SOIL ATLAS

TIRUVANNAMALAI

DISTRICT

SOIL SURVEY & LAND USE ORGANISATION
(Department of Agriculture, Tamil Nadu)
Coimbatore - 641 013

2004

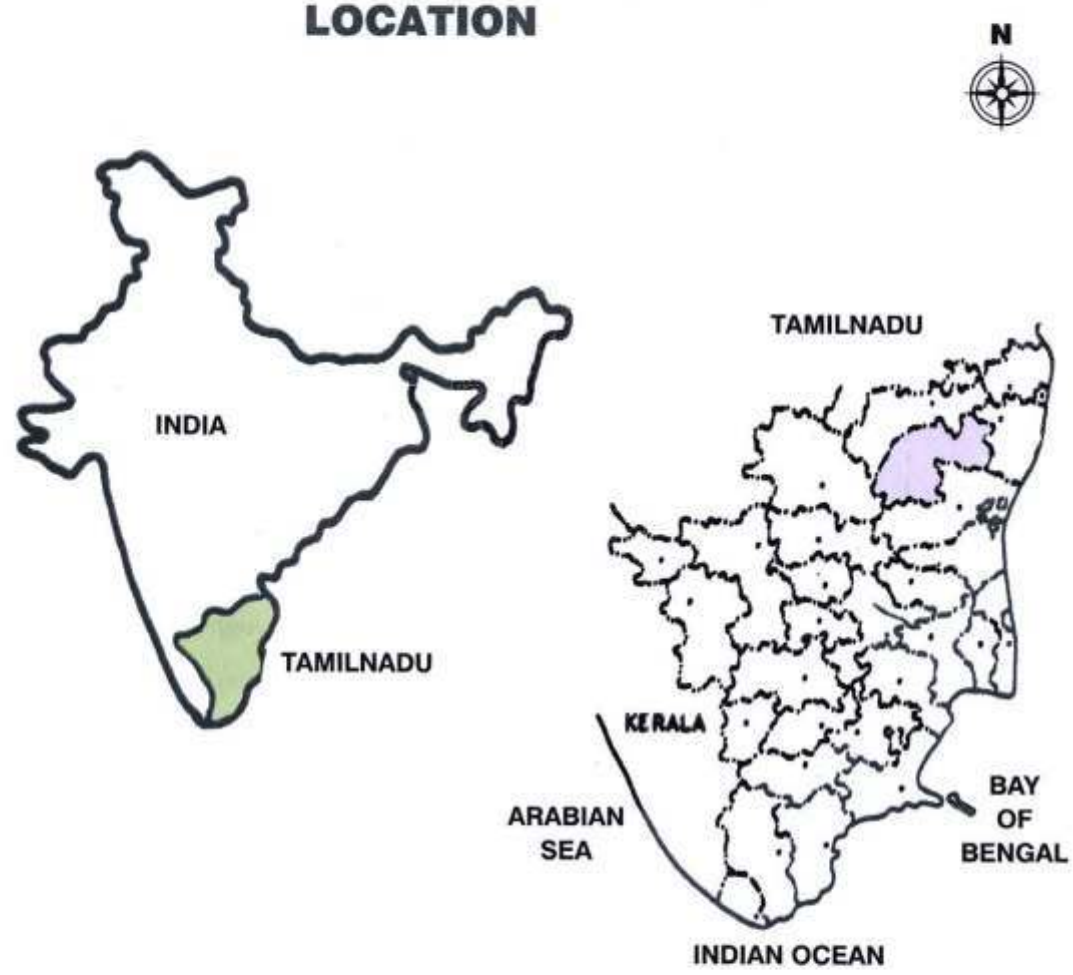
SOIL ATLAS
TIRUVANNAMALAI DISTRICT

SOIL SURVEY & LAND USE ORGANISATION
(DEPARTMENT OF AGRICULTURE, TAMIL NADU)
COIMBATORE - 641 013

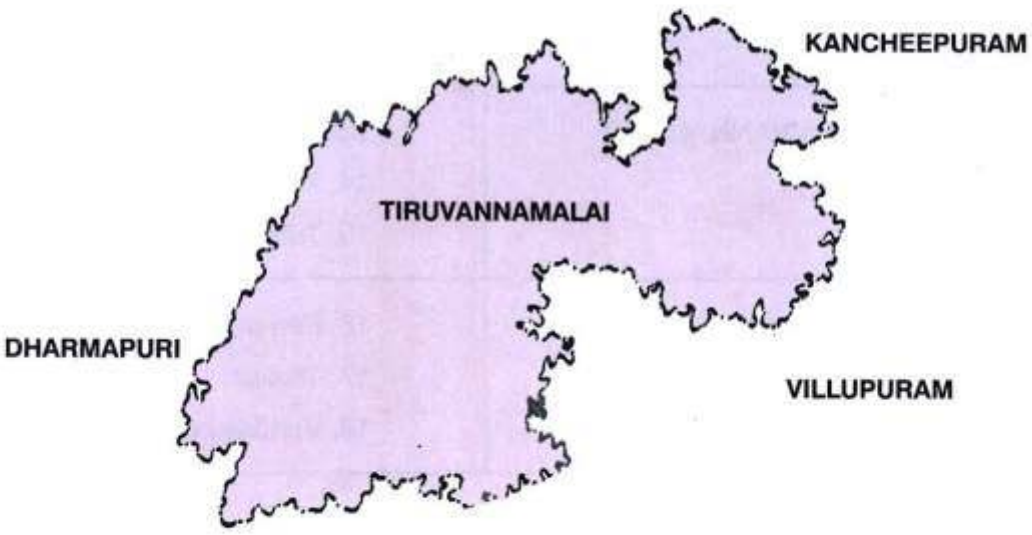
2004

CONTENTS

TIRUVANNAMALAI DISTRICT
LOCATION



TIRUVANNAMALAI DISTRICT

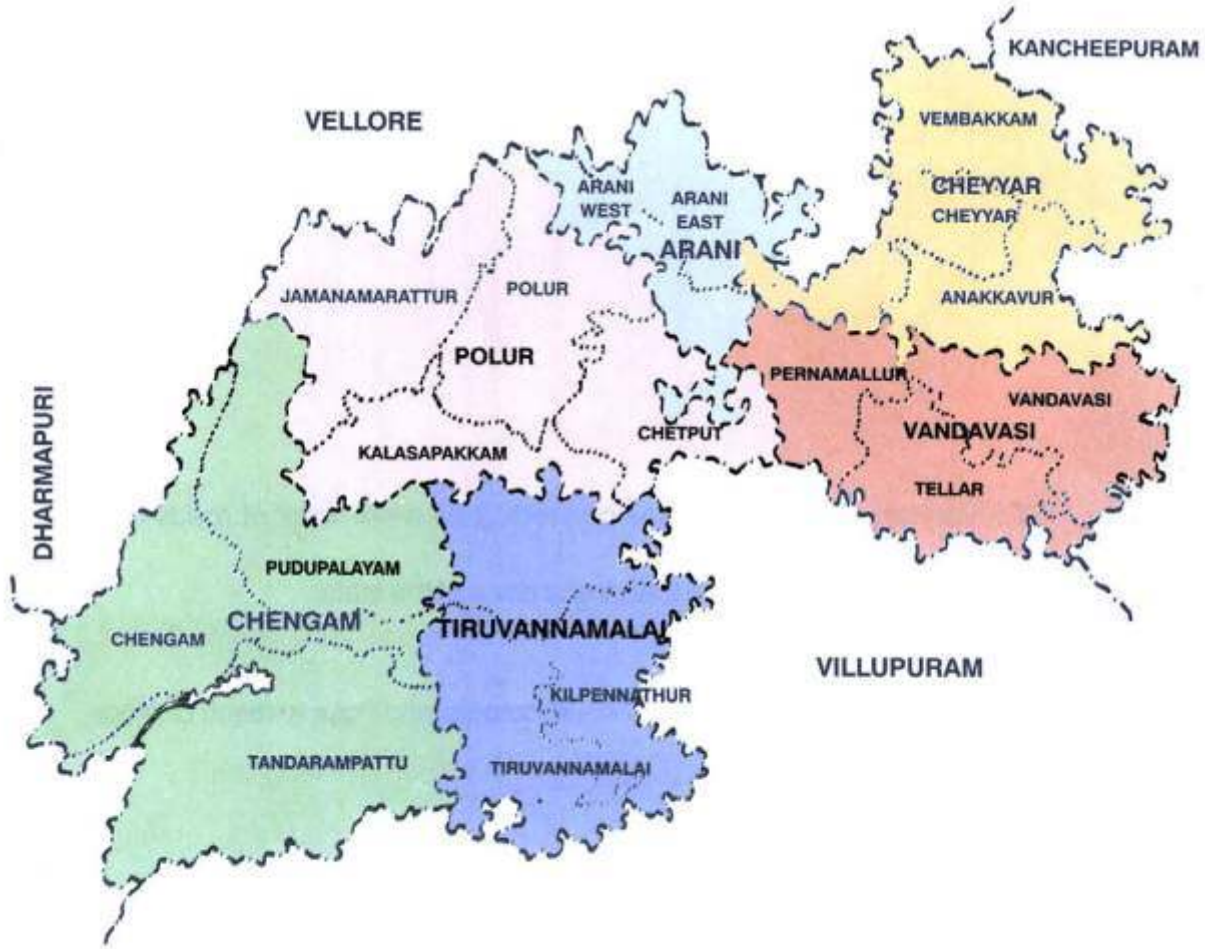


TALUKS AND PANCHAYAT UNIONS

The district comprises of six taluks and seventeen panchayat unions as indicated below.

S.No.	Taluk	Panchayat Union
1	ARANI	1. Arani east 2. Arani west
2	CHEYYAR	3. Anakkavur 4. Cheyyar 5. Vembakkam
3	CHENGAM	6. Chengam 7. Pudupalayam 8. Tandarampattu
4	POLUR	9. Chetput 10. Jamanamarattur 11. Kalasapakkam 12. Polur
5	TIRUVANNAMALAI	13. Kilpennathur 14. Tiruvannamalai 15. Turinjapuram
6	VANDAVASI	16. Pemamallur 17. Thellar 18. Vandavasi

TALUKS & PANCHAYAT UNIONS
TIRUVANNAMALAI DISTRICT



REFERENCE

S.R.P. DAM

DISTRICT BOUNDARY

LEGEND

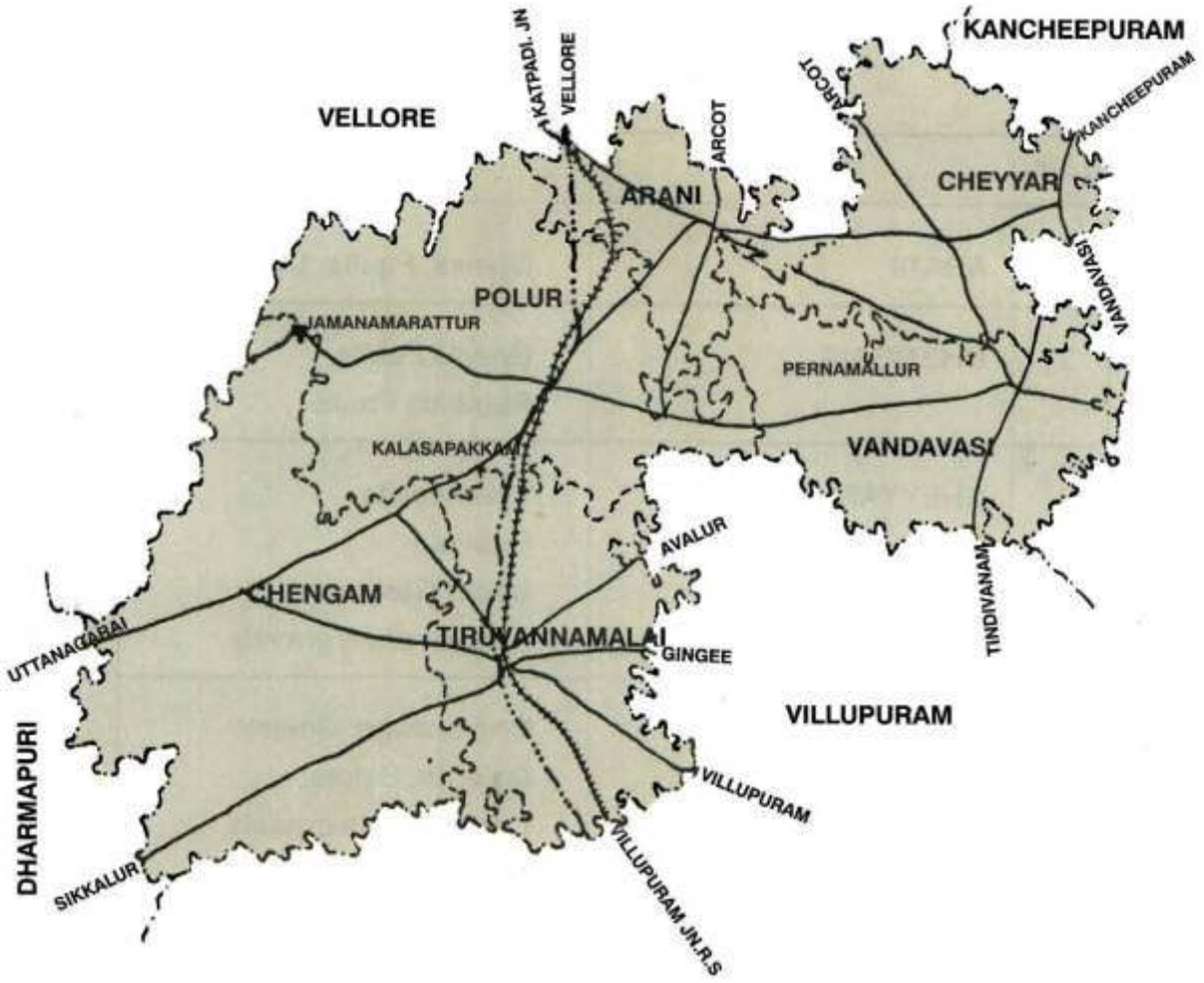
TALUK BOUNDARY

PANCHAYAT UNION BOUNDARY

ROADS & RAILWAYS

- Tiruvannamalai district is well connected by a net work of roads and railways from all important towns and cities of the state.
- State highway passes through Tiruvannamalai and Polur to reach Chittoor (Andhra Pradesh).
- Similarly, metergauge railway line passes through Tiruvannamalai and Polur to Chittoor.

ROADS & RAILWAYS
TIRUVANNAMALAI DISTRICT



REFERENCE

—•— DISTRICT BOUNDARY

— • — TALUK BOUNDARY

LEGEND

RAILWAY LINE (M.G.)

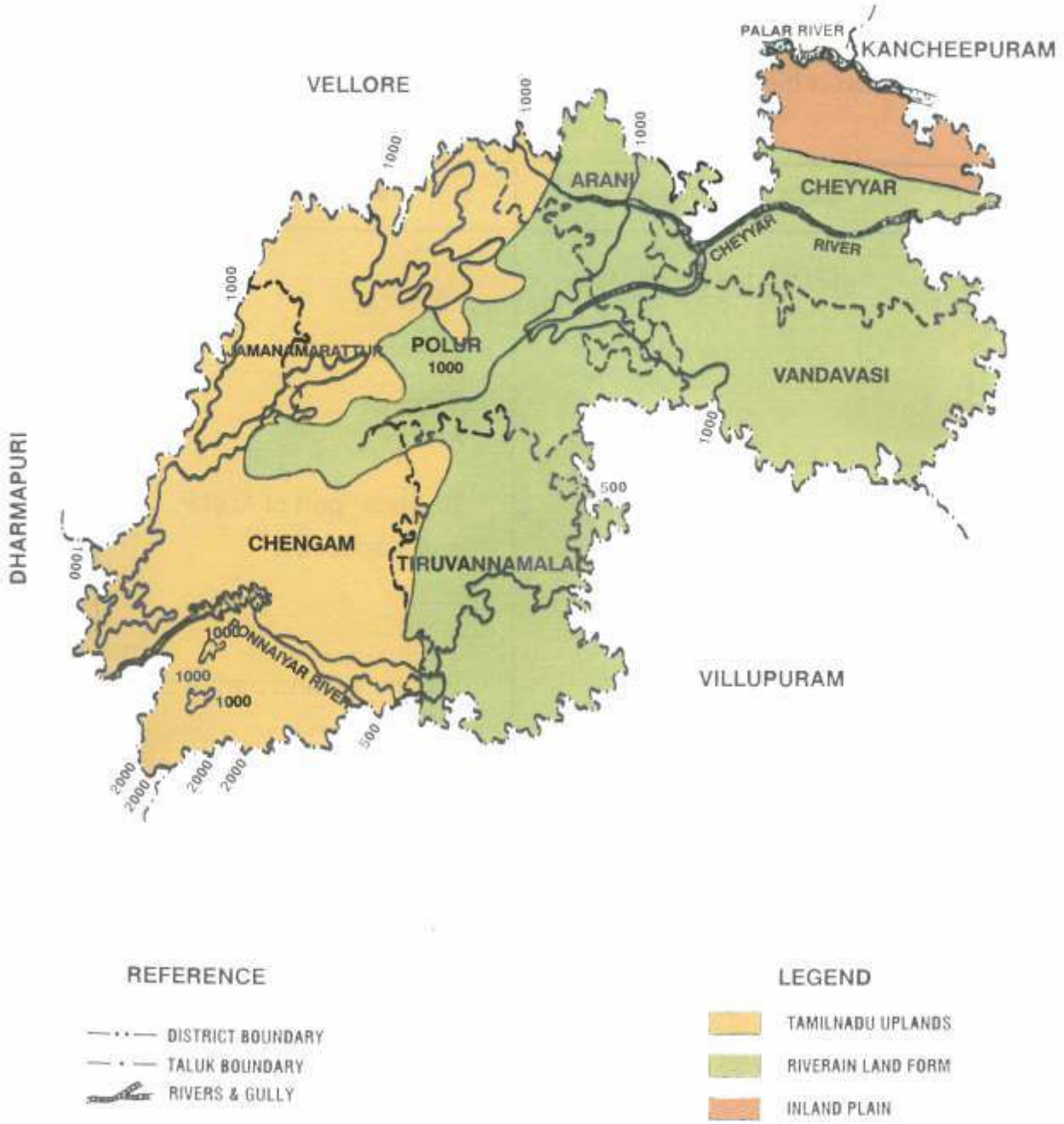
STATE HIGHWAYS

OTHER ROADS

PHYSIOGRAPHY

- The district is of Inland plain and is characterised by riverain landform in the eastern part and by Tamil Nadu uplands in the western part.
- Tamil Nadu uplands are with a relief of 150-450 m.
- Riverain landform occurs in north eastern part of the district to a small extent.

PHYSIOGRAPHY
TIRUVANNAMALAI DISTRICT

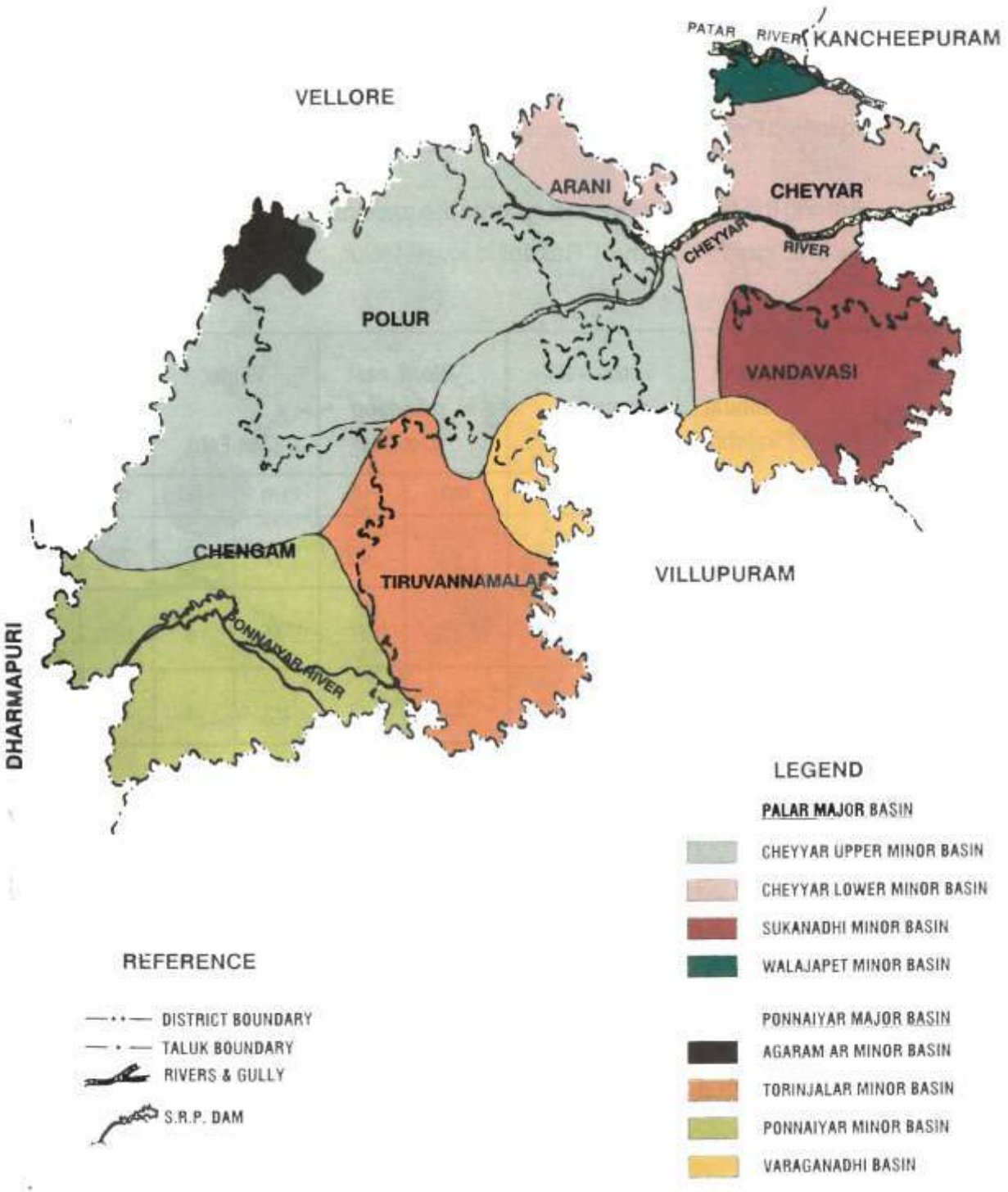


DRAINAGE AND RIVER BASINS

- Palar and Ponnaiyar are the two major basins benefitting the Agricultural activities and drainage of the district.
- Details of their minor basins are given below.

Major river basin	Taluks covered
a Palar major basin	
1. Cheyyar upper basin	Chengam Polur Arani
2. Cheyyar Lower basin	Cheyyar, part of Arani and Vandavasi
b Ponnaiyar major basin	
1. Sukanadhi basin	Vandavasi and part of Cheyyar
2. Walajapet basin	Part of Cheyyar
3. Agaram ar basin	Part of Polur
4. Thurinjalar basin	Tiruvannamalai
5. Ponnaiyar basin	Chengam
6. Varaganadhi basin	Part of Tiruvannamalai and Vandavasi

DRAINAGE & RIVER BASINS
TIRUVANNAMALAI DISTRICT

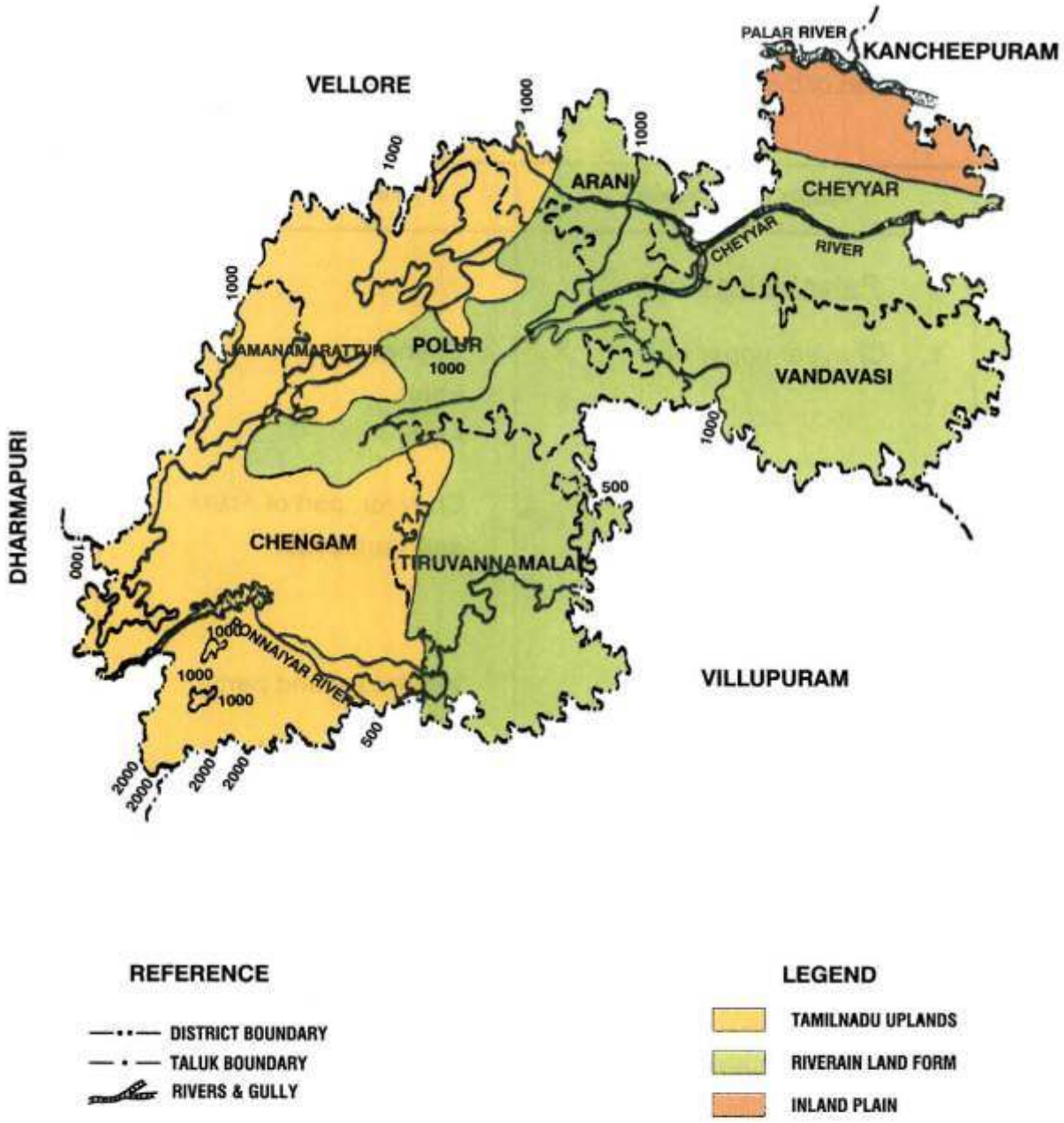


RAIN FALL

- Northeast monsoon contributes to the extent of 47% and is closely followed by southwest monsoon (43%)
- Among the taluks Vandavasi records the maximum of 1205 mm followed by Chengam (1093 mm). Rainfall is low in Polur.

Taluk	Mean annual rainfall	South west monsoon (Jun-Sep)		North east monsoon (Oct-Dec)		Winter (Jan-Feb)		Summer (Mar-May)	
		mm	%	mm	%	mm	%	mm	%
ARANI	904	404	45	407	45	17	2	76	8
CHENGAM	1093	463	43	512	47	15	1	103	9
CHEYYAR	990	461	47	467	47	13	1	49	5
POLUR	845	408	48	360	43	17	2	60	7
TIRUVANNAMALAI	1034	435	42	480	44	17	2	103	10
VANDAVASI	1205	453	38	656	54	25	2	71	6
MEAN FOR THE DISTRICT	**1011**	**437**	**43**	**480**	**47**	**17**	**2**	**77**	**8**

PHYSIOGRAPHY
TIRUVANNAMALAI DISTRICT



DRAINAGE AND RIVER BASINS

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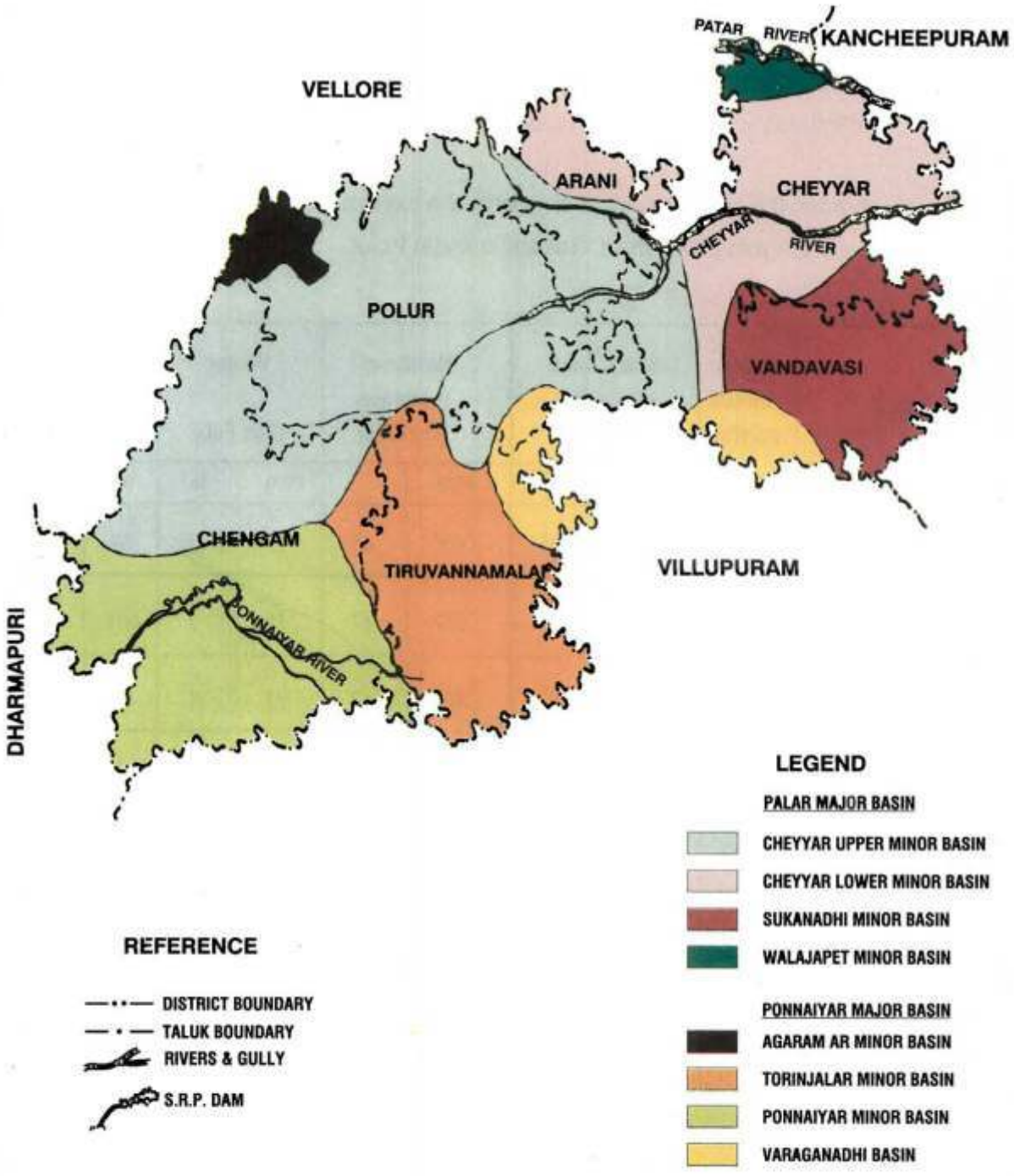
DRAINAGE & RIVER BASINS
TIRUVANNAMALAI DISTRICT



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CHENGAM	*1093*	*463*	*43*	*512*	*47*	*15*	*1*	*103*	*9*
CHEYYAR	*990*	*461*	*47*	*467*	*47*	*13*	*1*	*49*	*5*
POLUR	*845*	*408*	*48*	*360*	*43*	*17*	*2*	*60*	*7*
TIRUVANNAMALAI	*1034*	*435*	*42*	*480*	*44*	*17*	*2*	*103*	*10*
VANDAVASI	*1205*	*453*	*38*	*656*	*54*	*25*	*2*	*71*	*6*
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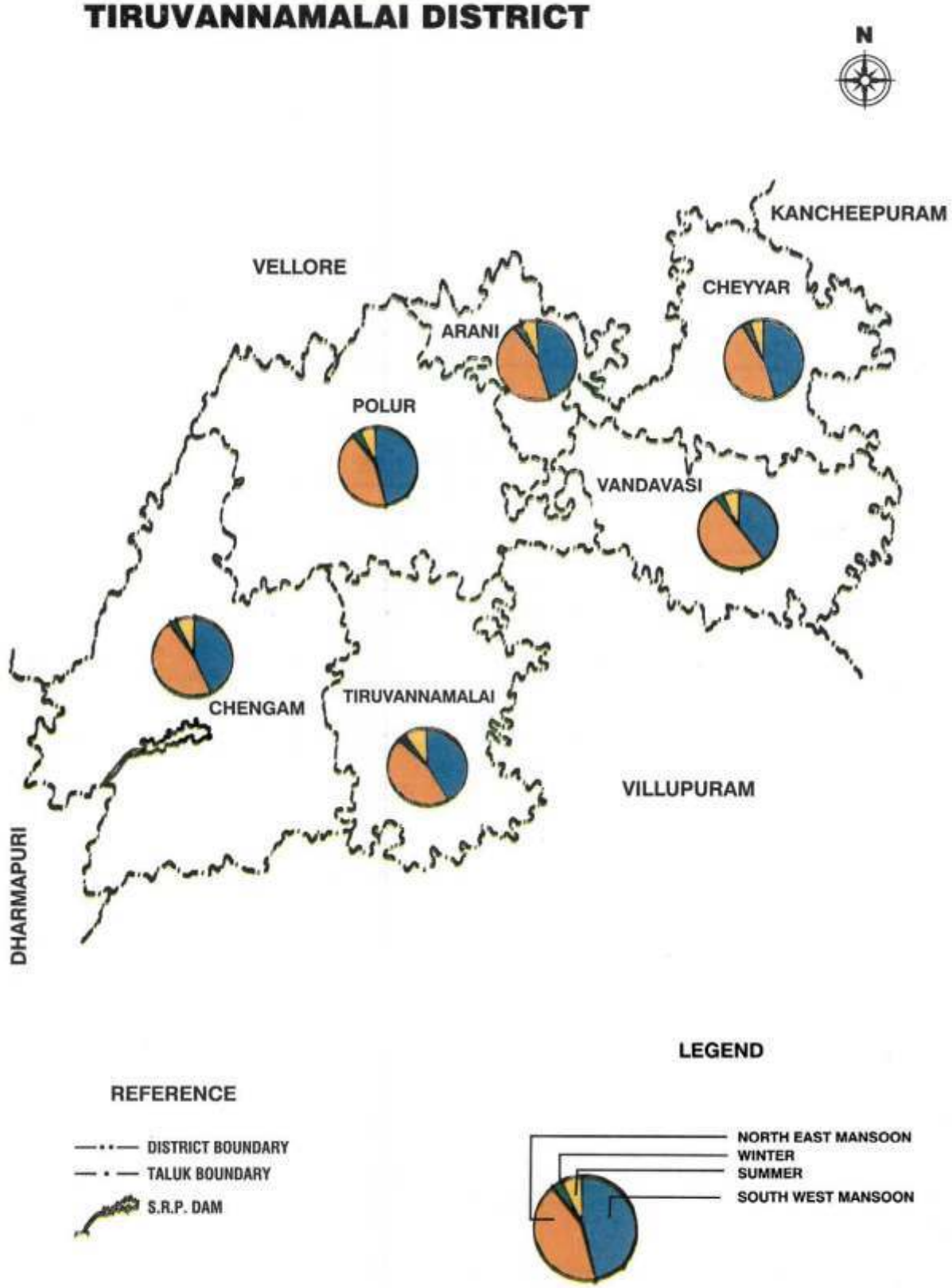
RAINFALL
TIRUVANNAMALAI DISTRICT



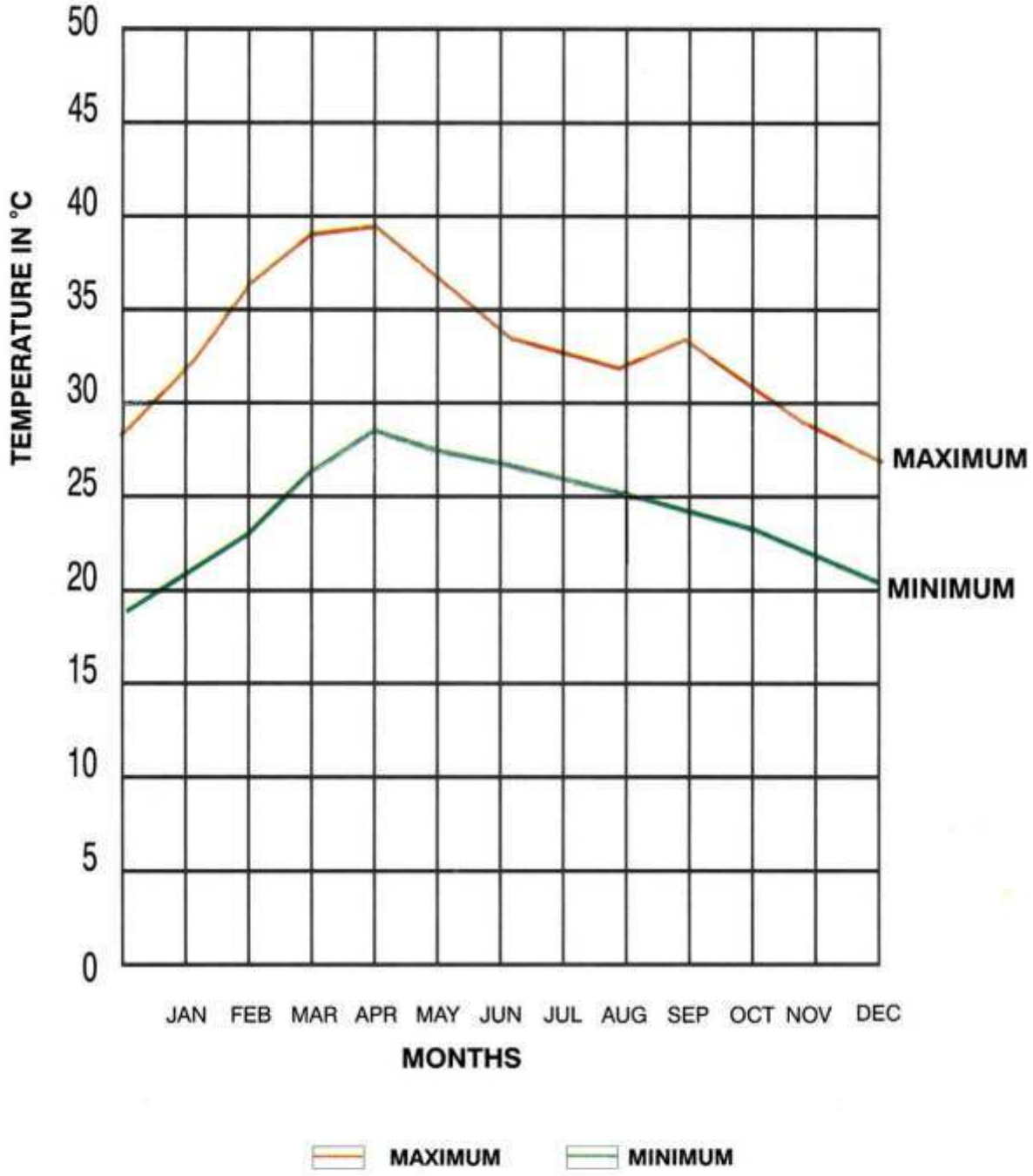
TEMPERATURE

The mean annual temperature is 28.62°C and the data of atmospheric temperature is given below :

Month	Maximum Temperature ° C	Minimum Temperature ° C	Mean Temperature ° C
January	28.93	19.52	24.22
February	31.76	20.98	26.37
March	35.06	22.31	28.68
April	37.48	26.43	31.95
May	38.05	27.86	32.95
June	35.37	27.29	31.33
July	33.80	26.76	30.28
August	32.67	25.68	29.17
September	32.91	25.43	29.17
October	31.41	24.88	26.14
November	29.77	23.73	26.7
December	27.51	21.51	24.51
Mean	32.89	24.36	28.62

The temperature regime is found to be Hyperthermic.

TEMPERATURE
TIRUVANNAMALAI DISTRICT

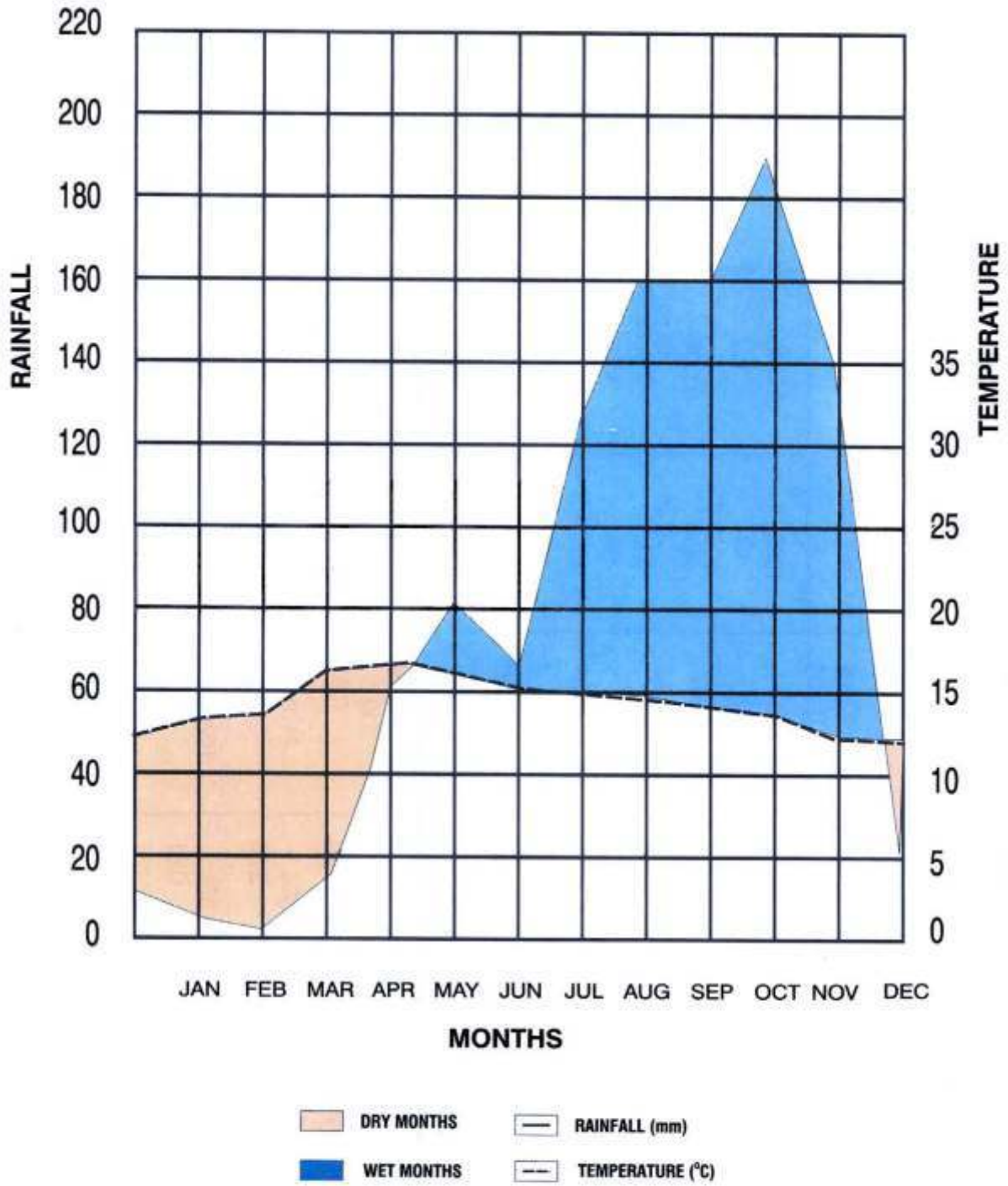


OMBROTHERMIC DATA

Month	Mean Temperature (°C)	Mean Rainfall (mm)
January	24	12
February	26	3
March	27	1
April	32	14
May	33	59
June	31	80
July	30	65
August	29	125
September	29	162
October	28	160
November	27	191
December	24	139
Total	**Mean 28**	**1011 mm**

The soil moisture regime could be described as ustic. The wet period lasts for seven months from June onwards, when conditions are favourable for crop growth.

OMBROTHERMIC DIAGRAM
TIRUVANNAMALAI DISTRICT

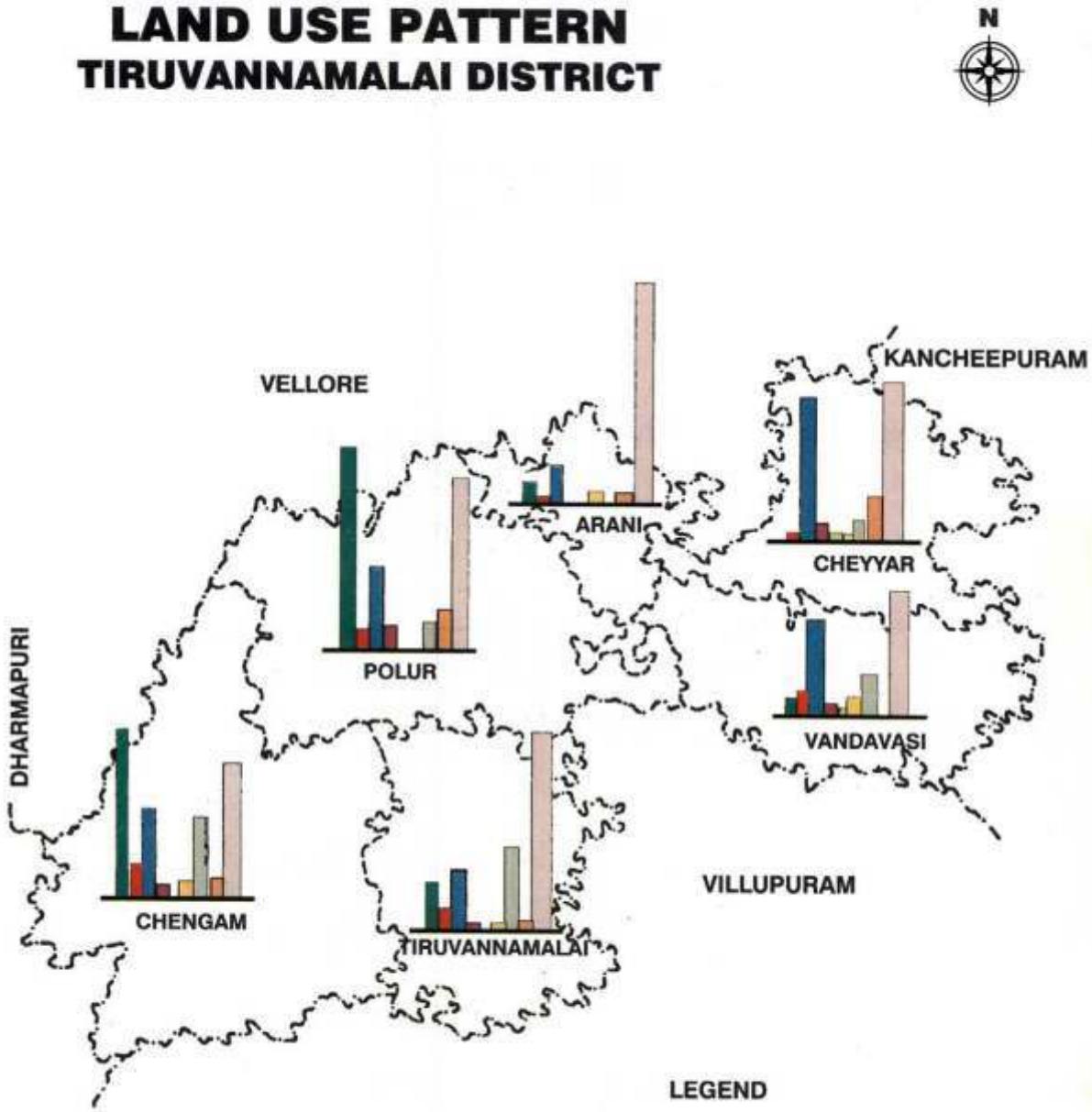


LAND USE PATTERN

Agriculture is practiced in 44% of the area and forests occupy 24% of the total geographical area (1998 - 99)

LAND USE		ARANI	CHENGAM	CHEYYAR	POLUR	TIRUVANNA MALAI	VANDAVASI	TOTAL
Total geographical area	ha	45493	168953	84757	147046	97015	87941	631205
	%	100	100	100	100	100	100	100
1) Forest	ha	4255	74098	338	63508	8463	2656	153318
	%	9.35	43.86	0.40	43.19	8.72	3.02	243
2) Barren and uncultivable land	ha	2092	5943	864	4072	4008	4060	21039
	%	4.60	3.51	1.02	2.77	4.13	4.62	33
3) Land put to non agricultural use	ha	6546	15558	26188	14381	12092	16995	91760
	%	14.39	9.20	30.89	9.78	12.46	19.33	14
4) Cultivable waste	ha	597	2102	2429	4032	1116	1675	11951
	%	1.31	1.24	2.87	2.74	1.15	1.90	19
5) Permanent pastures and grazing land	ha	360	110	845	896	167	1440	3818
	%	0.80	0.60	0.99	0.61	0.17	1.64	06
6) Miscellaneous tree crops and groves	ha	1074	2170	1159	804	892	2623	8722
	%	2.36	1.29	1.37	0.55	0.92	2.98	13
7) Current fallow	ha	371	14266	3916	4663	15468	7531	46215
	%	0.81	8.45	4.62	3.17	15.94	8.56	74
8) Other fallow land	ha	1106	3628	5030	7180	657	1402	1900
	%	2.43	2.16	5.93	4.88	0.68	1.59	30
9) Net area sown	ha	29092	51078	43998	47510	54158	49559	275395
	%	63.95	30.23	51.91	32.31	55.83	56.36	436

LAND USE PATTERN
TIRUVANNAMALAI DISTRICT

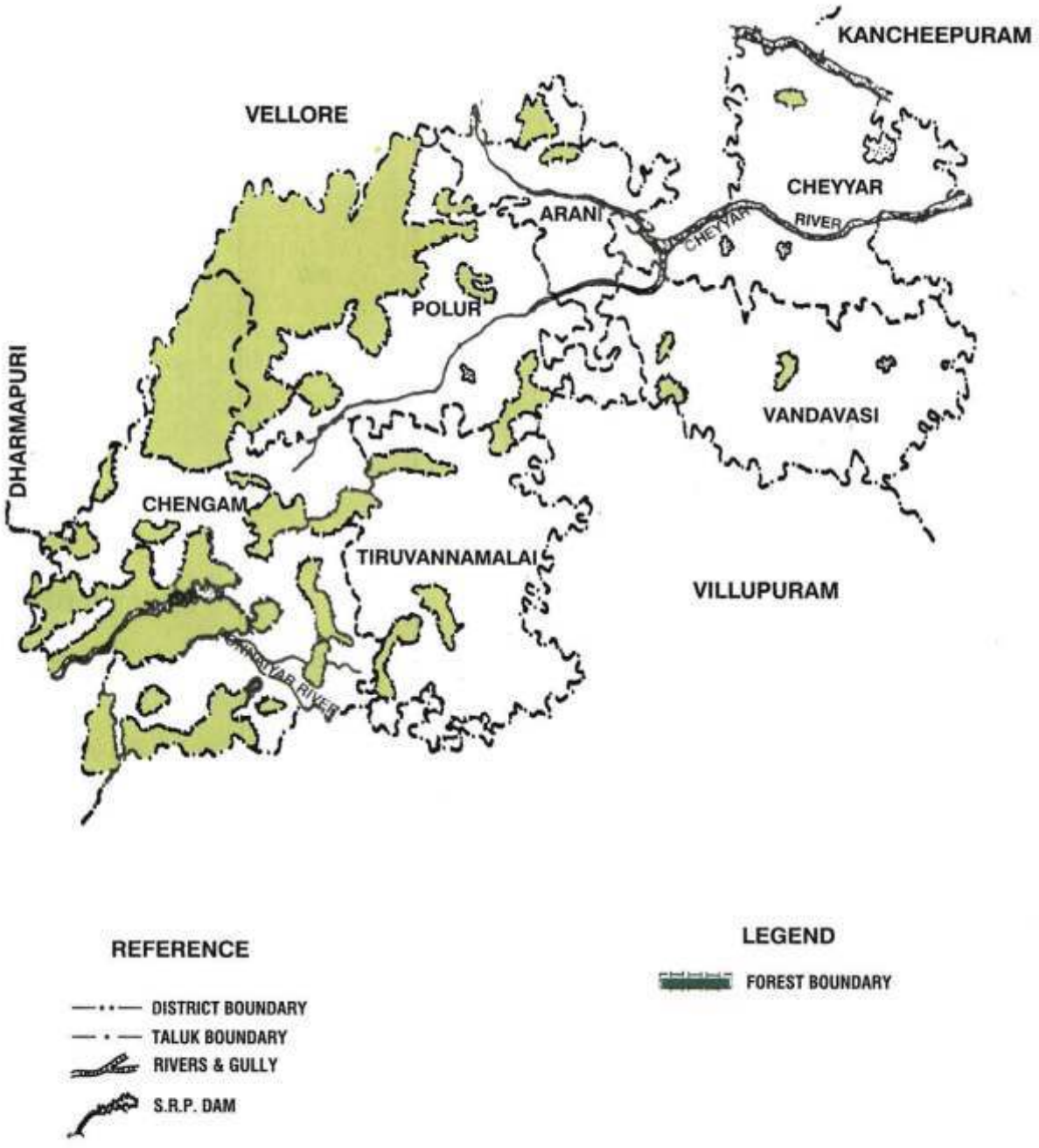


FOREST

Tropical moist deciduous type of forest is common and the talukwise distribution is given below :

Taluk	Area	
	ha	%
1. Arani	4255	2.78
2. Chengam	74098	48.33
3. Cheyyar	338	0.22
4. Polur	63508	41.42
5. Tiruvannamalai	8463	5.52
6. Vandavasi	2656	1.73
Total	**153318**	**100.00**

FOREST
TIRUVANNAMALAI DISTRICT

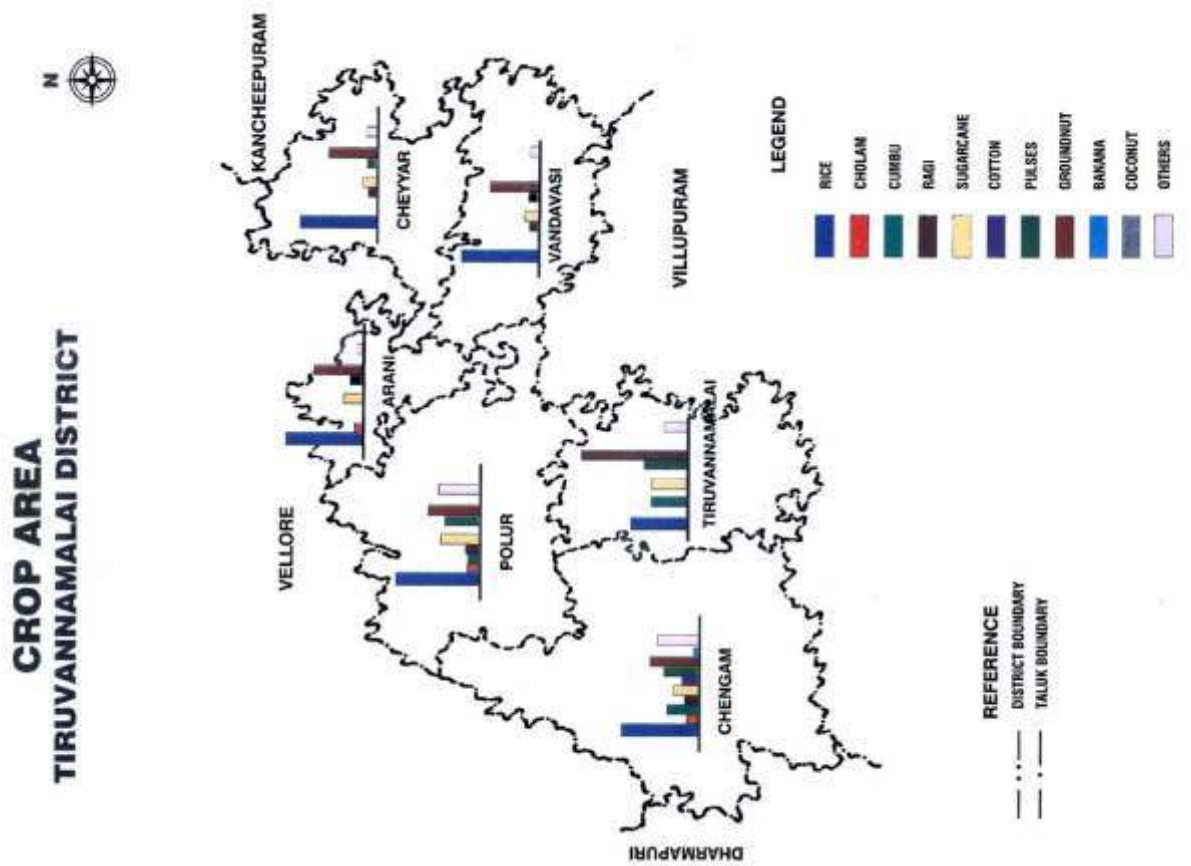


CROP AREA

(Area in hectares)

Crop	Arani	Chengam	Cheyyar	Polur	Tiruvannamalai	Vandavas	Total
1) Rice	12588	15923	15978	15888	11683	15518	87578 (33%)
2) Cholam	814	617	100	1384	2	2	2919 (1.1%)
3) Cumbu	342	5241	-	1358	7512	-	14453 (5.5%)
4) Ragi	631	2357	1266	1999	830	1189	8272 (3.1%)
5) Sugarcane	3292	5144	2438	7657	7244	2180	27955 (10.5%)
6) Cotton	-	2849	1	12	134	4	3000 (1.1%)
7) Pulses	2451	6111	2131	4629	8703	2392	26417 (10.0%)
8) Groundnut	6747	12702	9591	9523	21543	9705	69811 (26.3%)
9) Banana	307	769	11	472	32	6	1597 (0.6%)
10) Coconut	29	456	7	2	27	9	530 (0.2%)
11) Others	704	8717	732	6194	4959	1316	22622 (8.5%)
Total	**27905**	**60886**	**32255**	**49118**	**62669**	**32321**	**26515 (100%)**

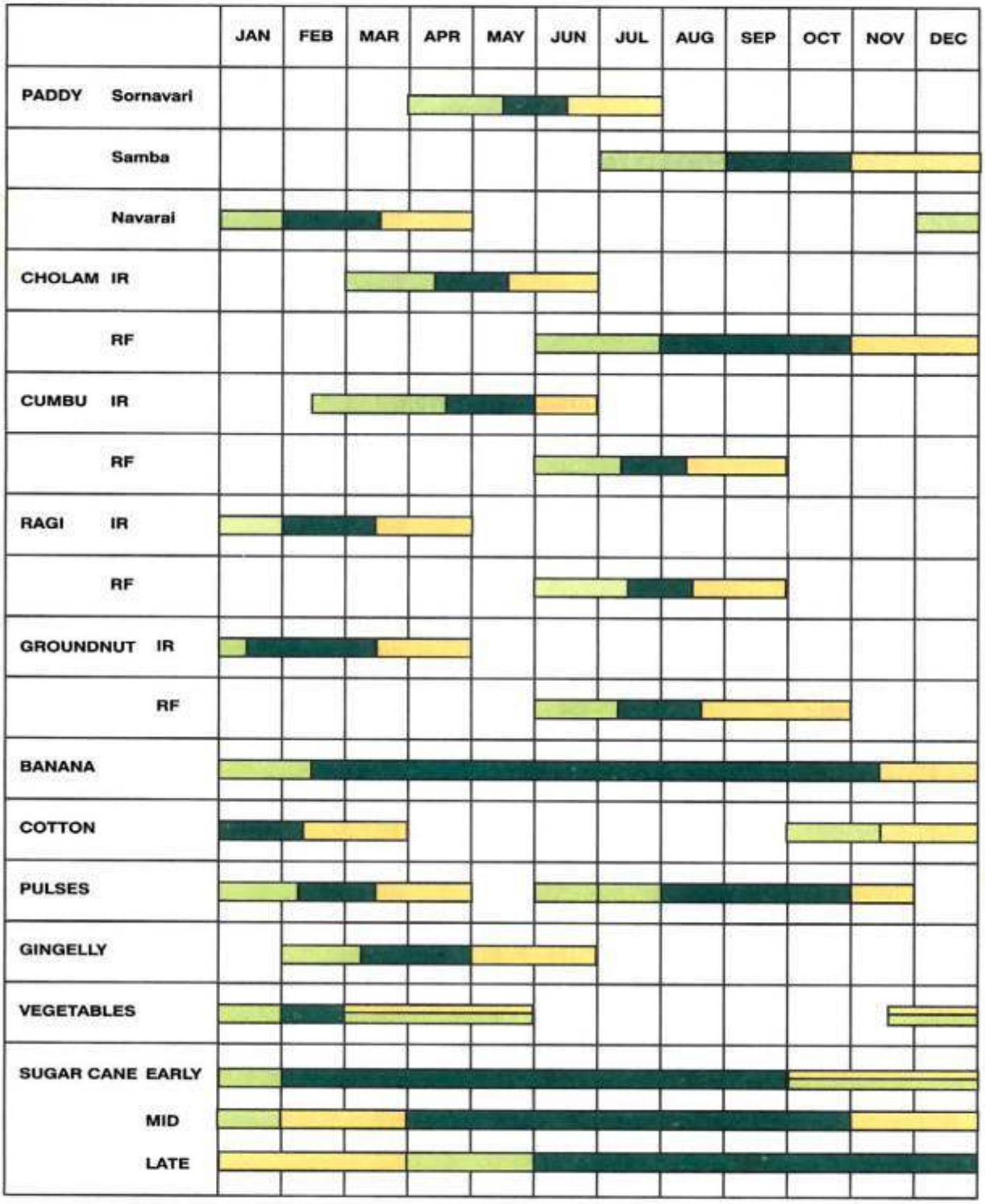
Rice is the predominent crop followed by groundnut throughout the district.


CROP AREA
TIRUVANNAMALAI DISTRICT
N
KANCHEEPURAM
CHEYYAR
VANDAVASI
VILLUPURAM
ARANI
VELLORE
POLUR
TIRUVANNAMALAI
CHENGAM
DHARMAPURI
LEGEND
RICE
CHOLAM
CUMBU
RAGI
SUGARCANE
COTTON
PULSES
GROUNDNUT
BANANA
COCONUT
OTHERS
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY

CROPPING CALENDAR

Crops	Sowing period	Growing period	Harvesting period
1) Paddy (Sornavari)	Apr -May	May –Jul	Aug- Sep
2) Paddy (Samba)	Aug-Sep	Sep-Nov	Dec-Feb
3) Paddy (Navarai)	Dec-Jan	Jan-Mar	Mar-Apr
4) Cholam (Rainfed)	Jun-Jul	Jul-Sep	Oct-Nov
5) Cumbu (Irrigated)	Apr-May	May-Jul	Aug-Sep
6) Cumbu (Rainfed)	Jun-Jul	Jul-Sep	Sep-Oct
7) Ragi (Irrigated)	Apr-May	May-Jul	Jul-Aug
8) Redgram (Rainfed)	Jul-Aug	Aug-Dec	Jan-Feb
9) Blackgram	Nov-Dec	Dec-Feb	Feb-Mar
10) Greengram	Jan-Feb	Feb-Mar	Mar-Apr
11) Sugarcane	Jan-Mar	Apr-Nov	Oct-Jan
12) Cotton (Irrigated)	Dec-Jan	Feb-May	Jun-Jul
13) Cotton (Rainfed)	Jun-Jul	Aug-Nov	Dec-Jan
14) Groundnut (Irrigated)	Dec-Jan	Jan-Mar	Mar-Apr
15) Groundnut (Rainfed)	Jun-Jul	Jul-Sep	Aug-Sep
16) Gingelly (Irrigated)	Apr-May	May-Jun	Jun-Jul
17) Gingelly (Rainfed)	Oct-Nov	Nov-Dec	Dec-Jan
18) Tapioca (Irrigated)	Dec-Jan	Feb-Aug	Aug-Sep

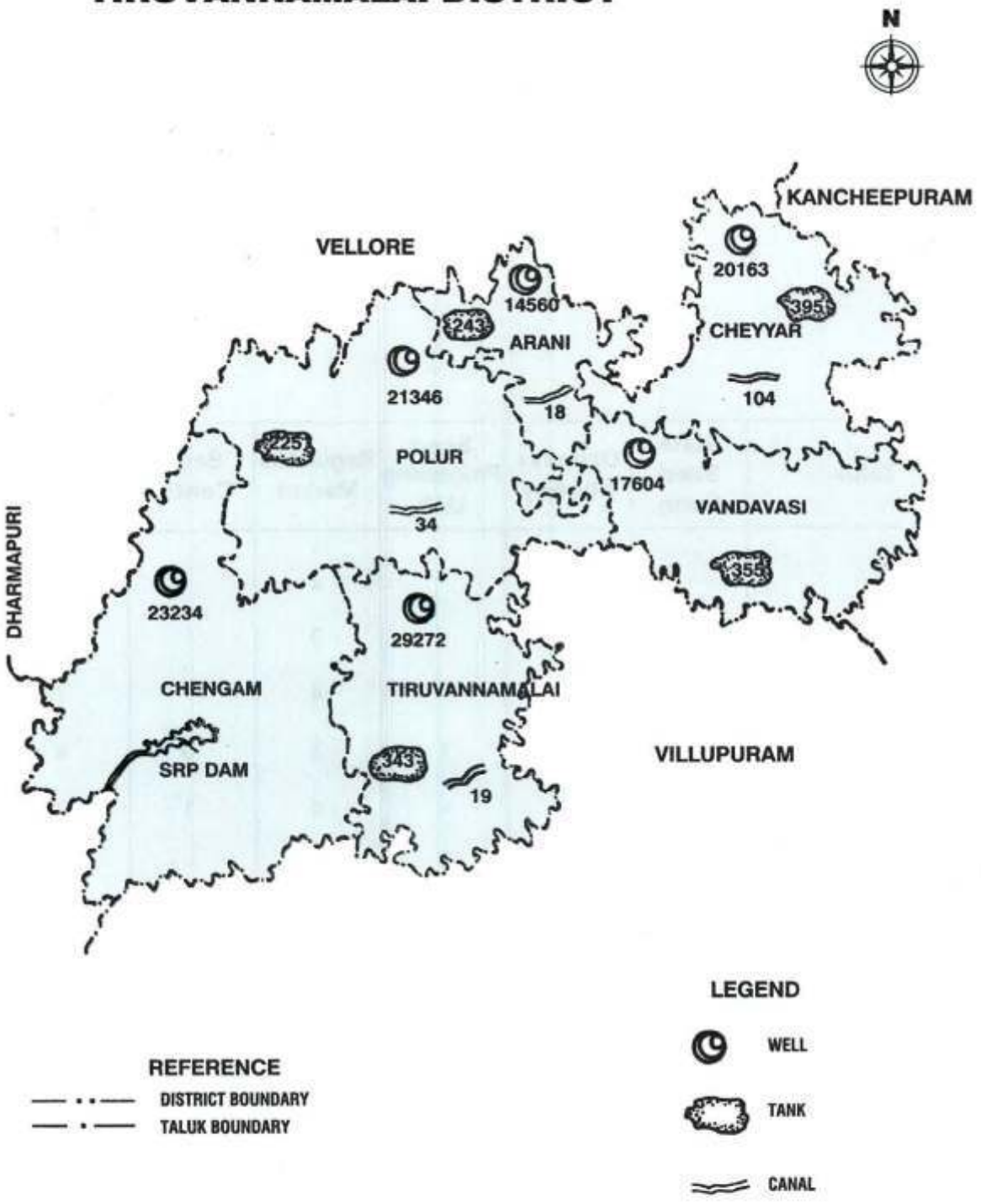
CROPPING CALENDAR
TIRUVANNAMALAI DISTRICT



SOURCES OF IRRIGATION

Taluk	Canal	Well	Tank	Dam
1) Arani	18	14560	243	-
2) Chengam	-	23234	-	1
3) Cheyyar	104	20163	395	- (SRP Dam)
4) Polur	34	21346	225	-
5) Tiruvannamalai	19	29272	343	-
6) Vandavasi	-	17604	355	-
TOTAL	**175**	**126179**	**1561**	**1**

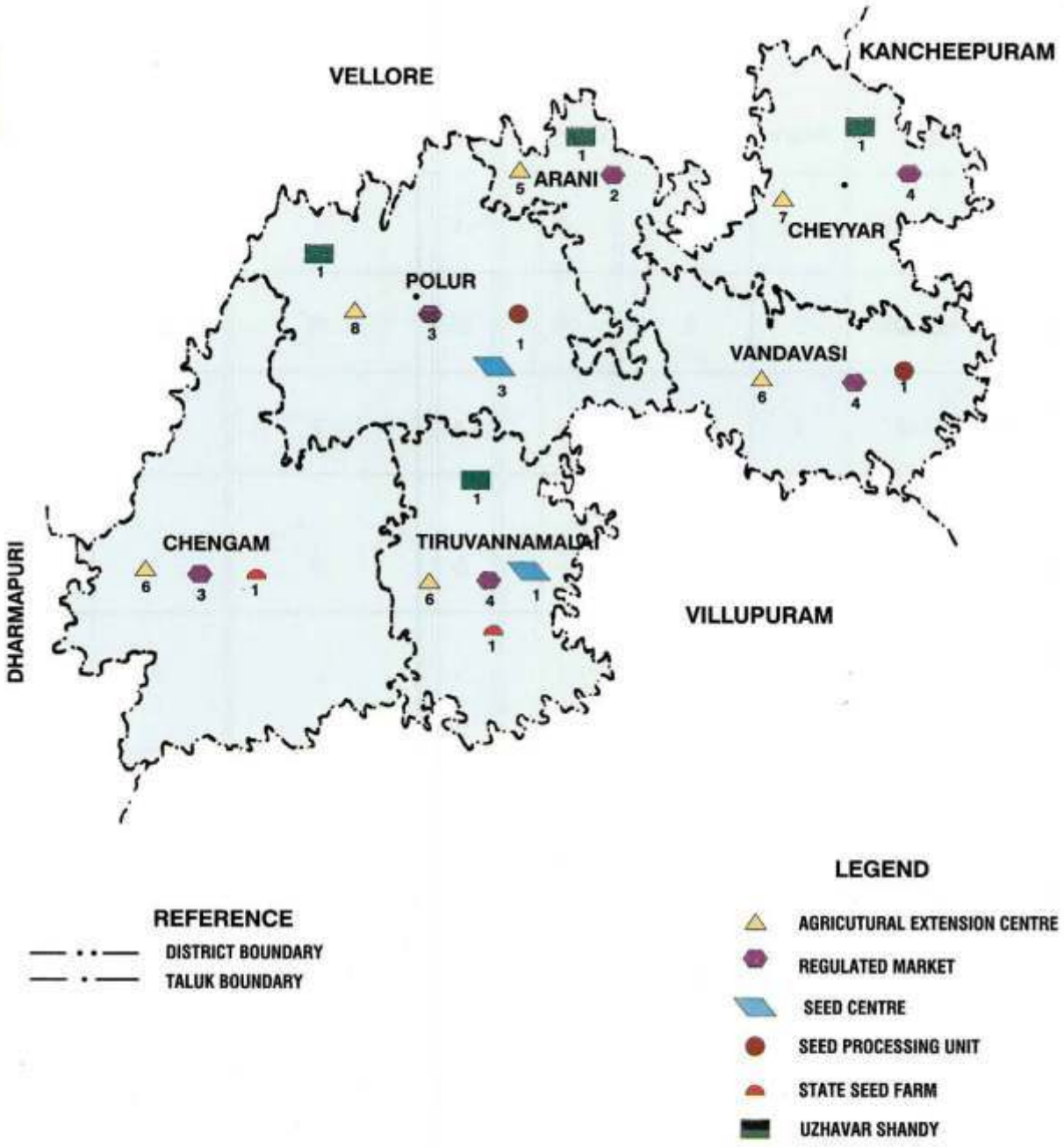
SOURCES OF IRRIGATION
TIRUVANNAMALAI DISTRICT



AGRICULTURAL INSTITUTIONS

Taluk	State Seed Farm	Uzhavar Shandy	Seed Processing Unit	Regulated Market	Seed Centre	Agricultural Extension Centre
1. Arani	-	1	-	2	-	5
2. Chengam	1	-	-	3	-	6
3. Cheyyar	-	1	-	4	-	7
4. Polur	-	1	1	3	3	8
5. Tiruvannamalai	1	1	-	4	1	6
6. Vandavasi	-	-	1	4	-	6
TOTAL	**2**	**4**	**2**	**20**	**4**	**38**

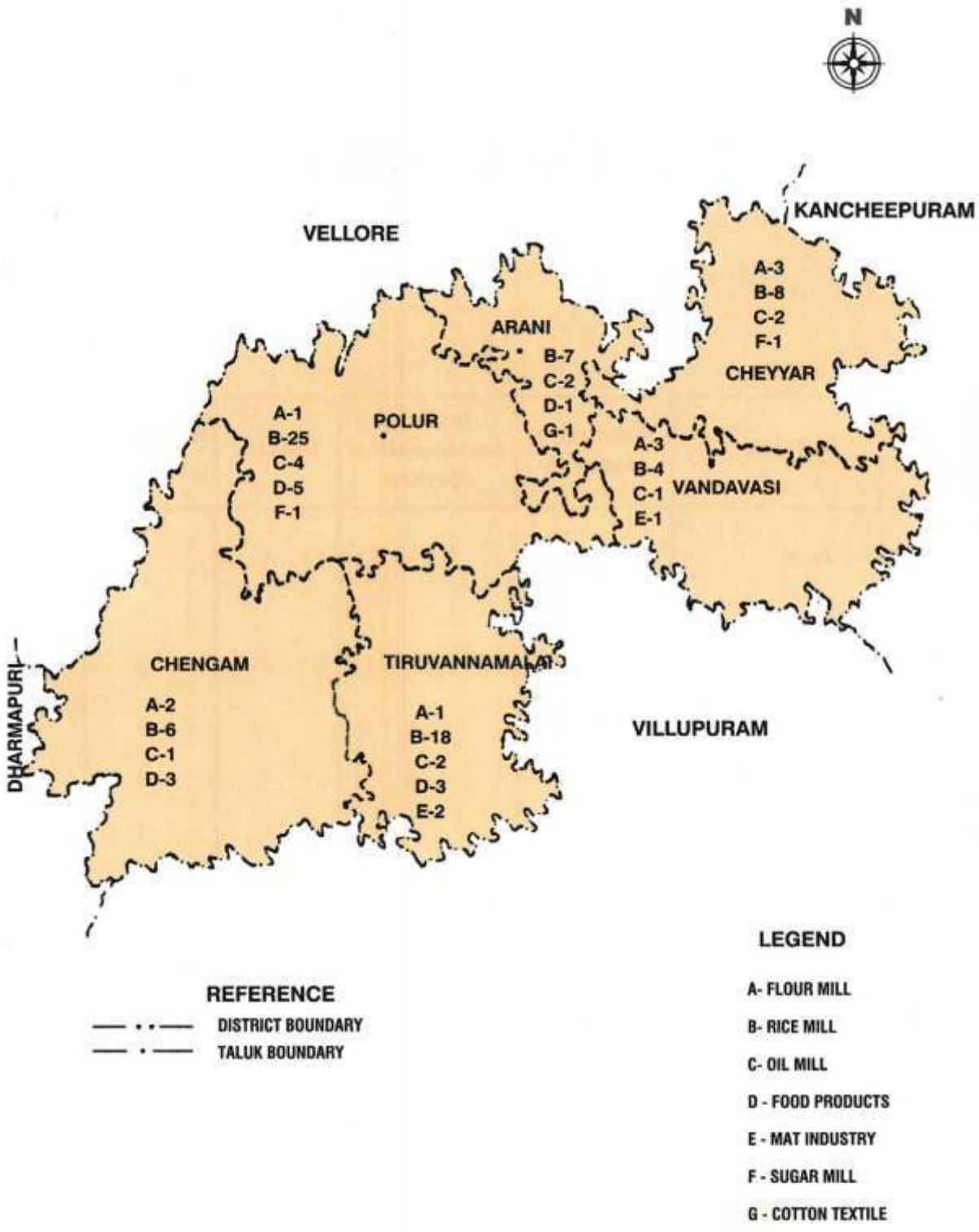
AGRICULTURAL INSTITUTIONS
TIRUVANNAMALAI DISTRICT



AGRO INDUSTRIES

Industry	Arani	Chengam	Cheyyar	Polur	Tiruvannamalai	Vandavasi	Total
A) Flour Mill	-	2	3	1	1	3	10
B) Rice Mill	7	6	8	25	18	8	72
C) Oil Mill	2	1	2	4	2	1	12
D) Food Product	1	3	-	5	3	-	12
E) Mat	-	-	-	-	2	1	3
F) Sugar Mill	-	-	1	1	-	-	2
G) Cotton Textile	1	-	-	-	-	-	1
TOTAL	**11**	**12**	**14**	**36**	**26**	**13**	**112**

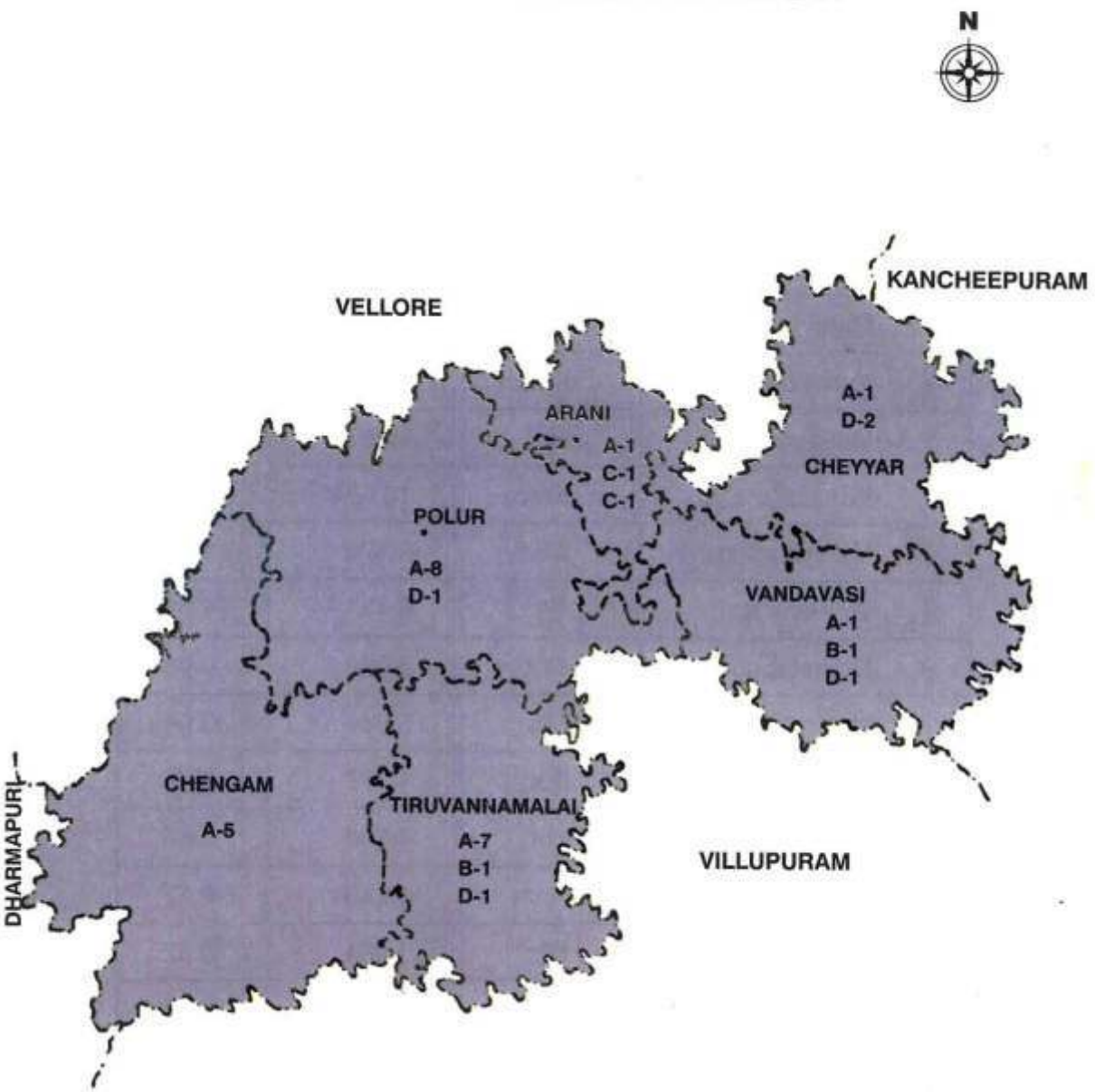
AGRO INDUSTRIES
TIRUVANNAMALAI DISTRICT



ANIMAL HUSBANDRY INSTITUTIONS

Taluk	Veterinary Hospital	Artificial Insemination Centre	Poultry	Slaughter House
1. Arani	1	-	1	1
2. Chengam	5	-	-	-
3. Cheyyar	1	-	-	2
4. Polur	8	-	-	1
5. Tiruvannamalai	7	1	-	1
6. Vandavasi	1	1	-	1
TOTAL	**23**	**2**	**1**	**6**

ANIMAL HUSBANDRY INSTITUTIONS
TIRUVANNAMALAI DISTRICT



REFERENCE

— • • — DISTRICT BOUNDARY

— • — TALUK BOUNDARY

LEGEND

A- VETERINARY HOSPITAL

B- ARTIFICIAL INSEMINATION CENTRE

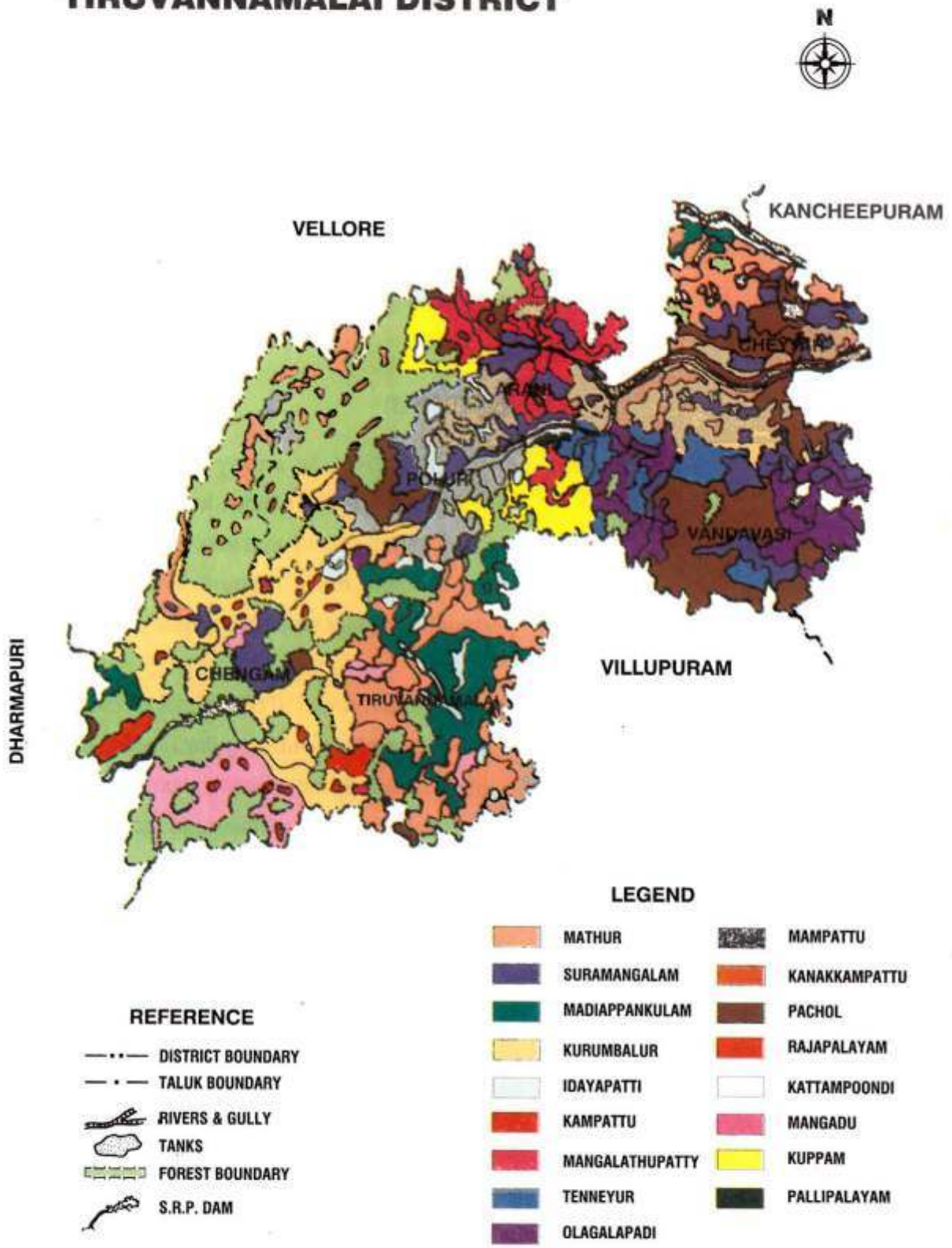
C- POULTRY

D- SLAUGHTER HOUSE

SOILS

Soil Series	Symbol	Extent	
		ha	%
1. Mathur	Mth	31,760	5.03
2. Suramangalam	Sur	29,370	4.65
3. Madiappankulam	Mpk	27,288	4.32
4. Kurumbalur	Kbr	17,305	2.74
5. Idayapatti	Idp	14,631	2.32
6. Kampattu	Kmp	10,684	1.69
7. Mangalathupatty	Mng	9,370	1.48
8. Tenneyur	Tnr	6,451	1.02
9. Olagalapadi	Ogp	5,966	0.95
10. Mampattu	Mpu	5,934	0.94
11. Kanakkampattu	Kpu	4,377	0.69
12. Pachol	Phl	4,286	0.68
13. Rajapalayam	Rpm	4,258	0.67
14. Kattampoondi	Ktp	3,284	0.52
15. Mangadu	Mgd	2,662	0.43
16. Kuppam	Kpm	1,287	0.21
17. Pallipalayam	Ppm	389	0.06
Soil association		**2,51,082**	**39.78**
Forest		**1,53,318**	**24.29**
Others		**47,503**	**7.53**
Grand Total		**6,31,205**	**100%**

SOILS
TIRUVANNAMALAI DISTRICT

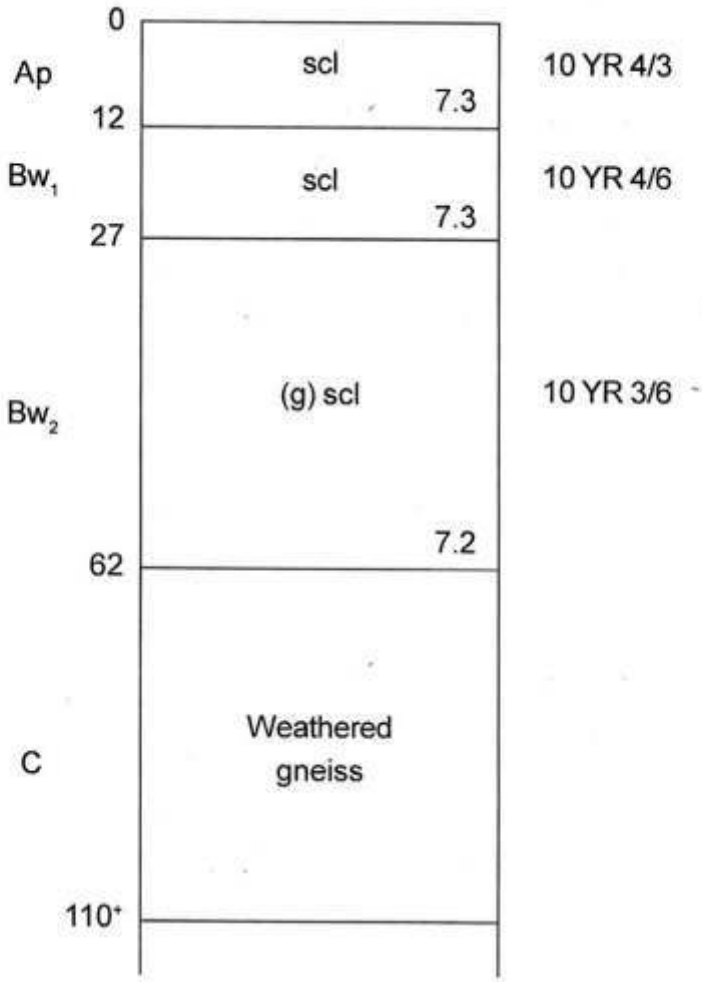


MATHUR SERIES (Mth)

Location	:	Mathur Cheyyar taluk
Physiography	:	Plain
Topography	:	Very gently sloping
Drainage	:	Well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 12 cm	Brown (10 YR 4/3); sandy clay loam; weak medium sub angular blocky; loose (dry), friable (moist), slightly sticky and slightly plastic (wet); many medium roots; many fine pores ; rapid permeability; clear smooth boundary; pH 7.3.
Bw_1	12-27 cm	Dark yellowish brown (10YR 4/6); sandy clay loam; moderate medium sub angular blocky; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet); few fine roots ; common fine pores ; rapid permeability; clear wavy boundary ; pH 7.3.
Bw_2	27-62 cm	Dark yellowish brown (10 YR 3/6); gravelly sandy clay loam; moderate medium sub angular blocky; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet); few irregular iron concretions; many fine roots; many fine pores; rapid permeability; clear smooth boundary; pH 7.2.
C	62-110+	Weathered gneiss.

MATHUR SERIES (Mth)



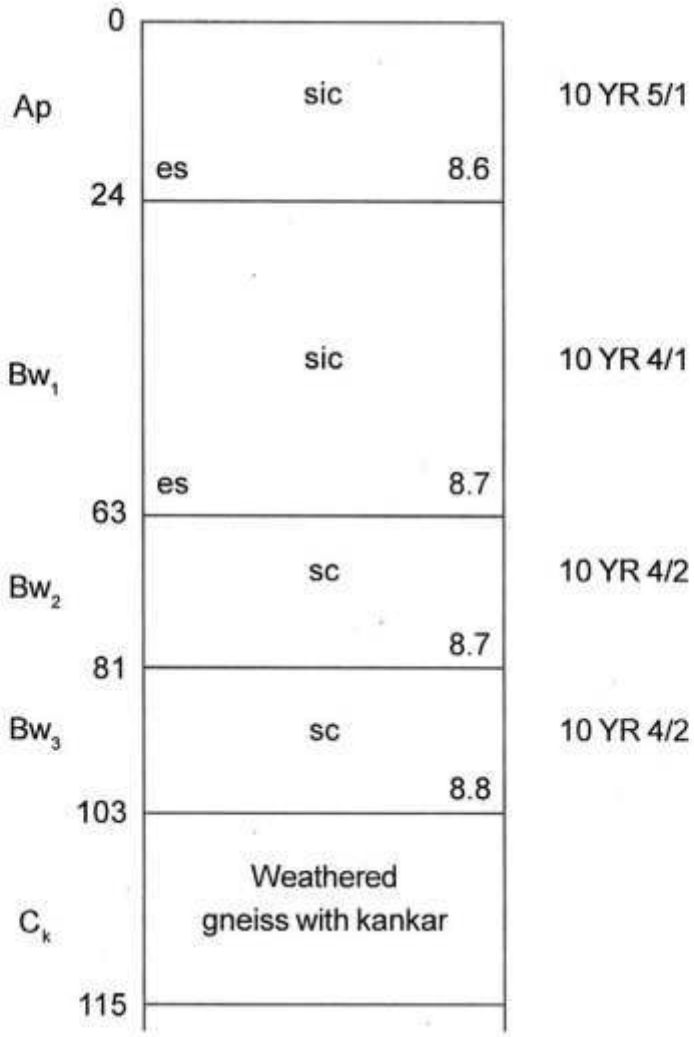
Soil Taxonomy : *Fine loamy mixed hyperthermic* ***Typic Ustropept***

SURAMANGALAM SERIES (Sur)

Location	:	Appur, Cheyyar taluk.
Physiography	:	Nearly levelled
Topography	:	Very gently sloping
Drainage	:	Moderate
Parent material	:	Weathered gneiss with kankar

Horizon	Depth	Description
Ap	0 - 24 cm	Grey (10 YR 5/1); silty clay; strong medium angular blocky ; hard (dry), firm (moist), sticky and plastic (wet); common fine roots; strong effervescence; few fine pores; slow permeability; diffuse wavy boundary; pH 8.6.
Bw_1	24 - 63 cm	Dark grey (10 YR 4/1) ; silty clay; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); few fine roots; strong effervesence; few fine pores; slow permeability; clear smooth boundary ; pH 8.7.
Bw_2	63 - 81 cm	Dark greyish brown (10 YR 4/2); sandy clay; strong medium subangular blocky; hard (dry), firm (moist), sticky and plastic (wet); few very fine roots; common fine pores; moderately slow permeability; clear smooth boundary; pH 8.7.
Bw_3	81 - 103 cm	Brown (7.5 YR 4/6); sandy clay; strong medium subangular blocky; firm (moist), sticky and plastic (wet); common fine pores; moderately slow permeability; gradual wavy boundary; pH 8.8.
C_k	103-115 cm	Weathered gneiss with $CaCO_3$

SURAMANGALAM SERIES (Sur)



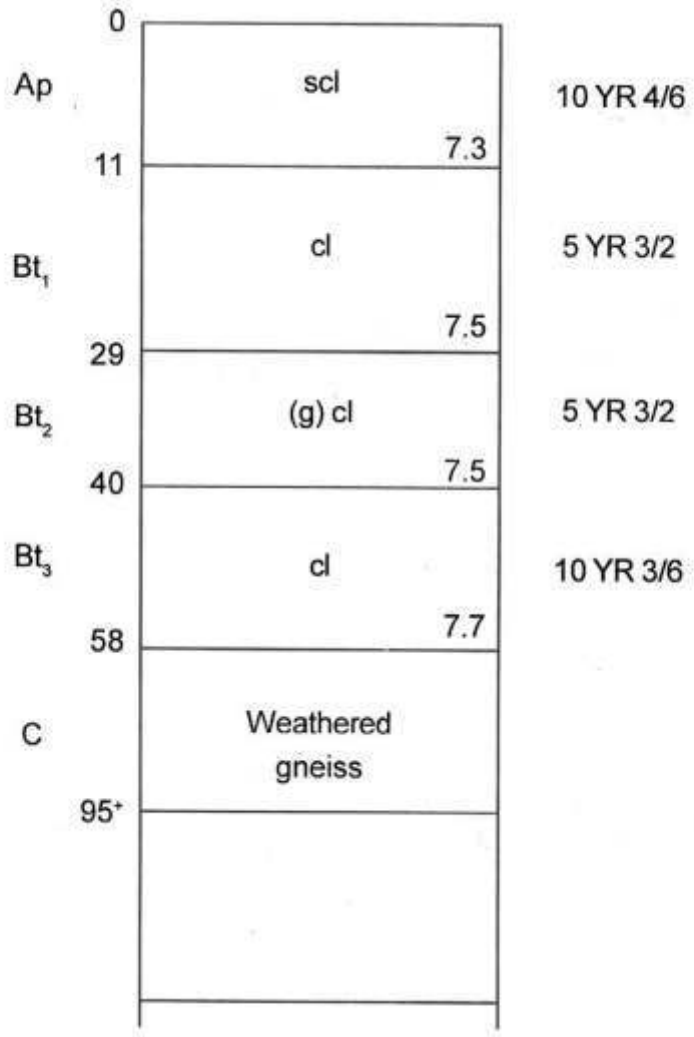
Soil Taxonomy : *Fine mixed calcareous hyperthermic* ***Vertic Ustropept***

KURUMBALUR SERIES (Kbr)

Location	:	Echur, Cheyyar taluk
Physiography	:	Plain
Topography	:	Very gently sloping
Drainage	:	Moderately drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 11 cm	Dark yellowish brown (10 YR 4/6); sandy clay loam; weak medium sub angular blocky; slightly hard (dry), loose (moist), slightly sticky and slightly plastic (wet); common medium roots; fine round pores; moderately rapid permeability; clear smooth boundary; pH 7.3.
Bt_1	11 - 29 cm	Dark reddish brown (5 YR 3/2); clay loam; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); thick continuous cutans; common medium roots; common fine tubular pores; slow permeability; diffused boundary; pH 7.5.
Bt_2	29 - 40 cm	Dark reddish brown (5 YR 3/2); gravelly clay loam; strong medium angular blocky; hard (dry), firm (moist),sticky and plastic (wet); few small irregular iron concretions; continuous thick cutans; few fine roots; few fine tubular pores; slow permeability; diffused wavy boundary; pH 7.5.
Bt_3	40 - 58 cm	Dark yellowish brown (10 YR 3/6); clay loam; moderate medium sub angular blocky; many irregular iron concretions; thin patchy cutans; few fine roots; many fine pores; slow permeability; diffused wavy boundary; pH 7.7.
C	58 - 95 +	Weathered gneiss.

KURUMBALUR SERIES (Kbr)



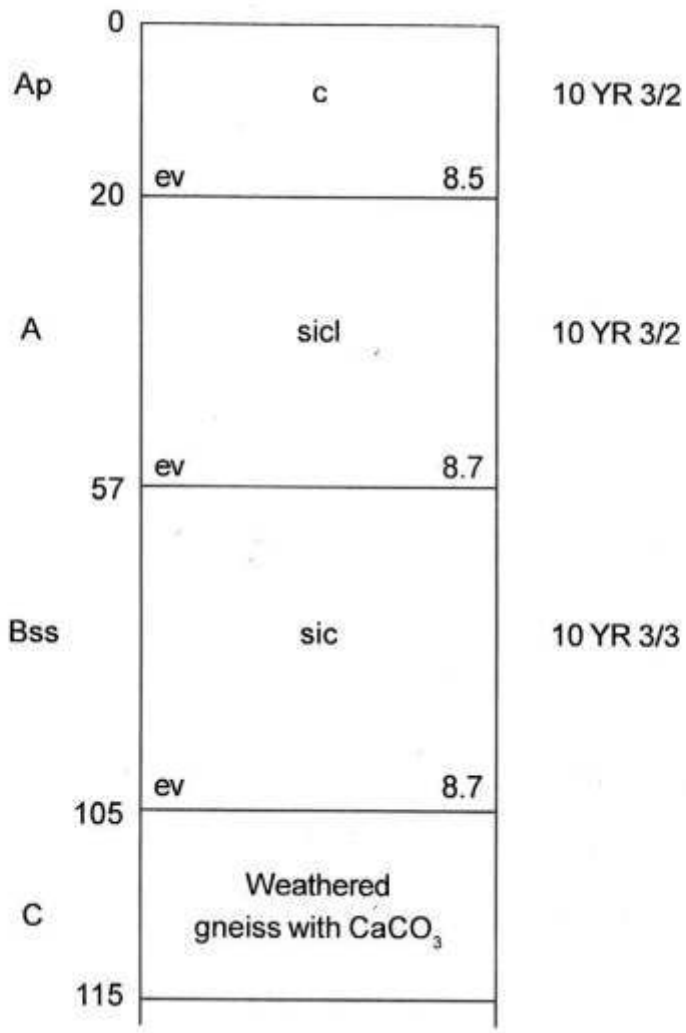
Soil Taxonomy : *Fine loamy mixed hyperthermic* ***Typic Haplustalf***

IDAYAPATTI SERIES (Idp)

Location	:	Vadamadhimangalam, Polur taluk.
Physiography	:	Level land
Topography	:	Flat
Drainage	:	Moderate
Parent material	:	Weathered gneiss with $CaCO_3$

Horizon	Depth	Description
Ap	0 - 20 cm	Very dark grayish brown (10 YR 3/2); clay; moderate coarse angular blocky; firm (moist), sticky and plastic (wet); common fine roots; common fine pores; violent effervescence; slow permeability; diffuse wavy boundary; pH 8.5.
A	20 - 57 cm	Very dark grayish brown (10 YR 3/2); silty clay loam; strong coarse subangular blocky; firm (moist), sticky and plastic (wet); common fine roots; common fine pores; moderately slow permeability; violent effervescence; diffuse wavy boundary; pH 8.7.
Bss	57 - 105 cm	Dark brown (10 YR 3/3); silty clay; strong coarse angular blocky; firm (moist), sticky and plastic (wet); prominent slickensides; few fine roots; slow permeability; violent effervescence; gradual wavy boundary; pH 8.7.
C	105-115 cm	Weathered gneiss with $CaCO_3$

IDAYAPATTI SERIES (Idp)



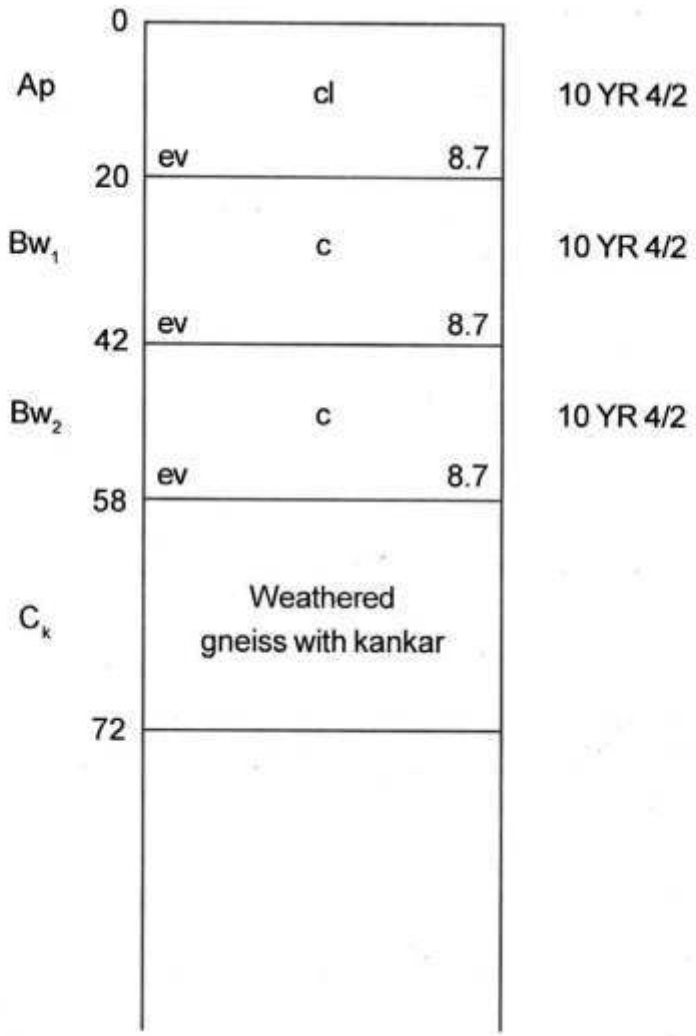
Soil Taxonomy : *Fine montmorillonitic calcareous hyperthermic* ***Typic Haplustert***

KAMPATTU SERIES (Kmp)

Location	:	Kampattu, Chengam taluk
Physiography	:	Plain
Topography	:	Gently sloping
Drainage	:	Poor
Parent material	:	Weathered gneiss with kankar

Horizon	Depth	Description
Ap	0 - 20 cm	Very dark brown (10 YR 4/2); clayloam; moderate medium sub angular blocky; hard (dry), firm (moist),sticky and plastic (wet); violent effervescence; many fine roots; more than 1 cm width and 30 cm long cracks present; common fine pores; slow permeability; diffused wavy boundary; pH 8.7.
Bw_1	20 - 42 cm	Dark brown (10 YR 4/2); clay; strong medium angular blocky; very hard (dry), very firm (moist), sticky and plastic (wet); violent effervescence; many fine roots; more than 1 cm width cracks present; common fine pores; pressure faces present; slow permeability; diffused wavy boundary; pH 8.7.
Bw_2	42 - 58 cm	Dark brown (10 YR 4/2); clay; strong medium angular blocky; very hard (dry), very firm (moist), sticky and plastic (wet); violent effervescence; few fine roots; cracks with more than 1 cm width present; common fine pores; pressure faces present; slow permeability; clear smooth boundary; pH 8.7.
C_k	58 - 72+	Weathered gneiss with kankar.

KAMPATTU SERIES (Kmp)



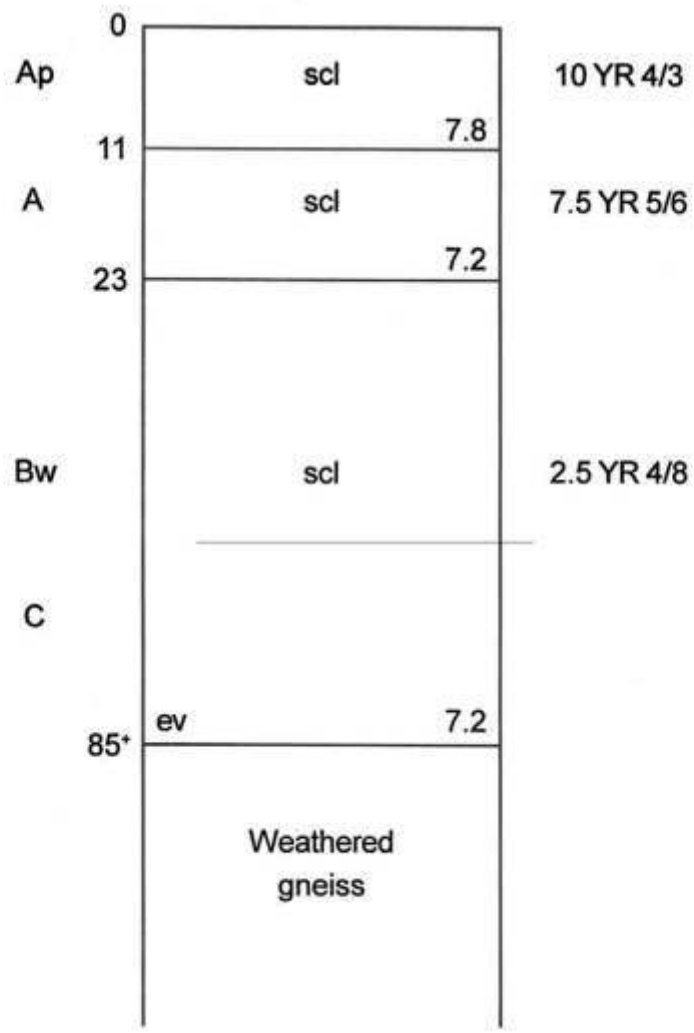
Soil Taxonomy : *Fine mixed calcareous hyperthermic* ***Vertic Ustropept***

MANGALATHUPATTY SERIES (Mng)

Location	:	Velleri, Arani taluk
Physiography	:	Inland Plain
Topography	:	Undulating
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 11 cm	Dark brown (10 YR 4/3); sandy clay loam; moderate medium sub angular blocky; slightly hard (dry), friable (moist), slightly sticky and slightly plastic (wet); common fine roots; moderate permeability; clear smooth boundary; pH 7.8.
A	11 - 23 cm	Strong brown (7.5 YR 5/6); sandy clay loam; weak fine subangular blocky; slightly hard (dry), friable (moist), slightly sticky (wet); few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.2.
Bw	23 - 85 cm	Red (2.5 YR 4/8); sandy clay loam; weak moderate subangular blocky; hard (dry), friable (moist), slightly stickly and slightly plastic (wet); very few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.2.
C	85 +	Weathered gneiss

MANGALATHUPATTY SERIES (Mng)



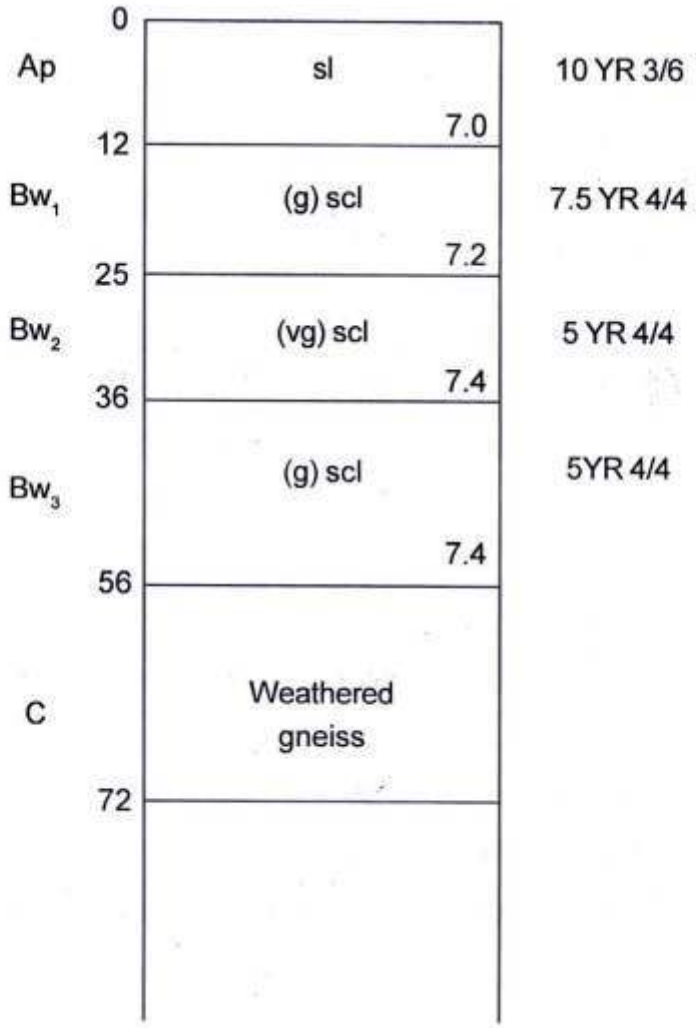
Soil Taxonomy : *Fine loamy mixed calcareous hyperthermic* ***Typic Ustropept***

TENNEYUR SERIES (Tnr)

Location	:	Tenneyur, Vandavasi taluk
Physiography	:	Uplands
Topography	:	Undulating
Drainage	:	Well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 12 cm	Yellowish brown (10 YR 3/6); sandy loam; weak fine subangular blocky; loose (dry), friable (moist), slightly sticky (wet); many coarse roots; common fine pores; rapid permeability; pH 7.0.
Bw_1	12 -25 cm	Strong brown (7.5 YR 4/4); gravelly sandy clay loam; moderate medium subangular blocky; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet); few fine roots; common medium pores; rapid permeability; clear smooth boundary; pH 7.2.
Bw_2	25 -36 cm	Yellowish red (5 YR 4/4) ; very gravelly sandy clay loam; weak medium subangular blocky; loose (dry), friable (moist), slightly sticky and slightly plastic (wet); few fine roots; many medium pores; rapid permeability; clear smooth boundary; pH 7.4.
Bw_3	36 - 56 cm	Yellowish red (5 YR 4/4); sandy clay loam mixed with weathered gneiss; moderate medium subangular blocky; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet); medium pores; moderately rapid permeability; gradual wavy boundary; pH 7.4.
C	56 - 72 cm	Weathered gneiss

TENNEYUR SERIES (Tnr)



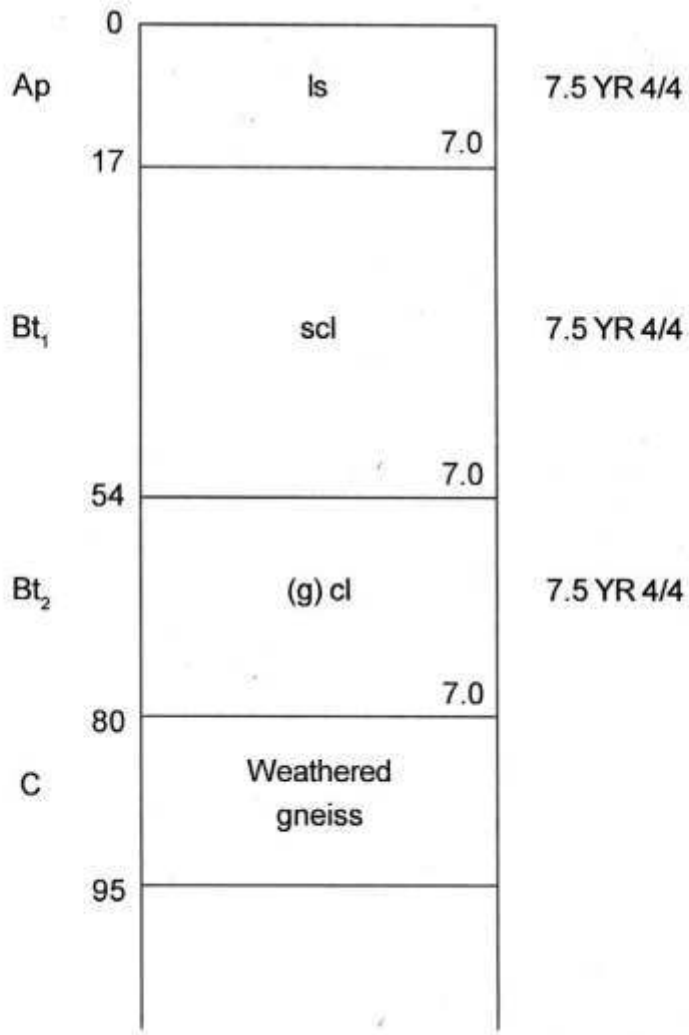
Soil Taxonomy : *Loamy skeletal mixed hyperthermic* ***Typic Ustropept***

OLAGALAPADI SERIES (Ogp)

Location	:	Olagalapadi, Chengam taluk
Physiography	:	Inland plain
Topography	:	Gently sloping to undulating
Drainage	:	Well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 17 cm	Dark brown (7.5 YR 4/4); loamy sand; loose (dry), granular; loose (dry), friable (moist); common coarse roots; rapid permeability; clear smooth boundary; pH 7.0.
Bt_1	17 - 54 cm	Dark brown (7.5 YR 4/4); sandy clay loam; moderate medium subangular blocky; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet) ; thin patchy clay films on ped faces; common fine roots; common fine pores; moderately rapid permeability; clear smooth boundary; pH 7.0.
Bt_2	54 - 80 cm	Dark brown (7.5 YR 4/4); gravelly clay loam; moderate medium subangular blocky; hard (dry), firm (moist), sticky and plastic (wet); 2 to 5 mm ferrugenous gravels (50%); thick patch clay films on ped faces; few fine roots; many medium pores; moderately rapid permeability; gradual wavy boundary; pH 7.0.
C	80 - 95 cm	Weathered gneiss

OLAGALAPADI SERIES (Ogp)



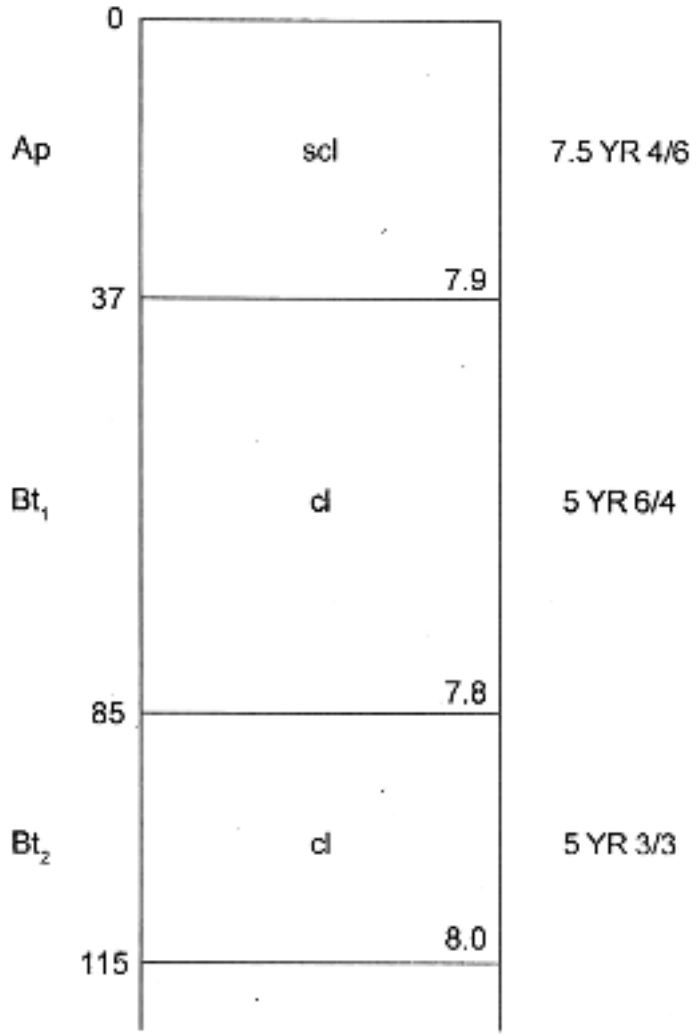
Soil Taxonomy : *Loamy skeletal mixed hyperthermic* ***Typic Haplustalf***

MAMPATTU SERIES (Mpu)

Location	:	Mampattu, Polur taluk
Physiography	:	Inland plain
Topography	:	Gently sloping to undulating
Drainage	:	Well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 37 cm	Dark brown (7.5 YR 4/6); sandy clay loam; weak fine subangular blocky; slightly hard (dry), slightly firm (moist), sligthly sticky and slightly plastic (wet); common fine roots; common fine pores; rapid permeability; clear smooth boundary; pH 7.9.
Bt_1	37 - 85 cm	Light reddish brown (5 YR 6/4); clay loam; moderate medium subangular blocky; firm (moist), sticky and plastic (wet); thin patchy clay films on ped faces; few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.8.
Bt_2	85 - 115 cm	Light reddish brown (5 YR 3/3); clay loam; moderate medium subangular blocky; firm (moist), sticky and plastic (wet); thick patchy clay films on ped faces; common fine pores; moderate permeabilty; pH 8.0.

MAMPATTU SERIES (Mpu)



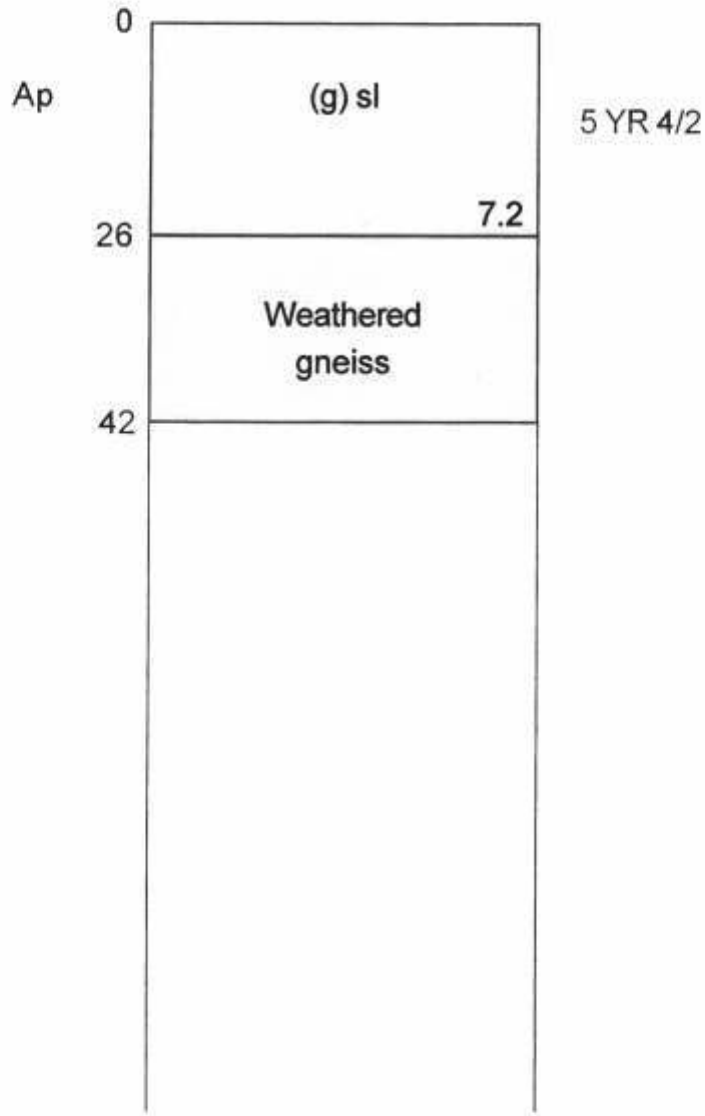
Soil Taxonomy : *Fine loamy mixed hyperthermic* ***Typic Haplustalf***

KANAKKAMPATTU SERIES (Kpu)

Location	:	Kanakkampattu, Arani taluk
Physiography	:	Inland
Topography	:	Undulating
Drainage	:	Well drained
Parent material	:	Weathered gneiss

Horizon	Depth	Description
Ap	0 - 17 cm	Yellowish red (5 YR 4/6); sandy clay loam; moderate medium sub angular blocky; slightly hard (dry), friable (moist), slightly sticky and sligthly plastic (wet); common fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.0.
Bt_1	17 - 45 cm	Dark reddish brown (2.5 YR 3/4); clay loam; strong medium sub angular blocky; hard (dry), firm (moist), sticky and plastic (wet); prominent continuous thick clay films; common fine roots; common fine pores; moderately slow permeability; clear smooth boundary; pH 6.7.
Bt_2	45 - 80 cm	Dark reddish brown (2.5 YR 3/4); clay; moderate medium sub angular blocky; hard (dry), firm (moist), sticky and plastic (wet); few black concreation; thin continuous clay films; few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 6.8.
Bt_3	80 - 98 cm	Dark red (2.5 YR 3/6); clay loam; massive; hard (dry), friable (moist), sticky and plastic (wet); few black concretions; common fine pores; moderate permeability; pH 6.9.
C	98 *	Weathered gneiss.

PACHOL SERIES (PhI)



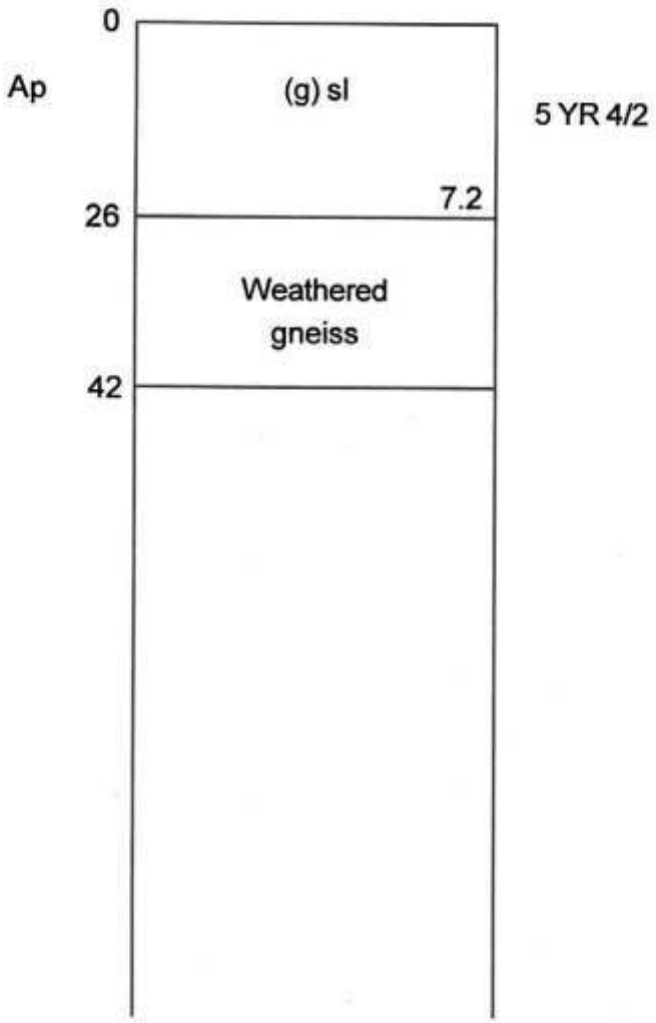
Soil Taxonomy : *Loamy skeletal mixed hyperthermic* ***Paralithic Ustorthent***

RAJAPALAYAM SERIES (Rmp)

Location	:	Rajapalayam, Tiruvannamalai taluk
Physiography	:	Nearly level
Topography	:	Gently sloping
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss with Kankar

Horizon	Depth	Description
Ap	0 - 25 cm	Dark gray (5 YR 4/1); sandy clay loam; moderate medium subangular blocky; slightly hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; medium fine roots; moderately slow permeability; gradual smooth boudnary; pH 7.9.
A	25 -52 cm	Grey (5 YR 5/1); sandy loam; moderate medium sub angular blocky; slightly hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; few fine, few coarse roots; moderately slow permeability; clear smooth boundary; pH 8.0.
Bw	52 - 98 cm	Dark brown (10 YR 3/3); sandy clay loam; moderate medium subangular blocky; slight hard (dry), friable (mosit), slightly sticky and slightly plastic (wet); strong effervescence; few fine roots; moderately slow permeability; pH 8.1.
C	98 *	Weathered gneiss.

PACHOL SERIES (Phl)



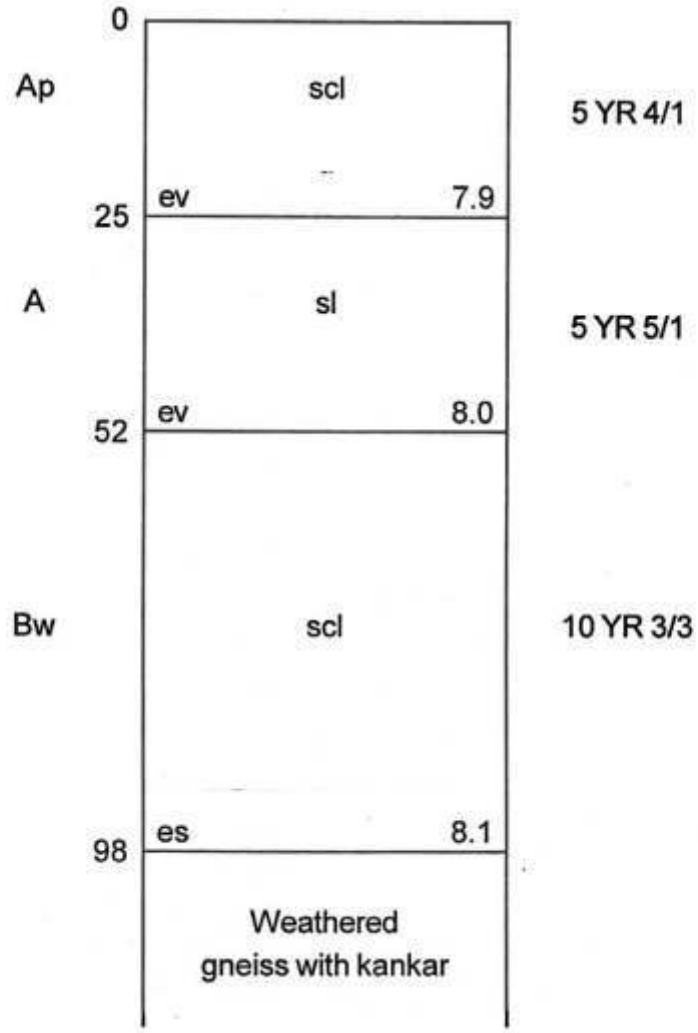
Soil Taxonomy : *Loamy skeletal mixed hyperthermic* ***Paralithic Ustorthent***

RAJAPALAYAM SERIES (Rmp)

Location	:	Rajapalayam, Tiruvannamalai taluk
Physiography	:	Nearly level
Topography	:	Gently sloping
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss with Kankar

Horizon	Depth	Description
Ap	0 - 25 cm	Dark gray (5 YR 4/1); sandy clay loam; moderate medium subangular blocky; slightly hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; medium fine roots; moderately slow permeability; gradual smooth boudnary; pH 7.9.
A	25 -52 cm	Grey (5 YR 5/1); sandy loam; moderate medium sub angular blocky; slightly hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; few fine, few coarse roots; moderately slow permeability; clear smooth boundary; pH 8.0.
Bw	52 - 98 cm	Dark brown (10 YR 3/3); sandy clay loam; moderate medium subangular blocky; slight hard (dry), friable (mosit), slightly sticky and slightly plastic (wet); strong effervescence; few fine roots; moderately slow permeability; pH 8.1.
C	98 *	Weathered gneiss.

RAJAPALAYAM SERIES (Rmp)



Soil Taxonomy : *Fine loamy mixed calcareous hyperthermic*

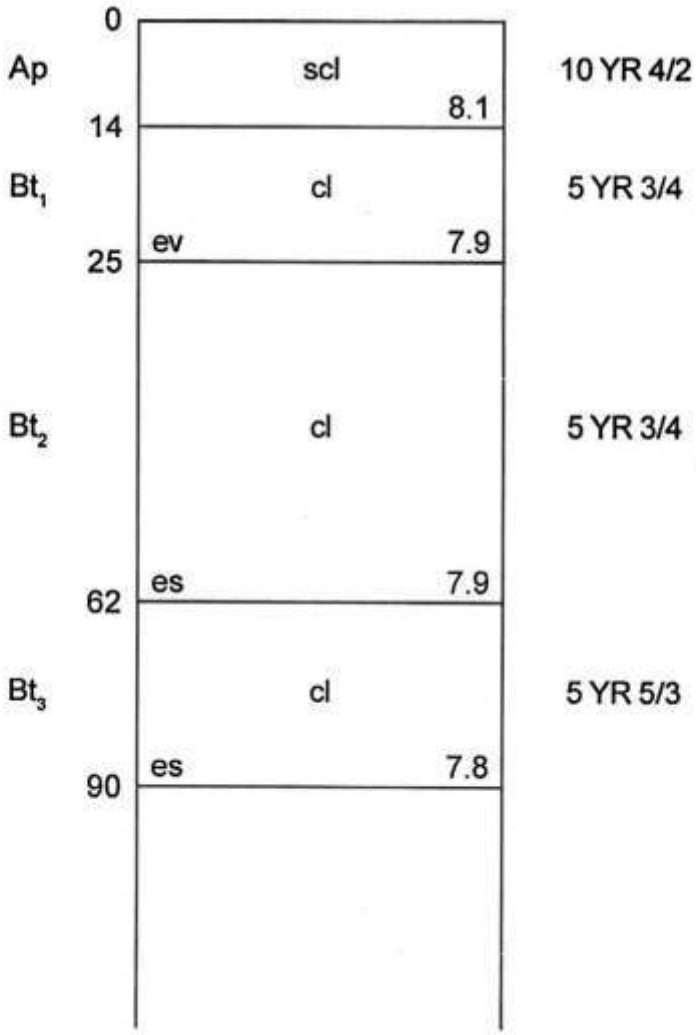
Typic Rhodustalf

KATTAM POONDI SERIES (Ktp)

Location	:	Kattampoondi, Tiruvannamalai taluk
Physiography	:	Inland plain
Topography	:	Very gently sloping
Drainage	:	Well drained
Parent material	:	Colluvium

Horizon	Depth	Description
Ap	0 - 14 cm	Dark yellowish brown (10 YR 4/2); sandy clay loam; weak fine subangular blocky; slightly firm (moist), slightly sticky and slightly plastic (wet); common fine roots; moderately rapid permeability; clear smooth boundary; pH 8.1.
Bt_1	14 - 25 cm	Dark reddish brown (5 YR 3/4); clay loam; moderate medium subangular blocky; hard (dry), firm (moist), sticky and plastic (wet); thin patchy clay films on ped faces; violent effervescence; common fine roots; common fine pores; moderate permeability; gradual smooth boundary; pH 7.9.
Bt_2	25 - 62 cm	Dark reddish brown (5 YR 3/4) clay loam; strong medium subangular blocky; hard (dry), firm (moist), sticky and plastic (wet); thick continuous clay films; strong effervescence; common fine pores; moderate permeability; clear smooth boundary; pH 7.9.
Bt_3	62 - 90 cm	Dark reddish brown (5 YR 5/3); clay loam; strong medium subangular blocky; hard (dry), firm (moist), sticky and plastic (wet); thin patchy clay films; strong effervescence; common fine pores; moderate permeability; pH 7.8.

KATTAM POONDI SERIES (Ktp)



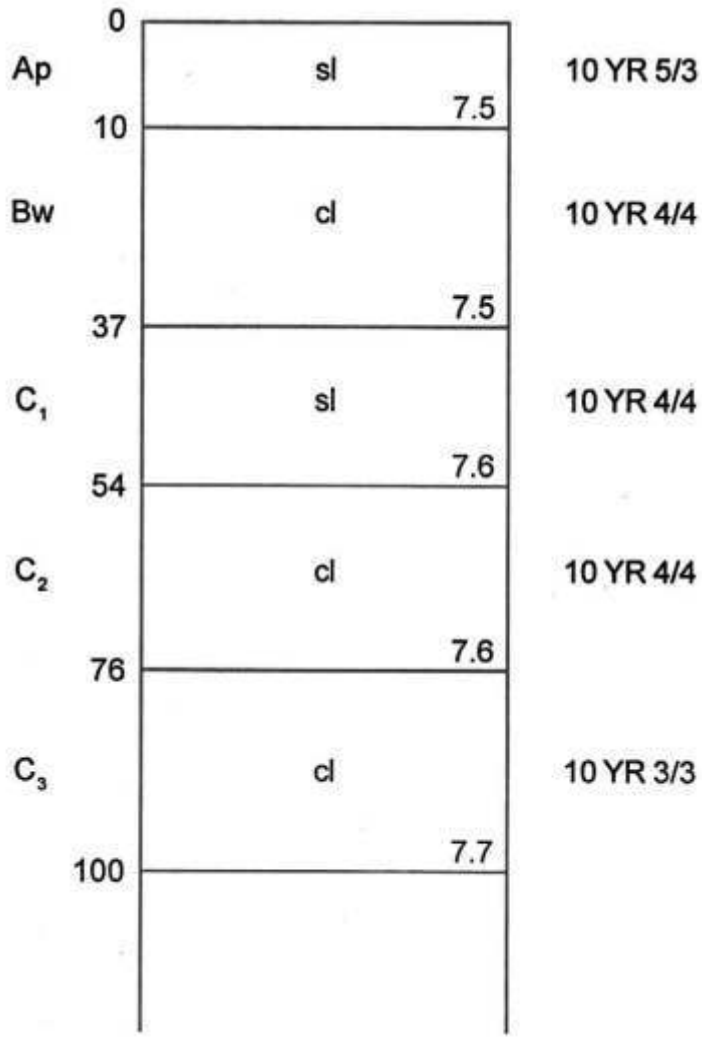
Soil Taxonomy : *Fine loamy mixed calcareous hyperthermic* ***Typic Haplustalf***

MANGADU SERIES (Mgd)

Location	:	Ettivade, Polur taluk
Physiography	:	Riverain
Topography	:	Very gently sloping
Drainage	:	Well drained
Parent material	:	River alluvium

Horizon	Depth	Description
Ap	0 - 10 cm	Light yellowish brown (10 YR 5/3); sandy loam; massive; loose (dry), friable (moist), slightly sticky (wet); common fine roots; common fine pores; rapid permeability; abrupt smooth boundary; pH 7.5.
Bw	10 - 37 cm	Dark yellowish brown (10 YR 4/4); clay loam; moderate medium subangular blocky; hard (dry), friable (moist), sticky and plastic (wet); few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.5.
C_1	37 - 54 cm	Dark yellowish brown (10 YR 4/4); sandy loam; weak medium subangular blocky; friable (moist), slightly sticky (wet); few fine roots; common fine pores; moderately rapid permeability; clear smooth boundary; pH 7.6.
C_2	54 - 76 cm	Dark yellowish brown (10 YR 4/4); clay loam; moderate medium subangular blocky; very hard (dry), very firm (moist), sticky and plastic (wet); very few fine roots; common fine pores; moderate permeability; clear smooth boundary; pH 7.6.
C_3	76 -100 cm	Dark brown (10 YR 3/3); clay loam; moderate medium subangular blocky; very hard (dry), firm (moist), sticky and plastic (wet); common fine pores; moderate permeability; pH 7.7.

MANGADU SERIES (Mgd)



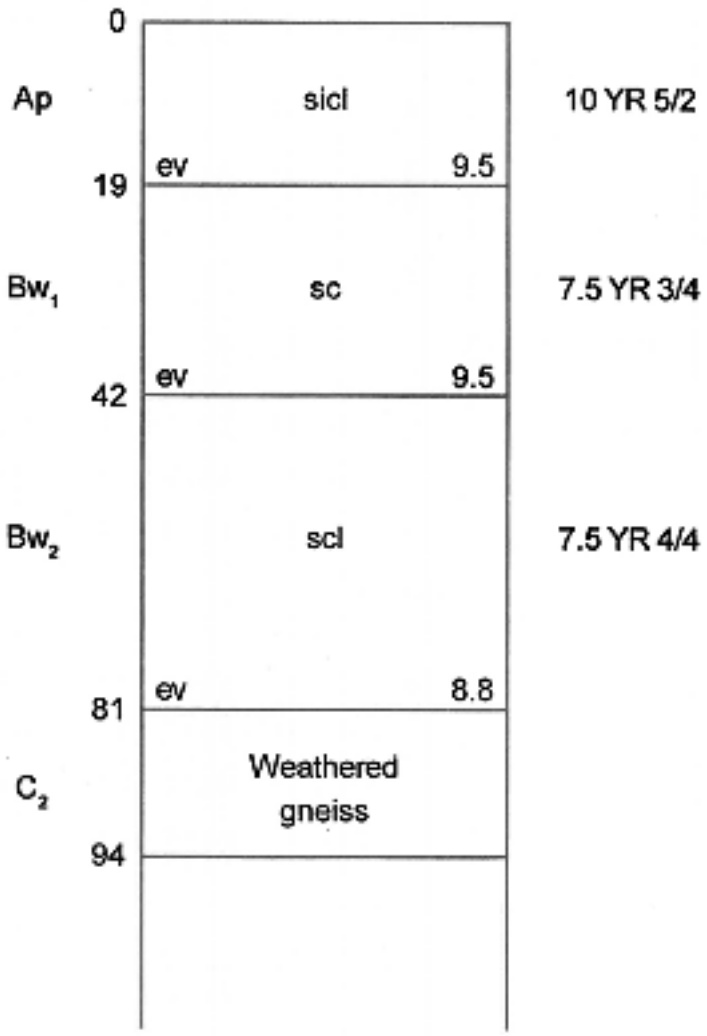
Soil Taxonomy : *Fine loamy mixed hyperthermic* ***Fluventic Ustropept***

KUPPAM SERIES (Kpm)

Location	:	Kuppam, Polur taluk
Physiography	:	Inland plain
Topography	:	Plain
Drainage	:	Moderately drained
Parent material	:	Gneiss

Horizon	Depth	Description
Ap	0 - 19 cm	Grayish brown (10 YR 5/2); silty clay loam; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); common fine roots; violent effervescence; common fine pores; moderately slow permeability; clear wavy boundary; pH 9.5.
Bw_1	19 - 42 cm	Dark brown (7.5 YR 3/4); sandy clay; moderate medium subangular blcoky; hard (dry), firm (moist), sticky and plastic (wet); common very fine roots; violent effervescence; common fine pores; moderate permeability; clear smooth boundary; pH 9.5.
Bw_2	42 - 81 cm	Dark brown (7.5 YR 4/4); sandy clay loam; slightly hard (dry), slightly firm (moist), slightly sticky and slightly plastic (wet); very few fine roots; violent effervescence; rapid permeability; gradual wavy boundary; pH 8.8.
C	81 - 94 cm	Weathered gneiss.

KUPPAM SERIES (Kpm)



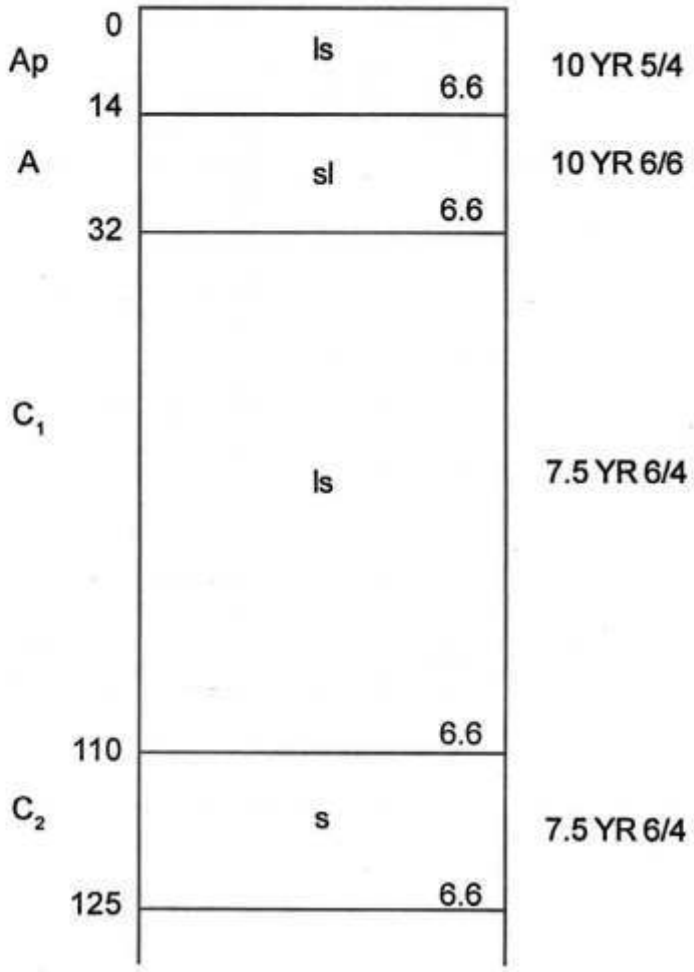
Soil Taxonomy : *Fine loamy mixed calcareous hyperthermic* ***Typic Ustropept***

PALLIPALAYAM SERIES (Ppm)

Location	:	Thellar, Arani taluk
Physiography	:	Valley
Topography	:	Flat
Drainage	:	Well drained
Parent material	:	River alluvium

Horizon	Depth	Description
Ap	0 - 14 cm	Yellowish brown (10 YR 5/4); loamy sand; granular; loose (dry), friable (moist); few fine roots; rapid permeability; clear smooth boundary; pH 6.6.
A	14 - 32 cm	Brownish yellow (10 YR 6/6); sandy loam; massive; loose (dry), friable (moist), slightly sticky (wet); very few fine roots; rapid permeability; clear smooth boundary; pH 6.6.
C_1	32 -110 cm	Light brown (7.5 YR 6/4); loamy sand; single grained; loose (dry), friable (moist); few fine roots; rapid permeability; clear smooth boundary; pH 6.6.
C_2	100-125 cm	Light brown (7.5 YR 6/4); sand; single grained; loose (dry), friable (moist); very rapid permea - bility; pH 6.6.

PALLIPALAYAM SERIES (Ppm)



Soil Taxonomy : *Coarse loamy mixed hyperthermic* ***Typic Ustifluvent***

LAND CAPABILITY

Land capability indicates the suitability of land for cultivation, grazing and forests based on the inherent soil characteristics, external land features and environmental factors that limit the use of land.

Area (ha)	Land capability classification	Soil series	Limitation	Needs
64844	II se	Mangalathupatty, Olagalapadi, Tenneyur Mathur, Rajapalayam Mangadu, Kanakkampattu	Erosion & run off	Soil conservation
40054	II sw	Suramangalam, Kampattu	Alkalinity salinity, cracks, wetness	Improving drainage; soil reclamation
14631	III s	Idayapatty	Cracks caleareousness alkalinity	Soil reclamation; selection of crops
55487	III se	Madiappankulam Kanakampattu Kattampoondi Kuppam, Mampattu Kaurumbalur	Coarse texture low fertility erosion	Soil conservation; selection of crops; fertility management
4286	IV s	Pachol	Shallow depth, texture, low fertility	Selection of crops; fertility management.

Class

II Good cultivable lands that have few limitations for sustained use under agriculture

III Moderately good cultivable lands that have severe limitations for sustained use under agriculture

IV Lands that have very severe limitations for sustained use under agriculture

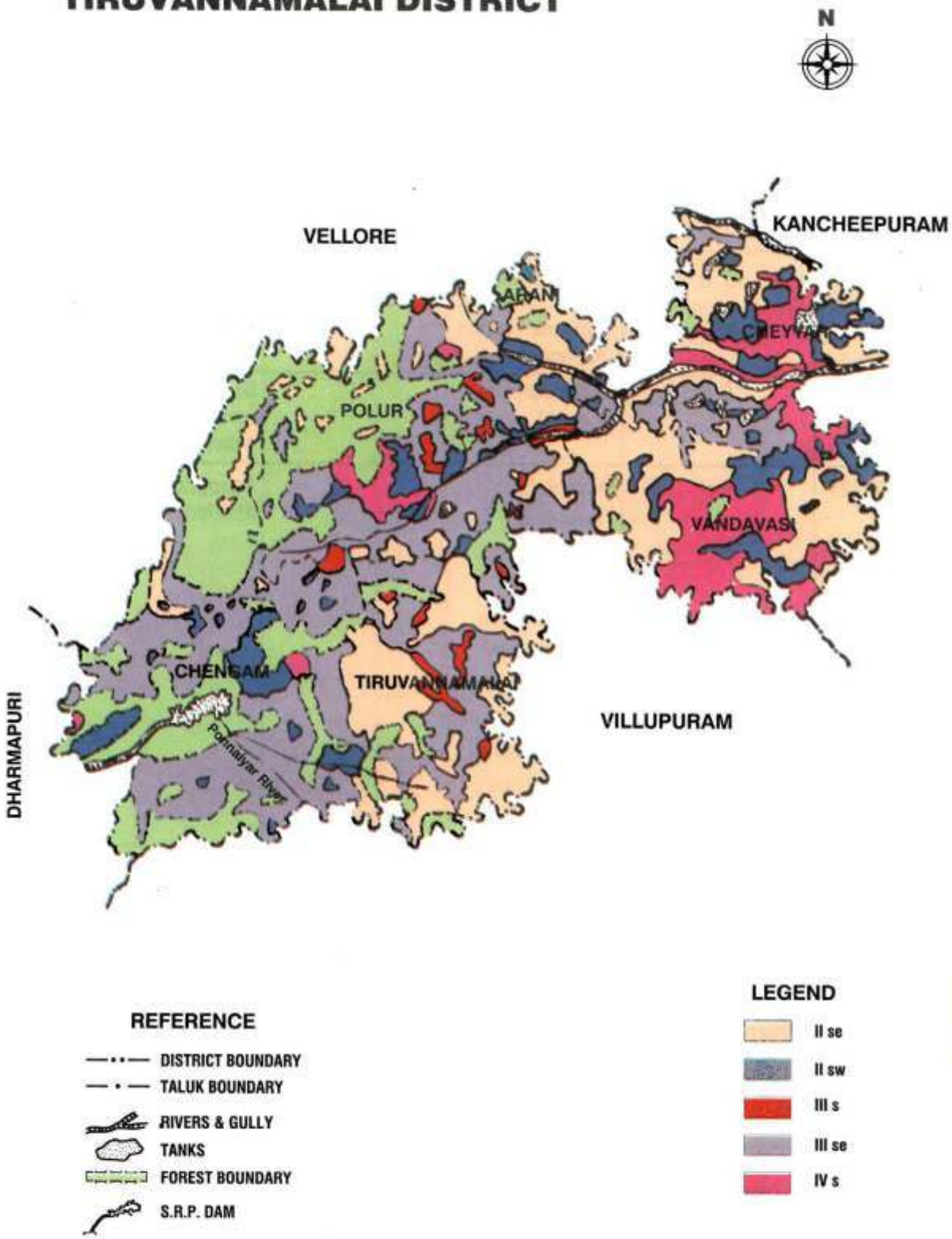
Sub Class

e. Erosion and runoff

w. Excess water

s. Root zone limitation

LAND CAPABILITY
TIRUVANNAMALAI DISTRICT



LAND IRRIGABILITY

Land irrigability tells the degree of limitation of soils for sustained use under irrigation.

Area (ha)	Land irrigability classification	Soil series	Limitation
9370	2 st	Mangalathupatty	Topography and run off
40054	2 sd	Suramangalam Kampattu	Drainage
4675	3 s	Pallipalayam Pachol	Shallow depth, low water holding capacity, coarse texture
110572	3 st	Mangadu Tenneyur Kuppam Mathur Rajapalayam Olagalapadi Kankkampattu Madiappankulam Kattampoondi Kurumbalur Mampattu	Topography erosion
14631	3 ds	Idayapatti	Alkalinity slow permeability

Class

2. Lands that have moderate limitations for sustained use under irrigation.
3. Lands that have severe limitations for sustained use under irrigation.

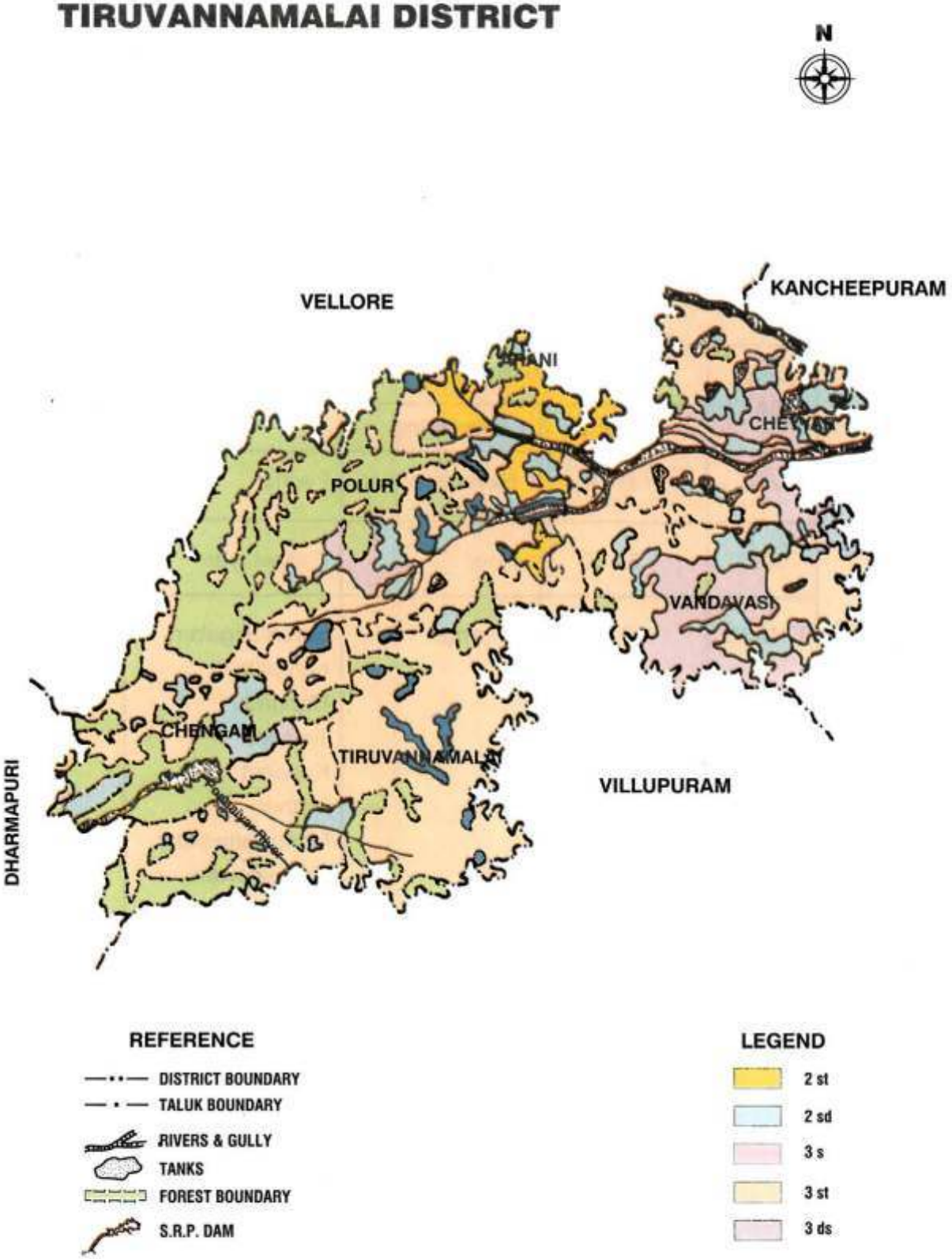
Sub Class

s. Soil limitation

d. Topography

t. Drainage

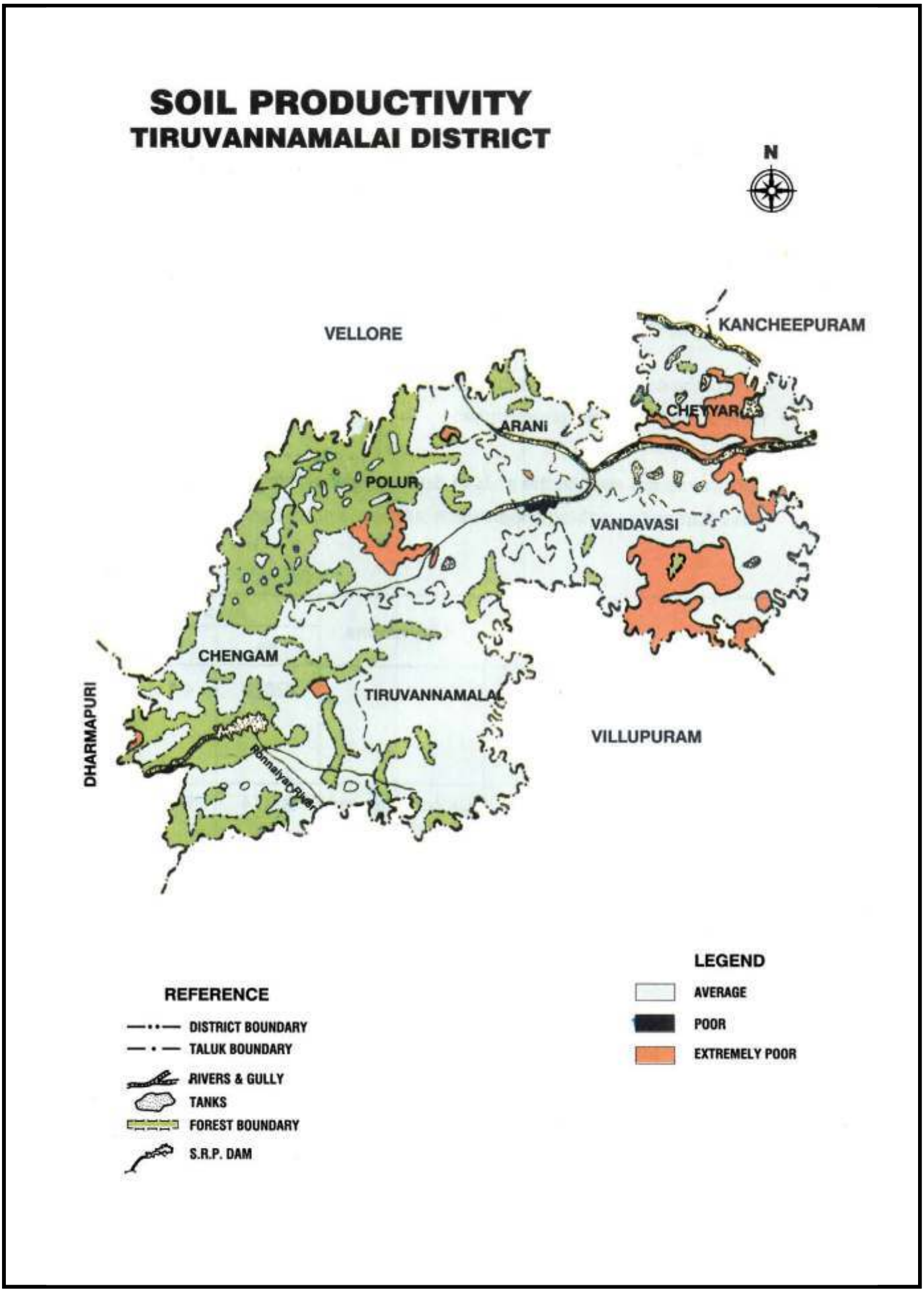
LAND IRRIGABILITY
TIRUVANNAMALAI DISTRICT



SOIL PRODUCTIVITY

Productivity is the capability of soil to produce certain amount of yield per unit area and is a function of soil characteristics under normal management.

Area (ha)	Productivity		Soil Series
	Rating	Grouping	
4286	0 - 7	Extremely poor	Pachol
389	8 - 19	Poor	Pallipalayam
174622	30 - 34	Average	Suramangalam Kampattu Mangadu Tenneyur Kuppam Mathur Mangalathupatty Rajapalayam Madiappankulam Kanakkampattu Kattampoondi Olagalapadi Mampattu Kurumbalur Idayapatti


SOIL PRODUCTIVITY
TIRUVANNAMALAI DISTRICT
N
VELLORE
KANCHEEPURAM
CHEYYAR
ARANI
POLUR
VANDAVASI
CHENGAM
TIRUVANNAMALAI
VILLUPURAM
DHARMAPURI
Ponnaiyar River
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM
LEGEND
AVERAGE
POOR
EXTREMELY POOR

SOIL SUITABILITY FOR GROUNDNUT

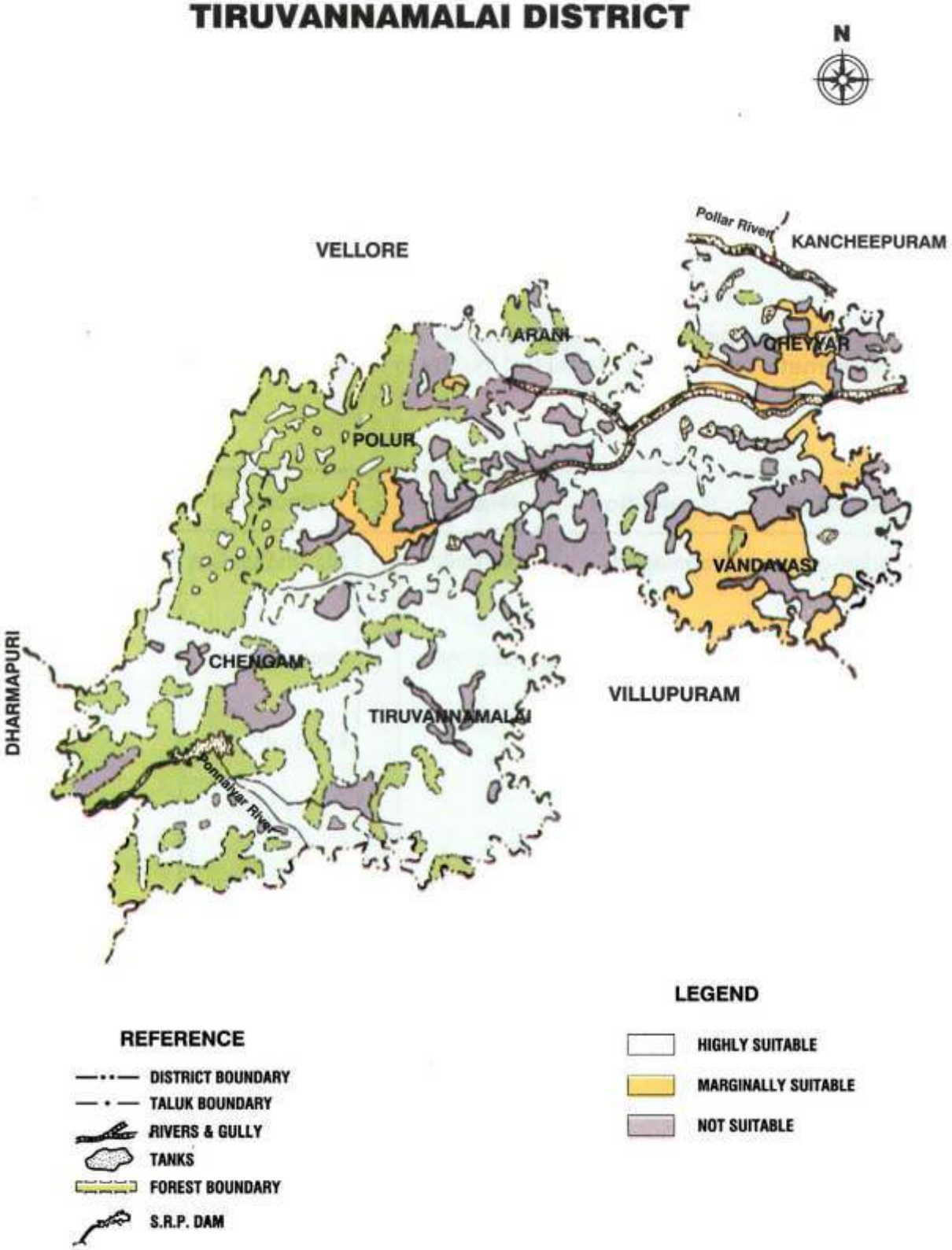
- Groundnut comes up well in light to medium texutured soils with a pH range of 5.4 - 8.2. However, the optimum pH for cultivation is 6.0 -7.5

- 4.1% of the area is highly suitable, 8.9% of the area is moderately suitable and 1.7% of the area is marginally suitable.

- Constraints are seen in the soils of Suramangalam, Idayapatti, Kampattu, Kanakkampattu and Madiappankulam and hence not suitable.

Class	Soil Series	Limitations	Area	
			ha	%
Highly suitable	Mangalathupatty Tenneyur Olagalapadi Pachol	-	26073	4.1
Moderately suitable	Mathur Kurumbalur Pallipalayam Mangadu Rajapalayam	Calcareousness alkalinity texture	56374	8.9
Marginally suitable	Mampattu Kattampoondi Kuppam	Calcareousness low fertility	10505	1.7
Not suitable	Suramangalam Idayapatti Kampattu Kanakkampattu Madiappankulam	Heavy texture alkalinity calcareousness drainage	86350	13.7

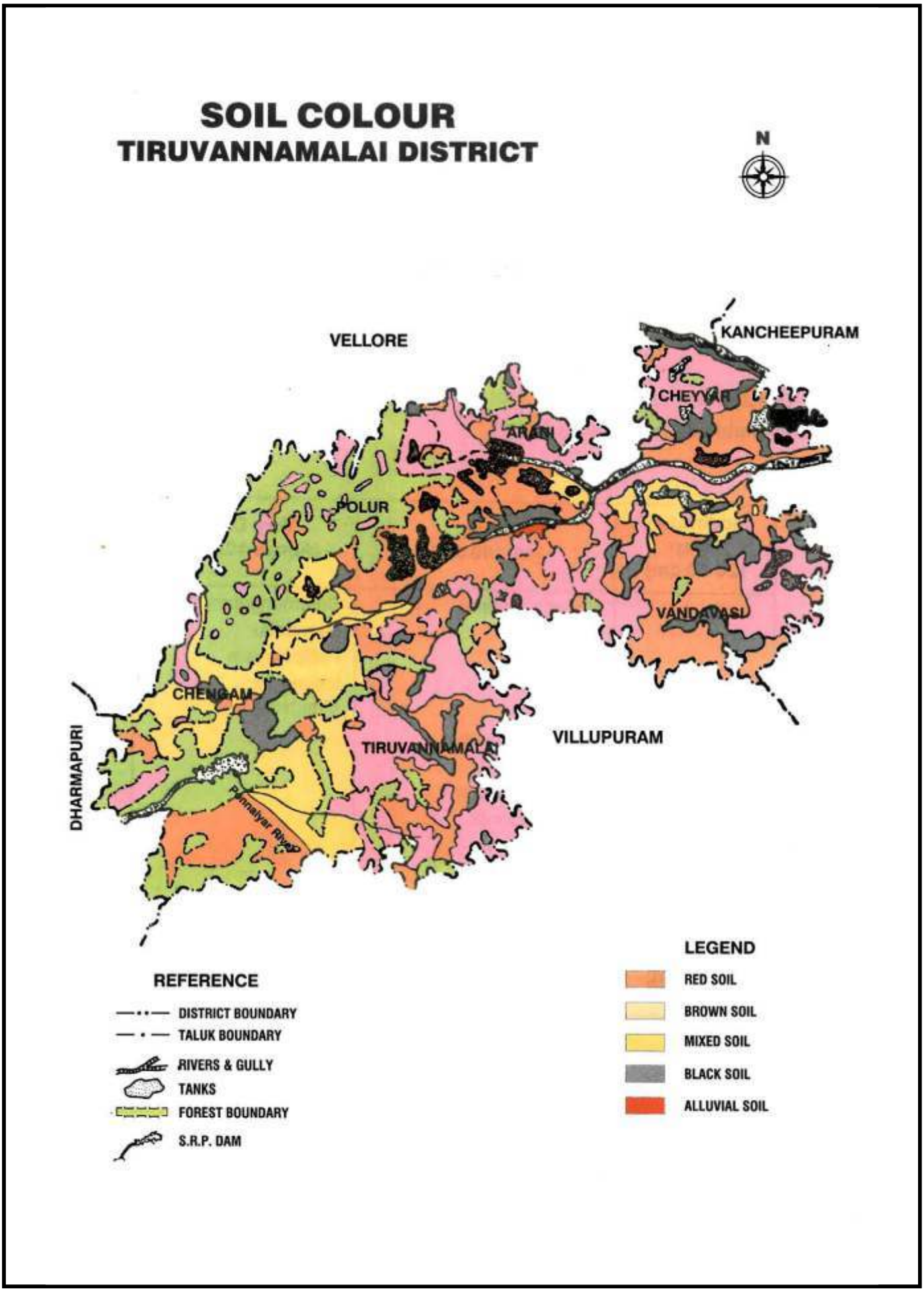
SOIL SUITABILITY FOR GROUNDNUT
TIRUVANNAMALAI DISTRICT



SOIL COLOUR

Soil colour provides ready clue to soil conditioning and is due to either mineral matter or organic matter but mostly to the admixture of both.

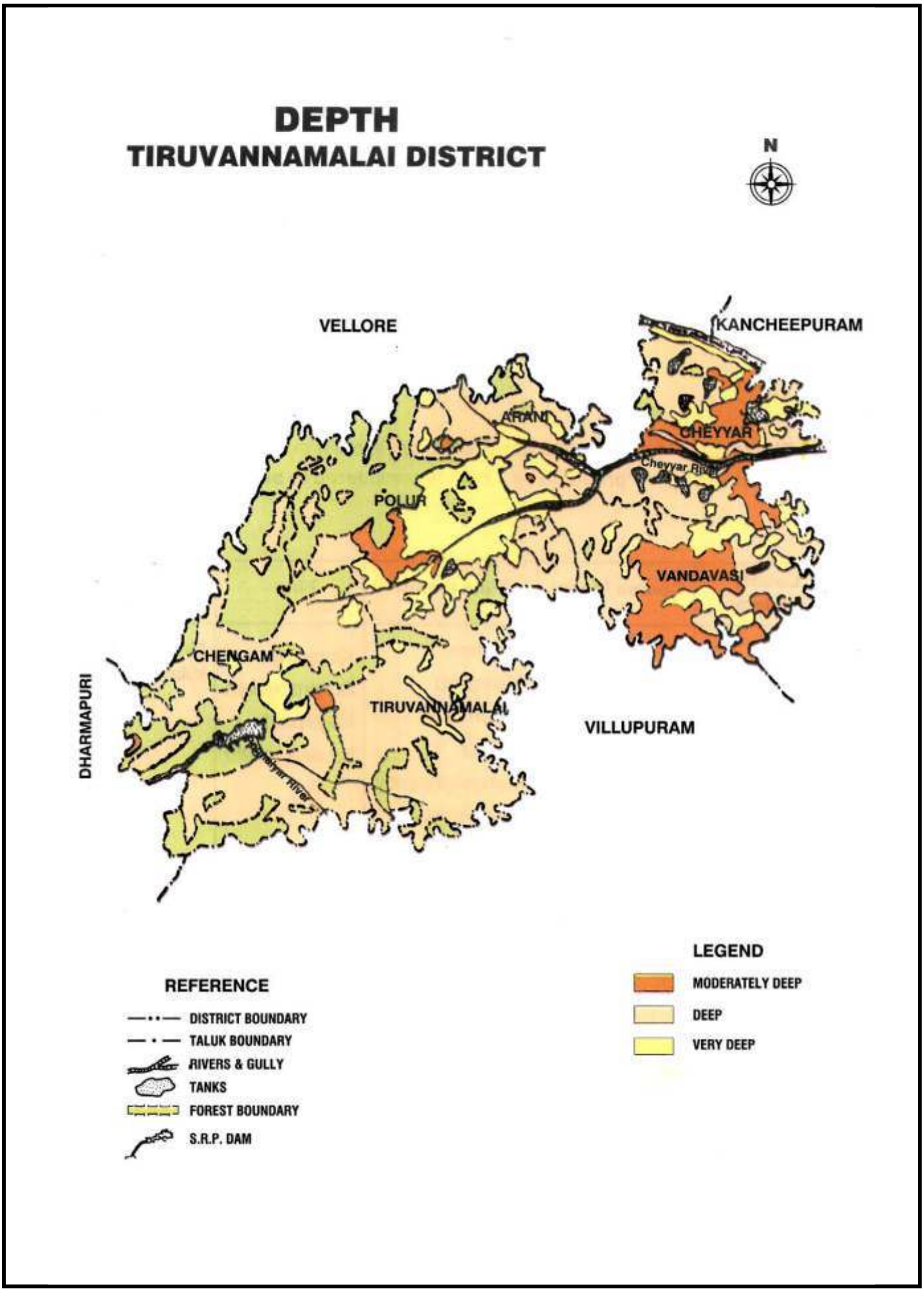
Red Soil	Brown Soil	Mixed Soil	Black Soil	Alluvial Soil
Madiappan-kulam	Olagalapadi	Kurumbalur	Suramangalam	Pallipalayam
Kattampoondi	Kuppam	Rajapalayam	Mangadu	
Tenneyur	Kampattu		Idayapatti	
Mampattu	Mathur			
Pachol	Mangalathupatty			
Kanakkampattu				
Area (ha) 50250	**59067**	**21563**	**46663**	**389**


SOIL COLOUR
TIRUVANNAMALAI DISTRICT
N
VELLORE
KANCHEEPURAM
CHEYYAR
ARANI
POLUR
VANDAVASI
CHENGAM
TIRUVANNAMALAI
VILLUPURAM
DHARMAPURI
Pennaiyar River
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM
LEGEND
RED SOIL
BROWN SOIL
MIXED SOIL
BLACK SOIL
ALLUVIAL SOIL

DEPTH

The depth of soil affects the root development of crops, nutrient availability and available water capacity in soil.

Moderately Deep (26-50 cm)	Deep (51-100 cm)	Very Deep (Above 100 cm)
Pachol	Kanakkampattu Kuppam Kampattu Kurumblaur Mathur Mangalathupatty Rajapalayam Madiappankulam Kattampoondi Tenneyur Olagalapadi	Suramangalam Mampattu Pallipalayam Idayapatti Mangadu
Area (ha) 4286	**122030**	**52986**

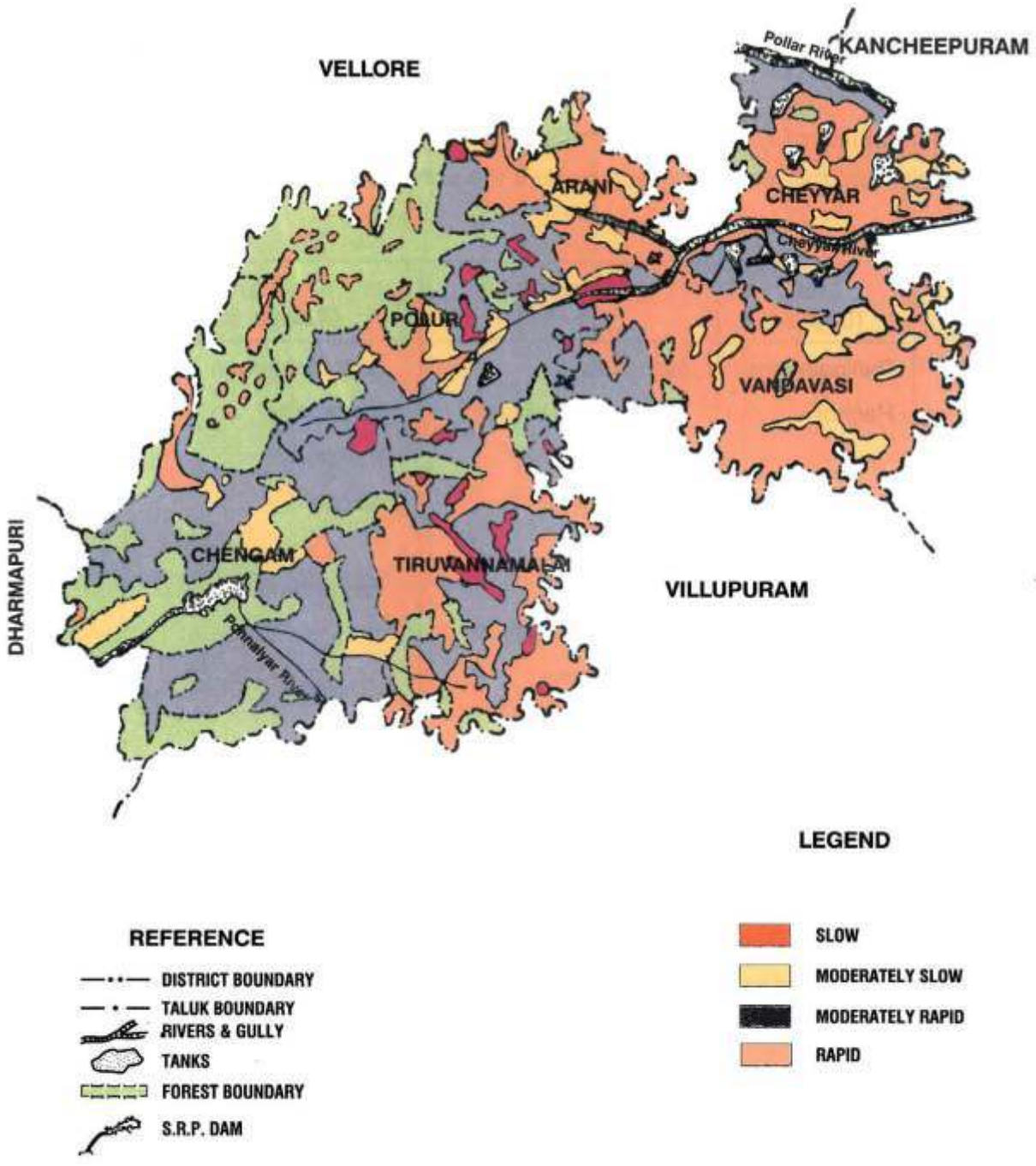

DEPTH
TIRUVANNAMALAI DISTRICT
N
VELLORE
KANCHEEPURAM
ARANI
CHEYYAR
Cheyyar River
POLUR
VANDAVASI
CHENGAM
TIRUVANNAMALAI
VILLUPURAM
DHARMAPURI
Pambaiyar River
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM
LEGEND
MODERATELY DEEP
DEEP
VERY DEEP

PERMEABILITY

This refers to the rate of intake of water through soil column or the amount of water that would move downwards. The degree of permeability plays an important role in the natural drainage.

Slow	Moderately slow	Moderately rapid	Rapid
Idayapatti	Suramangalam Kampattu Kanakkampattu	Mangadu Madiappankulam Kattampoondi Kuppam Mampattu Kurumbalur	Pallipalayam Tenneyur Olagalapadi Pachol Mathur Mangalathupatty Rajapalayam
Area (ha) 14631	**44431**	**68430**	**51810**

PERMEABILITY
TIRUVANNAMALAI DISTRICT

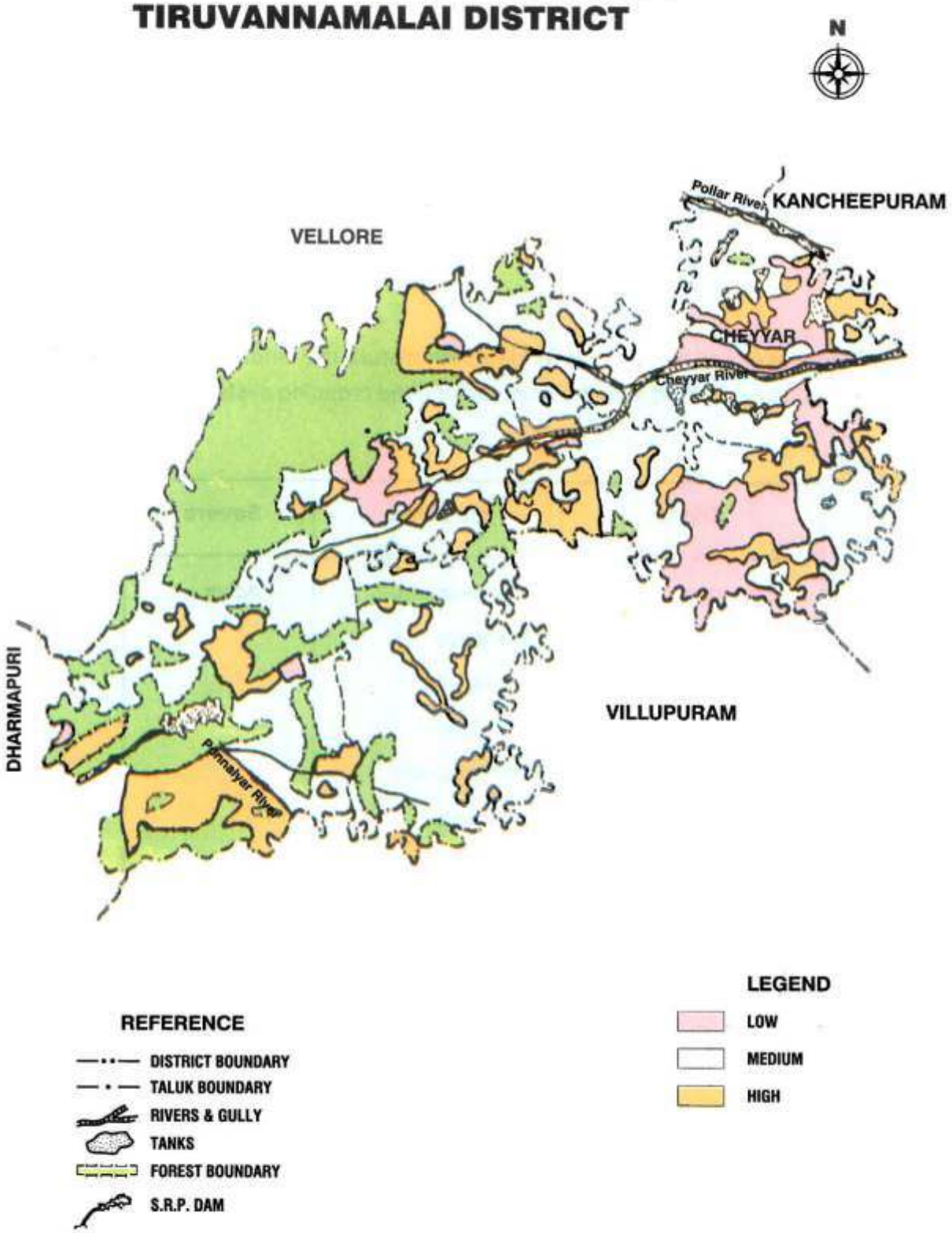


WATER HOLDING CAPACITY

The ability of soils to retain moisture in the soil is termed as water holding capacity and this condition determines the scheduling of irrigation.

Low (0-20%)	Medium (21 - 50)	High (Above 50%)
Pallipalayam Pachol	Mangadu Madiappankulam Olagalapadi Mampattu Kurumbalur Mathur Mangalathupatty Rajapalayam Kanakkampattu Tenneyur	Suramangalam Idayapatty Kampattu Kuppam Kattampoondi
Area (ha) 4675	**115371**	**59256**

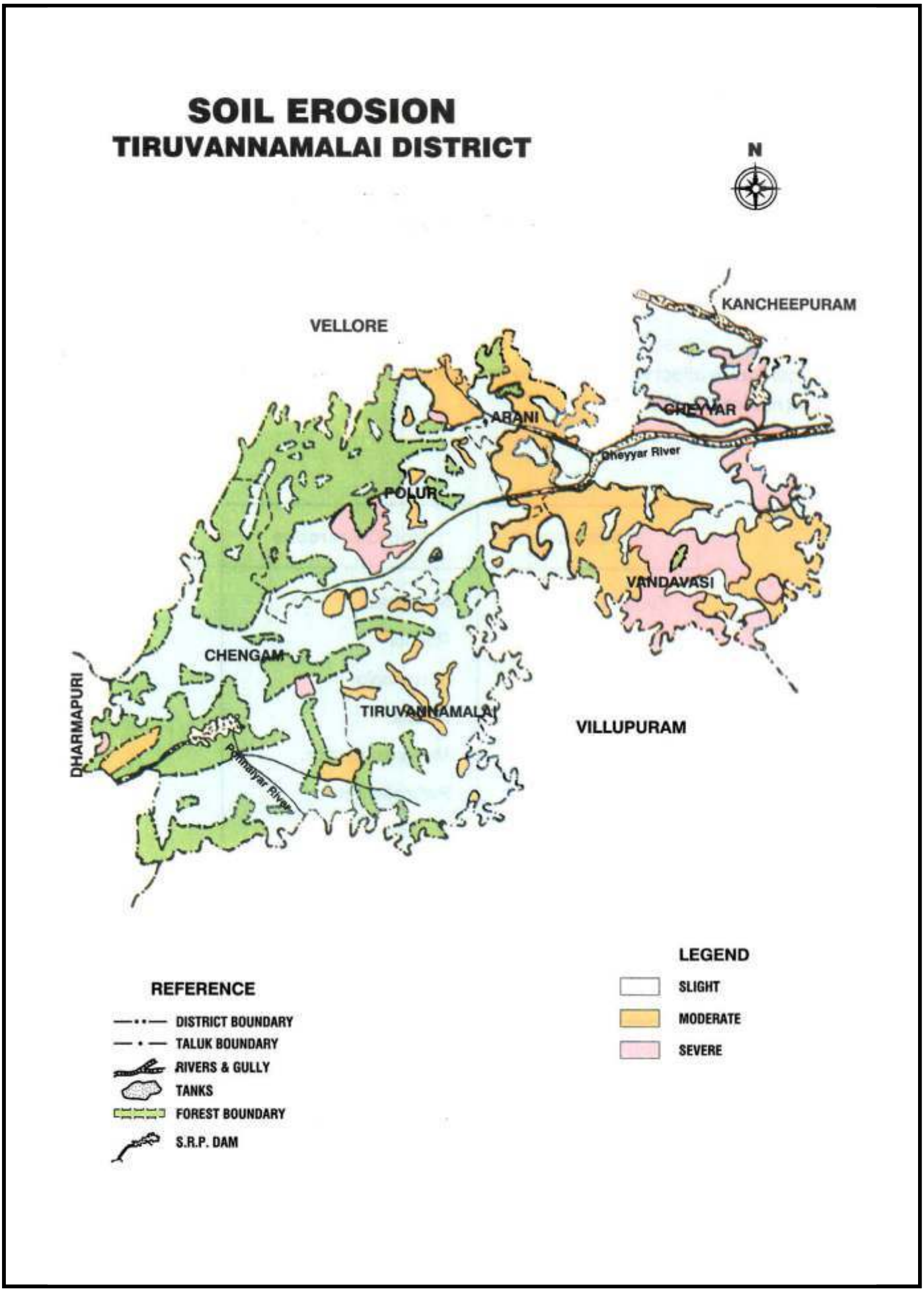
WATER HOLDING CAPACITY
TIRUVANNAMALAI DISTRICT



EROSION

Removal of soil by water or wind or both disturb the landscap and effect the fertility status of soil and also the land use and the cropping system.

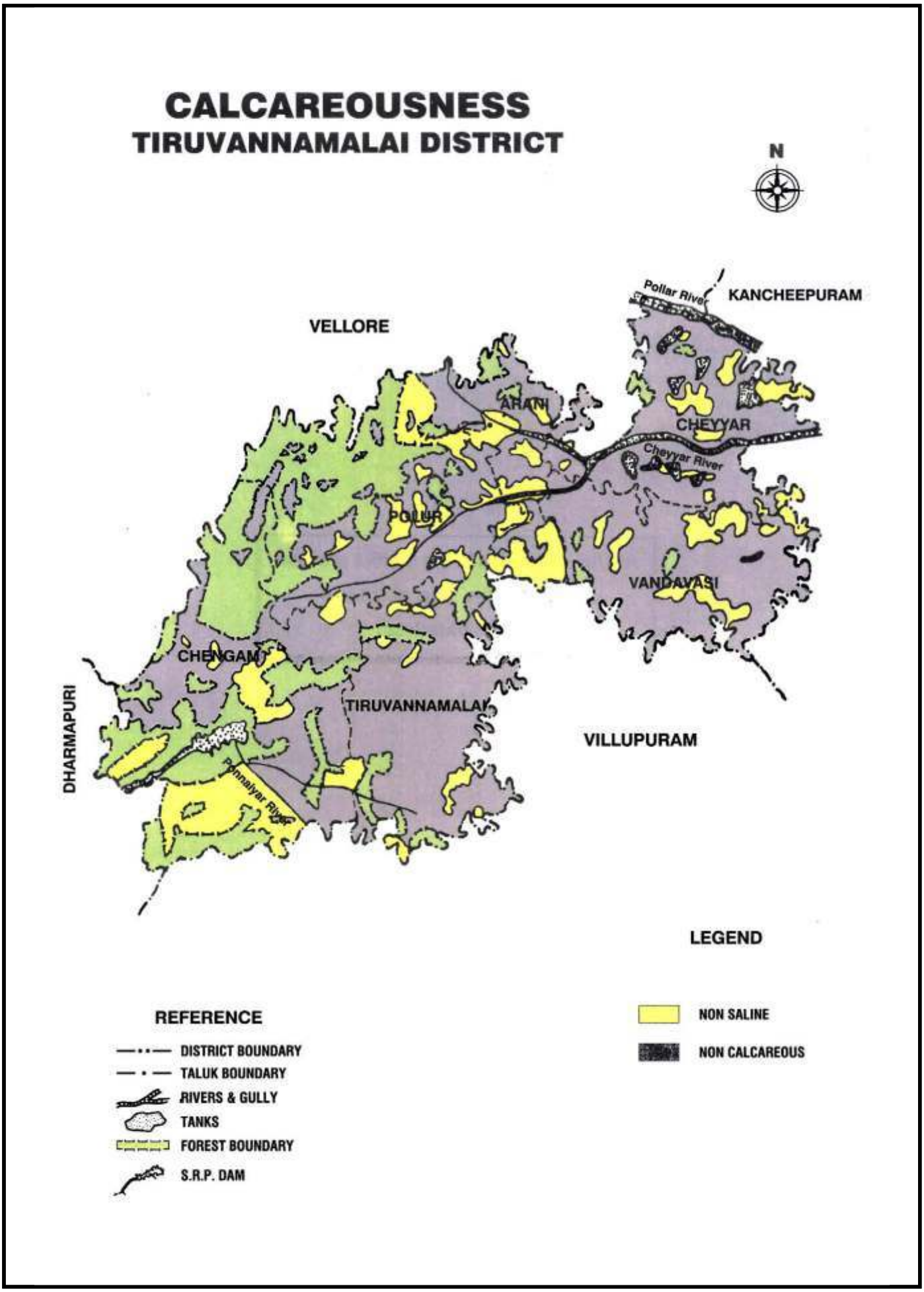
Slight	Moderate	Severe
Suramangalam	Pallipalayam	Pachol
Madiappankulam	Mangadu	
Kattampoondi	Idayapatti	
Kuppam	Tenneyur	
Mampattu	Olagalapadi	
Kurumbalur	Kampattu	
Mathur	Mangalathupatty	
Kanakkambattu	Rajapalayam	
Area (ha) 120605	**54411**	**4286**


SOIL EROSION
TIRUVANNAMALAI DISTRICT
N
KANCHEEPURAM
VELLORE
CHEYYAR
ARANI
Cheyyar River
POLUR
VANDAVASI
CHENGAM
DHARMAPURI
TIRUVANNAMALAI
VILLUPURAM
Ponnaiyar River
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM
LEGEND
SLIGHT
MODERATE
SEVERE

CALCAREOUSNESS

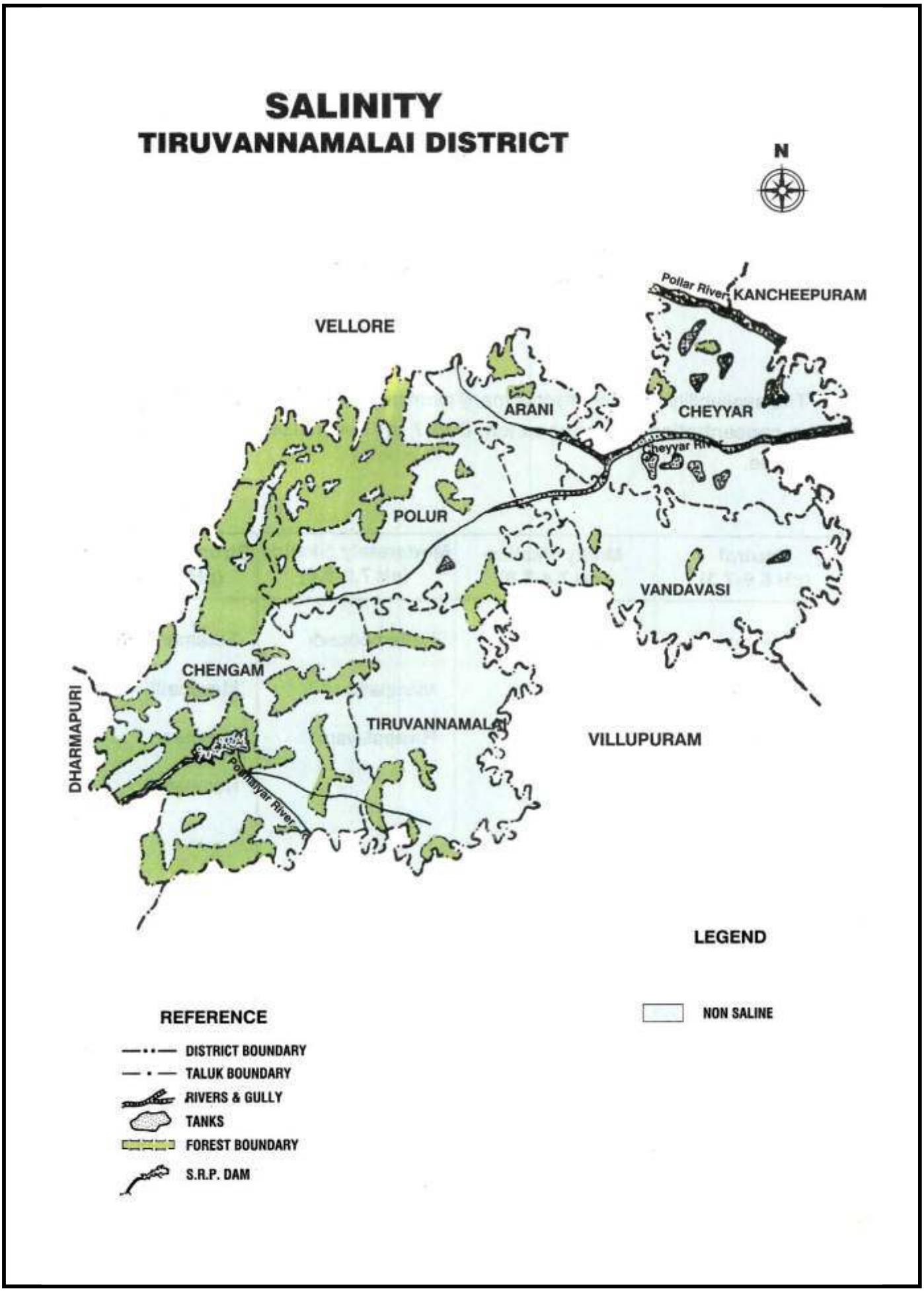
Calcareousness is due to the calcium carbonate content of the soil. Higher concentration affect yield of crops by increasing the pH levels; consequently uptake of plant nutrients is affected.

Calcareous	Non Calcareous
Kuppam Kampattu Rajapalayam Suramangalam Kattampoondi Idayapatti	Mampattu Pachol Kurumbalur Mathur Mangalathupatty Pallipalayam Madiappankulam Tenneyur Olagalpadi Mangadu Kanakkampattu
Area (ha) 63514	**115788**


CALCAREOUSNESS
TIRUVANNAMALAI DISTRICT
N
Pollar River
KANCHEEPURAM
VELLORE
ARANI
CHEYYAR
Cheyyar River
POLUR
VANDAVASI
CHENGAM
TIRUVANNAMALAI
VILLUPURAM
DHARMAPURI
Ponnaiyar River
LEGEND
NON SALINE
NON CALCAREOUS
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM

SALINITY

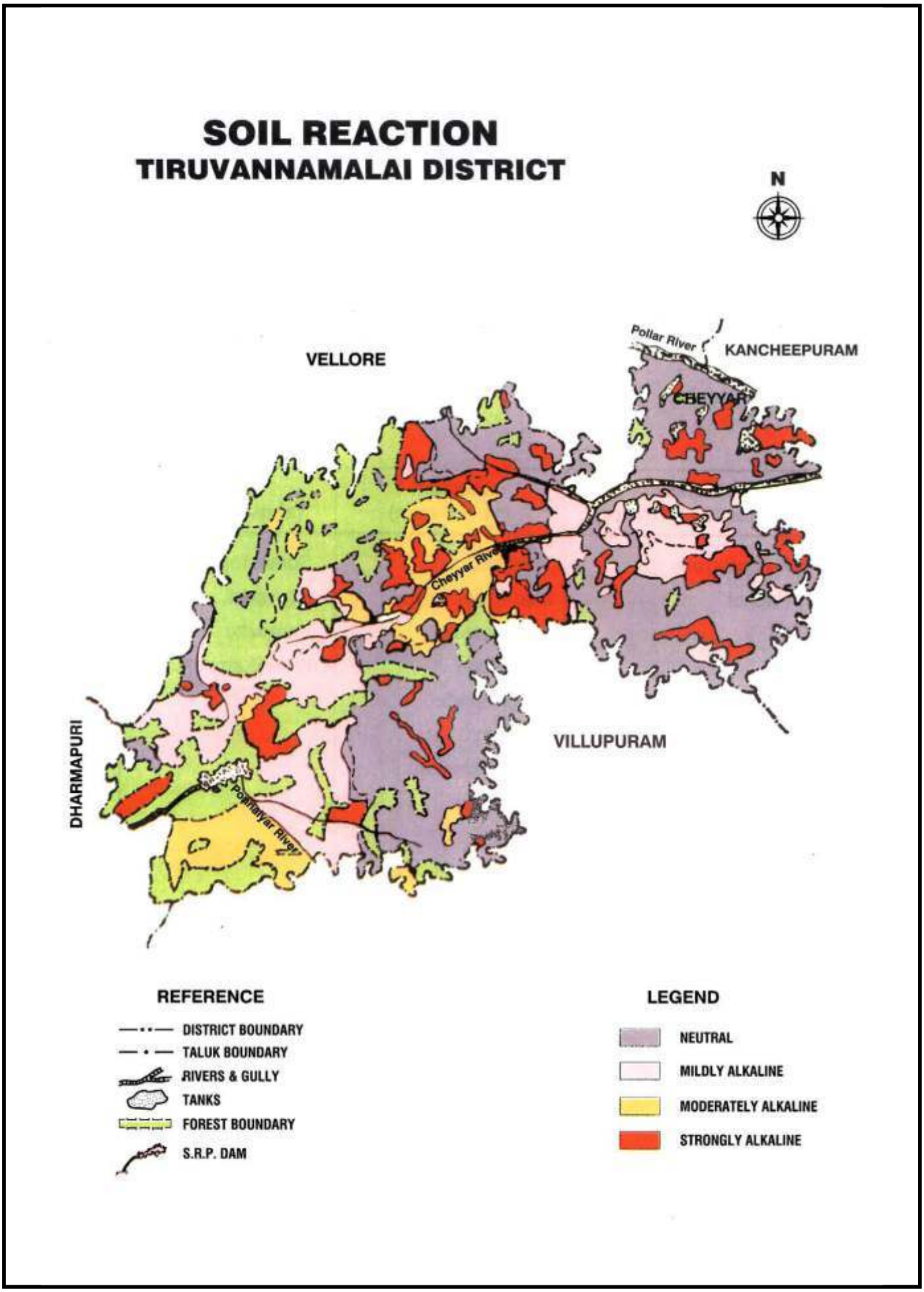
All the soil series in the district are non saline and the level of soluble salts is harmless.


SALINITY
TIRUVANNAMALAI DISTRICT
N
Pollar River
KANCHEEPURAM
VELLORE
ARANI
CHEYYAR
Cheyyar River
POLUR
VANDAVASI
CHENGAM
DHARMAPURI
TIRUVANNAMALAI
VILLUPURAM
Ponnaiyar River
LEGEND
NON SALINE
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM

SOIL REACTION

The availability and the effect of many plant nutrients depend on the pH of soils to the concentration of hydrogen ion. 6 to 7 pH is considered to be the most favourable.

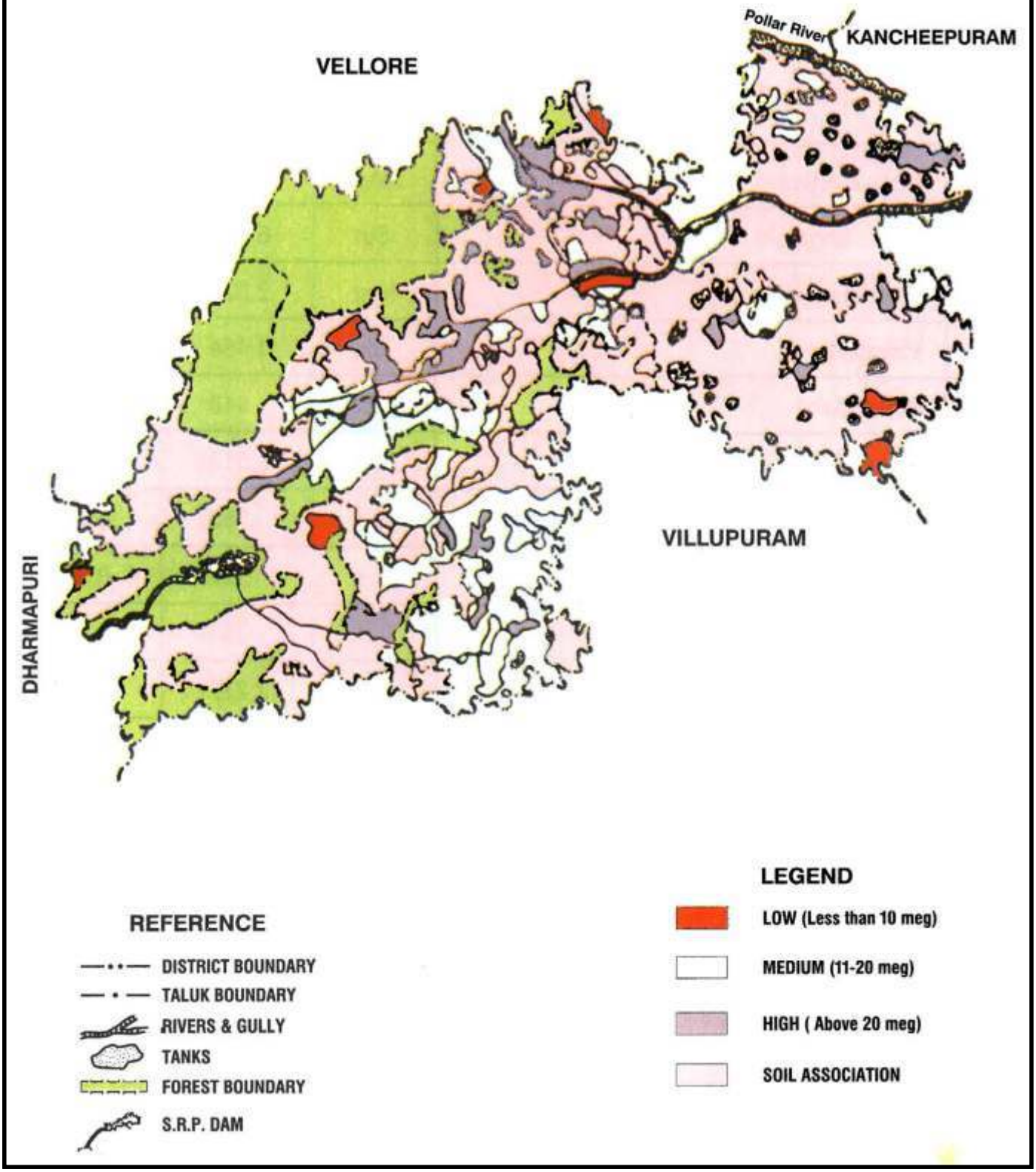
Neutral (pH 6.6-7.3)	Mildly alkaline (pH 7.4-7.8)	Moderately alkaline (pH 7.9-8.4)	Strongly alkaline (pH 8.5-9.0)
Pallipalayam	Mangadu	Kattampoondi	Suramangalam
Madiappankulam	Tenneyur	Mampattu	Idayapatti
Olagalapadi	Kurumbalur	Rajapalayam	Kuppam
Pachol			Kampattu
Mathur			
Mangalathupatti			
Kanakkampattu			
Area (ha) 82343	**26418**	**13476**	**55972**


SOIL REACTION
TIRUVANNAMALAI DISTRICT
N
VELLORE
Pollar River
KANCHEEPURAM
CHEYYAR
Cheyyar River
VILLUPURAM
DHARMAPURI
Ponnaiyar River
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
S.R.P. DAM
LEGEND
NEUTRAL
MILDLY ALKALINE
MODERATELY ALKALINE
STRONGLY ALKALINE

CATION EXCHANGE CAPACITY

Low (Less than 10 meq)	Medium (11 - 20 meq)	High (above 20 meq)
Pallipalayam Pachol	Mangadu Madiappankulam Kattampoondi Tenneyur Olagalapadi Kuppam Mangalathupatti Kurumbalur Mathur Rajapalayam Mampattu	Suramangalam Idayapatti Kampattu Kanakkampattu
Area (ha) 4675	**115565**	**59062**

CATION EXCHANGE CAPACITY
TIRUVANNAMALAI DISTRICT

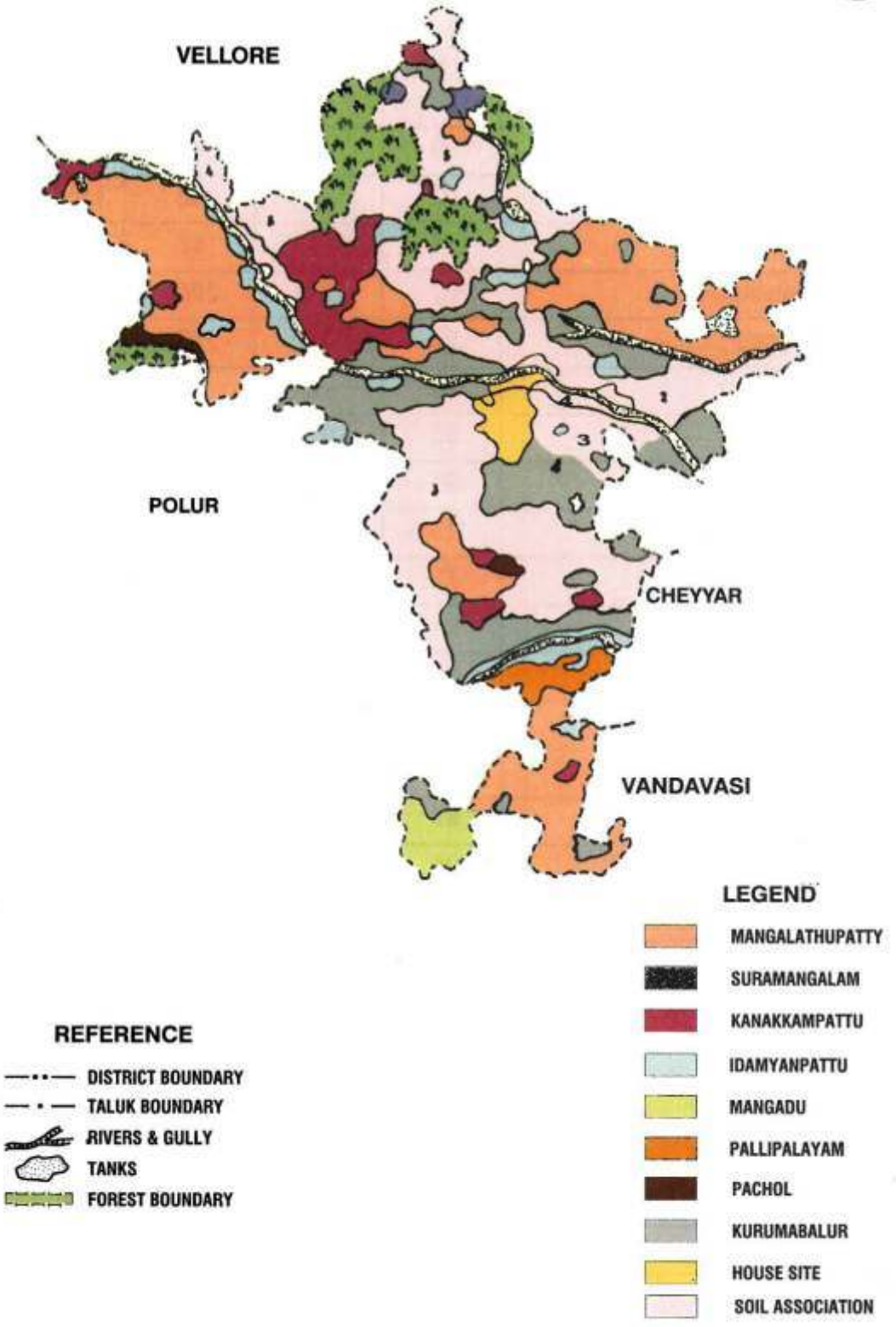


SOILS

ARANI TALUK

S.No.	Soil Series	Map Symbol	Extent	
			ha	%
1	Mangalathupatti	Mng	9,370	20.60
2	Suramangalam	Sur	6,138	13,49
3	Kanakkampattu	Kpu	2,823	6.21
4	Idayapatti	Idp	1,464	3.22
5	Kurumbalur	Kbr	648	1.42
6	Mangadu	Rkp	518	1.14
7	Pachol	Snp	363	0.80
8	Pallipalayam	Ppm	389	0.86
9	Mangalathupatti + Kurumbalur	1	481	1.06
10	Mangalathupatti + Kanakkampattu	2	2,227	4.90
11	Mangalathupatti + Kanakkampattu + Arani	3	6,609	14.53
12	Mangalathupatti + Kanakkampattu + Pachol	4	310	0.68
13	Mangalathupatti + Kanakkampattu + Pachol	5	3,988	8.77
	Forest		4,255	9,35
	Miscellaneous land		5,910	12.99
	Total		**45,493**	**100.0**

SOILS
ARANI TALUK



VILLAGEWISE FERTILITY STATUS AND DOMINANTSOIL SERIES

ARANI TALUK

Village	Fertility Status (kg / ac)			Dominant Soil Series
	N	P	K	
EAST ARANI PANCHAYAT UNION				
1 Adaiyapuram	88	7	60	Mng
2 Adanur	80	9	76	Mng
3 Agrapalayam	92	8	82	Mng
4 Ariyapadi	105	7	42	Mng
5 Irumbedu	102	14	295	Mng
6 Kalpoondi	92	12	286	Mng
7 Mamandur	90	8	87	Mng
8 Mattatherai	95	12	376	Mng
9 Meyyur	95	22	102	Kpm
10 Morapanthangal	110	9	418	Kpm
11 Mullandram	73	5	68	Kbr
12 Nesal	94	6	134	Mng
13 Ogaiyur	63	7	71	Mng
14 Paiyur	85	12	138	Mng
15 Paniayur	84	10	71	Mng
16 Pudupalayam	69	11	96	Kpm
17 Pusimalaikuppam	95	5	174	Mng
18 Puthur	74	11	136	Mng
19 Randam Kerattur	101	9	125	Mng
20 Rattinamangalam	100	11	297	Mng
21 Sevur	140	16	239	Sur
22 S.V. Nagaram	76	6	64	Mng
23 Vadugasathur	84	11	116	Kpm
24 Velapadi	70	6	101	Mng
25 Velleri	93	7	80	Mng
26 Vettiyankuppam	107	16	395	Mng

Village		Fertility Status (kg / ac)			Dominant Soil Series
		N	P	K	
WEST ARANI PANCHAYAT UNION					
1	Agaram	72	6	99	Mng
2	Araiyalam	79	9	130	Mng
3	Athimalaipattu	97	10	70	Mng
4	Ayyampalayam	83	9	499	Mng
5	Puthur	69	8	122	Mng
6	Devikapuram	70	10	68	Rkp
7	Kannamangalam	95	12	60	Mng
8	Kattukananathur	85	10	112	Mng
9	Kilnagar	83	9	149	Kpu
10	Kolathur	90	10	115	Kpu
11	Kunnathur	80	20	97	Sur
12	Kuppam	73	6	164	Sur
13	Marusur	86	8	178	Mng
14	Melnagar	53	9	142	Sur
15	Mullipattu	86	7	88	Mng
16	Muruganandal	80	10	104	Mng
17	Murugamangalam	82	20	486	Mng
18	Naachapuram	90	10	125	Sur
19	Palayam	102	8	138	Sur
20	Pungampadi	116	18	85	Mng
21	Pulamvambadi	66	9	62	Mng
22	Senuanandal	79	9	87	Mng
23	Thatchur	98	11	96	Sur
24	Thellur	90	15	74	Ppm
25	Vannankulam	87	12	268	Mng
26	Vinnamangalam	93	12	82	Mng

LAND CAPABILITY

ARANI TALUK

Area (ha)	Land Capability Classification	Soil Series	Limitation	Needs
13748	II se	Mangalathupatty Kanakkampattu Kurumbalur Mangadu Pallipalayam	Erosion surface run off topography	Soil conservation
6138	II sw	Suramangalam	Wetness salinity	Improving drainage selection of crops
464	III sw	Idayapatty	Alkalinity	Soil reclamation
363	IV se	Pachol	Erosion Shallow depth	Soil conservation selection of crops

Class

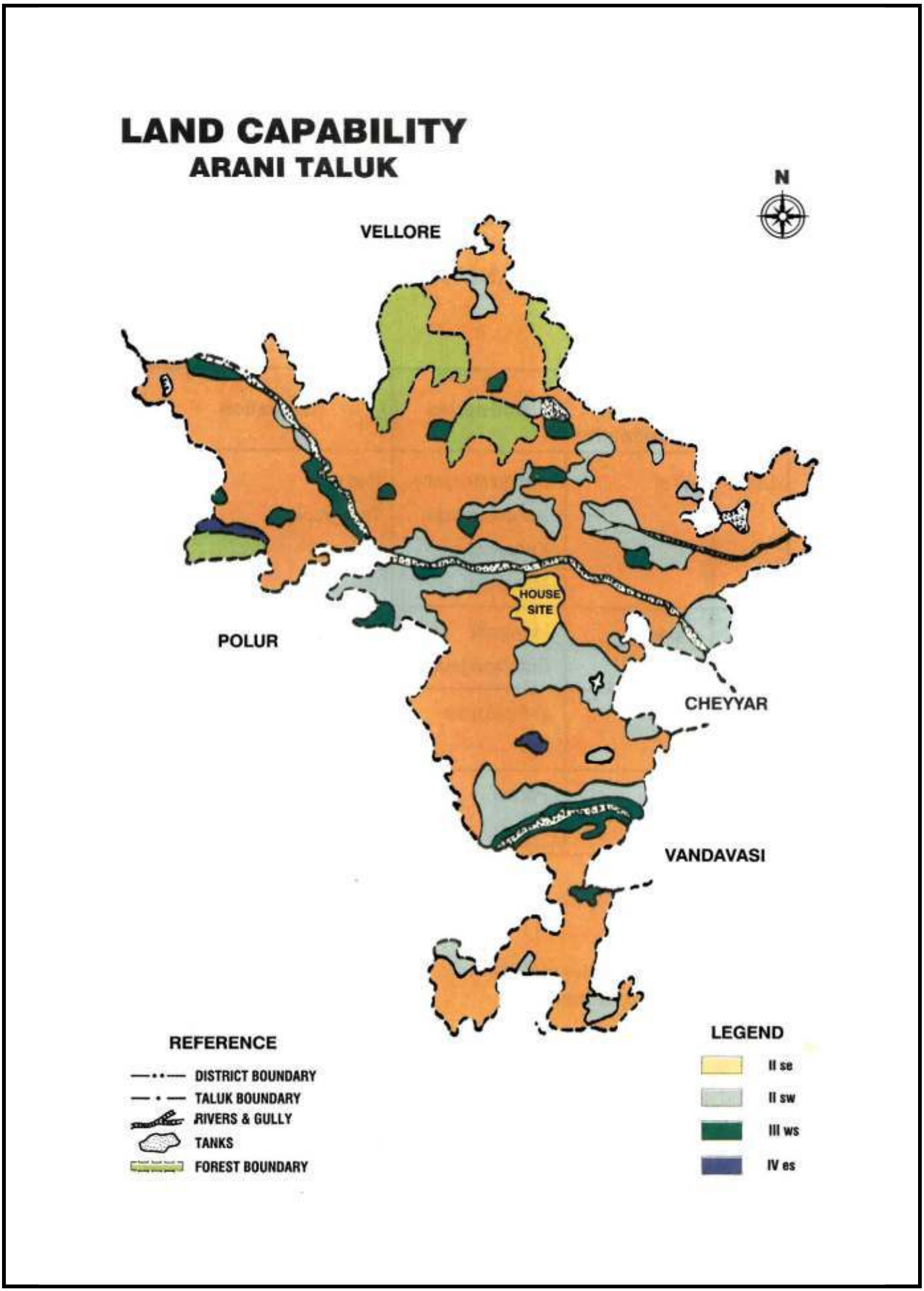
II. Good cultivable lands that have moderate limitations for sustained use under agriculture.

III. Moderately good cultivable lands that have severe limitations for sustained use under agriculture.

IV. Lands that have very severe limitations for sustained use under agriculture.

Sub Class

s. Root zone limitation
e. Erosion and Run off
w. Excess water


LAND CAPABILITY
ARANI TALUK
N
VELLORE
HOUSE SITE
POLUR
CHEYYAR
VANDAVASI
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
LEGEND
II se
II sw
III ws
IV es

LAND IRRIGABILITY

ARANI TALUK

Area (ha)	Land Irrigability Classification	Soil series	Limitation
13359	2 st	Mangalathupatty Kanakkampattu Kurumbalur Mangadu	Run off Topography
7602	2 sd	Idayapatti Suramangalam	Alkalinity Slow permeability
389	3 s	Pallipalayam	Coarse texture Sub surface drainage
363	3 st	Pachol	Shallow depth Topography

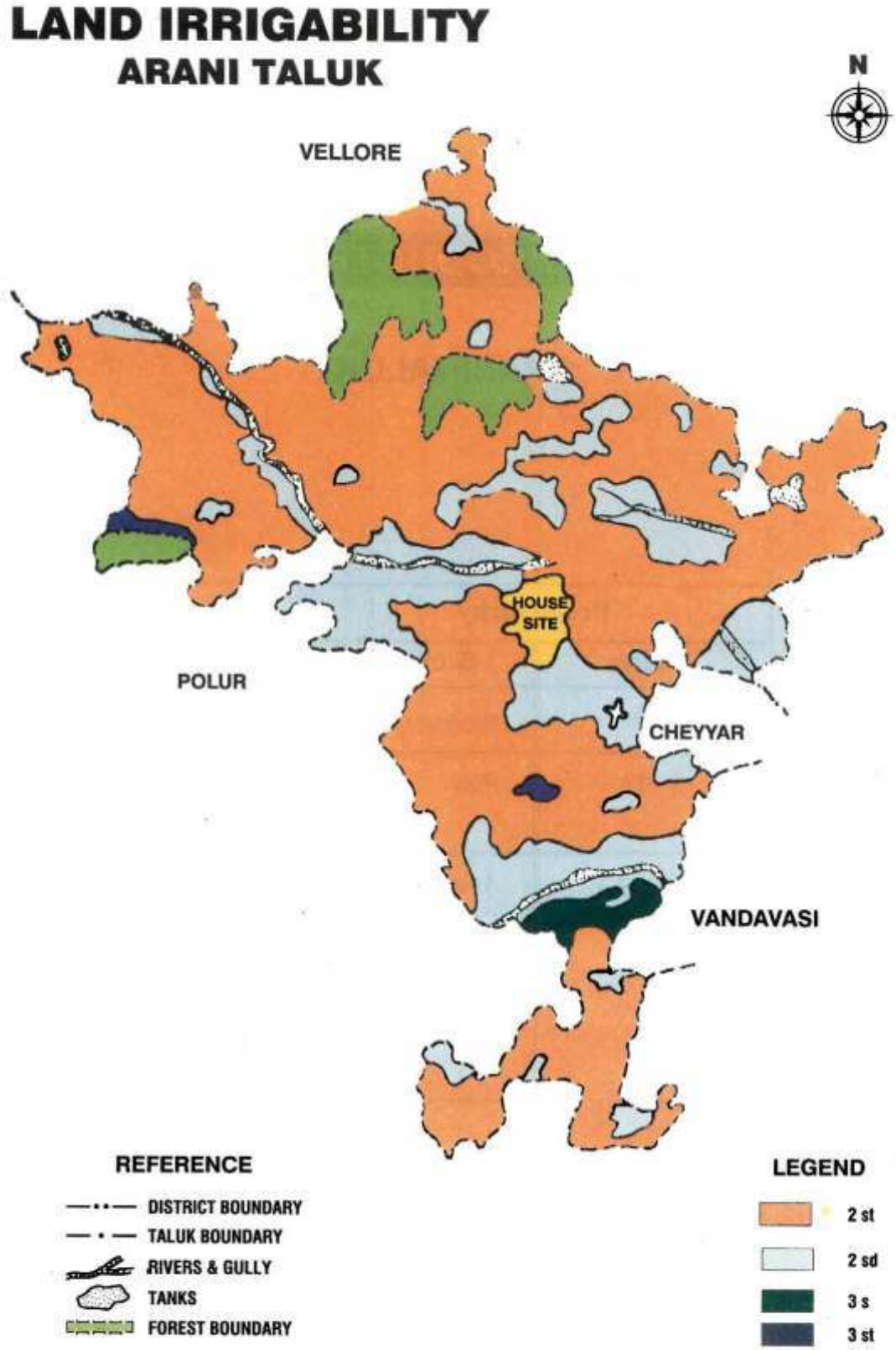
Class

2. Lands that have moderate limitations for sustained use under irrigation.

3. Lands that have severe limitations for sustained use under irrigation.

Sub Class

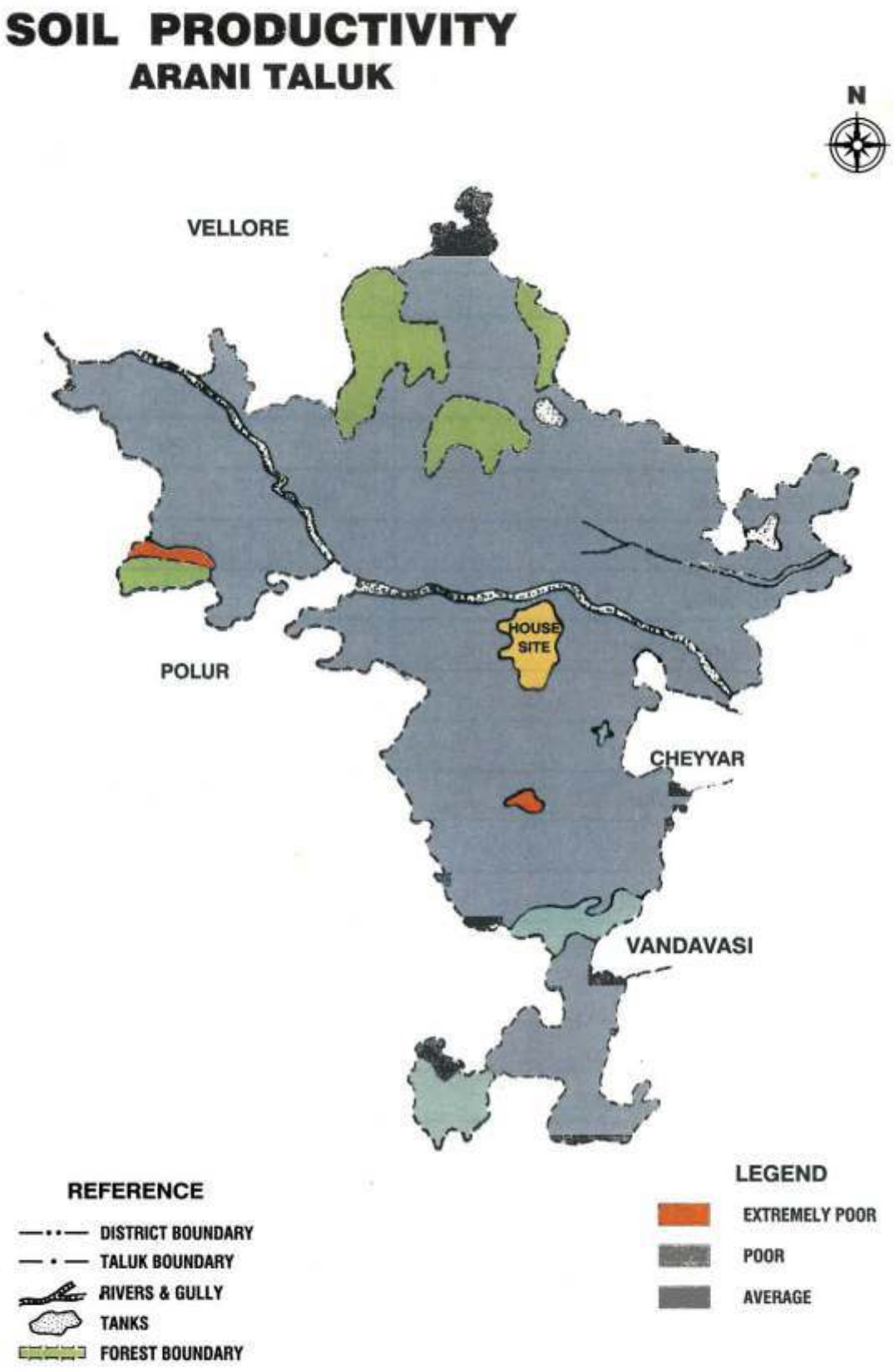
s - Soil limitations
t - Topography
d - Drainage


LAND IRRIGABILITY
ARANI TALUK
N
VELLORE
HOUSE SITE
POLUR
CHEYYAR
VANDAVASI
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
LEGEND
2 st
2 sd
3 s
3 st

SOIL PRODUCTIVITY

ARANI TALUK

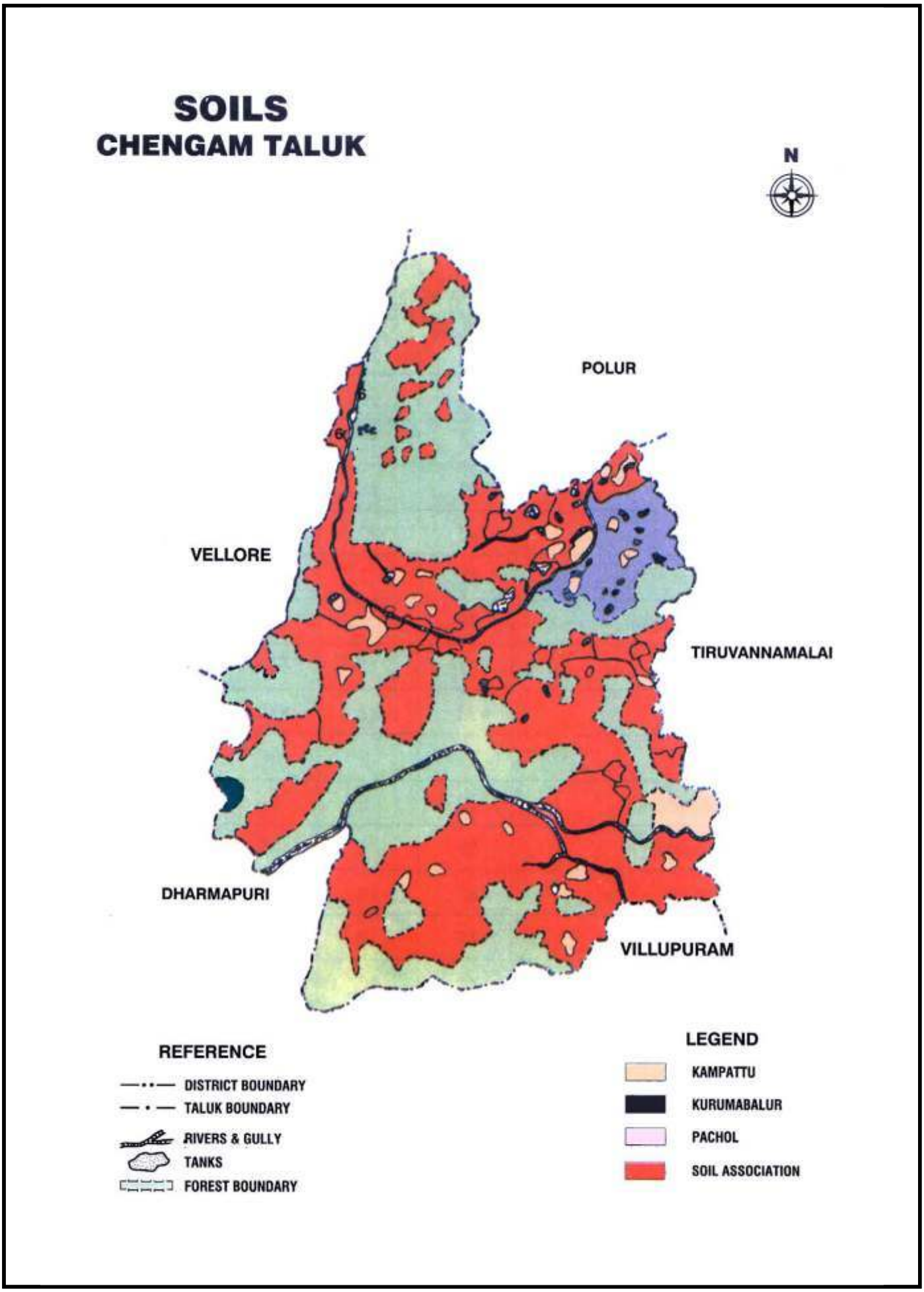
Area (ha)	Productivity		Soil series
	Rating	Grouping	
363	0 - 7	Extremely poor	Pachol
907	8 - 19	Poor	Pallipalayam Mangadu
20443	20 - 34	Average	Mangalathupatti Suramangakam Kanakkampattu Idayapatti Kurumbalur


SOIL PRODUCTIVITY
ARANI TALUK
N
VELLORE
HOUSE SITE
POLUR
CHEYYAR
VANDAVASI
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
LEGEND
EXTREMELY POOR
POOR
AVERAGE

SOILS

CHENGAM TALUK

S.No.	Soil Series	Map symbol	Extent	
			ha	%
1)	Kampattu	Kpt	10684	6.32
2)	Kurumbalur	Kbr	7663	4.54
3)	Pachol	Phl	1101	0.65
4)	Mathur	Mth	156	0.09
5)	Suramangalam	Sur	585	0.34
6)	Kurumbalur + Mathur	1	17095	10.12
7)	Mathur + Pachol	2	3393	2.00
8)	Mathur + Kurumbalur	3	285	0.17
9)	Pachol + Kurumbalur	4	14374	8.51
10)	Kattampoondi + Mathur	5	5115	3.03
11)	Kurumbalur + Mathur	6	13235	7.83
12)	Kurumbalur + Pachol	7	10153	6.01
13)	Suramangalam + Mathur	8	648	0.38
14)	Suramangalam + Kurumbalur	9	324	0.19
15)	Kampattu + Mathur	10	958	0.57
16)	Idayapatti + Kampattu	11	544	0.32
17)	Mathur + Pachol + Kurumbalur	12	129	0.08
18)	Madiappankulam + Kurumbalur + Pachol	13	790	0.47
19)	Kurumbalur + Pachol + Mathur	14	1981	1.17
20)	Kurumbalur + Pachol + Madiappankulam	15	3717	2.20
	Forest		**74098**	**43.86**
	Miscellaneous land		**1925**	**1.14**
		Total	**168953**	**100.00**


SOILS
CHENGAM TALUK
N
POLUR
VELLORE
TIRUVANNAMALAI
DHARMAPURI
VILLUPURAM
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
LEGEND
KAMPATTU
KURUMABALUR
PACHOL
SOIL ASSOCIATION

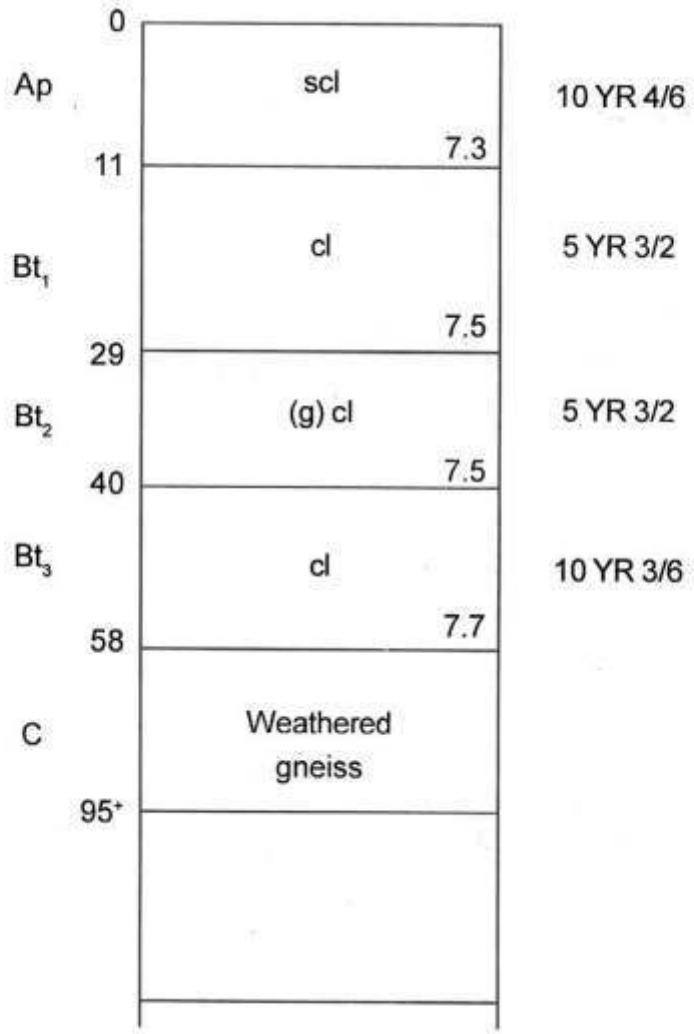
VILLAGEWISE FERTILITY STATUS AND DOMINANT SOIL SERIES

CHENGAM TALUK

Village	Village Fertility Index (kg/ac)			Dominant soil series
	N	P	K	
CHENGAM PANCHAYAT UNION				
1 Anadanur	87	10	134	Kbr
2 Andipatti	70	10	115	Kbr
3 Arattavadi	99	13	147	Kbr
4 Anwarbad	101	12	140	Kbr
5 Aswangaasuranai	93	10	130	Kbr
6 Chengam	61	7	127	Kbr
7 Chinnasamudram	78	9	135	Kbr
8 Elangunni	71	9	140	Mth
9 Kuppanatham	93	17	118	Mth
10 Kayampattu	72	8	86	Kbr
11 Karungalipadipattu	86	5	97	Kbr
12 Kariamangalam	86	9	122	Kbr
13 Melchengam	83	10	120	Kbr
14 Melpallipattu	75	9	166	Kbr
15 Melpennathur	88	10	104	Kbr
16 Neempathurai	133	10	120	Mth
17 Pudupattu	63	12	47	Kbr
18 Pakkiripalayam	80	10	118	Kbr
19 Puliampattu	88	9	151	Mth
20 Parasapattu	102	8	115	Kbr

Village	Village Fertility Index (kg/ac)			Dominant soil series
	N	P	K	
21 Pinjur	96	10	118	Kbr
22 Perumbakkam	101	9	96	Kbr
23 Pachal	85	8	140	Kbr
24 Quilam	109	11	116	Kbr
25 Sarapandal	78	14	121	Kbr
26 Thumbinaichanpatti	95	5	65	Kbr
27 Thalayathur	88	12	181	Kbr
28 Thikkapettai	150	11	125	Kbr
29 Uchimalaikuppam	76	8	118	Kbr
PUDUPALAYAM PANCHAYAT UNION				
30) Anandavadi	113	15	341	Kbr
31) Athipadi	45	20	132	Kbr
32) Andal	57	6	40	Kbr
33) Eraiyur	81	7	104	Kbr
34) Endal	87	9	113	Kbr
35) Jambodai	112	9	84	Phl
36) Kanakampattu	113	9	77	Kbr
37) Kanjee	54	9	134	Idp
38) Manikkal	91	5	113	Mth
39) Minurmangalam	92	9	118	Kbr
40) Muthanur	120	9	132	Idp
41) Melmadiyanur	74	9	159	Idp
42) Masan	80	15	120	Kbr

KURUMBALUR SERIES (Kbr)



Soil Taxonomy : *Fine loamy mixed hyperthermic* ***Typic Haplustalf***

IDAYAPATTI SERIES (Idp)

Location	:	Vadamadhimangalam, Polur taluk.
Physiography	:	Level land
Topography	:	Flat
Drainage	:	Moderate
Parent material	:	Weathered gneiss with $CaCO_3$

Horizon	Depth	Description
Ap	0 - 20 cm	Very dark grayish brown (10 YR 3/2); clay; moderate coarse angular blocky; firm (moist), sticky and plastic (wet); common fine roots; common fine pores; violent effervescence; slow permeability; diffuse wavy boundary; pH 8.5.
A	20 - 57 cm	Very dark grayish brown (10 YR 3/2); silty clay loam; strong coarse subangular blocky; firm (moist), sticky and plastic (wet); common fine roots; common fine pores; moderately slow permeability; violent effervescence; diffuse wavy boundary; pH 8.7.
Bss	57 - 105 cm	Dark brown (10 YR 3/3); silty clay; strong coarse angular blocky; firm (moist), sticky and plastic (wet); prominent slickensides; few fine roots; slow permeability; violent effervescence; gradual wavy boundary; pH 8.7.
C	105-115 cm	Weathered gneiss with $CaCO_3$

Village	Village Fertility Index (kg/ac)			Dominant soil series
	N	P	K	
43) Narasinganallur	86	10	111	Kbr
44) Nayambadi	88	15	165	Kbr
45) Pudurohengam	88	7	142	Kbr
46) Panaiolopadi	85	8	132	Kbr
47) Pudupalayam	72	3	51	Kbr
48) Padiagraharam	121	8	79	Kbr
49) Saranthanpal	54	15	125	Kbr
50) Senthamangalam	60	7	93	Kbr
51) Thakkavadi	91	8	126	Kbr
52) Thorappadi	90	17	65	Kbr
53) Vedankuppam	64	4	115	Kbr
54) Veppur Chekkadi	98	27	232	Kbr
55) Veeranandal	84	9	144	Kbr
THANDARAMPATTU PANCHAYAT UNION				
57) Akkarapatti	37	5	110	Kbr
58) Allappanur	70	13	107	Kbr
59) Agrampattipattu	98	9	113	Kbr
60) Beemdrapatti	85	7	173	Kbr
61) Chinniyampettai	72	8	127	Phl
62) Gulalore	77	9	135	Kbr
63) Gungampattu	50	10	108	Kbr
64) Kolundampattu	104	13	133	Kbr
65) Kilravandavadi	74	8	114	Kbr
66) Kottayur	78	7	79	Kbr

Village	Village Fertility Index (kg/ac)			Dominant soil series
	N	P	K	
67) Melmithanur	81	6	138	Kbr
68) Melmanjanur	85	9	119	Phl
69) Melkarippur	72	10	101	Kbr
70) Nedungavadi	73	9	119	Phl
71) Naryanakuppam	71	12	168	Phl
72) Olagalpadi	148	16	73	Ogp
73) Perungalathur	66	8	110	Phl
74) Puthurchekkadi	82	8	143	Phl
75) Perunthuraipattu	82	10	94	Kbr
76) Perayampattu	62	11	102	Kbr
77) Reddipalayam	81	8	119	Phl
78) Rayandapuram	107	9	83	Phl
79) Radhapuram	88	11	179	Kbr
80) Sathanur	92	8	128	Kbr
81) Sodakuppam	73	8	104	Kbr
82) Thiruvadathanur	88	11	126	Phl
83) Thanipadi	68	11	184	Phl
84) Thandrapattu	80	4	132	Kbr
85) Thenmudiyanur	76	9	165	Kbr
86) Unnamalaipalayam	115	8	94	Kbr
87) Veeranam	74	11	120	Kbr
88) Vanapuram	90	8	142	Kbr
89) Varagur	65	6	94	Kbr
90) Vakkulapattu	31	6	172	Kbr

LAND CAPABILITY

CHENGAM TALUK

Area (ha)	Land Capability Classification	Soil Series	Limitation	Needs
18347	II se	Kampattu Mathur Kurumbalur	Erosion Surface run off Topography.	Soil conservation
385	II sw	Suramangalam	Wetness Salinity	Improvement of drainage Selection of crops
1101	IV se	Pachol	Erosion Shallow depth	Soil conservation Selection of crops

Class

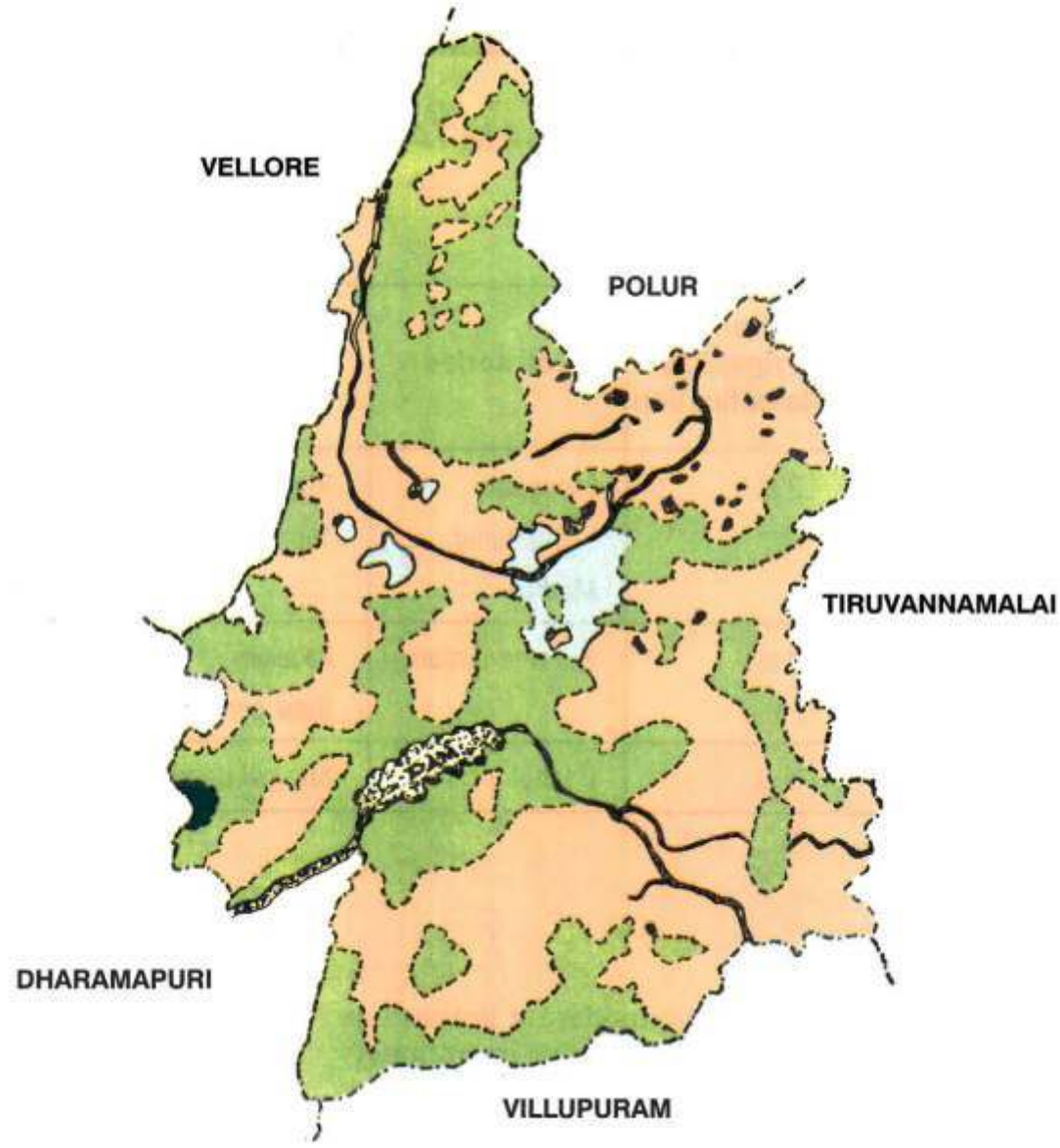
II Good cuitivable lands that have moderate limitations for sustained use under agriculture

IV. Lands that have very severe limitations for sustained use under agriculture

Sub Class

s. Root zone Limitation
e. Erosion and run off
w. Excess water

LAND CAPABILITY
CHENGAM TALUK



LAND IRRIGABILITY

CHENGAM TALUK

Area (ha)	Land Irrigability Classification	Soil series	Limitation
18347	2 st	Kampattu Kurumbalur Mathur	Run off Topography
385	2 st	Suramangalam	Alkalinity Slow permeability
1101	3 st	Pachol	Shallow depth

Class

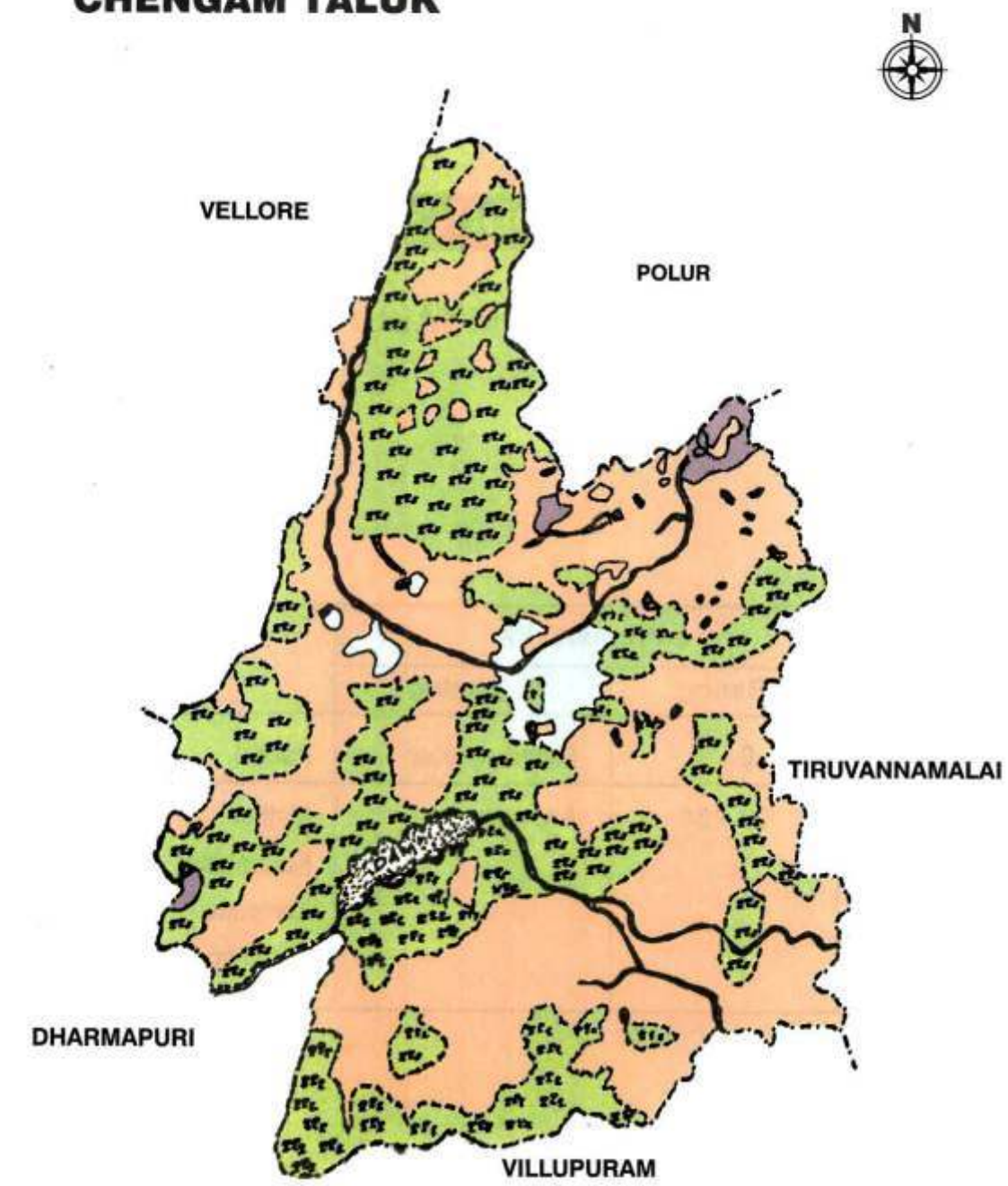
2 Lands that have moderate limitations for sustained use under irrigation.

3 Lands that have severe lilmitations for sustained use under irrigation.

Sub calass

s – Soil limitation
t – Topography

LAND IRRIGABILITY
CHENGAM TALUK



REFERENCE

- DISTRICT BOUNDARY
- TALUK BOUNDARY
- RIVERS & GULLY
- TANKS
- FOREST BOUNDARY

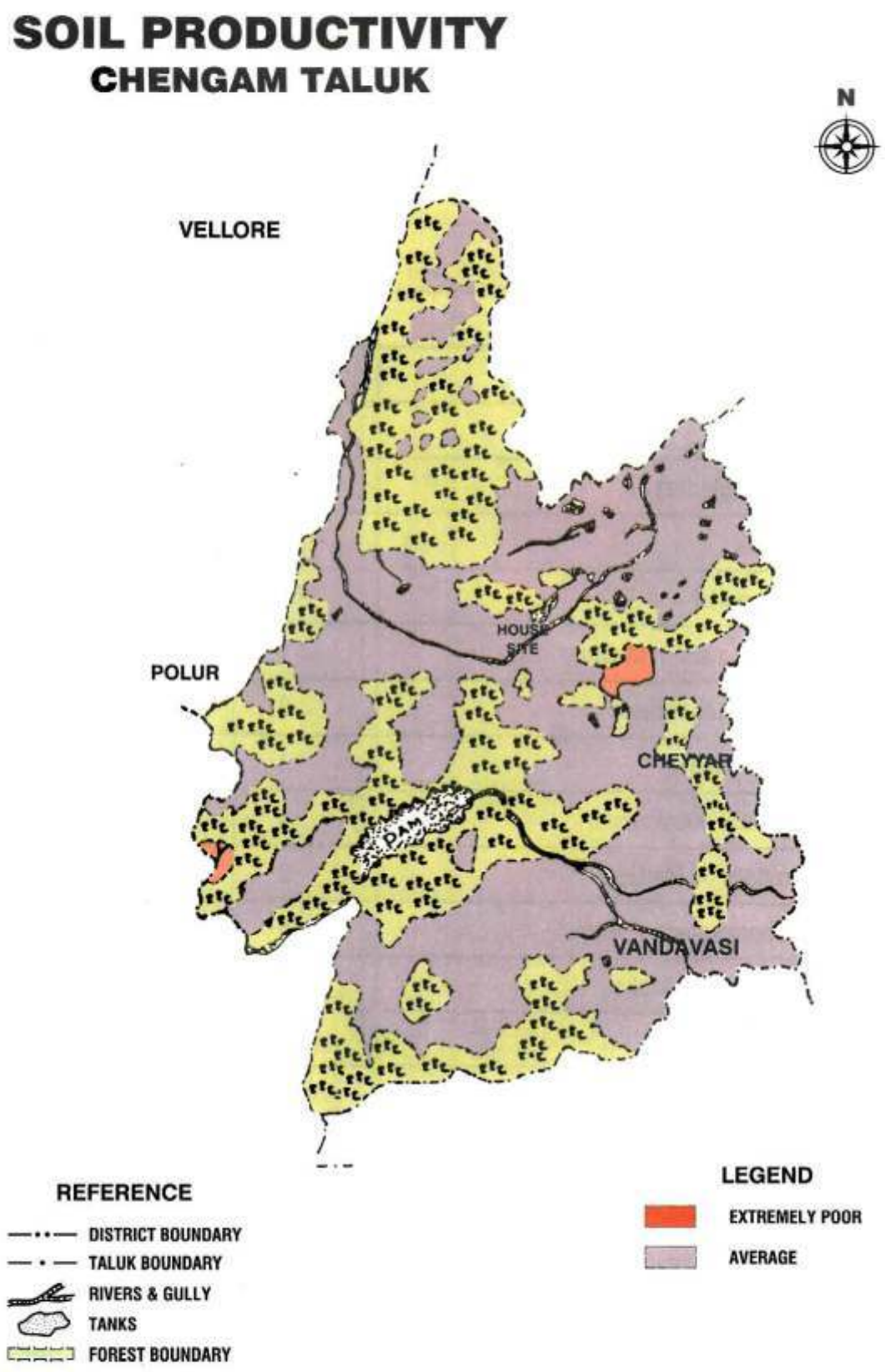
LEGEND

- 2 st
- 2 sd
- 3 st

SOIL PRODUCTIVITY

CHENGAM TALUK

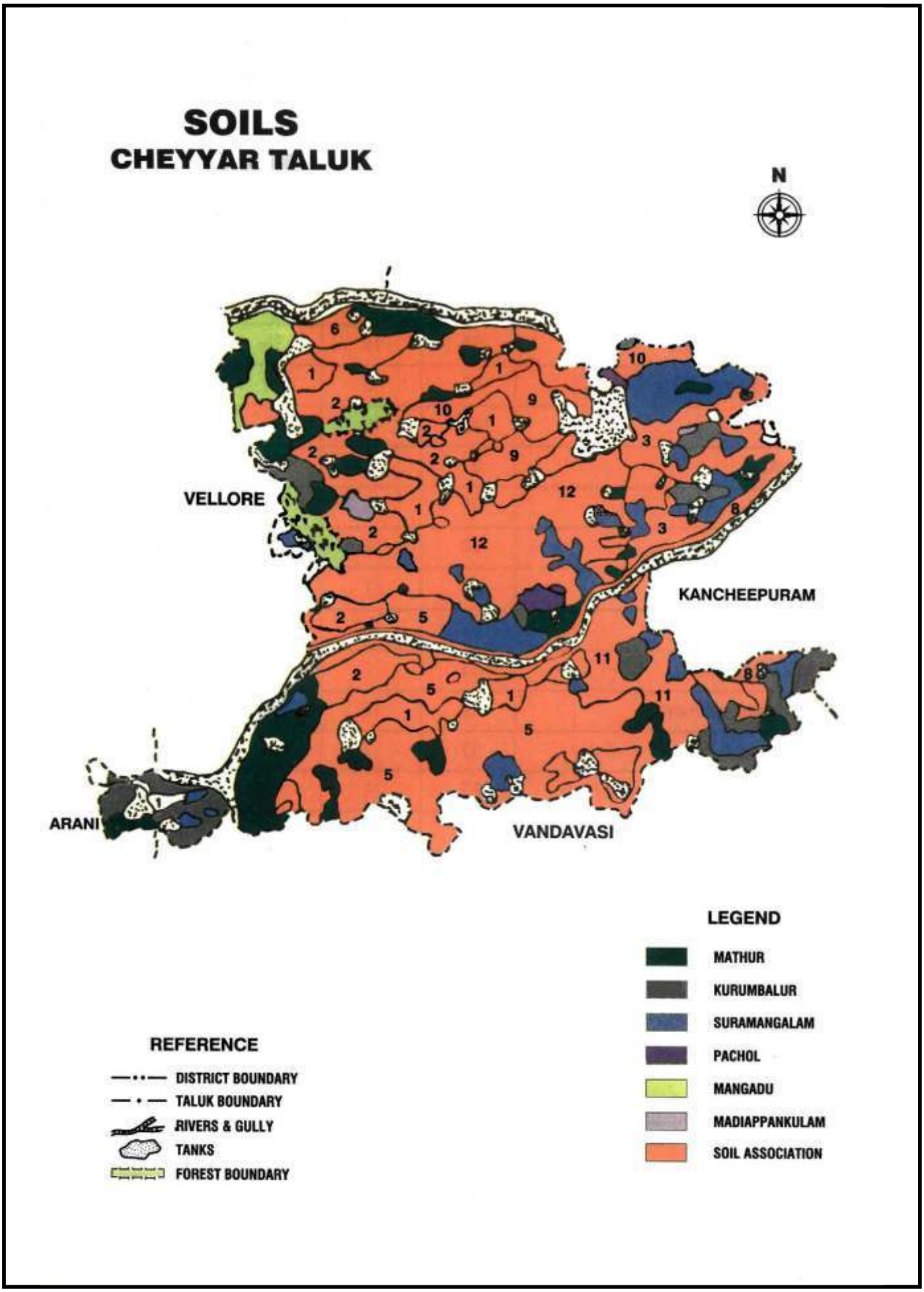
Area (ha)	Productivity		Soil series
	Rating	Grouping	
1101	0 – 7	Extremely poor	Pachol
19088	20 – 34	Average	Mathur Kurumbalur Kampattu Suramangalam


SOIL PRODUCTIVITY
CHENGAM TALUK
N
VELLORE
POLUR
HOUSE SITE
CHEYYAR
DAM
VANDAVASI
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY
LEGEND
EXTREMELY POOR
AVERAGE

SOILS

CHEYYAR TALUK

S.No.	Soil Series	Map Symbol	Extent	
			ha	%
1)	Mathur	Mth	11,765	13.88
2)	Kurumbalur	Kbr	8,424	9.94
3)	Suramangalam	Sur	5,387	6.36
4)	Pachol	Phl	1,204	1.42
5)	Madiappankulam	Mpk	1,554	1.83
6)	Mangadu	Mgd	828	0.98
7)	Kattampoondi	Ktp	155	0.18
8)	Suramangalam + Mathur	1	6,500	7.69
9)	Mathur + Karumbalur	2	4,959	5.85
10)	Mathur + Pachol	3	3,587	4.23
11)	Mangadu + Kurumbalur	4	2,771	3.27
12)	Kurumbalur + Mathur	5	2,123	2.50
13)	Madiappankulam + Mathur	6	802	0.95
14)	Mathur + Kurumbalur	7	3,056	3.61
15)	Pachol + Mathur	8	725	0.85
16)	Pachol + Kurumbalur	9	725	0.85
17)	Mathur + Pachol + Kurumbalur	10	2,874	3.39
18)	Pachol + Mathur + Kurumbalur	11	2,952	3.48
19)	Pachol + Kurumabalur + Mathur	12	6,526	7.69
	Forest		**338**	**0.40**
	Misellaneous land		**17,502**	**20.65**
	Total		**84,757**	**100.0**


SOILS
CHEYYAR TALUK
N
VELLORE
KANCHEEPURAM
ARANI
VANDAVASI
LEGEND
MATHUR
KURUMBALUR
SURAMANGALAM
PACHOL
MANGADU
MADIAPPANKULAM
SOIL ASSOCIATION
REFERENCE
DISTRICT BOUNDARY
TALUK BOUNDARY
RIVERS & GULLY
TANKS
FOREST BOUNDARY

VILLAGEWISE FERTILITY STATUS AND DOMINANT SOIL SERIES

CHEYYAR TALUK

Village	Fertility Status (kg/ac)			Dominant soil series
	N	P	K	
ANAKAVUR PANCHAYAT UNION				
1) Akkur	90	7	91	Mth
2) Anakavur	70	6	51	Kbr
3) Arasanippalai	55	19	38	Rkp
4) Arasur	80	8	112	Kbr
5) Arumparthi	189	19	87	Rkp
6) Athi	91	13	175	Vpt
7) Buderi	81	15	185	Mth
8) Echur	80	9	141	Mth
9) Edaval	72	7	111	Vpt
10) Erumaivetti	98	10	229	Mth
11) Girijapuram	83	7	99	Sur
12) Kammanthangal	82	16	95	Mth
13) Kanikilupai	82	7	101	Sur
14) Kodanagar	82	8	95	Mth
15) Kolathur (Mel)	70	10	165	Kbr
16) Kottagram	84	19	180	Kbr
17) Kovilur	93	5	140	Kbr
18) Kunnavakkam	89	8	166	Mth
19) Madipakkam	83	8	82	Sur
20) Mulagiripattu	76	10	252	Kbr
21) Nedungal	87	8	116	Kbr
22) Perumpulimedu	87	7	191	Vpt
23) Purisai	136	9	90	Kbr
24) Sengadu	97	12	251	Kbr
25) Senianallur	81	18	104	Sur

Village	Fertility Status (kg/ac)			Dominant soil series
	N	P	K	
26) Seyyathuvannan	89	10	163	Kbr
27) Thavasi	73	11	60	Kbr
28) Thenthurai	73	7	93	Vpt
29) Thirumpoondi	83	8	82	Vbr
30) Vellai	70	8	95	Kbr
CHEYYAR PANCHAYAT UNION				
31) Anaputhur	83	5	128	Vpt
32) Arugavoor	90	15	85	Mth
33) Eraiyur	97	7	111	Kbr
34) Kalanipakkam	92	8	111	Kbr
35) Kaliyur	51	10	264	Klr
36) Kilapalavandal	129	15	62	Mth
37) Korkai	85	14	124	Kbr
38) Kunnathur	40	9	191	Sur
39) Madurai	82	26	103	Kbr
40) Marapakkam (Veda)	71	7	130	Mth
41) Mairanellur	91	6	59	Vpt
42) Melbuderi	67	6	130	Kbr
43) Mukkur	92	10	162	Kbr
44) Kunukapattu	86	8	92	Kbr
45) Naval	98	9	137	Kbr
46) Navalpakkam	89	13	107	Mth
47) Nedumpirai	107	17	122	Vpt
48) Palli	101	12	160	Vpt
49) Pappanthangal	81	9	164	Vpt
50) Periakoil	146	11	182	Mth
51) Perungalathur	79	12	97	Vpt
52) Puliyaranpakkam	81	9	56	Vpt

Village	Fertility Status (kg/ac)			Dominant soil series
	N	P	K	
53) Pullavakkam	105	15	184	Kbr
54) Ramakrishnapuram	87	4	140	Mth
55) Sarampattu	84	9	55	Rkp
56) Shesamangalam (mel)	95	9	129	Kbr
57) Sirunallur	125	8	105	Sur
58) Siruveliyanallur	121	8	122	Vpt
59) Thandarai	99	13	80	Mth
60) Thirumani	93	18	183	Kbr
61) Tholuppedu	109	10	110	Vpt
62) Vadathandalam	94	15	287	Mth
63) Valavandal	89	9	104	Sur
64) Veliyanallur	96	11	144	Mth
65) Vinnamangalam	68	7	215	Kbr
66) Vinnavadi	141	13	478	Vpt
VEMBAKKAM PANCHAYAT UNION				
67) Abdulapuram	84	8	130	Mth
68) Alivadithangal	60	5	81	Vpt
69) Chitamur	86	18	166	Kbr
70) Dusi	77	7	80	Sur
71) Elacheri	78	9	207	Mth
72) Kolathur (kil)	70	10	180	Vpt
73) Kudianthangal	63	10	73	Sur
74) Kuthanur	67	9	59	Mth
75) Manandur	83	20	75	Sur
76) Mangalam	189	19	87	Vpt
77) Mathur	107	14	165	Mth
78) Melma	89	15	110	Vpt
79) Mamandi	72	20	80	Mth
80) Nayanthangal	63	12	160	Mth

Village	Fertility Status (kg/ac)			Dominant soil series
	N	P	K	
81) Nelli (Kill)	95	8	68	Vpt
82) Nemili	145	7.5	98	Kbr
83) Netteri	90	10	71	Mth
84) Palavarani	85	10	200	Mth
85) Pavoor	56	5	200	Mth
86) Perungattur	91	10	148	Sur
87) Pillandi	97	11	102	Mth
88) Pillanthangal	105	8	148	Mth
89) Pudupalayam	86	9	79	Rkp
90) Pulindai	74	10	140	Mth
91) Pulivalam	105	15	184	Mpk
92) Pulaithangal	96	7	90	Sur
93) Rantham	86	8	92	Kbr
94) Sethuvanthangal	98	11	116	Mth
95) Solavaram	107	7	132	Mpk
96) Shomovaram	125	8	105	Sur
97) Sirunallur	130	9	110	Mth
98) Sirunavalpattu	86	8	116	Mpk
99) Siruvanjipattu	85	8	38	Mpk
100) Sumangali	95	26	132	Sur
101) Surattal	64	9	79	Sur
102) Thenkalani	104	9	150	Sur
103) Thennampattu	72	9	80	Sur
104) Thiruppannagadu	64	9	79	Sur
105) Thiruppannur	84	8	116	Sur
106) Vadagampattu	101	6	107	Vpt
107) Vagai	92	10	126	Mth
108) Vakkadai	54	14	144	Kbr
109) Vembakkam	92	18	121	Sur
110) Vengalathur	90	8	86	Mth

LAND CAPABILITY

CHEYYAR TALUK

Area (ha)	Land Capability Classification	Soil series	Limitation	Needs
22726	II se	Mathur Kurumbalur Madiappankulam Mangadu Kattampoondi	Erosion surface run off topography	Soil conservation
5387	II sw	Suramangalam	Wetness salinity	Improvement of drainage selection of crops
1204	IV se	Pachol	Erosion shallow depth	Soil conservation selection of crops

Class

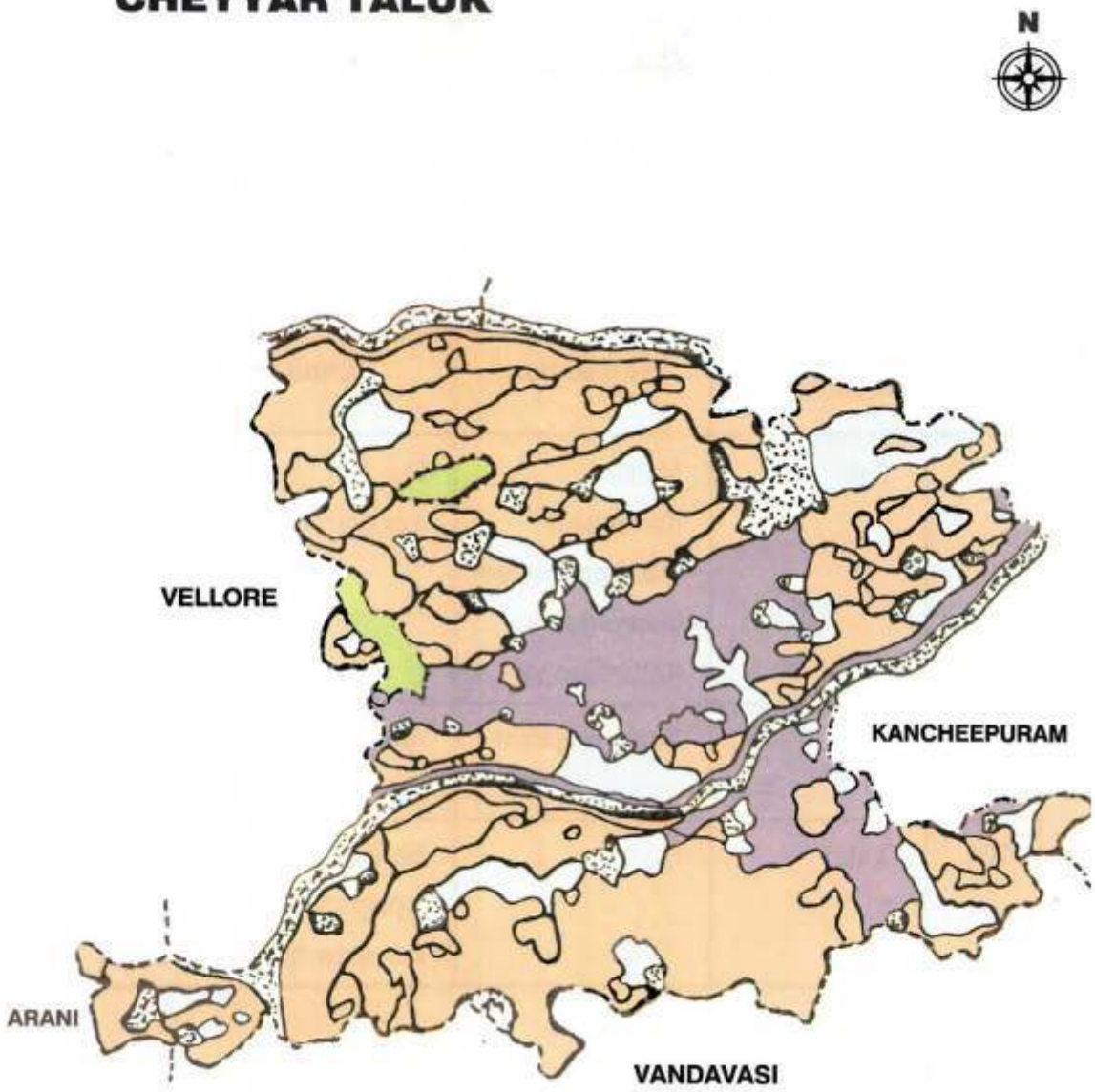
II. Good cultivable lands that have moderate limitations for sustained use under agriculture

IV. Lands that have very severe limitations for sustained use under agriculture

Sub class

s. Root Zone limitation
e. Erosion and run off
w. Excess water

LAND CAPABILITY
CHEYYAR TALUK



LAND IRRIGABILITY

CHEYYAR TALUK

Area (ha)	Irrigability Classification	Soil Series	Limitation
22726	2 st	Mathur Kurumbalur Madiappankulam Mangadu Kattampoondi	Run off topography
5387	2 sd	Suramangalam	Alkalinity slow permeability
1204	3 st	Pachol	Shallow depth topography low water holding capactiy

Class

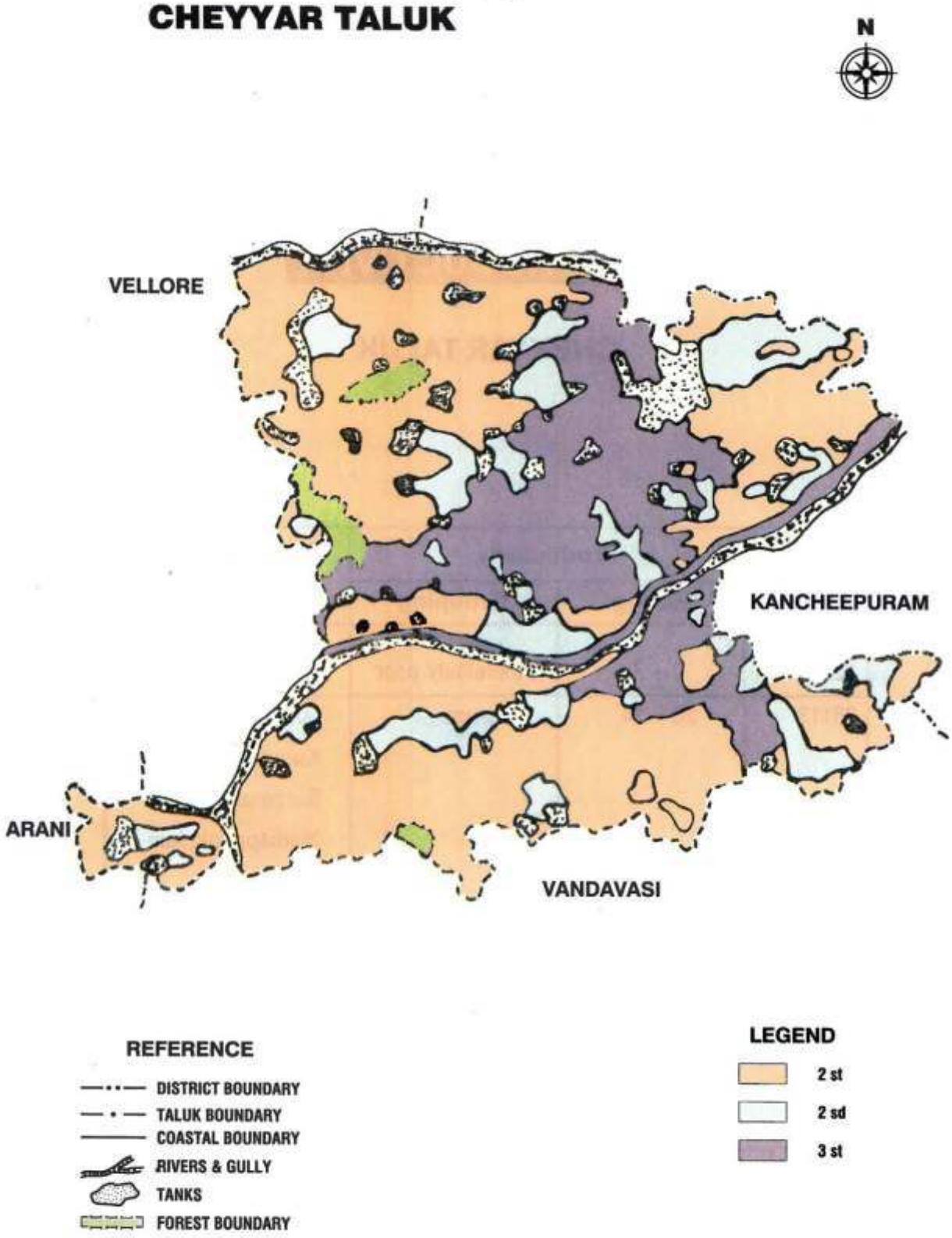
2 Lands that have moderate limitation for sustained use under irrigation.

3 Lands that have severe lilmitations for sustained use under irrigation.

Sub class

s – Soil limitation
t – Topography
d – Drainage

LAND IRRIGABILITY
CHEYYAR TALUK

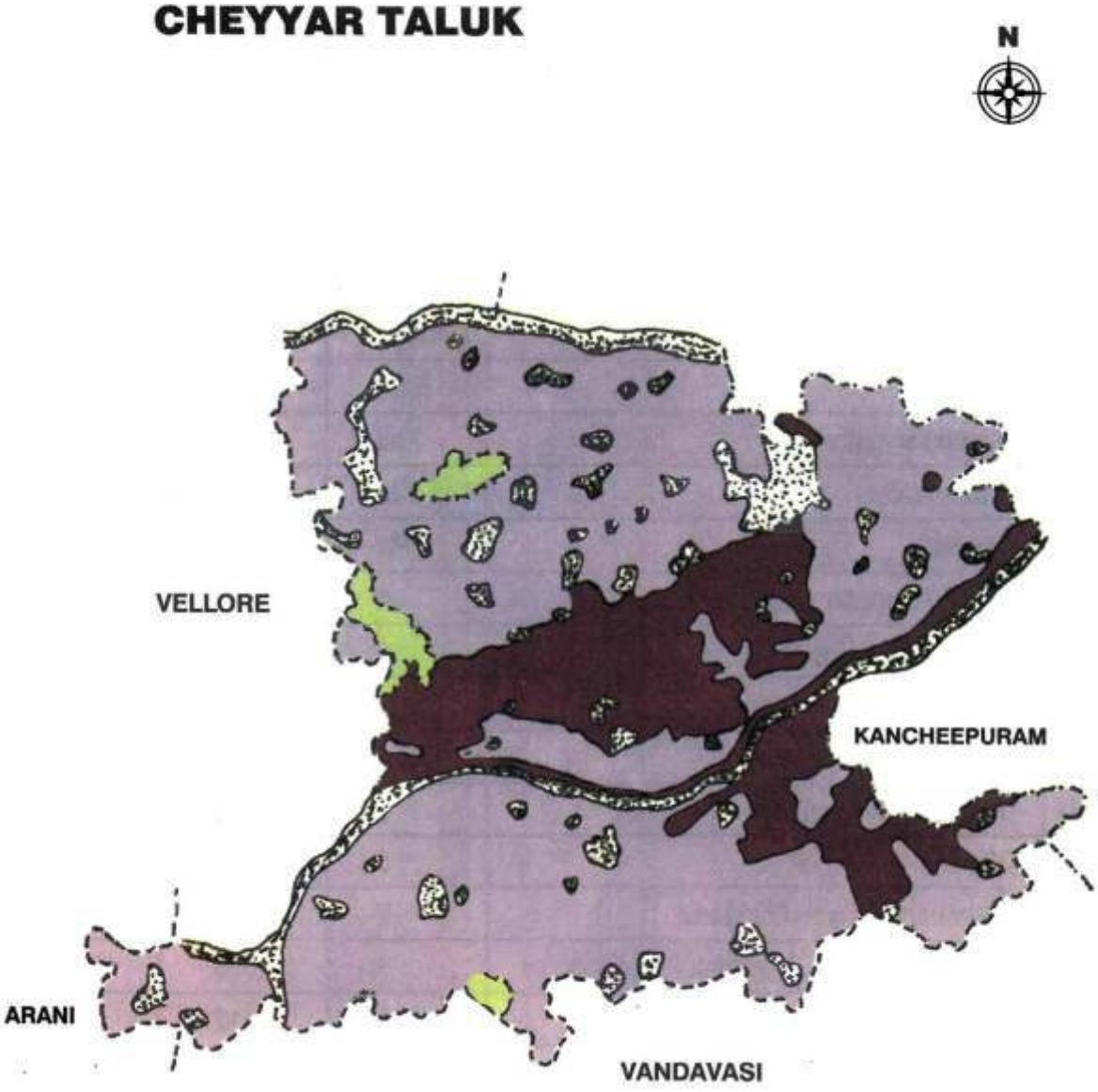


SOIL PRODUCTIVITY

CHEYYAR TALUK

Area (ha)	Productivity		Soil Series
	Rating	Grouping	
1204	0 – 7	Extremely poor	Pachol
28113	20 – 34	Average	Mathur Kurumbalur Suramangalam Madiappankulam Mangadu Kattampoondi

SOIL PRODUCTIVITY
CHEYYAR TALUK

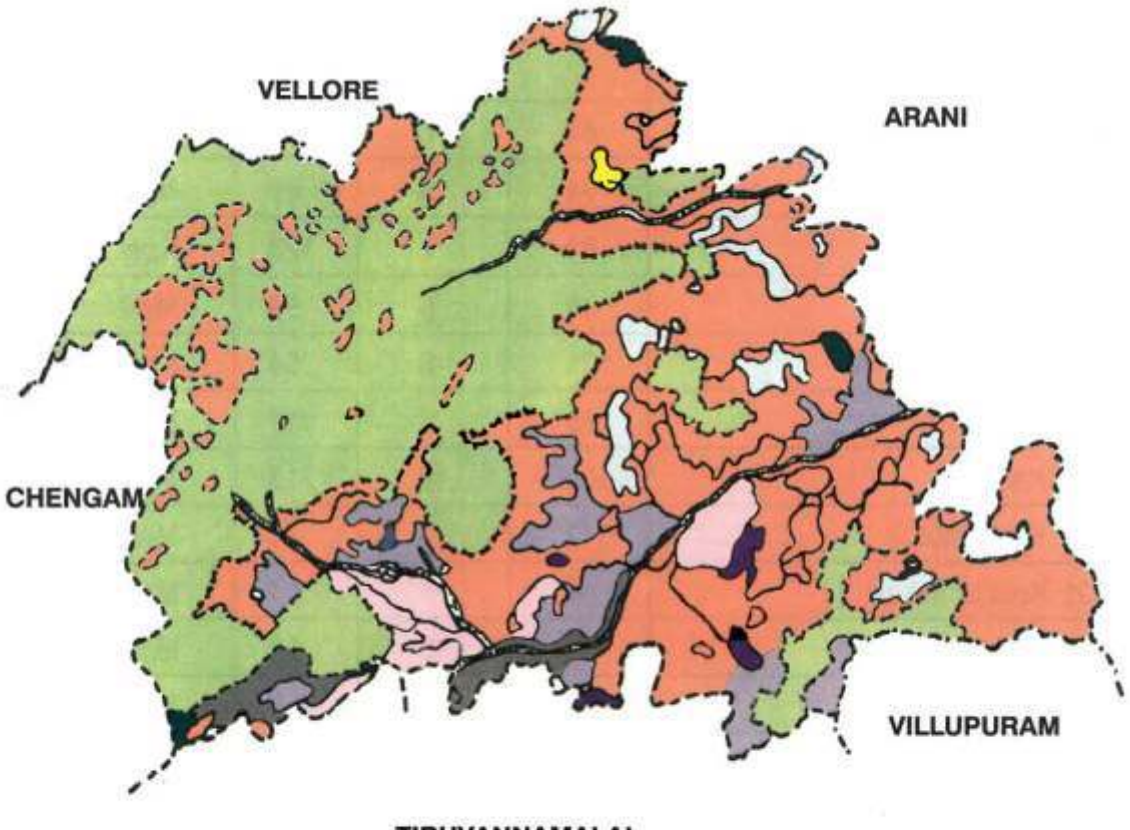


SOILS

POLUR TALUK

S.No.	Soil Series	Map Symbol	Extent	
			ha	%
1)	Suramangalam	Sur	9,246	6.29
2)	Mampattu	Mpu	5,934	4.03
3)	Idayapatti	Idp	3,781	2.57
4)	Mangadu	Mgd	1,127	0.77
5)	Kuppam	Kpm	1,287	0.87
6)	Kanakkampattu	Kpu	1,554	1.06
7)	Kurumbalur	Kbr	570	0.39
8)	Pachol	Phl	259	0.18
9)	Kanakkampattu + Mampattu	1	5,465	3.72
10)	Mampattu + Kuppam	2	6,604	4.49
11)	Mampattu + Mangadu	3	130	0.09
12)	Kurumbalur + Kuppam	4	1,321	0.90
13)	Kuppam + Mampattu	5	3755	2.55
14)	Kuppam + Pachol	6	855	0.58
15)	Suramangalam + Mangadu	7	544	0.37
16)	Suramangalam + Idayapatti	8	1,088	0.74
17)	Idayapatti + Suramangalam	9	2,512	1.71
18)	Mampattu + Kurumbalur + Kuppam	10	1,865	1.27
19)	Mampattu + Kuppam + Kanakkampattu	11	5,262	3.58
20)	Mampattu + Kuppam + Pachol	12	4,403	2.99
21)	Kuppam + Mampattu + Pachol	13	3,009	2.05
22)	Kuppam + Mampattu + Kanakkampattu	14	4,273	2.90
23)	Kuppam + Mampattu + Kurumbalur	15	6,008	4.08
24)	Pachol + Kuppam + Mampattu	16	6,034	4.10
	Forest		**63,508**	**43.19**
	Miscellaneous land		**6,657**	**4.53**
	Total		**1,47,046**	**100.0**

SOILS
POLUR TALUK



LEGEND

- KANAKKAMPATTU
- IDAYAPATTI
- MAMPATTU
- SURAMANGALAM
- MANGADU
- KURUMBALUR
- PACHOL
- KUPPAM
- SOIL ASSOCIATION

REFERENCE

- DISTRICT BOUNDARY
- TALUK BOUNDARY
- RIVERS & GULLY
- TANKS
- FOREST BOUNDARY

VILLAGEWISE FERTILITY STATUS AND DOMINANT SOIL SERIES

POLUR TALUK

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
CHETPET PANCHAYAT UNION				
1) Alampoondi	99	22	126	Mpu
2) Alliyalamangalam	79	6	113	Mpu
3) Ariyathur	67	8	127	Sur
4) Aurmbalur	81	8	73	Mpu
5) Athurai	94	8	86	Mpu
6) Chetpet	91	7	128	Kpm
7) Cuddalore	98	9	99	Mpu
8) Edayankolathur	101	5	58	Kpm
9) Indiravanam	95	7	112	Mpu
10) Kalur	109	16	213	Mpu
11) Karikathur	112	3	71	Mpu
12) Koralapakkam	64	7	54	Mpu
13) Mandakolathur	95	8	92	Idp
14) Mandaparai	95	9	138	Mpu
15) Mansurabad	77	9	112	Kpu
16) Maruthuvambadi	71	15	17	Kpu
17) Mathimangalam	91	10	106	Mpu
18) Nambedu	100	13	138	Kpm
19) Nreasingapuram	79	10	105	Kpm
20) Randam	91	7	128	Kpm
21) Semmiyamangalam	83	8	131	Idp
22) Sennadhal	74	11	107	Kpm
23) Tennagaram	76	6	117	Kpm
24) Thirumalai	107	4	73	Mpu
25) Vasur	69	26	107	Sur
26) Villapakkam	89	11	135	Phl

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
KALASAPAKKAM PANCHAYAT UNION				
27) Adamangalam	75	16	94	Sur
28) Alangramangalam	106	14	222	Mpu
29) Anaivadi	91	9	102	Mpu
30) Devarayanapalayam	79	16	104	Kbr
31) Elathur	86	9	93	Kbr
32) Ernamangalam	86	9	162	Sur
33) Gengalamahadevi	96	14	144	Kpm
34) Kadaladi	83	11	93	Mpu
35) Kadampalayam	74	5	93	Kbr
36) Kalasapakkam	72	11	232	Idp
37) Kalvasal	96	9	144	Mpu
38) Kandapalayam	74	5	93	Sur
39) Kappalur	95	8	107	Sur
40) Kettavarampalayam	88	9	139	Sur
41) Kilpotharai	150	10	316	Sur
42) Ladavaram	58	8	169	Mpu
43) Mattuvettu	86	9	77	Mpu
44) Melarani	85	9	96	Kbr
45) Modiyur	96	16	130	Mpu
46) Pallipattu	85	9	142	Mpu
47) Panampattu	90	15	111	Mpu
48) Pathiyavadi	82	8	133	Mpu
49) Pillur	93	9	71	Sur
50) Poondi	72	17	39	Sur
51) Pulivannandal	73	5	124	Mpu
52) Sengapatheri	143	4	71	Mpu
53) Siruvallur	86	6	120	Sur

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
POLUR PANCHAYAT UNION				
54) Ananthapuram	85	7	119	Kpm
55) Athimur	72	13	89	Kpm
56) Edapparai	125	20	277	Mpu
57) Eluvambadi	97	9	92	Sur
58) Enduvanbadi	93	9	96	Mpu
59) Kalambur	81	7	209	Mpu
60) Kallkuppam	82	9	172	Kpm
61) Kalpattu	85	10	173	Kbr
62) Kelur	82	9	137	Idp
63) Kuppam	96	11	125	Kpm
64) Mampattu	123	14	80	Sur
65) Mukkurumbi	79	7	112	Mpu
66) Narayanamangalam	83	11	124	Idp
67) Odanagaram	94	9	113	Kpm
68) Padavedu	53	8	97	Sur
69) Polur	62	12	124	Mpu
70) Potharai	74	14	130	Mpu
71) Pudupalayam	83	12	72	Sur
72) Rendaripattu	87	11	134	Idp
73 Sandavasal	94	14	130	Mpu

Village		Village Fertility Index (kg/ac)			Dominant Soil Series
		N	P	K	
74	Sengunam	125	11	97	Mpu
75	Setharampattu	88	53	438	Mpu
76	Thurinjikuppam	92	8	128	Mpu
77	Tindivanam	88	8	98	Kpm
78	Vellur	105	17	89	Mpu
79	Venmani	61	5	111	Mpu
80	Vilankuppam				

LAND CAPABILITY

POLUR TALUK

Area (ha)	Land Capability Classification	Soil Series	Limitation	Needs
9185	II se	Mampattu Mangadu Kanakkampattu Kurumbalur	Erosion surface run off topography	Soil conservation
9246	II sw	Suramangalam	Wetness salinity	Drainage improvement selection of crops
5068	III sw	Idayapatty Kuppam	Alkalinity cracks	Soil reclamation
259	IV se	Pachol	Erosion shallow depth	Soil conservation selection of crops.

Class

II. Good cultivable lands that have moderate limitations for sustained use under agriculture.

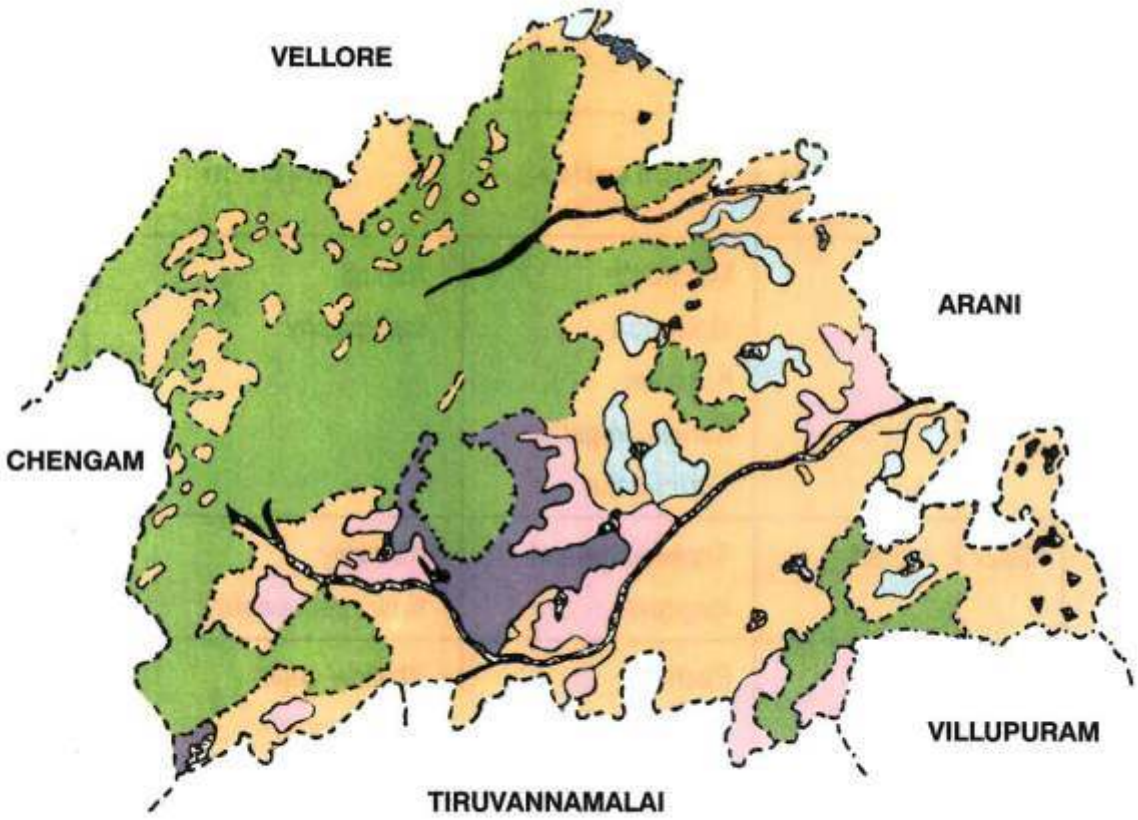
III. Moderately good cultivable lands that have severe limitations for sustained use under agriculture.

IV. Lands that have very severe limitations for sustained use under agriculture.

Sub class

s. Root Zone limitation
e. Erosion and run off
w. Excess water

LAND CAPABILITY
POLUR TALUK



REFERENCE

- DISTRICT BOUNDARY
- TALUK BOUNDARY
- RIVERS & GULLY
- TANKS
- FOREST BOUNDARY

LEGEND

- II se
- II sw
- III sw
- III se

LAND IRRIGABILITY

POLUR TALUK

Area (ha)	Land Irrigability Classification	Soil series	Limitation
10472	2 st	Mampattu Mangadu Kuppam Kanakkampattu Kurumbalur	Run off topography
13027	2 sd	Suramangalaml Idayapatti	Alkalinity slow permeability
259	3 st	Pachol	Shallow depth topography

Class

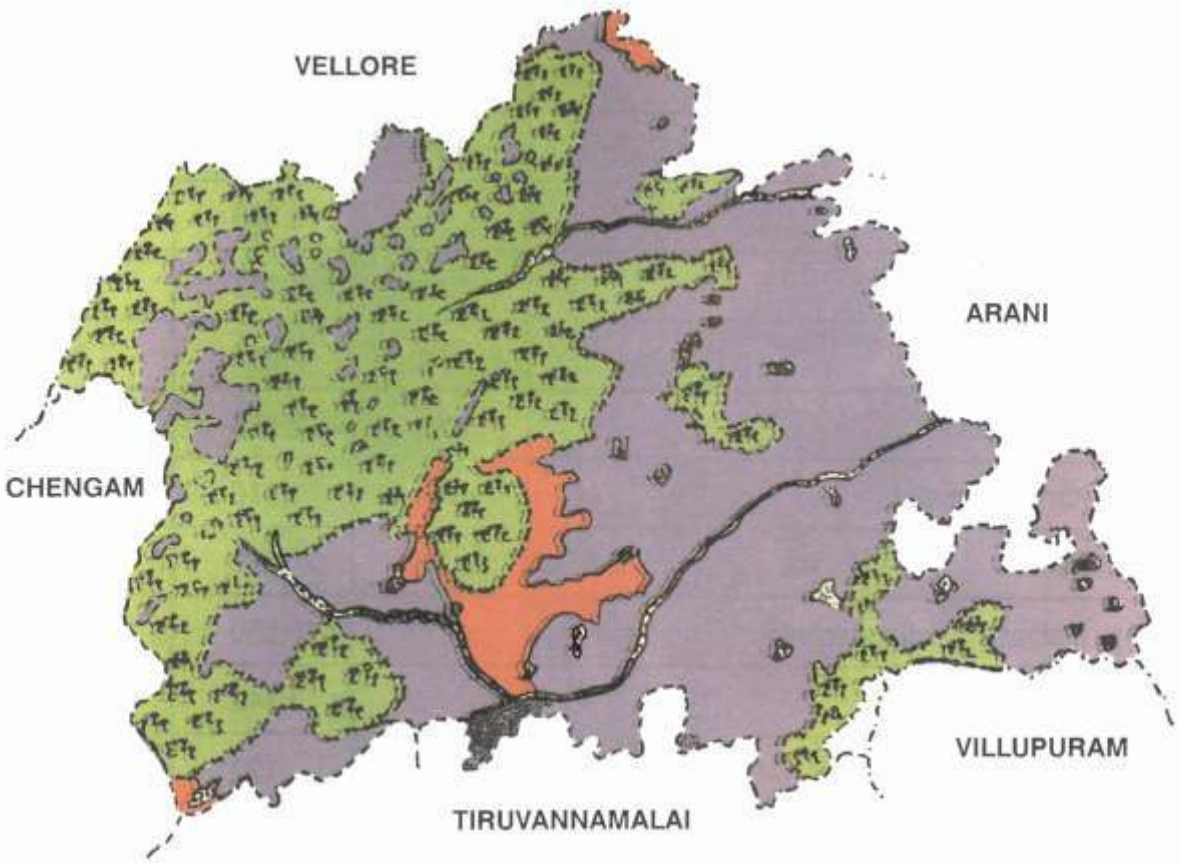
2 Lands that have moderate limitations for sustained use under irrigation.

3 Lands that have severe limitations for sustained use under irrigation.

Sub class

s - Soil limitation
t - Topography
d - Drainage

SOIL PRODUCTIVITY
POLUR TALUK



SOIL PRODUCTIVITY

POLUR TALUK

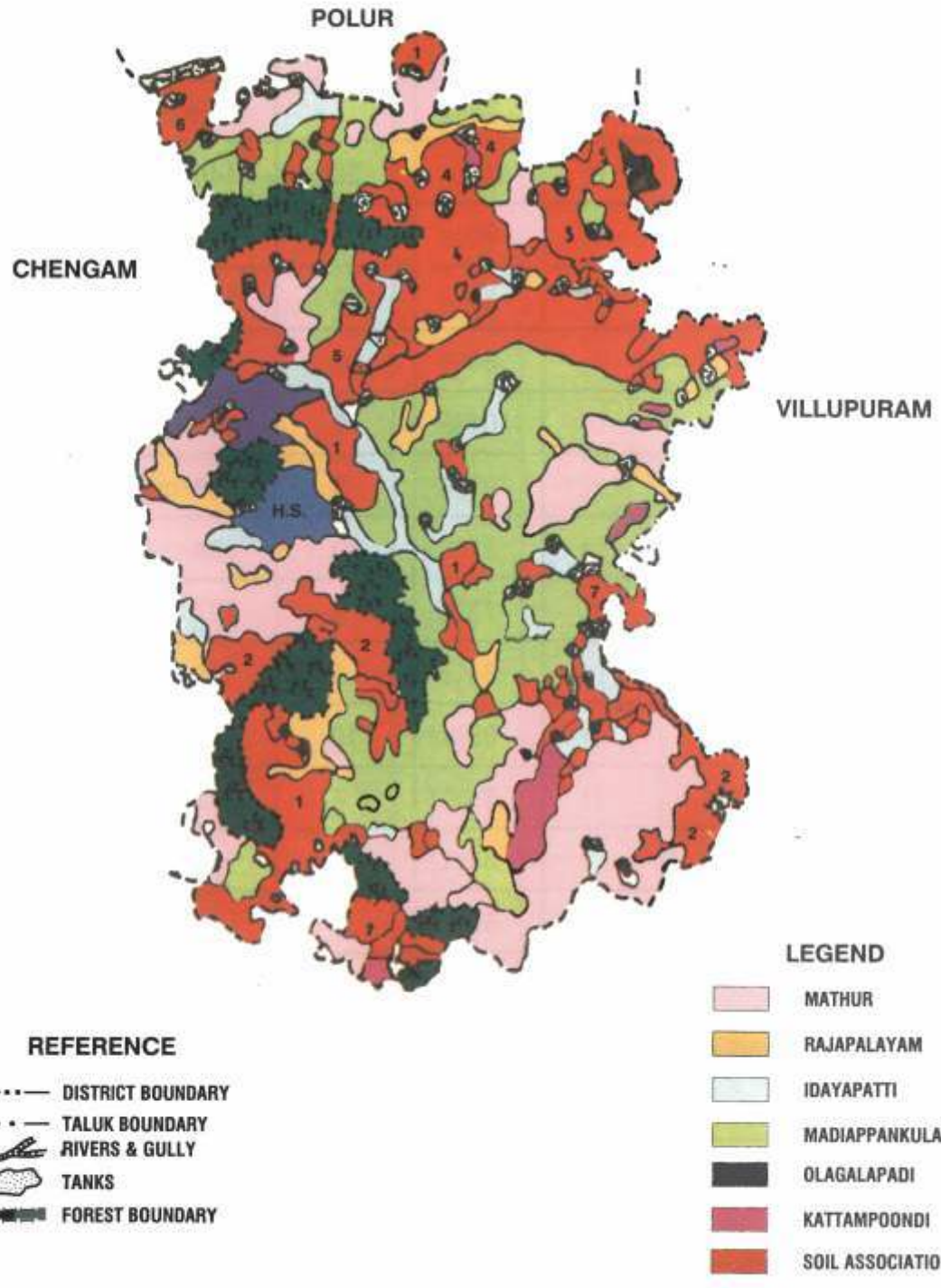
Area (ha)	Productivity		Soil series
	Rating	Grouping	
259	0 – 7	Extremely poor	Pachol
23499	20 – 34	Average	Kuppam Mangadu Suramangalam Kurumbalur Mambpattu Idayapatty Kanakkampattu

SOILS

TIRUVANNAMALAI TALUK

Soil Series	Map Symbol	Extent	
		ha	%
1) Madiappankulam	Mpk	25,649	26.44
2) Mathur	Mth	19,839	20.45
3) Idayapatti	Idp	9,386	9.68
4) Rajapalayam	Rpm	4,103	4.23
5) Kattampoondi	Ktp	1,914	1.97
6) Olagalapadi	Ogp	2,165	2.23
7) Kanakkampattu	Kpu	1,370	1.41
8) Pachol	Phl	378	0.39
9) Mathur + Madiappankulam	1	10,650	10.98
10) Mathur + Pachol	2	3,142	3.24
11) Mathur + Olagalapadi	3	122	0.13
12) Pachol	4	2,279	2.35
13) Madiappankulam + Rajapalayam	5	4,255	4.39
14) Olagalapadi + Kattampoondi	6	686	0.70
15) Rajapalayam + Idayapatti	7	492	0.50
Forest		**8,463**	**8.72**
Others		**2,122**	**2.19**
Total		**97,015**	**100.0**

SOILS
TIRUVANNAMALAI TALUK



VILLAGEWISE FERTILITY STATUS AND DOMINANT SOIL SERIES

TIRUVANNAMALAI TALUK

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
TIRUVANNAMALAI PANCHAYAT UNION				
1) Aranji	67	7	79	Mpk
2) Avur	82	11	77	Mth
3) Angunam	84	7	49	Mth
4) Chellakuppam	115	20	146	Mph
5) Gandampai	90	9	118	Mth
6) Ganalapadi	86	9	132	Mpk
7) Karampoondi	84	8	74	Mpk
8) Karikalampady	101	6	83	Idp
9) Kattumalaiyanur	97	9	86	Mpk
10) Kethalampattu	81	13	74	Mpk
11) Kariyandipoondi	73	8	127	Mpk
12) Kallikulam	84	9	119	Mpk
13) Keekaloor	86	10	93	Mpk
14) Kivanoor	85	7	117	Mth
15) Kolathur	84	8	85	Mpk
16) Kunnakuppam	82	5	65	Mth
17) Kilpennathur	8	8	98	Mpk
18) Naiyanangalam	72	11	89	Mth
19) Namiyanthal	123	7	86	Mpk
20) Rajapalayam	101	10	121	Mpk
21) Samasipadi	97	13	84	Mpk
22) Severapoondi	85	14	113	Mth

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
23) Vaipur	78	5	99	Mth
24) Valadarakuppam	81	6	106	Mpk
25) Vayalur	89	16	131	Mpk
26) Adiannamalai	93	8	86	Mpk
27) Adayur	58	7	81	Mpk
28) Aiyampalayam	96	10	123	Mth
29) Anandal	95	6	23	Mpk
30) Andampallam	82	7	87	Ogp
31) Alaganandal	62	6	259	Mth
32) Allikaradepattu	84	8	103	Mth
33) Athiyandal	98	10	65	Mpk
34) Chinnakallapadi	81	14	143	Mth
35) Chinnakangeyam	126	12	87	Mpk
36) Isunalikatteri	58	5	56	Mth
37) Kosalai	57	10	203	Mpt
38) Kanchirapattu	125	10	130	Mpk
39) Kattmapoondi	120	11	120	Ktp
40) Kilnachipattu	125	10	130	Mth
41) Kadaganam	85	10	136	Mth
42) Kandiyankuppam	93	11	96	Mth
43) Kalleri	178	7	80	Mth
44) Kollakudi	106	8	124	Idp
45) Kannapanthal	80	7	71	Mth
46) Kilkarppur	59	7	77	Mth
47) Kolathur	90	9	110	Mtp

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
48) Melsettipattu	86	9	112	Mth
49) Melkanchirupattu	103	12	175	Mth
50) Madurampattu	82	14	152	Mth
51) Meyyur	79	10	185	Mth
52) Nachanandal	8	7	80	Mth
53) Nadupattu	105	11	186	Idp
54) Nallavanpalayam	89	10	128	Mth
55) Panditapattu	74	8	127	Mth
56) Perayampattu	97	11	116	Mth
57) Palayanur	62	7	78	Mpk
58) Papambadi	104	8	68	Mpk
59 Periyakallapadi	84	8	103	Mpk
60) Pannaiyur	73	5	196	Idp
61) Savalpundi	102	7	276	Mth
62) Tatayampalayam	86	8	89	Mth
63) Thennathur	62	9	179	Mth
64) Thirukavalavetti	72	6	104	Mth
65) Thiruvannamalai	82	13	131	Rpm
66) Udayanandal	85	10	167	Mth
67) Vaniyanthangal	104	9	120	Mpk
68) Viswanthangal	95	11	132	Mpk
69) Veliyambakkam	85	10	325	Mth
70) Vetavalam	91	7	191	Ogp

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
THURINJAPURAM PANCHAYAT UNION				
71) Arapakkam	59	5	114	Mth
72) Buthamangalam	84	8	72	Mth
73) Devanampattu	59	7	90	Mpk
74) Devanandal	94	9	60	Vpt
75) Durgai Namiyandal	55	9	147	Mth
76) Karaiyandal	72	8	500	Mth
77) Kolaravadi	97	10	120	Mth
78) Karkonam	94	16	62	Rpm
79) Kovur	98	12	61	Mpk
80) Mallavadi	80	8	83	Mth
81) M.N. Palayam	65	11	71	Mth
82) Mutharasampondi	83	14	68	Idp
83) Muniyanthal	83	17	126	Mth
84) Nayadumangalam	59	12	78	Mpk
85) Namiyanthal	55	9	147	Mpk
86) Nookambadi	89	6	88	Rpm
87) Oosambady	74	12	86	Mth
88) Perkuram	79	11	128	Rpm
89) Randam	95	9	63	Mth
90) Sadayaodai	86	18	63	Mth
91) Sorakolathur	80	6	59	Mth
92) Silapandal	80	10	83	Mth
93) Sanandal	77	17	89	Mth
94) Salaiyanur	72	11	71	Mth
95) Thurijapuram	55	12	122	Mpk
96) Uthirampoondi	82	12	99	Idp
97) Vedandavadi	61	4	61	Idp

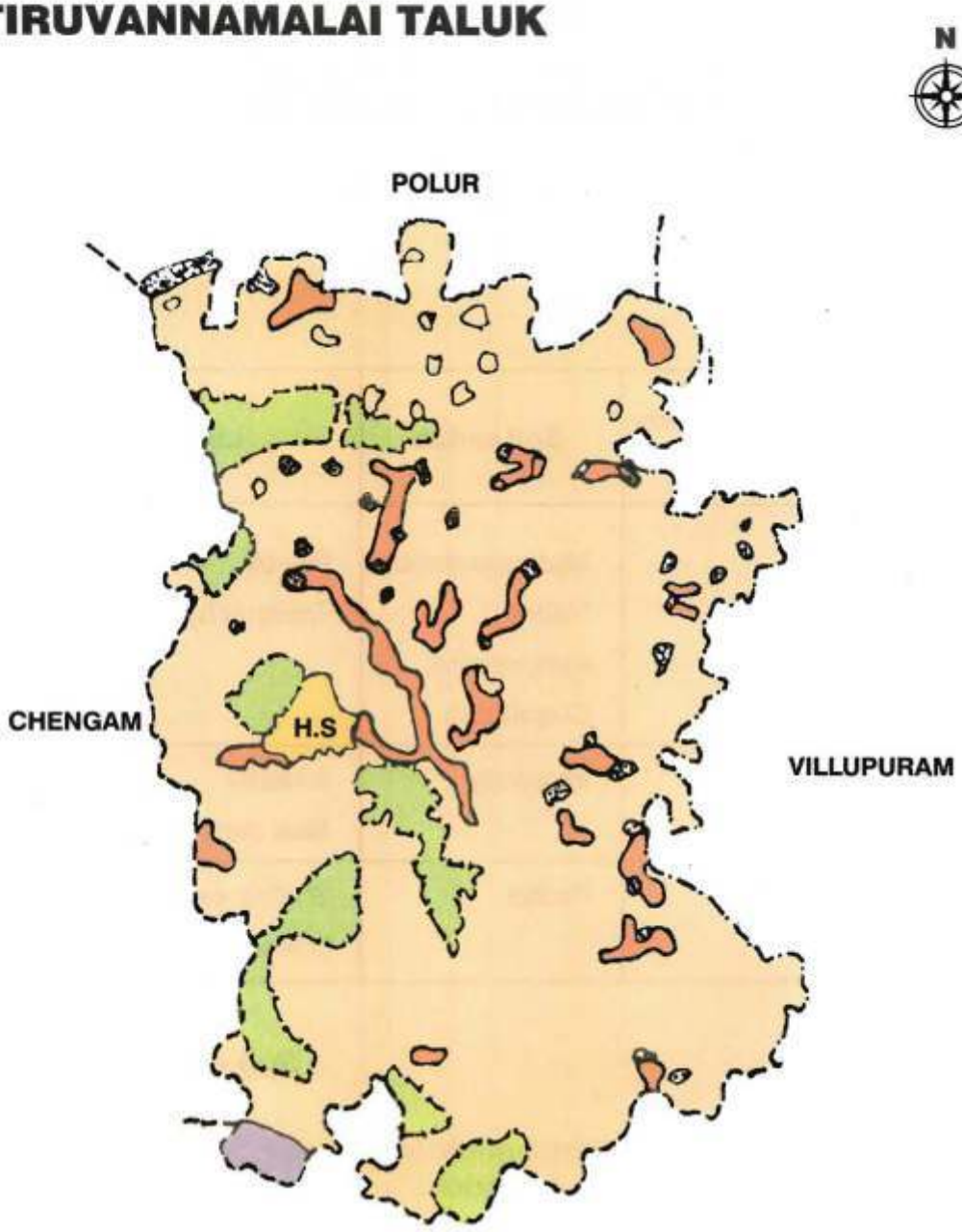
LAND CAPABILITY

TIRUVANNAMALAI TALUK

Area (ha)	Land Capability Classification	Soil series	Limitation	Needs
55040	II se	Mathur Madiappankulam Kattampoondi Olagalapadi Rajapalayam	Erosion Surface run off	Soil conservation
9386	III sw	Idayapatti	Alkalinity	Soil reclamation Drainage improvement
378	IV se	Pachol	Erosion Shallow depth	Soil conservation Selection of crops

Class	***Sub class***
II. Good cultivable lands that have moderate limitations for sustained use under agriculture.	s. Root zone limitation
III. Moderately good cultivable lands that have severe limitations for sustained use under agriculture.	e. Erosion and run off
IV. Lands that have very severe limitations for sustained use under agriculture.	w. Excess water

LAND CAPABILITY
TIRUVANNAMALAI TALUK



LAND IRRIGABILITY

TIRUVANNAMALAI TALUK

Area (ha)	Land Irrigability Classification	Soil series	Limitation
55046	2 st	Madiappankulam Mathur Kattampoondi Olagalapadi	Run off Topography
9386	2 sd	Idayapatty	Alkalinity Slow permeability
378	3 st	Pachol	Shallow depth Low water holding capacity

Class

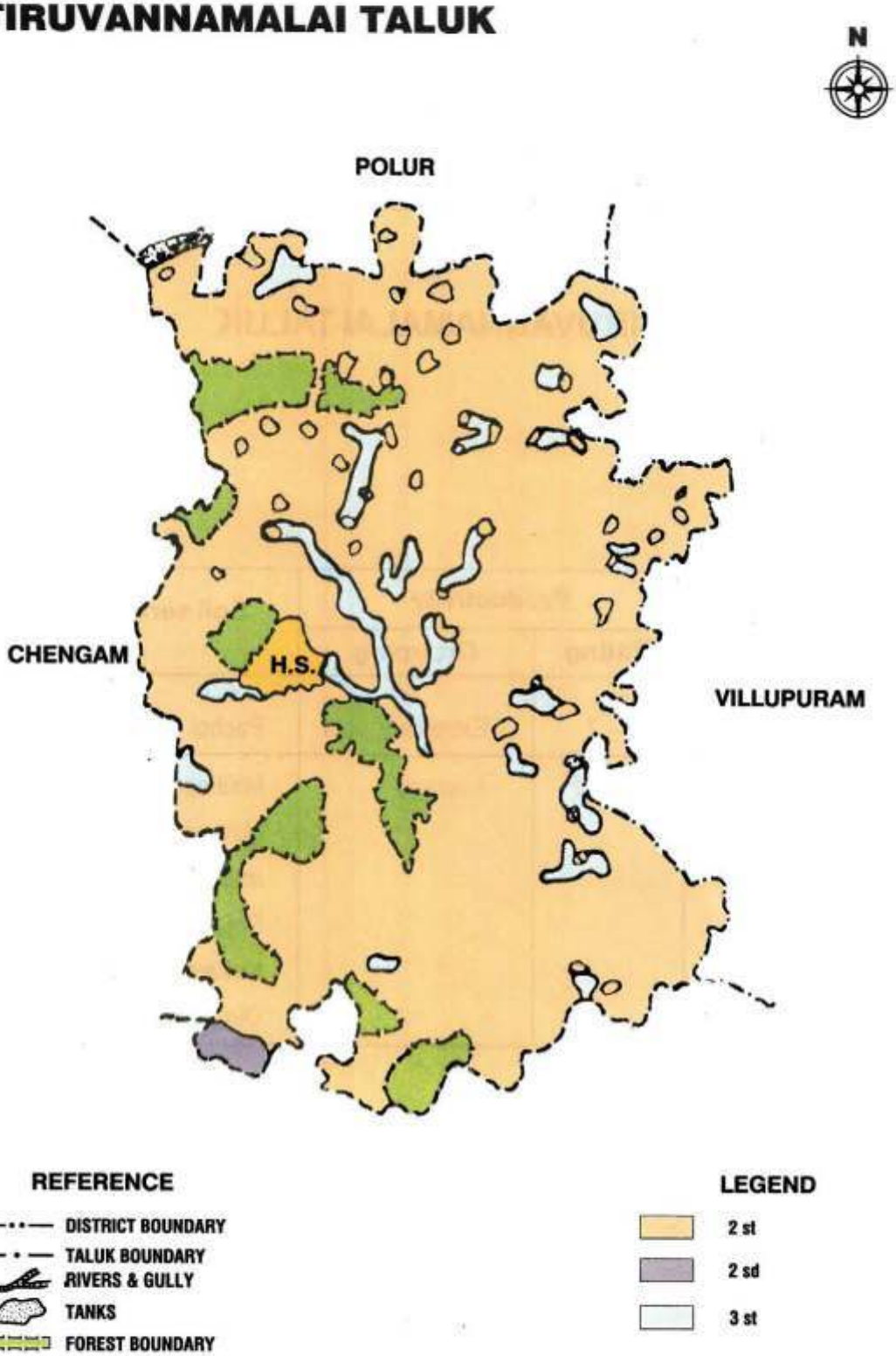
2. Lands that have moderate limitations for sustained use under irrigation.

3. Lands that have severe limitations for sustained use under irrigation.

Sub class

s - Soil limitation
t - Topography
d - Drainage

LAND IRRIGABILITY
TIRUVANNAMALAI TALUK

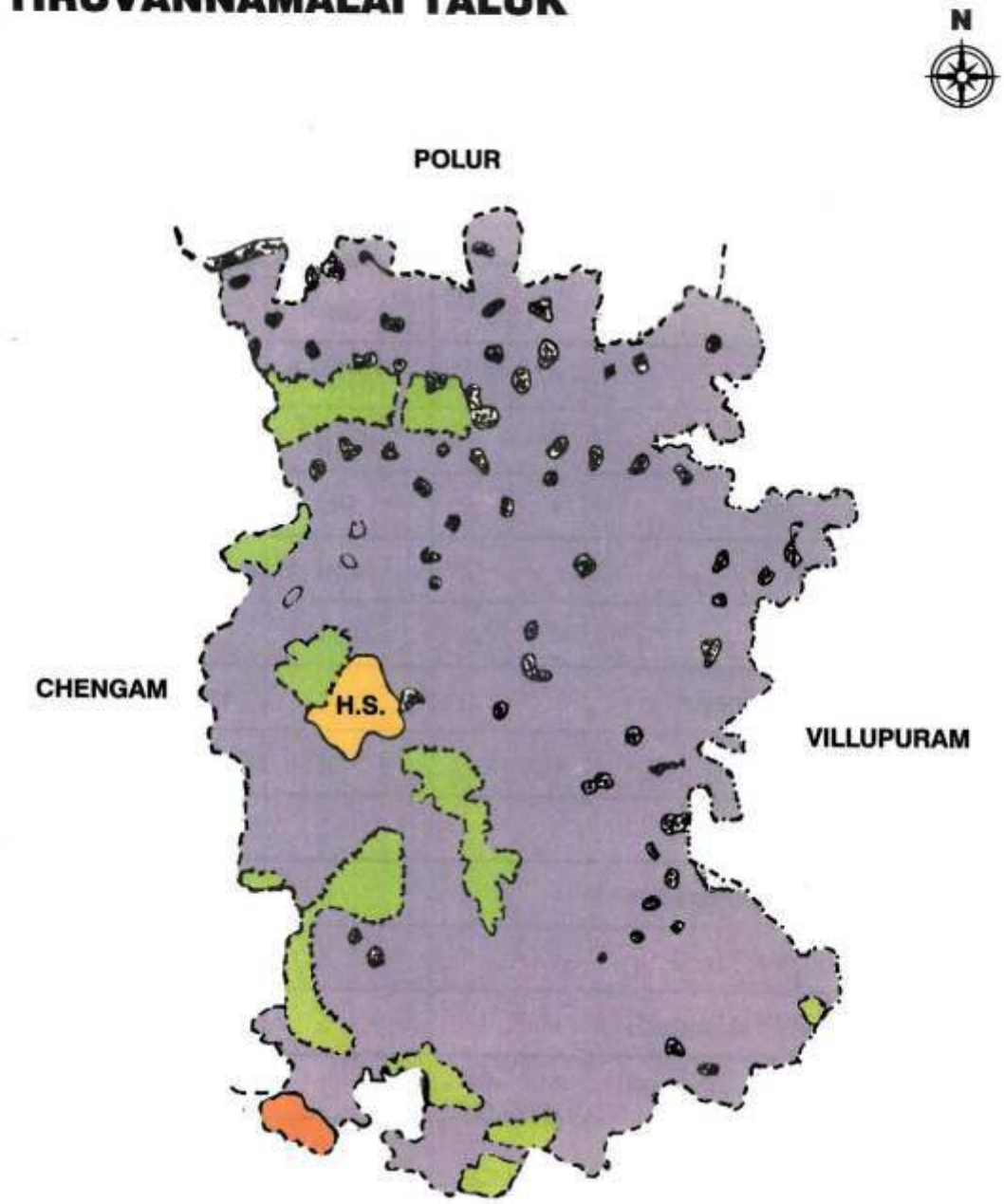


SOIL PRODUCTIVITY

TIRUVANNAMALAI TALUK

Area (ha)	Productivity		Soil series
	Rating	Grouping	
378	0 – 7	Extremely poor	Pachol
64426	20 – 34	Average	Madiappankulam Mathur Idayapatti Rajapalayam Kattampoondi Olagalapadi

SOIL PRODUCTIVITY
TIRUVANNAMALAI TALUK

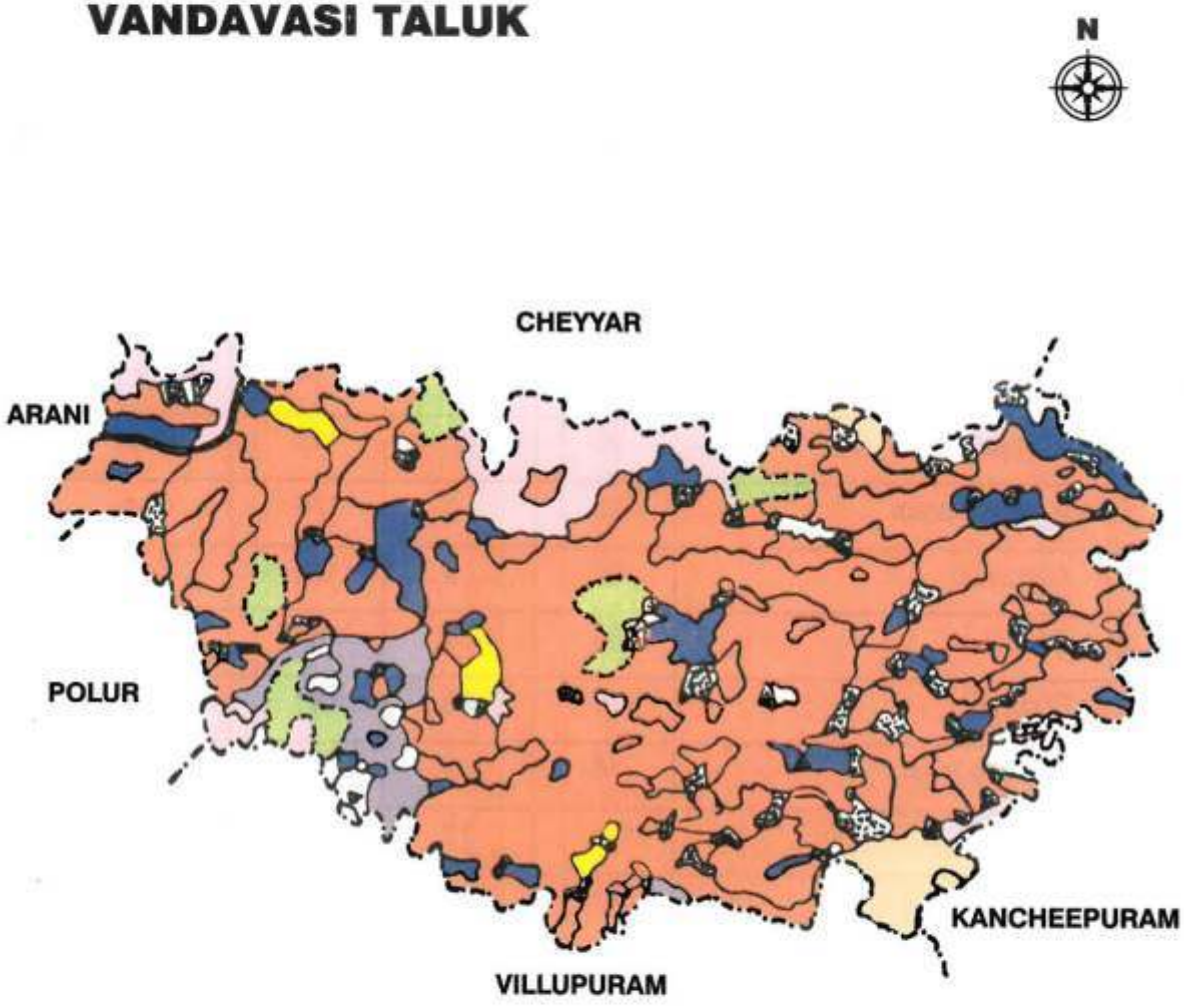


SOILS

VANDAVASI TALUK

S.No.	Soil Series	Map Symbol	Extent	
			ha	%
1)	Suramamgalam	Sur	8,014	9.11
2)	Tenneyur	Thr	6,451	7.34
3)	Olagalapadi	Ogp	3,801	4.32
4)	Pachol	Phl	981	1.12
5)	Mangadu	Mgd	189	0.21
6)	Madiappankulam	Mpk	85	0.10
7)	Olagalapadi + Tenneyur	1	11,526	13.10
8)	Olagalapadi + Pachol	2	1,178	1.34
9)	Tenneyur + Olagalapadi	3	5,703	6.48
10)	Tenneyur + Suramangalam	4	4,470	5.08
11)	Suramangalam + Tenneyur	5	5,828	6.63
12)	Suramangalam + Mangadu	6	445	0.51
13)	Mangadu + Suramangalam	7	790	0.90
14)	Pachol + Suramangalam	8	20,021	22.77
15)	Olagalapadi + Tenneyur + Pachol	9	1,904	2.16
16)	Tenneyur + Pachol	10	507	0.58
	Forest		**2,656**	**3.02**
	Miscellaneous land		**13,392**	**15.23**
	Total		**87,941**	**100.0**

SOILS
VANDAVASI TALUK



REFERENCE

- DISTRICT BOUNDARY
- TALUK BOUNDARY
- RIVERS & GULLY
- TANKS
- FOREST BOUNDARY

LEGEND

- PACHOL
- TENNEYUR
- OLAGALAPADI
- MANGADU
- MAIDAPPANKULAM
- SURAMANGALAM
- SOIL ASSOCIATION

VILLAGEWISE FERTILITY STATUS AND DOMINANT SOIL SERIES

VANDAVASI TALUK

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
PERANAMALLUR PANCHAYAT UNION				
1) Aliyur	86	8	90	Ogp
2) Amudur	88	10	115	Tnr
3) Anaibogi	77	13	98	Tnr
4) Annarudai	64	7	114	Tnr
5) Ariyapadi	96	9	115	Snp
6) Avaniyapuram	92	8	176	Ogp
7) Ayalapadi	92	9	115	Tnr
8) Enadal	84	8	183	Tnr
9) Erumbur	91	18	141	Snp
10) Gangapuram	78	8	120	Tnr
11) Injemedu	114	12	113	Ogp
12) Koilpuliyar	91	9	81	Tnr
13) Kuthuvedu	70	10	120	Snp
14) Marakunam	142	13	149	Opg
15) Namatodu	86	9	139	Tnr
16) Nambedu	83	8	114	Tnr
17) Narayanamangalm	100	9	155	Tnr
18) Pernamallur	80	8	53	Ogp
19) Pernambakkam	44	8	121	Ogp
20) Perunkadapattor	100	8	121	Ogp
21) Ragunathasamudram	93	11	122	Tnr
22) Sathiyapadi	78	8	100	Snp
23) Seeyamangalam	90	10	98	Snp
24) Thadinolambadi	85	9	150	Snp

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
25) Telampallam	89	8	125	Ogp
26) Vallam	88	17	121	Tnr
27) Velanallur	94	12	103	Tnr
28) Vepambattu	94	11	58	Tnr
29) Vinayagapuram	71	10	147	Snr
THELLAR PANCHAYAT UNION				
30) Achamangalam	95	15	194	Tnr
31) Agrahakottai	88	8	109	Tnr
32) Ariyampondi	89	7	116	Snp
33) Desur	94	6	59	Snp
34) Gangampoondi	68	20	125	Snp
35) Irumbili	98	10	118	Snp
36) Kadambai	87	17	150	Snp
37) Kandianallur	72	11	277	Ogp
38) Katteri	60	6	210	Snp
39) Kilnamandi	82	17	108	Snp
40) Kilvelliyar	81	19	81	Snp
41) Kolappalur	89	11	124	Tnr
42) Korakkottai	92	10	99	Snp
43) Kothandapuram	46	9	69	Snp
44) Kunnaganpondi	84	16	132	Snp
45) Kuthampattu	89	7	142	Snp
46) Madam	102	9	107	Ogp
47) Melcheri	90	10	160	Ogp
48) Melpadi	55	7	147	Ogp
49) Melvandiyambadi	91	6	96	Tnr

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
50) Nalleri	75	5	173	Snp
51) Nedungunam	64	9	116	Tnr
52) Panjarai	102	7	92	Snp
53) Palaveri	60	8	61	Snr
54) Ponnur	94	11	143	Snp
55) Ramasamudram	63	10	202	Ogp
56) Semmanbadi	94	9	94	Sur
57) Sathapondi	110	7	93	Snp
58) Senal	101	8	144	Snp
59) Teyyar	85	16	126	Sur
60) Tenthinnalur	102	6	121	Snp
61) Vadavanakkambadi	57	8	50	Snp
62) Vedal	46	7	185	Snp
VANDAVASI PANCHAYAT UNION				
63) Adiyanur	94	8	125	Ogp
64) Allyandal	85	11	138	Ogp
65) Arasur	119	6	111	Snp
66) Ariyathur	118	8	79	Rkp
67) Athipakkam	90	9	130	Snp
68) Birudur	98	10	141	Snp
69) Garudapuram	70	9	65	Snp
70) Karanai	72	7	154	Rkp
71) Kulkodungalur	96	15	121	Ogp
72) Kilkovalavedu	95	8	133	Tnr
73) Kilpakkam	92	7	143	Ogp

Village	Village Fertility Index (kg/ac)			Dominant Soil Series
	N	P	K	
74) Kovalam	86	9	120	Ogp
75) Mamandur	44	11	44	Ogp
76) Mangalam	72	8	142	Ogp
77) Maruthadu	85	17	57	Rkp
78) Melsathamangalam	102	9	151	Ogp
79) Mummuni	122	7	87	Rkp
80) Navalpakkam	87	10	118	Snp
81) Pudur	95	14	135	Snp
82) Salavedu	88	6	130	Ogp
83) Salukkai	97	8	134	Ogp
84) Senavaram	84	4	61	Ogp
85) Singampondi	75	13	53	Snp
86) Tensendamangalam	108	15	113	Rkp
87) Thellur	139	10	86	Rkp
88) Thellarampattu	69	8	100	Ogp
89 Ulundai	81	19	81	Ogp
90) Vandavasi	51	8	143	Snp
91) Vangaram	73	10	156	Snp
92) Gazhur	117	7	117	Ogp
93) Venmandai	51	8	72	Snp
94) Villudipattu	85	8	198	Ogp

LAND CAPABILITY

VANDAVASI TALUK

Area (ha)	Land Capability Classification	Soil Series	Limitation	Needs
10526	II se	Tenneyur Olagalapadi Mangadu Madiappankulam	Erosion surface run off topography	Soil conservation
8014	II sw	Suramangalam	Wetness salinity	Improving drainage selection of crops
981	IV se	Pachol	Erosion shallow depth	Soil conservation selection of crops

Class

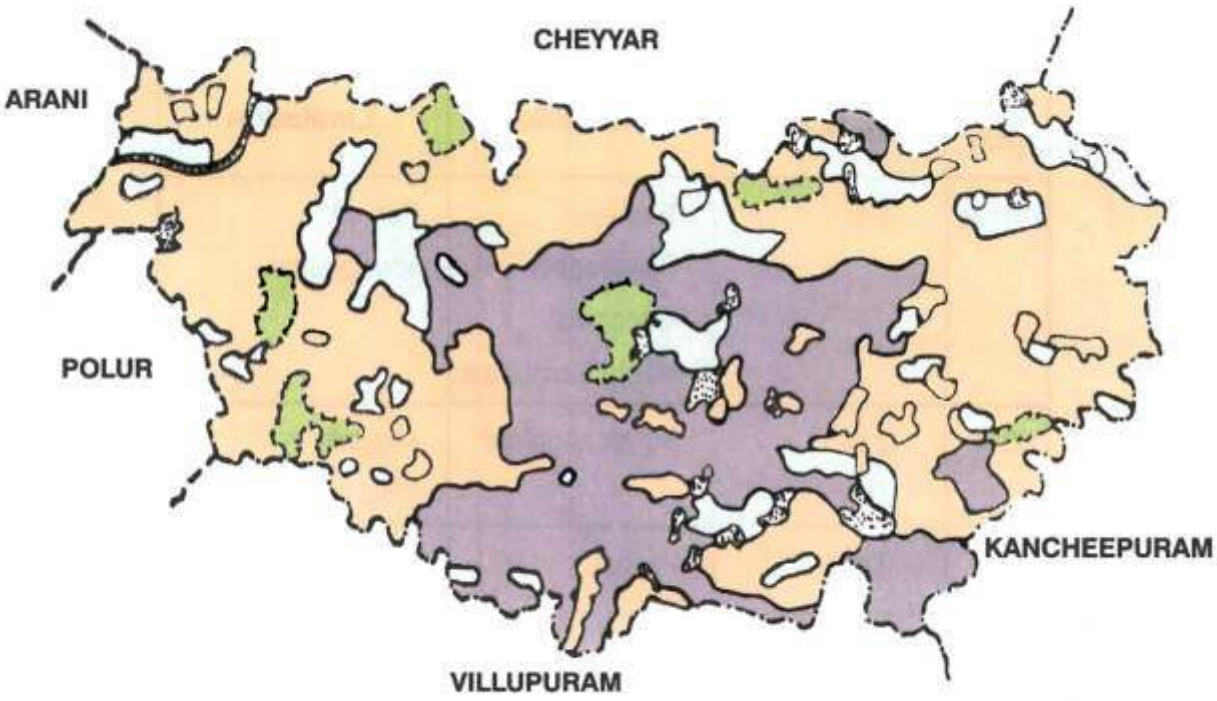
II. Good cultivable lands that have moderate limitations for sustained use under agriculture.

IV. Lands that have very severe limitations for sustained use under agriculture.

Sub class

s. Root Zone limitation
e. Erosion and run off
w. Excess water

LAND CAPABILITY
VANDAVASI TALUK



REFERENCE

- DISTRICT BOUNDARY
- TALUK BOUNDARY
- RIVERS & GULLY
- TANKS
- FOREST BOUNDARY

LEGEND

- II se
- III ws
- III es

LAND IRRIGABILITY

VANDAVASI TALUK

Area (ha)	Irrigability Classification	Soil Series	Limitation
10526	2 st	Tenneyur Olagalapadi Mangadu Madiappankulam	Run off Topography
8014	2 sd	Suramangalam	Alkalinity Slow permeability
981	3 st	Pachol	Shallow depth

Class

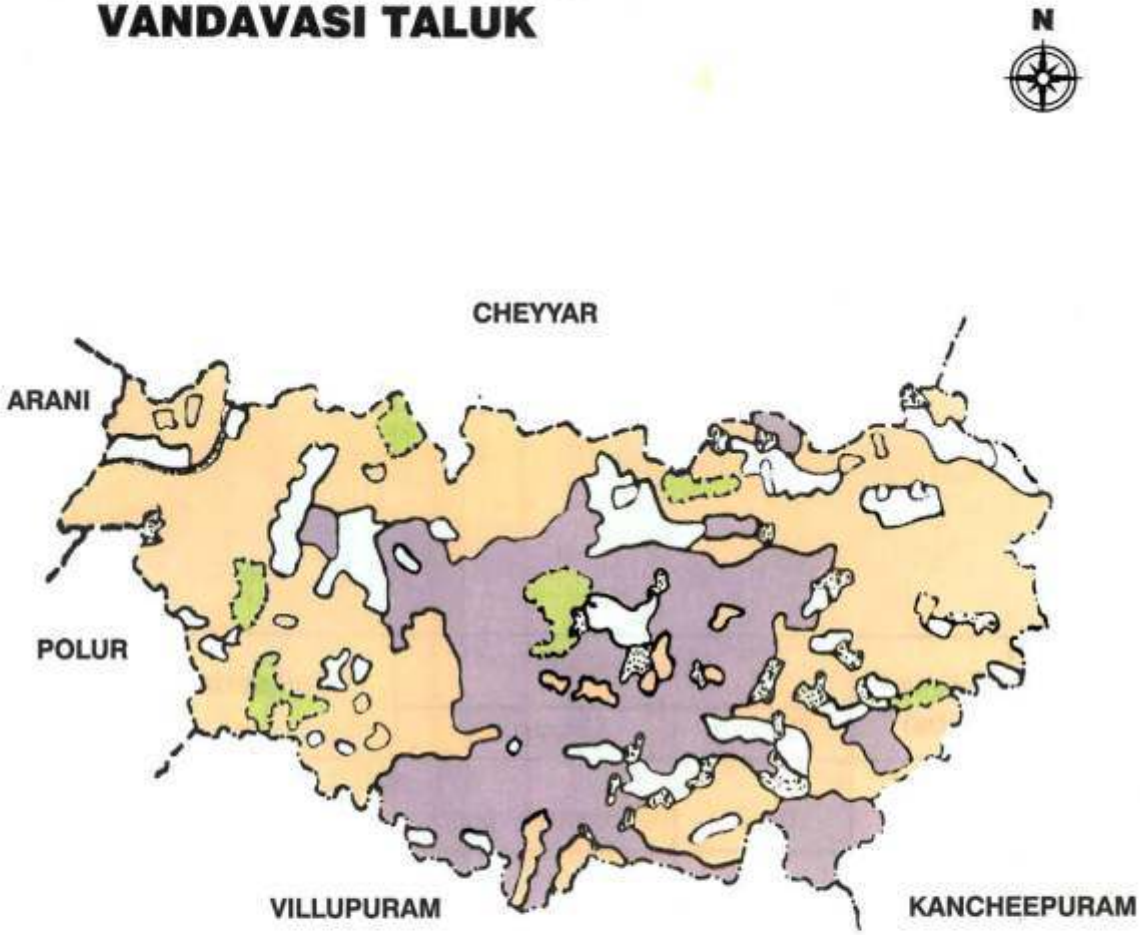
2 Lands that have moderate limitation for sustained use under irrigation.

3. Lands that have severe limitation for sustained use under irrigation.

Sub class

s - Soil limitation
t - Topography
d - Drinage

LAND IRRIGABILITY
VANDAVASI TALUK



REFERENCE

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- TANKS
- FOREST BOUNDARY

LEGEND

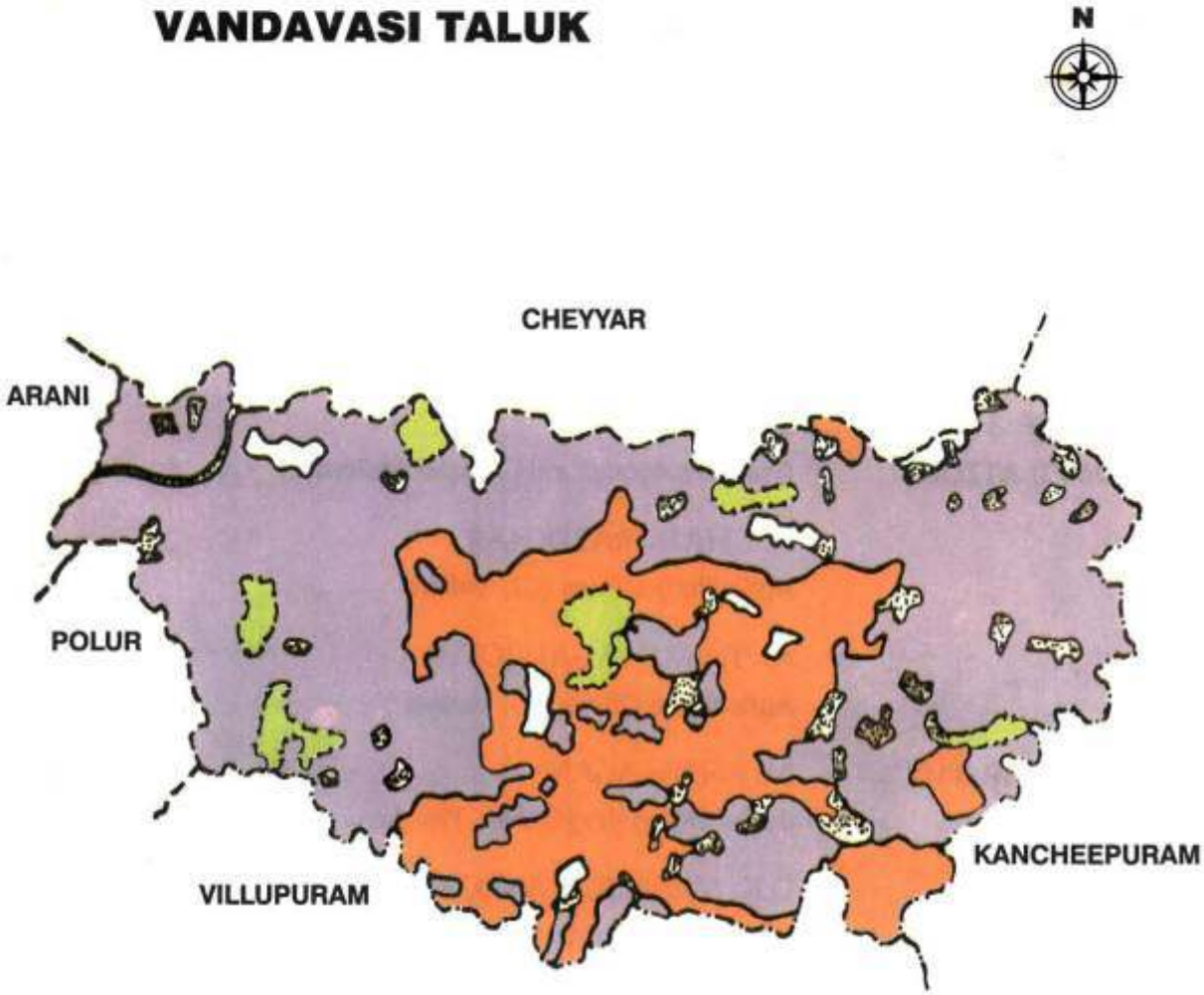
- 2 st
- 2 sd
- 3 ts

SOIL PRODUCTIVITY

VANDAVASI TALUK

Area (ha)	Productivity		Soil series
	Rating	Grouping	
981	0 – 7	Extremely poor	Pachol
189	8 – 19	Poor	Mangadu
18351	20 – 34	Average	Suramangalam Tenneyur Olagalapadi Madiappankulam

SOIL PRODUCTIVITY
VANDAVASI TALUK



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