### **4.5.2 Irrigation water availability**

Senanayake Samudraya is the main irrigation tank in the district in addition to several minor tanks (Figure 14). Since the available irrigation water is not adequate even for paddy cultivation, irrigated cultivation of sugarcane is not possible. According to the Regional Director of Irrigation, Ampara, there are abandoned minor tanks in Maha Oya and Padiyatalawa region which could be renovated for irrigation of sugarcane.



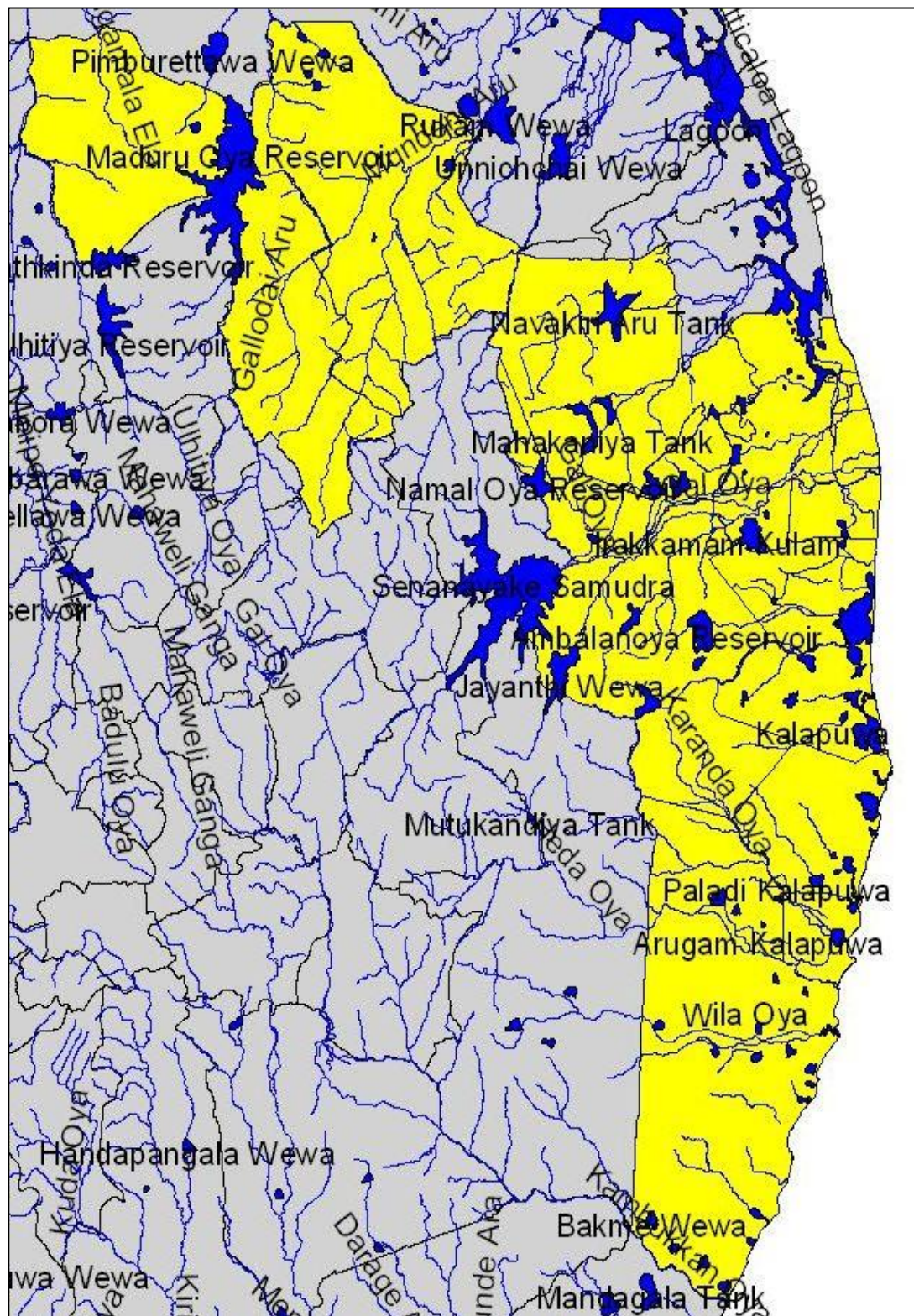


Figure 14 Tanks and streams in Ampara district



#### 4.6 Vavuniya District

Vavuniya district in the Northern Province of Sri Lanka covers an area of 196191 ha with 4 DS divisions, namely, Vavuniya, Vavuniya South, Vengalcheddikulam and Vavuniya North (Figure 15). Vavuniya is predominantly an agricultural district and has Asweddumised land extent of 21010 ha for paddy cultivation. In addition, cultivation of other field crops, livestock farming, forestry and inland fisheries are the main agricultural activities.

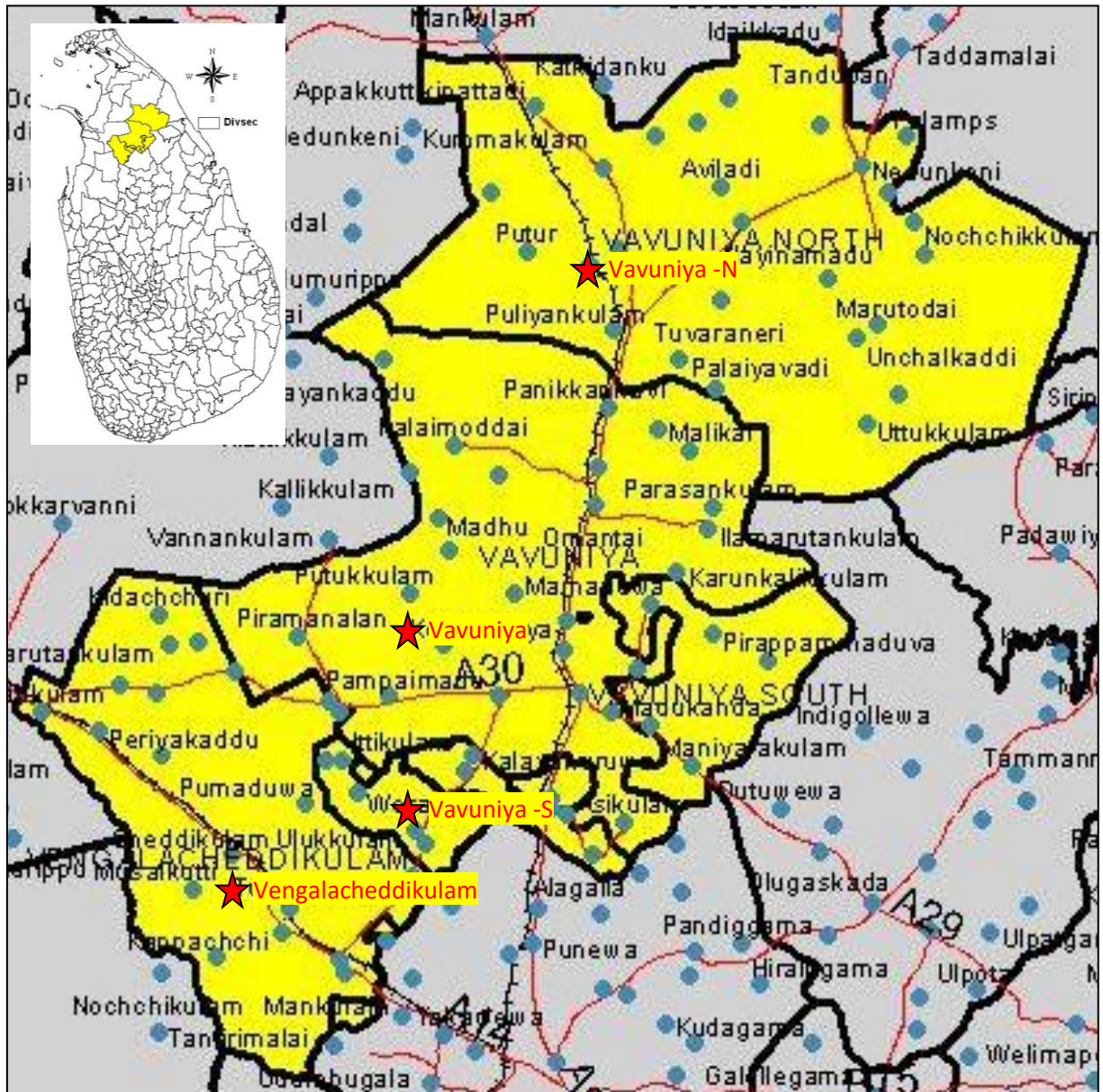


Figure 15 Divisional Secretariats divisions in Vavuniya district



#### **4.6.1 Land use pattern and potential availability of lands for sugarcane cultivation**

Nearly 47 % (89791 ha) of Vavunia district is covered with forests. About 21,000 ha land is used for paddy cultivation of which 10900 ha is irrigated by minor irrigation schemes. In addition, there are about 10000 ha under perennial and other crops (Table 9 and Figure 16). Total availability of lands for sugarcane cultivation is about 57990 ha, particularly in Vavuniya north (17720 ha), Vengalcheddikulam (16980 ha) and Vavuniya (15430 ha) DS divisions.

#### **4.6.2 Irrigation water**

There is one major, 22 medium and 674 minor irrigation tanks including 22 annicuts (Table 10 and Figure 17) in this district and water resources mainly depend on rainfall as there are no perennial rivers. Presently, the total available irrigation water is used for paddy.

Table 9 Land use pattern and lands available for sugarcane in Vavuniya district

DS Division	Extent (ha)								Total	Lands available for sugarcane
	Barren land	Home garden	Forest	Paddy	Other crop	Shrub lands	Chena/sparsely used lands	Other used land		
Vavuniya	10	7199	22731	9070	100	3760	11660	4500	59030	15430
Vavuniya South	10	2730	5830	4470	160	2630	5220	2540	23590	7860
Vengalcheddikulam	70	2930	13020	3780	580	4800	12110	2190	39480	16980
Vavuniya North	DNA	3140	48210	3690	DNA	6560	11160	1840	74600	17720
Total	90	15999	89791	21010	840	17750	40150	11070	196700	57990

Source : District Secretariat, Vavuniya.

DNA – Data not available

Table 10 Major irrigation schemes in Vavuniya district

Division	Scheme	Capacity in ha. m	Command area (ha)
Vavuniya	Rajendrakulam	105	119
Vavuniya South	Maruthamadu	185	177
Vavuniya South	Iratperiyakulam	436	204
Vengalcheddikulam	Muhathankulam	296	326
Vengalcheddikulam	Pavatkulam	3330	1674
Total		4352	24990

Source: Deputy Director of Irrigation, Vavuniya.

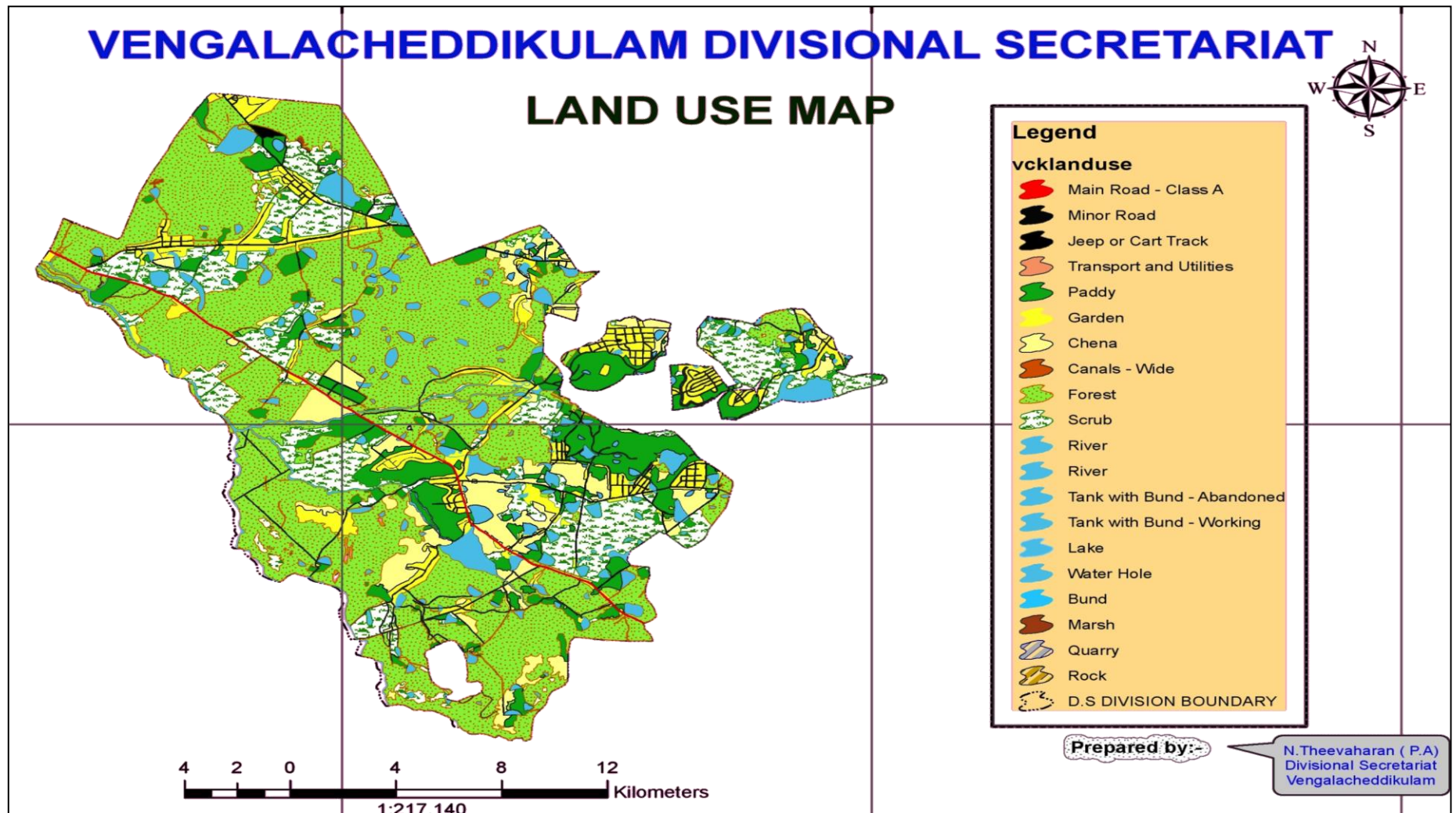


Figure 16 A part of land use map in Vavuniya district



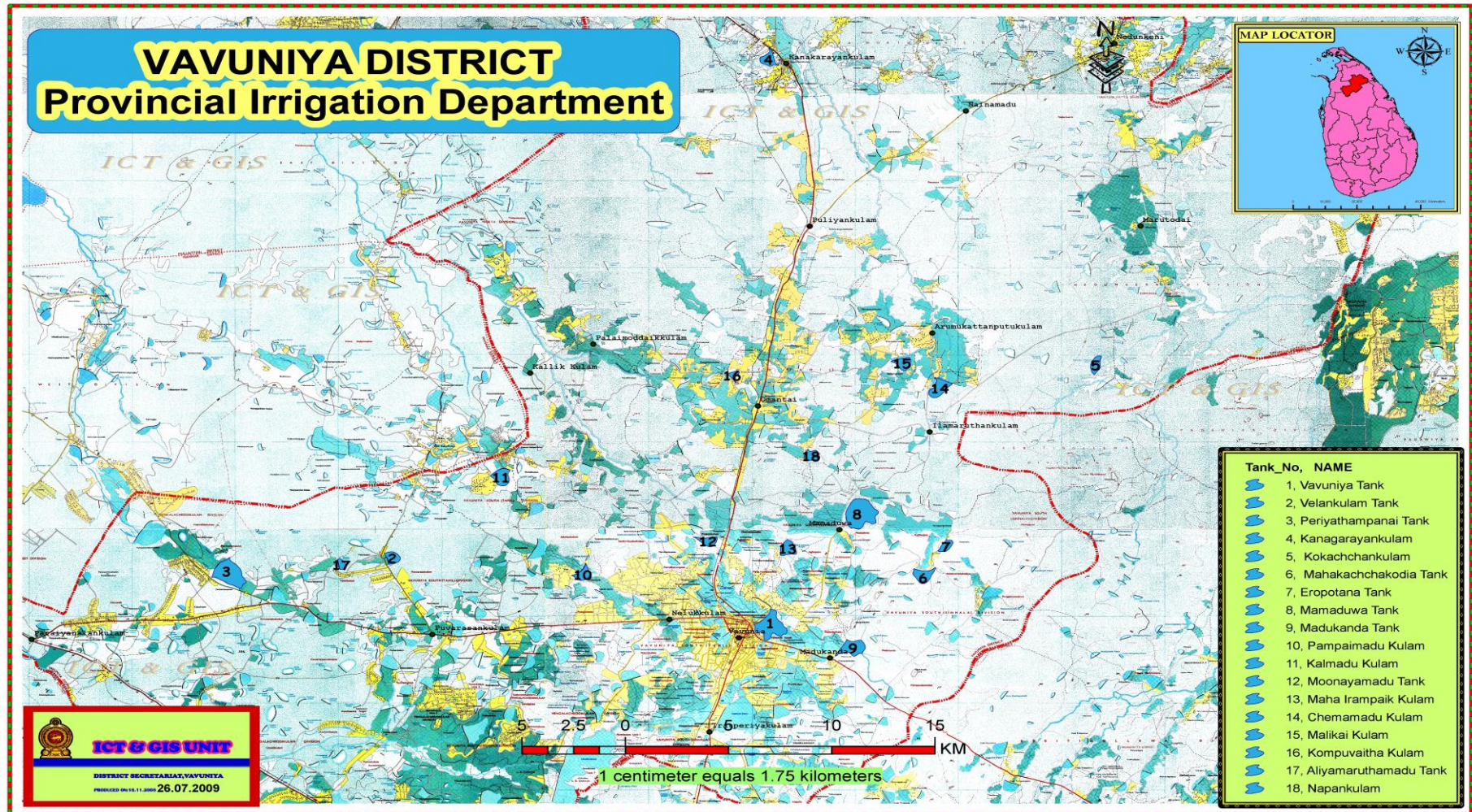


Figure 17 Tanks and streams in Vavuniya district



#### 4.7 Killinochchi district

Killinochchi district situated in the Northern Province covers a land area of 1237 km<sup>2</sup> and inland water ways of 44 km<sup>2</sup>. The district is divided into 4 DS divisions, namely, Karachchi, Poonakary, Pachchilaipalli and Kandawalai (Figure 18). The cultivation of paddy is the main occupation of more than 80% of the population.

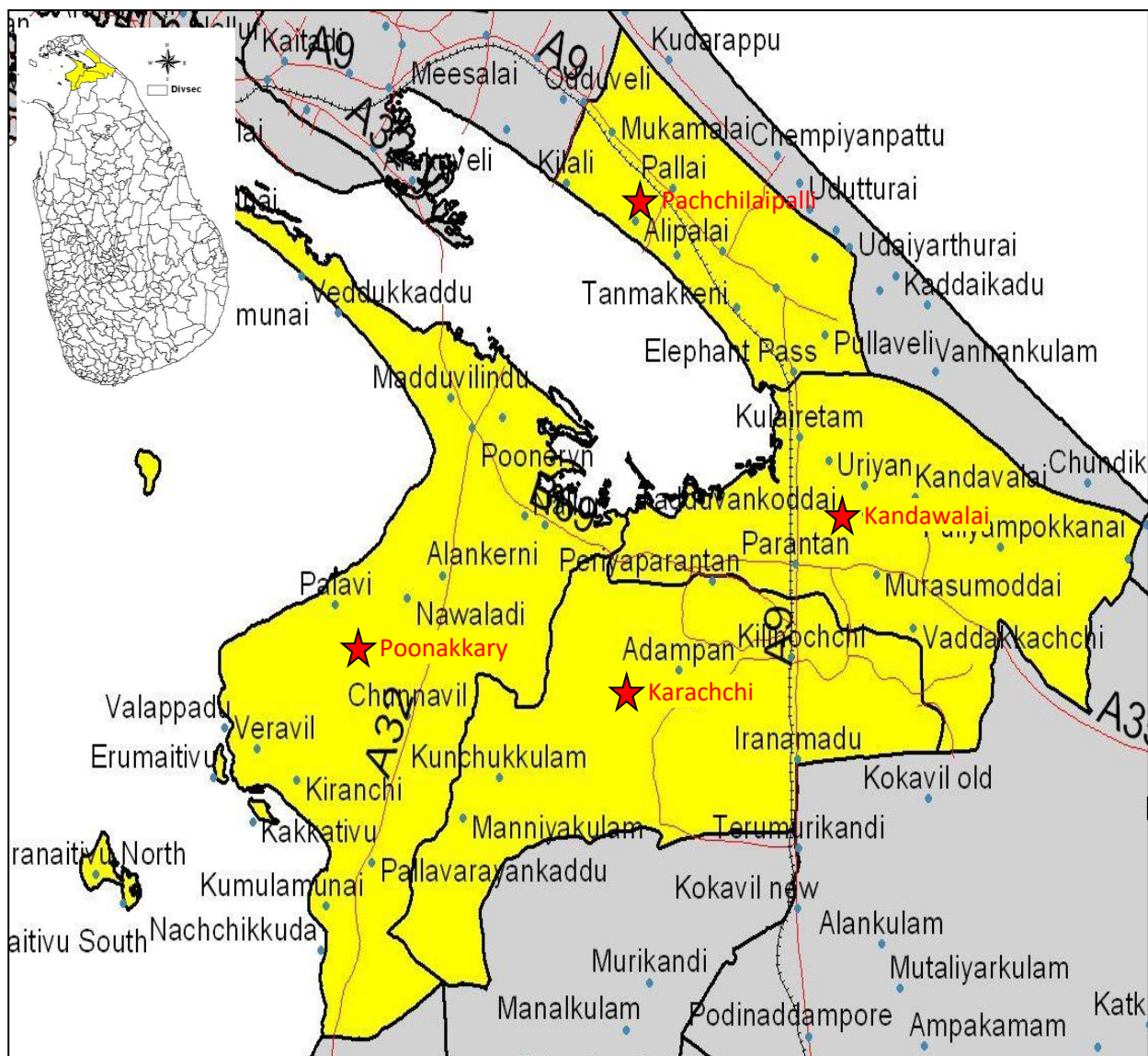


Figure 18 Divisional Secretariat divisions in Killinochchi district

#### 4.7.1 Land use pattern and potential availability of lands for sugarcane cultivation

A total of 41210 ha of lands in the district are under forests, while 26870 ha of lands are cultivated with paddy (Table 11 and Figure 19). Total land available for sugarcane cultivation is 32320 ha. These lands are mainly found in Karachchi and Poonakary DS divisions.

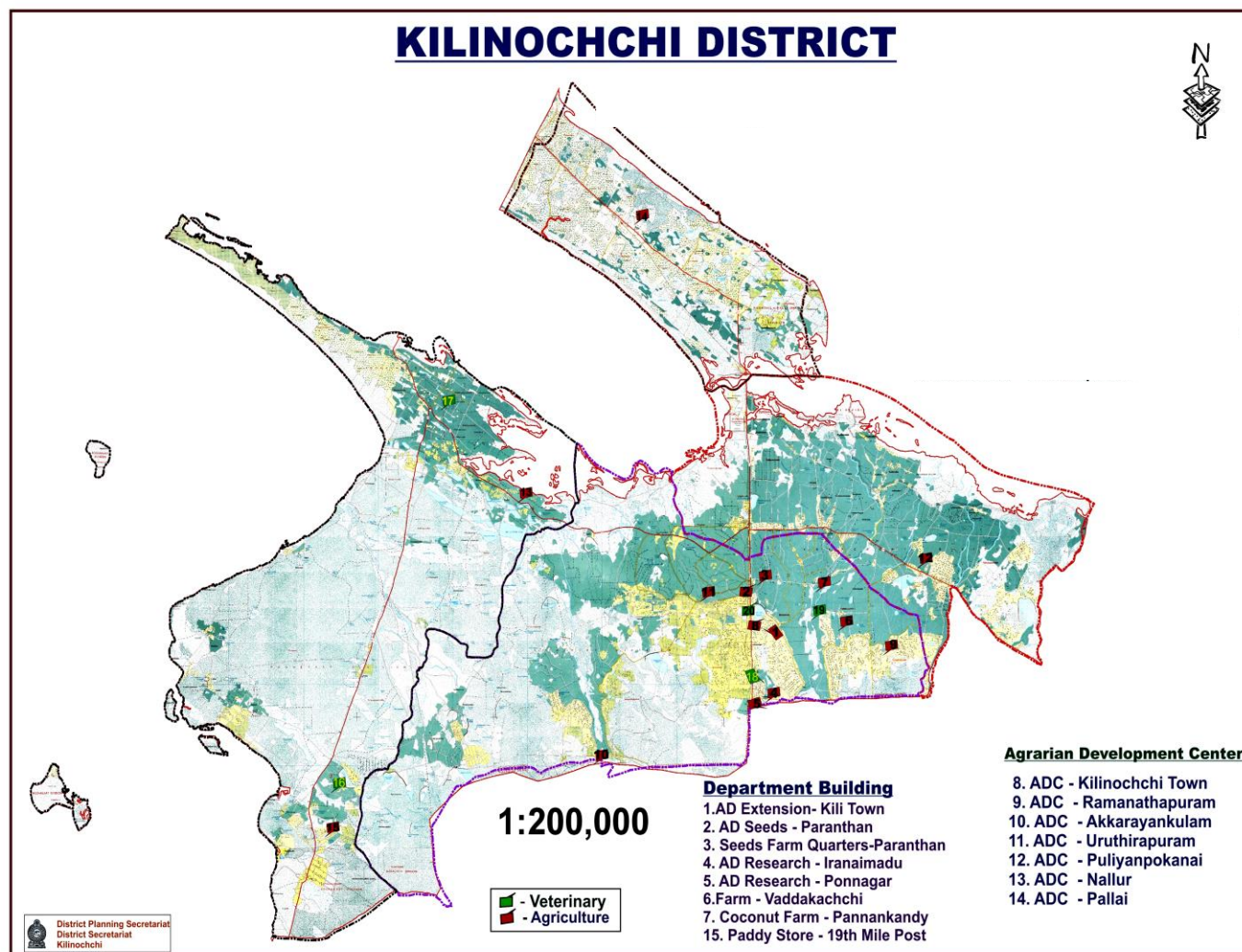


Figure 19 A part of land use map in Killinochchi district

Table 11 Land use pattern in Killinochchi district

DS Division	Extent (ha)										Potential lands for Sugarcane
	Barren lands	Home- steads	Forest/G rassland	Paddy	Plantation crops	Other crops	Shrub land	Chena	Other used land area	Total	
Karachchi	1860	9740	15950	21980	40	90	4270	7350	2250	63550	13480
Poonakary	3450	1600	24160	4890	390	1160	3210	5970	2800	47630	12630
Pachchilaipalli	490	1860	1100	DNA	2650	910	2750	2980	2990	15730	6220
Total	5800	13200	41210	26870	3080	2160	10230	16300	8040	127930	32330

DNA- Data not available, Source: District Secretariat, Killinochchi.

#### 4.7.2 Irrigation water availability

There are 8 major and medium irrigation tanks in the district and irrigable area is 13668ha (Table 12 and Figure 20). However, at present, total irrigation water available in the district is used for paddy.

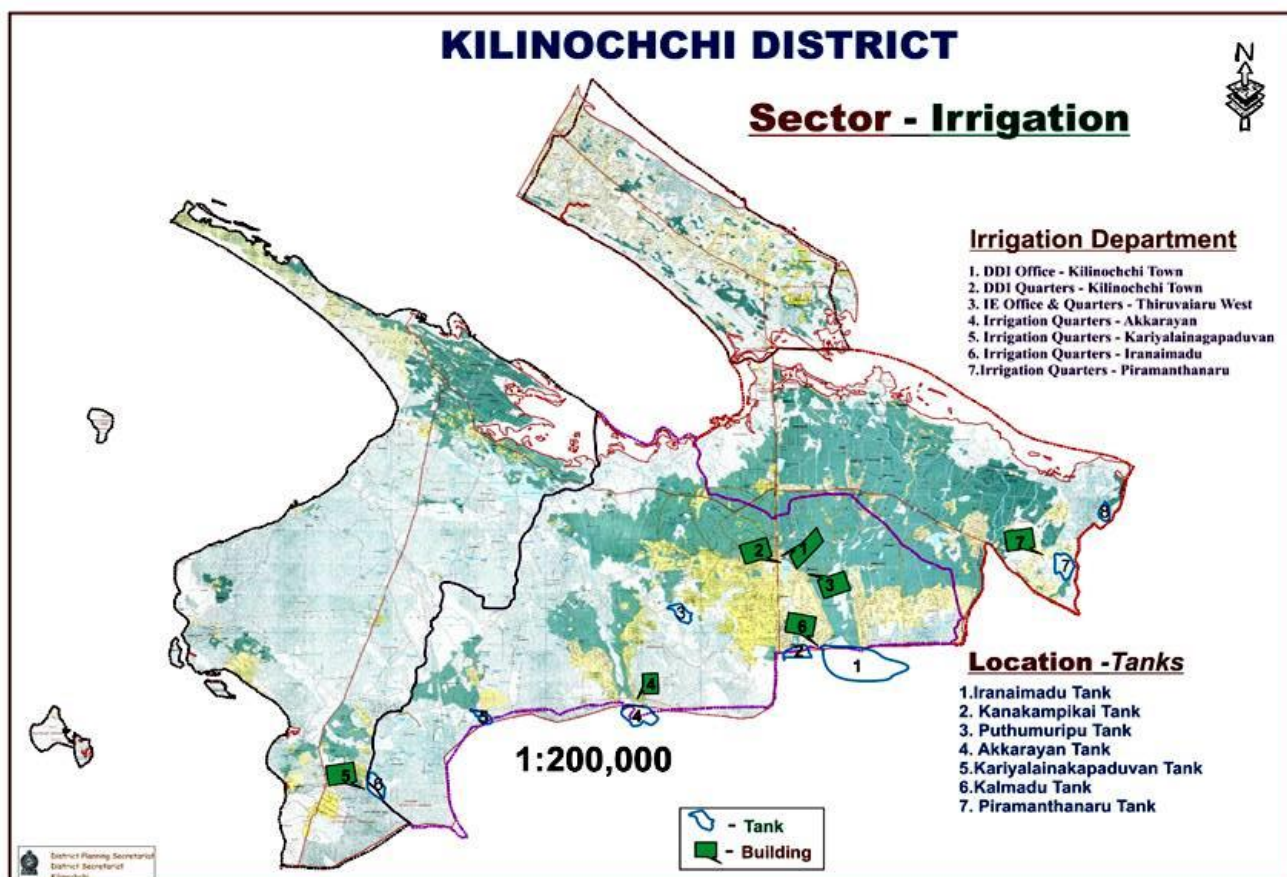


Figure 20 Tanks and streams in Killinochchi district



Table 12 Major and medium tanks in Killinochchi district

DS division	Scheme	Capacity (ac.ft)	Command area(ha)
Karachchi	Vannerikulam	1713	139
	Puthumurippu	3410	496
	Kanagambikai kulam	1221	105
	Akkarayan kulam	21200	1383
Karachchi/ Kandawalai	Iranaimadhu	106500	8901
Kandawalai	Kalmadhu kulam	12075	1791
	Piramanthanaru kulam	3128	244
Poonakary	Kariyalainagapaduvan	11709	609
Total:		160956	13669

Source : Deputy Director of Irrigation, Killinochchi.

#### 4.8 Kurunegala District

Kurunegala district is situated in North-Western Province and part of it is in the dry zone and the rest is in the intermediate zone. The district comprises of 30 DS divisions (Figure 21).

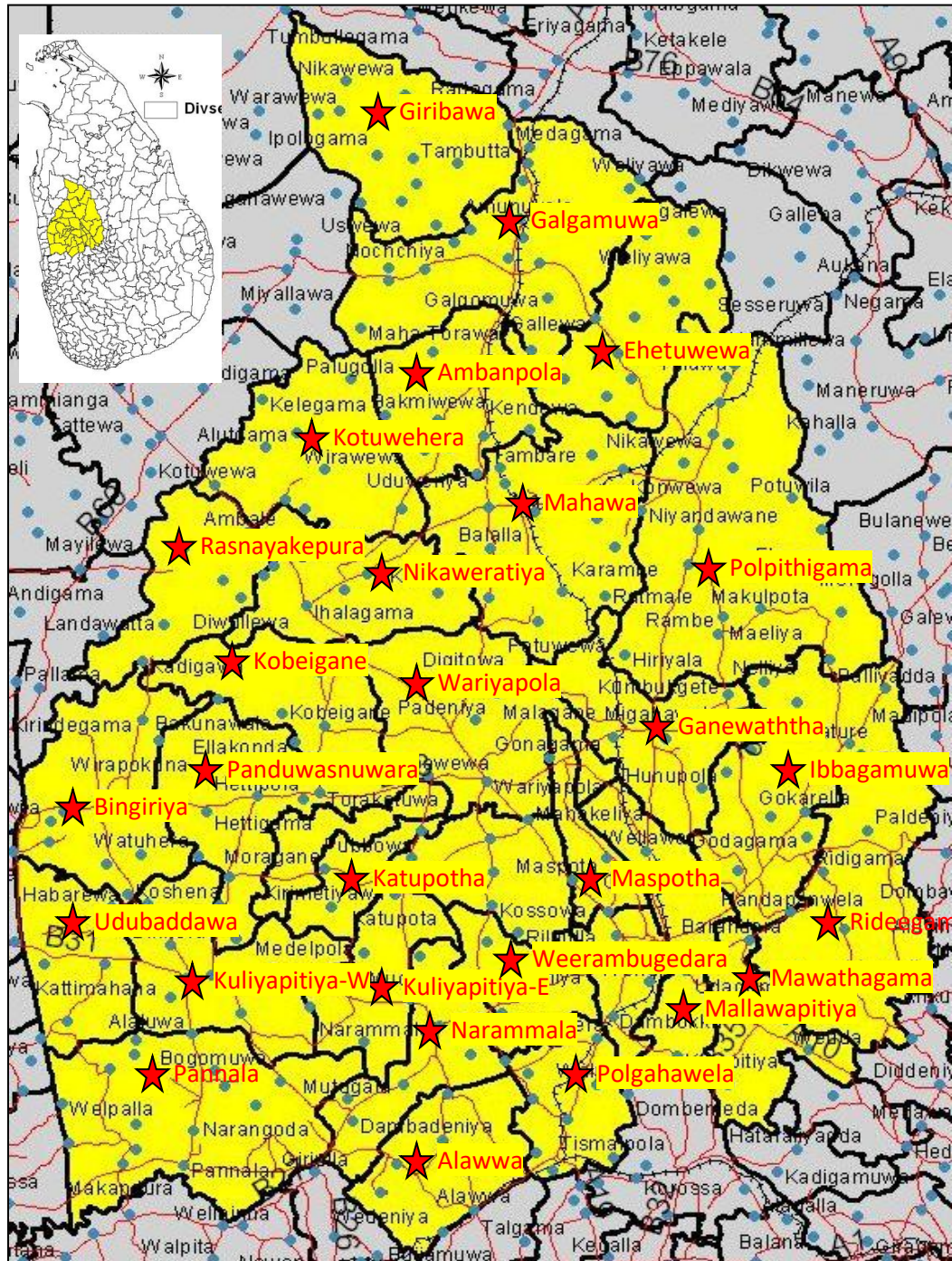


Figure 21: Divisional Secretariat divisions in Kurunegala district

#### **4.8.1 Land use pattern and potential availability of lands for sugarcane cultivation**

Kurunegala district has 485516 ha of lands and of which 46% (224269 ha) has been used for agriculture; 133619 ha are under coconut cultivation and 105908 ha are under paddy cultivation (Table 13). Some of the paddy lands are cultivated with paddy in maha season and other field crops, such as chillies, mung bean and ginger in yala season, especially if they are rain-fed. Total potential area for sugarcane cultivation is 46442 ha, and many divisional secretariats have potential lands below 5000 ha.

Agricultural and administrative authorities of the district do not like sugarcane cultivation due to elephant problem.

#### **4.8.2 Irrigation water availability**

There are 27 major irrigation schemes in the district with a total command area of about 14600 ha (Table 14 and Figure 22). The irrigable lands have been allocated for paddy and other agricultural crops, and irrigation water is not available for sugarcane cultivation.



Table 13 Land use pattern and potential lands for sugarcane cultivation in Kurunegala district

GS Division	Extent (ha)										Sugarcane cultivable lands
	Barren land	Home garden	Forest	Paddy	Plantations	Other crop	Shrub lands	Chena	Other used land	Total	
Giribawa	0	4806	2623	4674	527	403	4171	1014	4278	22497	5185
Galgamuva	0	8690	904	6016	571	260	4455	2148	375	23420	6603
Ehetuwewa	0	5192	1822	4143	174	72	3349	498	3105	18355	3847
Ambanpola	1	5018	624	2897	802	45.25	1166	1406	3468	15428	2573
Kotuvehera	3	5624	837	3701	337	179	3800	1485	3986	19951	5288
Mahawa	58	7453	78	9156	1214	91	4980	678	3578	27286	5716
Polpithigama	21	14069	2642	9608	2698	306	2710	1266	9644	42957	3996
Nikaweratiya	13	3574	134	4642	1701	460	934	1565	3025	16048	2512
Rasnayakepura	0	3777	124	2353	1750	111	1181	1920	1593	12809	3101
Kobeigane	0	5127	306	2296	4452	83	288	2	1921	14476	290
Wariyapola	10	4680	191	4222	7398	107	256	DNA	2243	19107	266
Ganewaththa	12	4679	614	3201	5228	87	696	DNA	915	15432	709
Ibbagamuva	0	7072	1548	5474	4457	337	1533	36	2137	22588	1570
Bingiriya	0	71	0	4467	0	87	DNA	DNA	29	4653	0

Cont..d

GS Division	Barren land	Home garden	Forest	Paddy	Plantation	Other crop	Scrub lands	Chena	Other used land	Total	Sugarcane cultivable lands
Panduvastuvara-west	25	5730	1711	4389	5049	171	13	171	2394	18114	209
Panduvastuvara-east	5	2561	181	2534	5445	104	117	40	1137	12123	161
Bamunagotuva	0	2836	256	2228	3637	4	30	6	840	9837	36
Maspotha	0	1813	576	1452	3326	46	39	2	252	7505	40
Kurunegala	106	3999	269	2073	3617	40	476	15	1149	11744	597
Mallavapitiya	0	1797	265	1424	3578	54	151	45	312	7625	196
Ridigama	80	8534	1101	2546	6462	852	189	1146	430	21340	1414
Mawathagama	11	915	255	1844	7373	61	167	36	155	10816	213
Udubaddawa	700	3317	94	1808	7181	0	10	37	146	13291	747
Kuliyapitiya-west	61	2762	386	3929	8152	91	15	6	700	16102	82
Kuliyapitiya-east	0	4976	51	1713	3423	35	DNA	DNA	305	10504	0
Wiradugedara	1	2199	22	1743	5290	4	89	6	528	9882	96
Narammala	18	7613	66	2215	4077	66	216	11	760	15040	245
Polgahawela	0	3633	4	2282	3216	52	118	30	479	9813	148
Alawwa	0	1985	439	1519	3726	173	130	322	345	8640	452
Pannala	6	11789	1087	5365	8757	359	142	DNA	628	28133	148
Total	1131	146288	17664	105908	113619	4741	31421	13890	50854	485515.9	46442

DNA – Data not available, Source: LUPPD, Kurunegala.

Table 14 Major tanks and their command areas in Kurunegala district

DS Division	Name of Scheme	Type of Scheme	Command area (ha)
Pannala	Makadura	Tank	316
Bingiriya	Kiniyama	Tank	184
Paduwasnuwara	Nikapitiya	Anicut	91
Paduwasnuwara	Madulla	Anicut	140
Bingiriya	Wellangiriya	Lift Irrigation	40
Nikaweratiya	Hulugalla	Tank	97
Ambanpola	Mediyawa	Tank	486
Nikaweratiya	Magalla	Tank	2429
Wariyapola	Kekirihena	Anicut	142
Wariyapola	Kadiragala	Anicut	89
Ambanpola	Abakolawewa	Tank	340
Ehetuwewa	Attaragalla	Tank	419
Galgamuwa	Mahannanneriya	Tank	162
Galgamuwa	Usgala Siyambalangamuwa	Tank	850
Galgamuwa	Palukadawala	Tank	820
Galgamuwa	Mahagalgamuwa	Tank	166
Polpitigama	Maha Siyambalangamuwa	Tank	168
Ibbagamuwa	Meddeketiya	Tank	98
Polpitigama	Hakwatunaoya	Tank	2579
Mallawapitiya	Wennaruwewa	Tank	190
Ibbagamuwa	Batalagoda	Tank	3091
Ibbagamuwa	Diyature	Anicut	231
Ibbagamuwa	Kimbulwanaoya	Tank	911
Ridigama	Kospotuoya	Anicut	116
Polpitigama	Moragoda	Anicut	228
Polpitigama	Morathioya	Anicut	101
Ridigama	Welikumbura	Tank	115
Total			14600

Source: Regional Irrigation Office, Kurunegala.



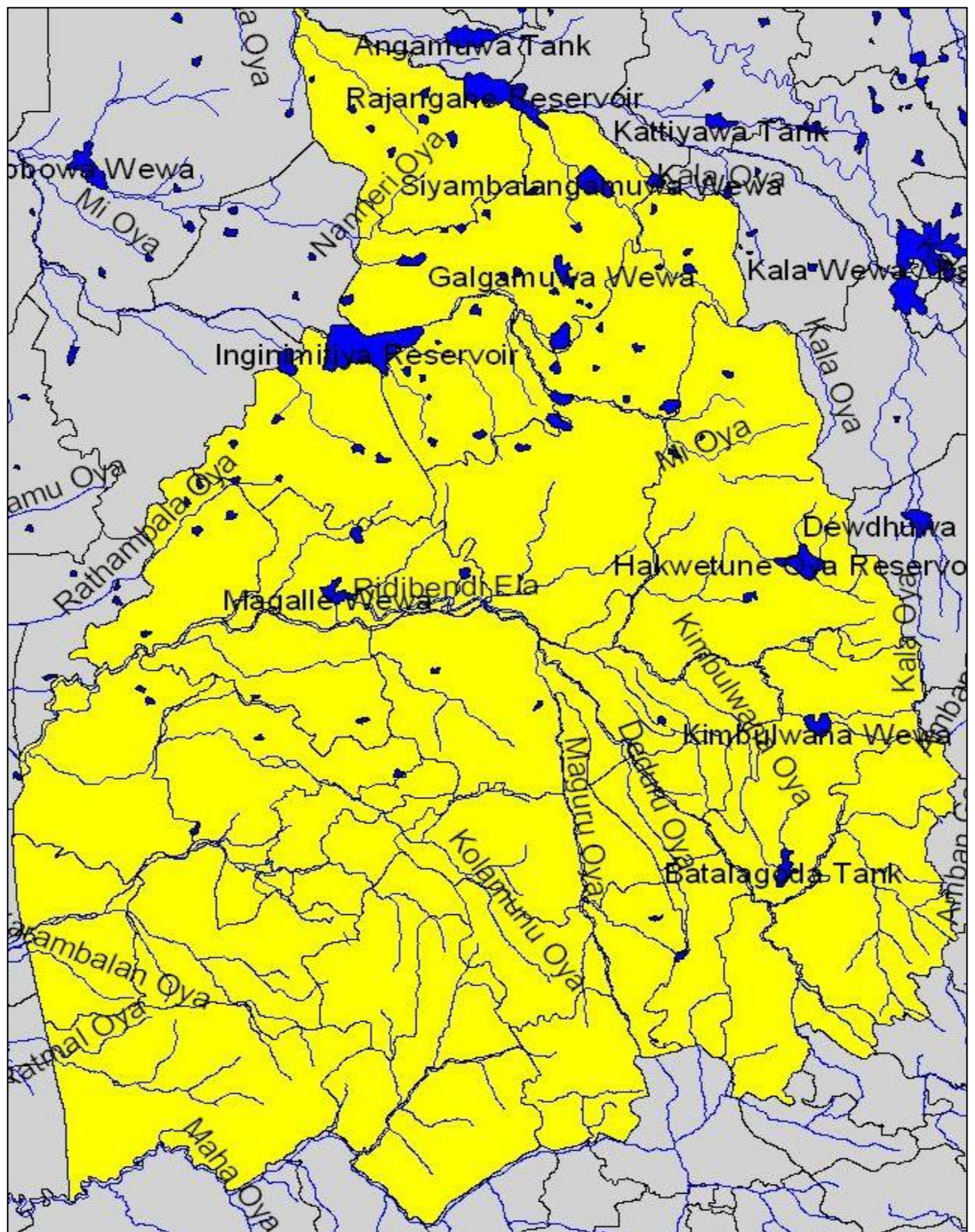


Figure 22 Tanks and streams in Kurunegala district

## **5. Conclusion**

Anuradhapura, Moneragala, Badulla and Trincomalee districts have a considerable extent of lands which can be used for sugarcane cultivation in large plantations for sugar production. The other four districts studied, have small extents of lands which can be used for sugarcane cultivation for small-scale sugar factories and for cottage-level sugarcane industries like jaggery and syrup. Irrigation water is available for sugarcane cultivation only in Trincomalee district. In addition there are abandoned tanks that could be renovated for cultivation in Ampara district (DS divisions, Maha Oya and Padiyathalawa). This study identified lands available for sugarcane cultivation however; further studies are required to verify the identified lands for their actual availability and suitability sugarcane cultivation.