SOIL ATLAS
RAMANATHAPURAM DISTRICT

SOIL SURVEY & LAND USE ORGANISATION
(DEPARTMENT OF AGRICULTURE TAMIL NADU)
PALAYAMCOTTAI 627 007
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வீரபாண்டி எஸ். ஆறுமுகம்
வேளாண்மைத் துறை அமைச்சர்

தலைமைச் செயலகம்
சென்னை 600 009

அணிந்துரை

தமிழ்நாடு வேளாண்மைத் துறையில் உள்ள வேதியியல் பிரிவு தமிழக வேளாண் பெருங்குடி மண்ணின் தேவையை அறிந்து மண்வள தொகுப்பேடு ஒன்று தயாரித்து இருப்பது பாராட்டுக்குரிய செயலாகும்.

வேளாண்மைக்கு அடித்தளமாய் அமைவது நிலமும், நீரும் ஆகும். மண்ணின் வகைகளை அறிந்து அதன் வளத்தை தெரிந்து கொண்டு, அதற்கேற்ற பயிர் வகைகளை பயிர் செய்வதால் உற்பத்தி திறன் அதிகரிப்பதோடு, மண் வளமும் பாதுகாக்கப்படுகிறது. சங்க காலத்தில் மண்வளத்தை அறிந்து கொள்ள குறிஞ்சி, முல்லை, மருதம், நெய்தல் என நம் முன்னோர்களால் நிலப் பாகுபாடுகளை அறிந்து வைத்திருந்தார்கள். பிற்காலங்களில் மண்ணை, செம்மண் என்றும், கரிசல் மண் என்றும், வண்டல் மண் என்றும், மணற்பாங்கான மண் என்றும், மண்ணின் தன்மைக்கு ஏற்ப பிரித்து வைத்திருந்தார்கள். பண்டைய காலங்களில் மண் பாகுபாடு செய்வது தேவையற்ற ஒன்றாக கருதப்பட்டாலும், இன்றைய சூழ்நிலைக்கு மண் பாகுபாடு மிகவும் அவசியமாகிறது. வளர்ந்து வரும் மக்கள் தொகைக்கு ஏற்ப உணவு உற்பத்தியை பெருக்க மண் வரை தொகுப்பு வேளாண்மை ஆராய்ச்சியாளர்களுக்கும், விரிவாக்க அலுவலர்களுக்கும் மிகவும் பயன் உள்ளதாக இருக்கும் என நம்புகிறேன்.

இத்தொகுப்பினை வெளியிட உதவிய அனைத்து அலுவலர்களுக்கும் எனது பாராட்டுக்களையும், வாழ்த்துக்களையும் தெரிவித்துக் கொள்கிறேன்.

அன்புடன்,

29.4.98

நா. ஆதிமூலம், இ.ஆ.ப.
அரசு செயலர்

வேளாண்மைத் துறை
சென்னை 600 009

அணிந்துரை

மண்வளமும் மனித வளமும் ஒரு நாட்டிற்கு இன்றியமையாதன ஆகும். இன்னும் சொல்லப்போனால் நிலத்து மண் ஆனது மனிதச்சரீரத்தின் பிரதிபலிப்பு ஆகும். ஏனெனில் அதுவே மனித நாகரீகத்தின் மாட்சியையும் வீழ்ச்சியையும் எடுத்துரைப்பதாக இருந்து வந்துள்ளது. இதற்குச் சரித்திரச் சான்றுகளும் பல உண்டு. இப்படித்தான் பெருமை படைத்த மண்வளம் பற்றிய விவரங்களை நெறிப்படுத்தி அண்டியோர்க்குப் பயன் அளிக்கும் வகையில் அமையச் செய்வது காலத்தின் கட்டாயமாகும். அதிலும் குறிப்பாக ஒன்பதாவது ஐந்தாண்டுத் திட்டத்தின் துவக்கத்திலேயே இப்பணி நடைபெறுவது சாலச்சிறந்தது ஆகும். ஏனெனில் இத்திட்டப் பெரு நோக்கங்களில் ஒன்றாக மண்வளம் சார்ந்த இனங்களை அடையாளம் கண்டு செயல்படுவது மிகவும் வலியுறுத்தப்பட்டுள்ளது.

எனவே, மாவட்ட வாரியாக மண்வள ஆதாரங்களைத் தொகுக்கும் முயற்சி மேற்கொள்ளப்பட்டது. இப்பணி நான் வேளாண்மை இயக்குநராகப் பொறுப்பில் இருந்த காலத்தில் முடிக்கப்பட்டது. தமிழ்நாட்டில் அப்போதிருந்த 15 மாவட்டங்களுக்கும் தனித்தனியே மண்வளத் தொகுப்பேடுகள் தயாரிக்கப்பட்டன. ஆயினும் அவை வரைவு நகல்களாகவே இருந்து வந்துள்ளன. அதனால் அதன் பயனை நுகர மிகச் சிலருக்கே வாய்ப்பு கிட்டியது.

இத்தொகுப்பேட்டில் விரவிக்கிடக்கும் விவரங்கள் சீரிய திட்டமிடலுக்கு அடித்தளமாக அமைகின்றன. ஓரிடத்தில் நிலவும் தட்பவெப்ப நிலை, பாசன வளம், பயிர் சாகுபடி விவரங்கள், மண் வகைகள் அவற்றின் விளைதிறன், ஏற்புடைய பயிர்கள் பற்றிய விளக்கங்கள் இடம்பெற்றுள்ளன. ஆக இவற்றின் அடிப்படையில் அமுல்படுத்தப்படும் உற்பத்திப் பெருக்குத் திட்டங்கள் அபரிமித வெற்றி அளிப்பதில் ஆச்சரியமில்லை. உதாரணமாக அண்மையில் மணிகண்டம் ஒன்றியத்தில் நிறைவேற்றப்பட்ட வேளாண் வானியியல் வளிமண்டலத் திட்டத்தினைச் சொல்லலாம். இத்திட்டத்தின் முதன்மைச் செயல் அம்சமாக இப்பகுதி நிலங்கள் நெறிப்படுத்தப்பட்டன. இத்தகைய அணுகுமுறையினால் கார்த்தன்மை உடைய இப்பகுதி நிலங்களில் சீர்திருத்தம் மேற்கொண்டதின் மகசூலானது எக்டேருக்கு 400 கிலோ முதல் 700 கிலோ வரை உயர்ந்துள்ளது என்பது பெருமைக்குரியதாகும்.

மீக்க பயன் அளிக்கவல்ல இத்தொகுப்பேட்டு விவரங்களினை உற்பத்தி முனைவோர் அனைவரும் பெற்றிட இதனை அச்சிடும் பணிக்கு ரூ. 10.5 இலட்சம் அனுமதித்து தமிழ்நாடுஅரசு ஆணையிட்டுள்ளது. அதன் தொடர் நிகழ்வாகவே ஏட்டளவில் இருந்த இத்தொகுப்பேடுகள் வண்ணமிகு வடிவுடனும், விவரப்பொலிவுடனும் அச்சேறி தற்போது நற்பயன் அளிக்கும் நிலை பெற்றுள்ளன. வேளாண்மை இயக்குநராக அன்று நான் துவக்கிய பணி, செயலராகப் பொறுப்பேற்றுள்ள இந்நாளில் மலர்ந்து மிளிர்வது குறித்து மட்டற்ற மகிழ்ச்சி அடைகிறேன். அத்துடன் இத்தொகுப்பேட்டுவிவரங்கள் நுண் திட்டமிடல், ஏறுமுகத் திட்டம் போன்றவற்றிற்கும் ஆதாரமாய் அமைகின்றன. புதிய சாதனைகளைத் தொடுவோரை வள்ளுவர்,

வாரிப்பெருக்கி வளம்கூட்டு உற்றதை
ஆராய் வான் எனப் பெருமைப்படுத்துவார்.

அவர் கூற்றுப்படி ஆராய முனைவோர்க்கு முன்னோடியாகவும், முதனிலைப் பின்புலமாகவும் இத்தொகுப்பேடு அமைந்துள்ளது என்பதில் பெரிதும் மகிழ்வடைகிறேன்.

இத்தொகுப்பேடு நன்கு வடிவமைக்கப்பட்டு, விவரங்கள் பயன்தரும் வகையில் தெளிவுப்படுத்தப்பட்டுள்ளமைக்குப் பொறுப்பான அனைவருக்கும் எனது பாராட்டுதலைத் தெரிவித்துக் கொள்கிறேன்.

17.4.98

அரசு செயலர்
வேளாண்மைத்துறை

சென்னை
17. 4. 1998

டாக்டர். க. அருள்மொழி, இ.ஆ.ப.
வேளாண்மை இயக்குநர்

சேப்பாக்கம்
சென்னை 600 005

அணிந்துரை

நில மடந்தை நமக்கு அளித்துள்ள இயற்கை வளங்களில் மிக முதன்மையானது மண்வளம் ஆகும். அத்துடன் தமிழர் வாழ்வியலில் மண்ணும் மனிதனும் பின்னிப் பிணைந்தே பேசப்படும். எனவே தான் மண்வகைகளைப் பற்றியும், அவற்றின் சாதக பாதகத் தன்மைகள் பற்றியும் சங்க கால இலக்கியங்கள் விரிவாகவே பேசுகின்றன. பிற்கால அறிவியல் முன்னேற்றம் காரணமாக ஆய்ந்தறிந்து பெறப்பட்ட உண்மைகளும் முந்தையனவைப் பெரிதும் ஒத்து இருந்தமை ஆனது பண்டைத் தமிழரின் அறிவியல் மேன்மையை எடுத்துக் கூறுவதாக அமைந்துள்ளது.

மண்வளங்களைப் பயன்படுத்துவது என்பது சமுதாயக் கட்டாயங்களினால் ஏற்பட்டதாகும். விரிந்து வரும் மக்கள் தொகை பெருகி வரும் உணவுத் தேவைகள் மற்றும் சுருங்கி வரும் சாகுபடிப் பரப்பு ஆகியவை இவற்றுள் அடங்கும். இந்த வகையில் பல மண்வகையீட்டு முயற்சிகள் தேசிய அளவிலும், மாநில அளவிலும் எடுக்கப்பட்டுவந்துள்ளன. அந்நாட்களில் சென்னை இராஜதானியில் நடத்தப்பட்ட மண்வகையீட்டுமுயற்சி இதன் துவக்கம் எனலாம். இதுவும் பின்னர் நடத்தப்பட்ட திட்டங்களும், குறிப்பிட்ட நோக்கத்திற்காகவே அமல் செய்யப்பட்டன. இதன் உச்சக்கட்டமாக 1960 ம் ஆண்டில் தரமான மண்வகையீட்டுத் திட்டம் ஒன்று மண்வகைகளின் தன்மைகளை விரிவாகவும் விளக்கமாகவும் கூர்ந்தாய்வு செய்திட அறிமுகம் செய்யப்பட்டது.

தமிழ்நாட்டு மண்வள ஆதாரங்களை விளக்கும் வரைபடங்கள் தயாரிக்கும் பணியில் வேளாண் துறையின் வகையீட்டுஅலகுகள் பணிக்கப்பட்டன. இவைகள் நடத்திய துவக்க மண்வகையீடு மூலம் பெறப்பட்ட மண்வள ஆதார விவரங்கள் மாவட்ட வாரியாகத் தொகுக்கப்பட்டன. இவை மாவட்ட வளர்ச்சிக்கான திட்டமிடலுக்கு உதவுகரமாக அமைந்துள்ளன. எனினும் வெறும் வரைவு ஏடுகளாகவே இருந்து வந்த இத்தொகுப்பேடுகளை அனைவரும் பெற்றிடும் வகையில் அச்சுப் பதித்து வெளியிட தமிழ்நாடுஅரசு ரூ. 10.5 இலட்சம் நிதி அனுமதித்துள்ளது. இந்த இனிய துவக்கமாகவே மாவட்ட மண்வளத் தொகுப்பேடுகள் தற்சமயம் வெளியிடப்பட்டுள்ளன. இத்தொகுப்பேடுகளில் உணவு உற்பத்திக்கான ஊக்க முயற்சிகளுக்கு போதுமான நிலம் மற்றும் அதனைச் சார்ந்த அனைத்து விவரங்களும் இடம் பெற்றுள்ளன. நீர்ப்பாசனம், தட்பவெப்பச்சூழல், பயிர் வகைகள் விளைதிறன் ஆகிய விவரங்களின் அடிப்படையில் கிராம அளவிலான நுண் திட்டமிடல், ஏறுமுக வளர்ச்சித்திட்டம், பல்துறை பங்கேற்புத் திட்டம் போன்ற முயற்சிகள் அமல் செய்யப்படுவதற்கான இடங்களை அடையாளம் காண இத்தொகுப்பேடு பெரிதும் உதவும்.

பெரும்பயன் தரவல்ல இத்தொகுப்பேட்டினை உருவாக்கி, தொகுத்து வடிவமைத்து வெளியிட உதவிய அனைவர்க்கும் எனது பாராட்டுதல்களை மகிழ்ச்சியுடன் தெரிவித்துக் கொள்கிறேன்.

க. அருள்மொழி 30.3.98

சென்னை
30. 3. 1998

வேளாண்மை இயக்குநர்

RAMANATHAPURAM

CONTENTS

ABOUT THE SOIL ATLAS

Agriculture play a vital role in the Indian economy and provides occupation to about 75% of the population which in turn depends on several inputs applied on soil. As such soil forms the basic non renewable natural resource, its health and land productivity on a sustained basis have to be maintained for sound production system. All inputs in the production systems can be functional only when there is soil/land which is qualitatively suitable for such purpose.

In this context, soil survey form the basic tool for agriculturl development programmes and provides information on characteristics and location of the different kinds of soils and their management potentials as well as their limitation for different purposes. Keeping this in view a data base on soils of the district have been developed through reconnaissance soil survey and this is useful for planning at regional level.

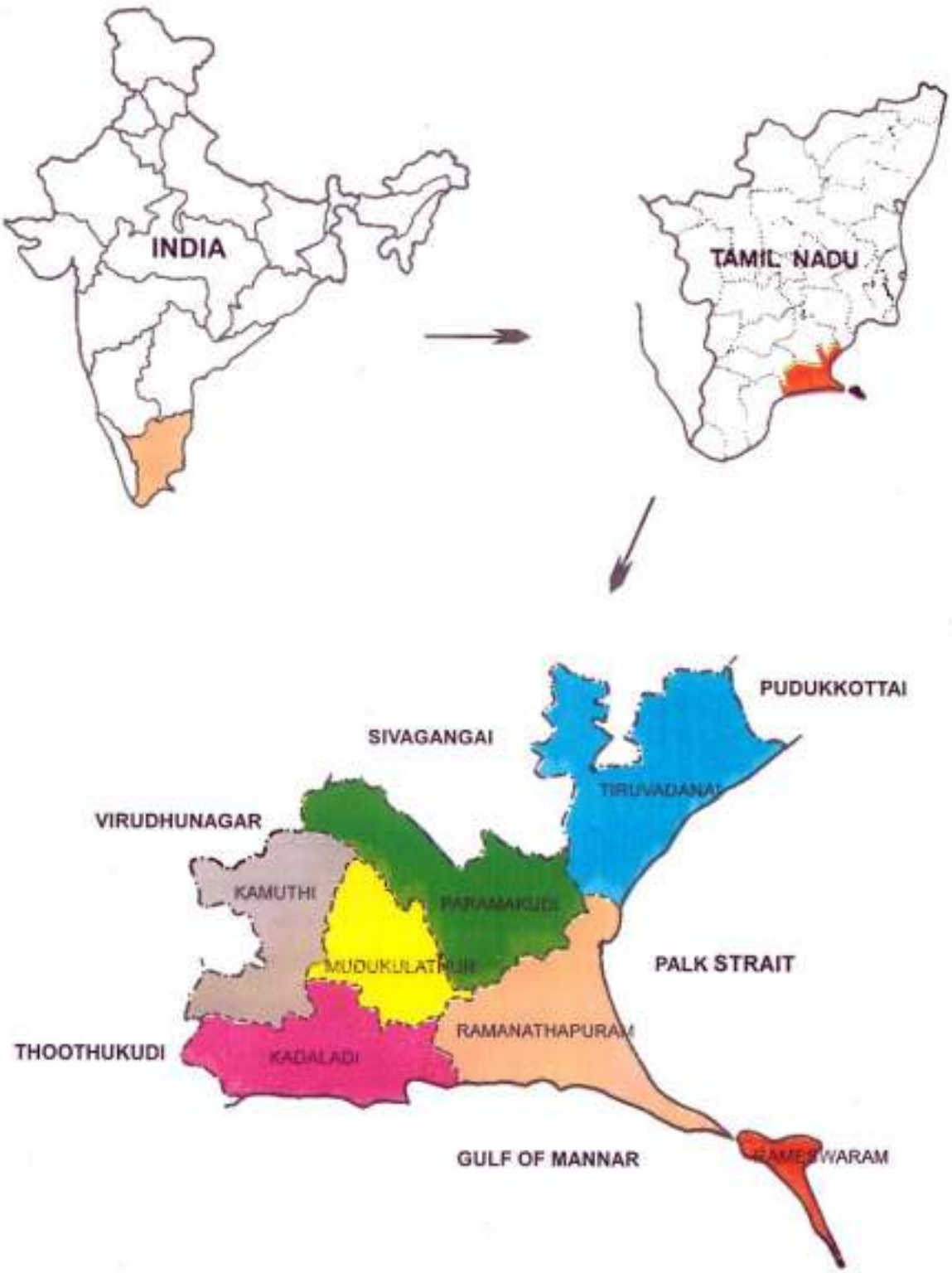
In the Atlas, all the information pertinent to the socio economic condition of the district is provided briefly. Soil characteristics and their interpretations are subsequently presented at district level in small scale. For better understanding soil information and their interpretations are also given at taluk level. Further, dominant kind of soil at village level and their fertility status have been provided for developing optimum fertility management programmes.

As soil is highly heterogeneous in nature, differences in soil can occur within short distances and therefore it is needless to say that detailed soil surveys at higher intensity are necessary for micro level development programmes.

LOCATION

Ramanathapuram district is a coastal district bounded by Sivagangai district on the North, Gulf of Mannar on the South, Palk strait on the East and Virudhunagar and Thoothukudi districts on the West. It lies between $9^{o}5^{'}$ and $9^{o}57^{'}$ North Latitude and $78^{o}10^{'}$ and $79^{o}27^{'}$ East longitude. It has a total geographical area of 4233.44 sq.km and is divided into seven taluks viz Kadaladi, Kamuthi, Mudukulathur, Paramakudi, Ramanathapuram, Rameswaram and Thiruvadanai. Out of seven Agroclimatic zone of Tamilnadu, this district falls under Southern zone.

LOCATION MAP
RAMANATHAPURAM DISTRICT



TALUKS & PANCHAYAT UNIONS

The district comprises of seven taluks and eleven panchayat unions as indicated below.

Taluk	Panchayat union
1. Kadaladi	1. Kadaladi
2. Kamuthi	2. Kamuthi
3. Mudukulathur	3. Mudukulathur
4. Paramakudi	4. Paramakudi 5. Nayinarkovil 6. Bogalur
5. Ramanathapuram	7. Ramanathapuram 8. Tiruppullani
6. Rameswaram	9. Mandabam (Uchipuli)
7. Thiruvadanai	10. Thiruvadanai 11. R.S. Mangalam

TALUKS AND PANCHAYAT UNIONS

RAMANATHAPURAM DISTRICT

REFERENCE

COASTAL BOUNDARY ————————

DISTRICT BOUNDARY —·—·—·—·—

TALUK BOUNDARY — — — — — —

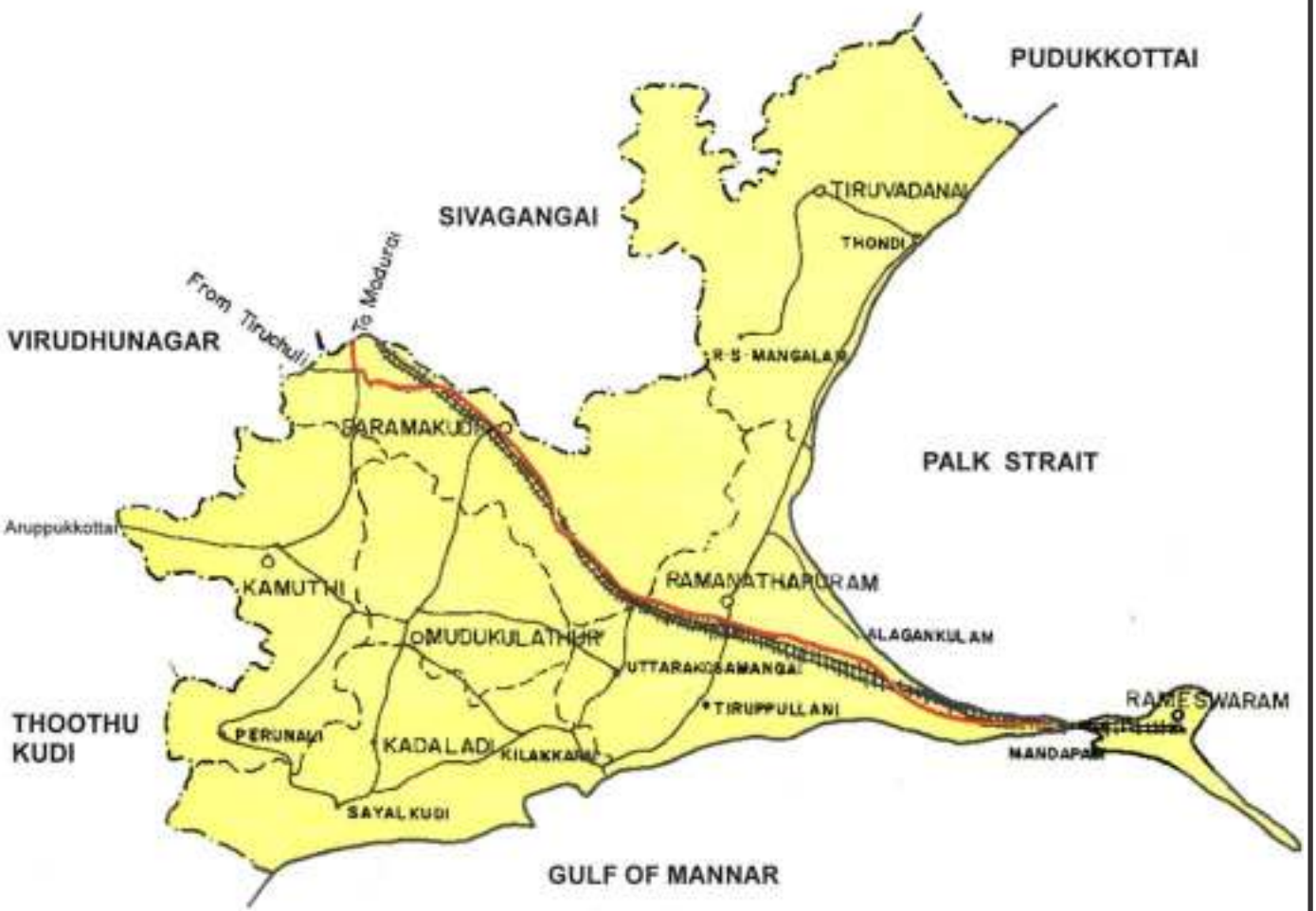
UNION BOUNDARY .....

ROADS & RAILWAYS

Ramanathapuram district is connected with metre gauge railway line runs upto Rameswaram via Paramakudi, Ramanathapuram and Mandabam.

There is one National Highway No 49 which starts from Karisalkulam, runs upto Mandabam via Paramakudi and Ramanathapuram to a distance of 98km. The District highways run from the District Head Quarters Ramanathapuram to Thiruvadanai and Ramanathapuram to Kamuthi. The other main places of the district are also well connected by roads. All towns and important villages are connected through surface traffic.

ROADS & RAILWAYS
RAMANATHAPURAM DISTRICT



LEGEND

NATIONAL HIGHWAYS

OTHER ROADS

RAILWAY LINE

GEOLOGY

The District consists of the following Geological compositions.

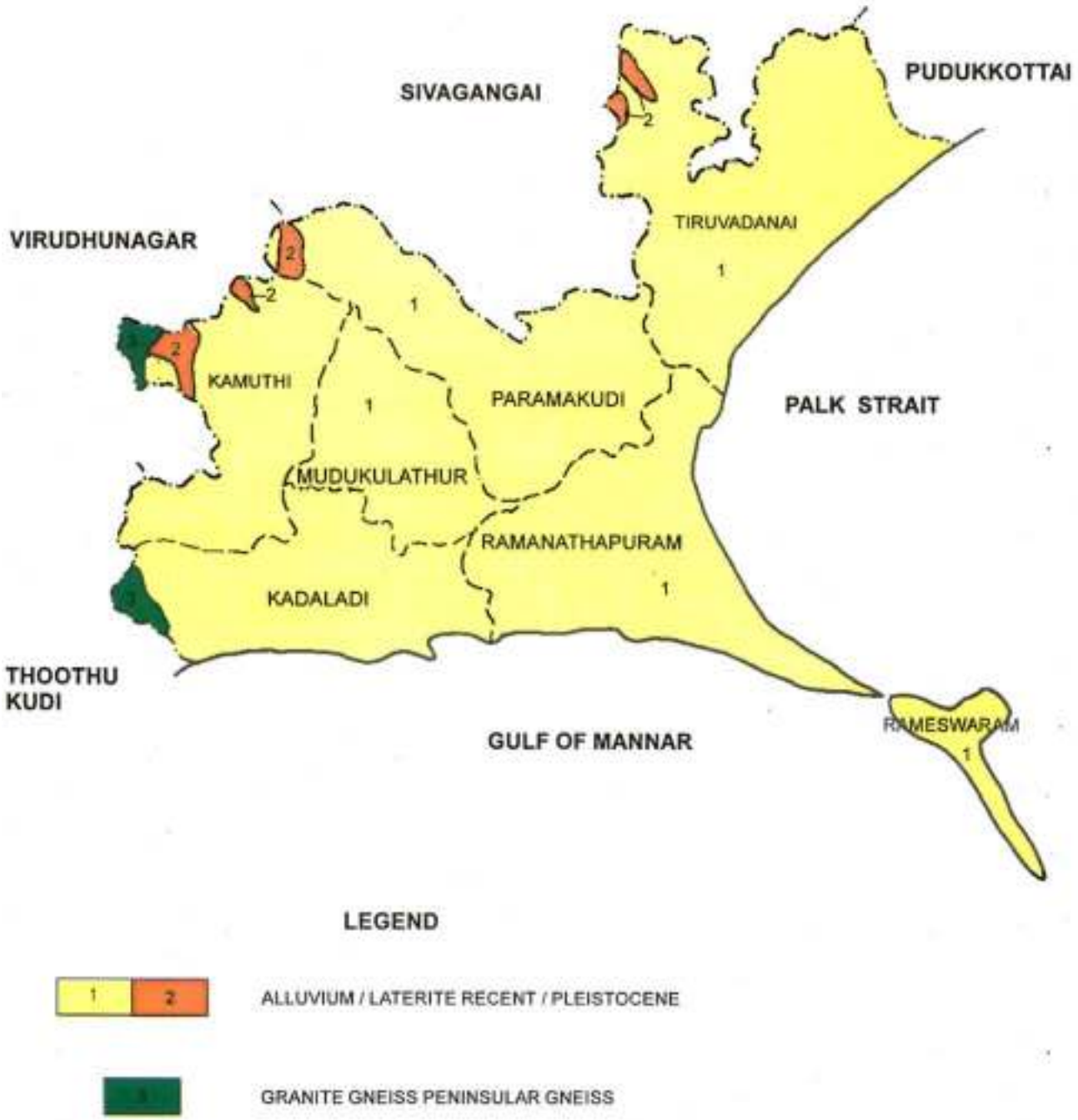
1. Felsic rocks of Archaean age consisting of Charnockites, granites and their metamorphic peninsular gneisses of varying types in Kadaladi, Kamuthi, Mudukulathur and parts of Paramakudi and Ramanathapuram taluks.

2. Sedimentary rocks of upper Gondwana age consisting of micaceous sand stone, lime stone alternating shales and grits and river and coastal alluvium in Paramakudi, Thiruvadanai, Mudukulathur and Ramanathapuram taluks. Marine lime stones, calcareous sand stones of sub recent age are noticed in Rameswaram island.

3. Laterites of sub recent age in localised pockets.

Important minerals : Limestone, graphite, gypsum, Ilmenite and garnet are the important mineral resources of the district.

GEOLOGY
RAMANATHAPURAM DISTRICT



PHYSIOGRAPHY

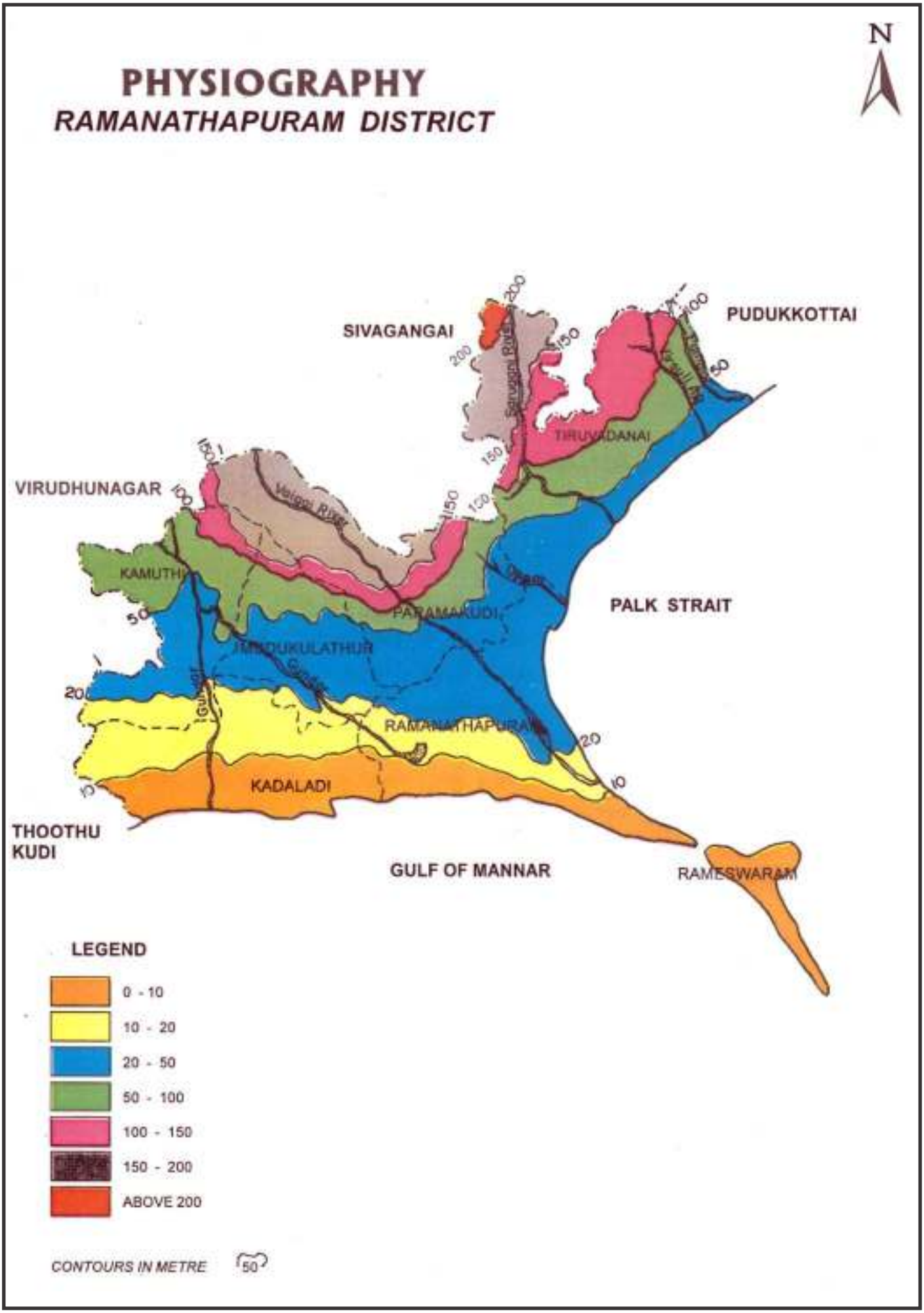
Physiographically Ramanathapuram district is divisible into three district regions, viz.,

1. Vast stretch of black soil peneplains in Mudukulathur, Kamuthi, Paramakudi and Ramanathapuram taluks drained by Vaigai and Gundar rivers.

2. Gently sloping to undulating red and lateritic land form of Paramakudi and Tiruvadanai taluks drained by Pambar, Virisuli and Sarugani rivers.

3. Sand Hummocky and sandy plains of Ramanathapuram and Rameswaram taluks. The coast is fringed by both stabilized and unstabilized sand dunes with swamps at their back. The southern coast of the District is fronted by a chain of inlets extending to a distance of 5-9 km off shore, of which Rameswaram island is the biggest. Northern part of the district has the highest elevations. Coastal belt has the lowest elevations. The relief is normal.

PHYSIOGRAPHY
RAMANATHAPURAM DISTRICT



DRAINAGE & RIVER BASINS

The Vaigai river originating from Madurai district enters the Ramanathapuram district crosses Paramakudi and ends in Athankarai of Ramanathapuram taluk. The rivers Virisuli and Kottakarai run in the Tiruvadanai taluk. The river Gundar which originates in Kamuthi taluk enters in Mudukulathur taluk and ends in Ramanathapuram taluk. There are two river basins and five minor river basins in the district viz Vaigai river basin, Sarugani river basin, Manimuttar minor basin, Gundar minor basin, Parali- Kridamal minor basin, Arjuna Nadhi minor basin, Goundanathi and Kanal Odai minor basin.

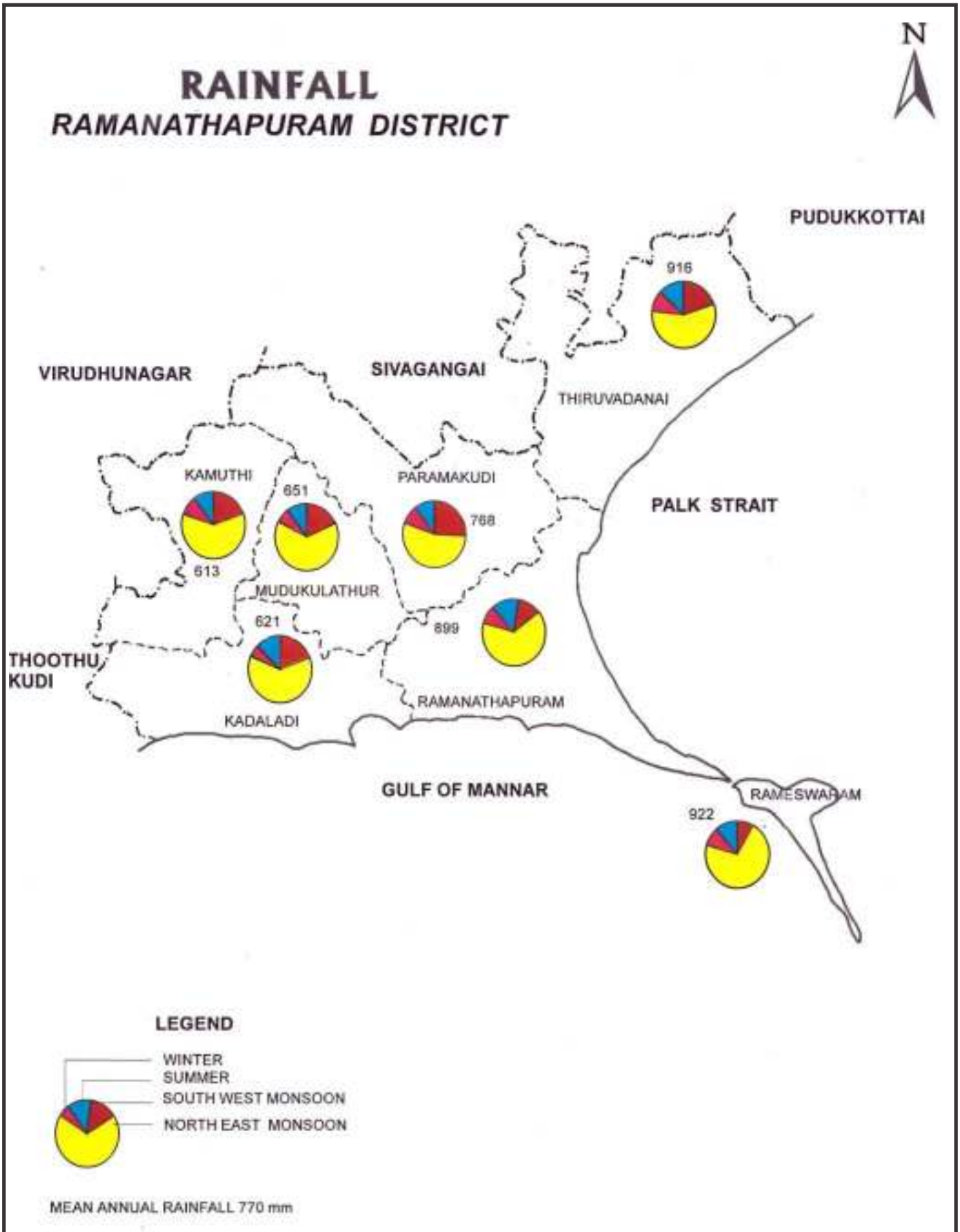
RIVER BASIN & WATER SHED

RAMANATHAPURAM DISTRICT

RAINFALL

Taluk	Mean annual rainfall	Southwest monsoon (Jun - Sep)		Northeast monsoon (Oct - Dec)		Winter (Jan - Feb)		Summer (Mar - May)	
	mm	mm	%	mm	%	mm	%	mm	%
1. Kadaladi	621	116	18.7	384	61.8	41	6.6	80	12.9
2. Kamuthi	613	114	18.6	382	62.3	41	6.7	76	12.4
3. Mudukulathur	651	113	17.3	406	62.4	46	7.1	86	13.2
4. Paramakudi	768	189	24.6	416	54.2	57	7.4	106	13.8
5. Ramanathapuram	899	122	13.6	575	64.0	80	8.9	122	13.5
6. Rameswaram	922	69	7.9	674	71.5	87	10.0	92	10.5
7. Thiruvadanai	916	170	17.6	547	61.8	75	7.8	124	12.8
Mean for the district	**770**	**128**	**15.5**	483	63.9	**61**	**7.9**	**98**	12.7

RAINFALL
RAMANATHAPURAM DISTRICT



MEAN ANNUAL RAINFALL 770 mm

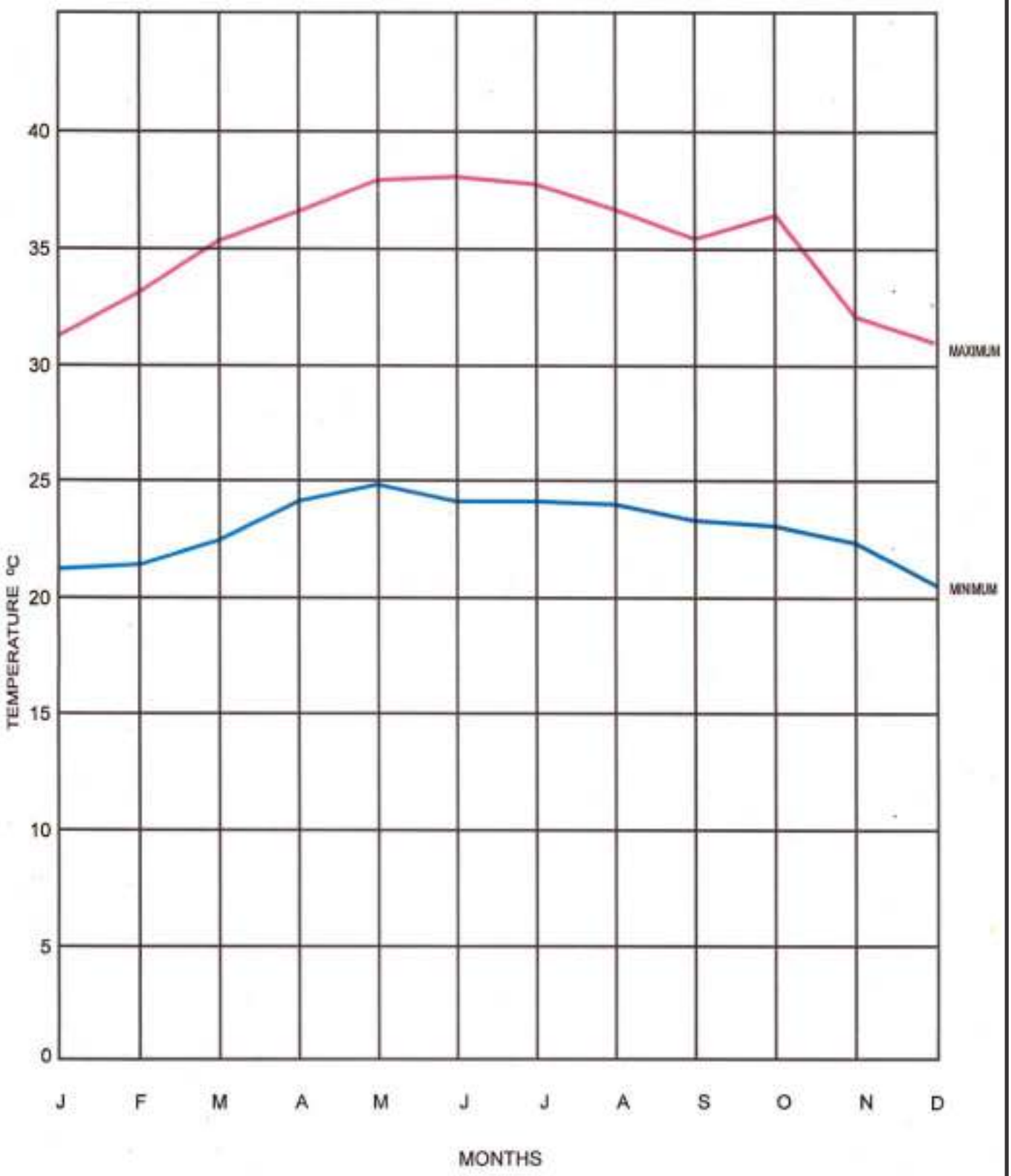
TEMPERATURE

The mean annual temperature of Ramanathapuram district is 29.1°C. Data on atmospheric temperature (o^{C}) is given below.

Months	Maximum temperature (°C)	Minimum temperature (°C)	Mean temperature (°C)
January	31.3	21.1	26.2
February	33.3	21.3	27.3
March	35.1	22.3	28.7
April	36.8	24.0	30.4
May	37.7	24.9	31.3
June	38.0	24.0	31.0
July	37.3	24.3	30.8
August	36.5	24.2	30.4
September	35.2	23.8	29.5
October	36.4	23.6	30.0
November	32.1	22.2	27.2
December	31.0	20.4	25.7
Mean	**35.1**	23.0	29.1

TEMPERATURE

RAMANATHAPURAM DISTRICT



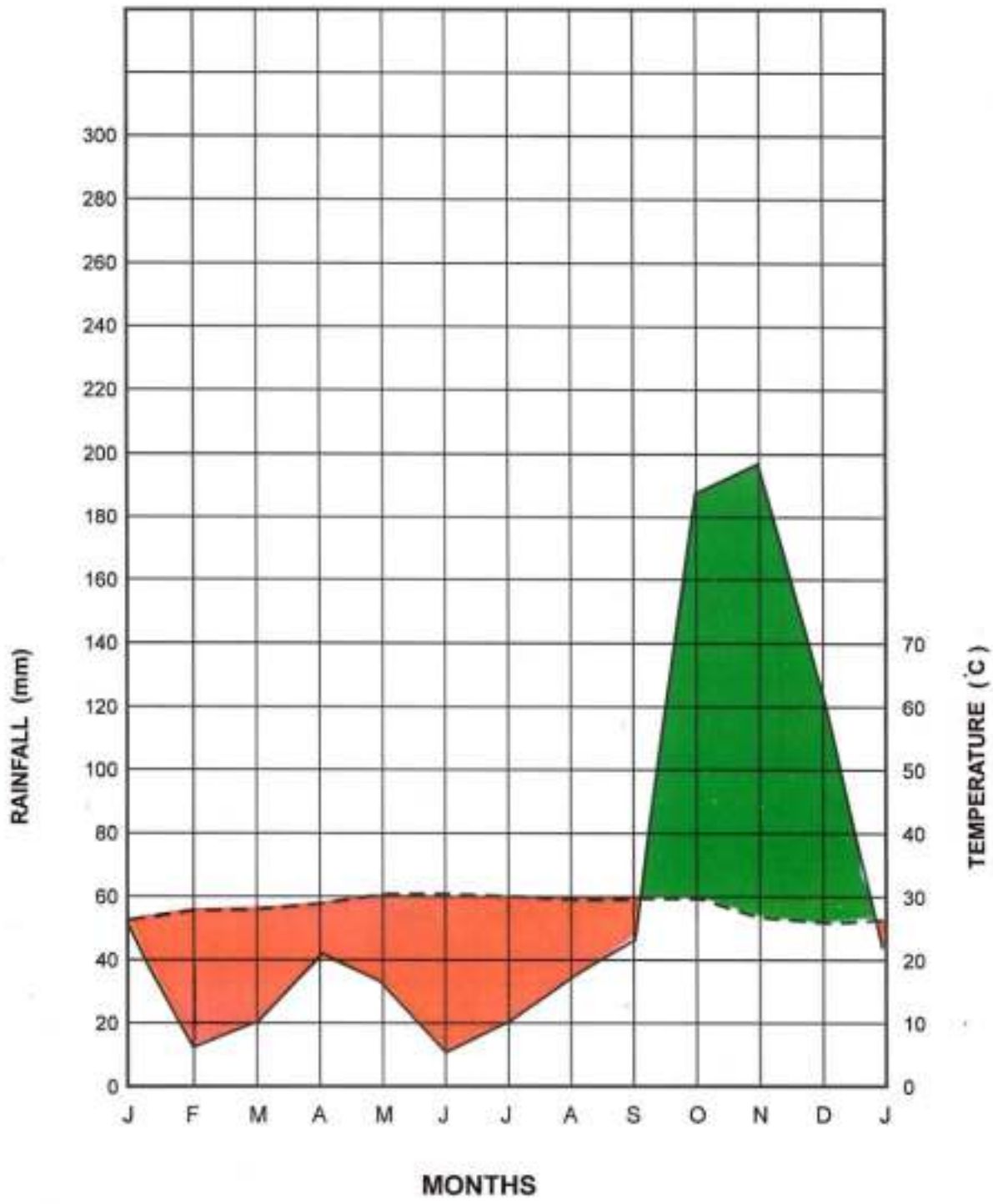
OMBROTHERMIC DATA

Month	Mean rainfall (mm)	Mean temperature (°C)
January	47	26.2
February	14	27.3
March	20	28.7
April	43	30.4
May	35	31.3
June	17	31.0
July	22	30.8
August	33	30.4
September	47	29.5
October	184	30.0
November	198	27.2
December	110	25.7
	Total 770 mm	**Mean 29.1**

The Ombrothermic diagram indicates nine months of dry period and three months of wet period.

OMBROTHERMIC DIAGRAM

RAMANATHAPURAM DISTRICT

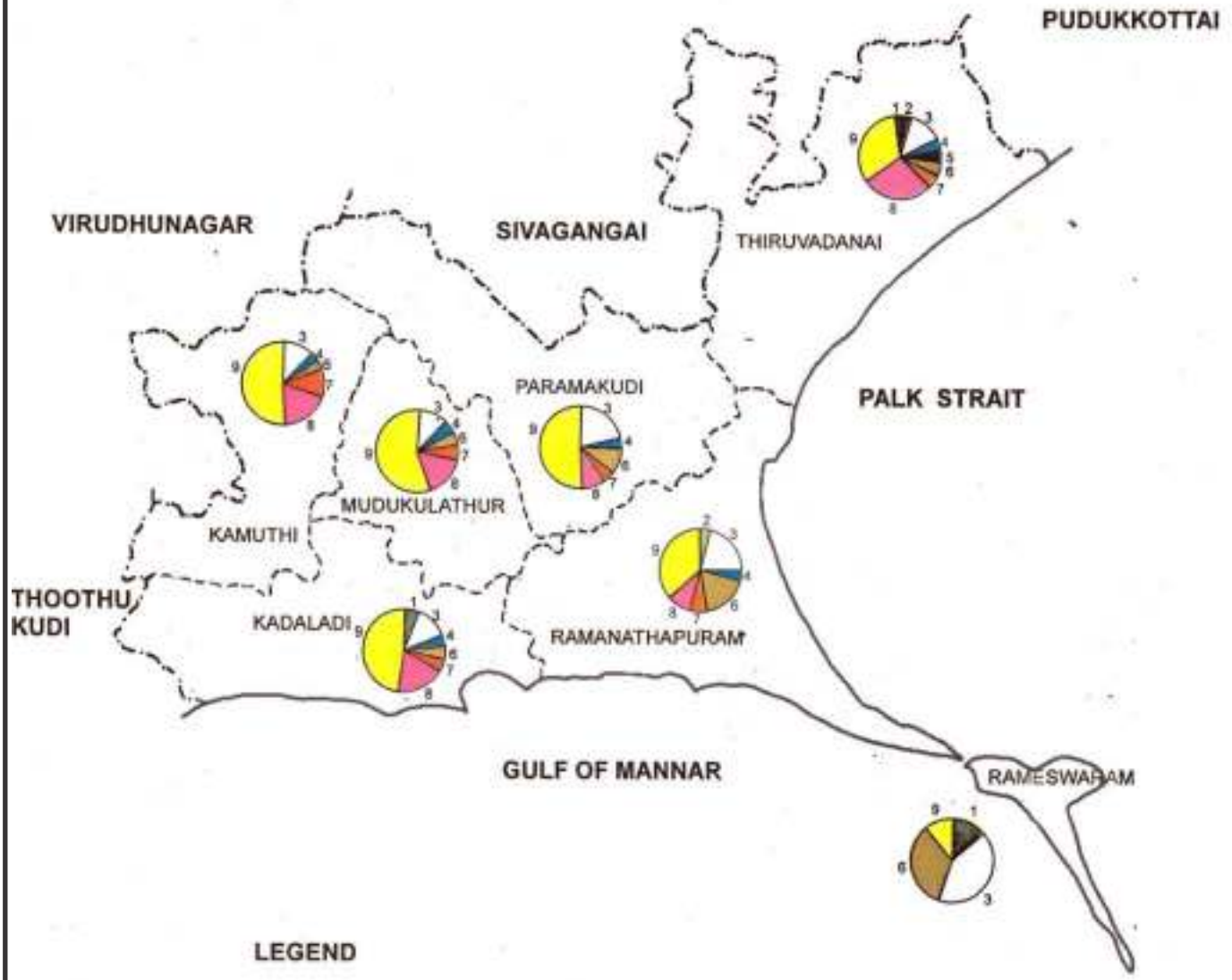


LAND USE PATTERN

unit : Hectares

Land use	Kadaladi	Kamuthi	Mudu-kulathur	Parama-kudi	Ramanatha-puram	Rames-waram	Thiruva-danai	Total
Total geographical area	61,223	57,847	48,085	73,794	77,499	9,048	95,848	4,23,344
1. Forest	2,817	—	—	—	—	1,325	346	4,488
2. Barren and uncultivable land	—	31	—	32	2,002	—	2,896	4,961
3. Land put to non agricultural use	11,880	9,109	7,235	17,167	21,280	3,838	14,715	85,224
4. Cultivable waste	887	914	525	413	1,252	—	1,683	5,674
5. Permanent pastures and grazing land	8	4	16	21	—	—	498	547
6. Miscellaneous tree crops and groves	2,172	417	2,352	6,357	13,707	2,816	464	28,285
7. Current fallow	2,039	7,403	1,341	2,208	1,452	—	1,157	15,600
8. Other fallow land	12,081	12,203	28,264	9,239	9,100	—	29,059	80,034
9. Net area sown	29,339	27,766	28,264	38,357	28,706	1,069	45,030	1,98,531

LAND USE PATTERN
RAMANATHAPURAM DISTRICT



FOREST

Total area under forests is 4488 ha which accounts for 1.1% of the District. The main forest ranges of the district are

i) Mudukulathur range (Selvanur forest) where in cashew occupies most of the area.

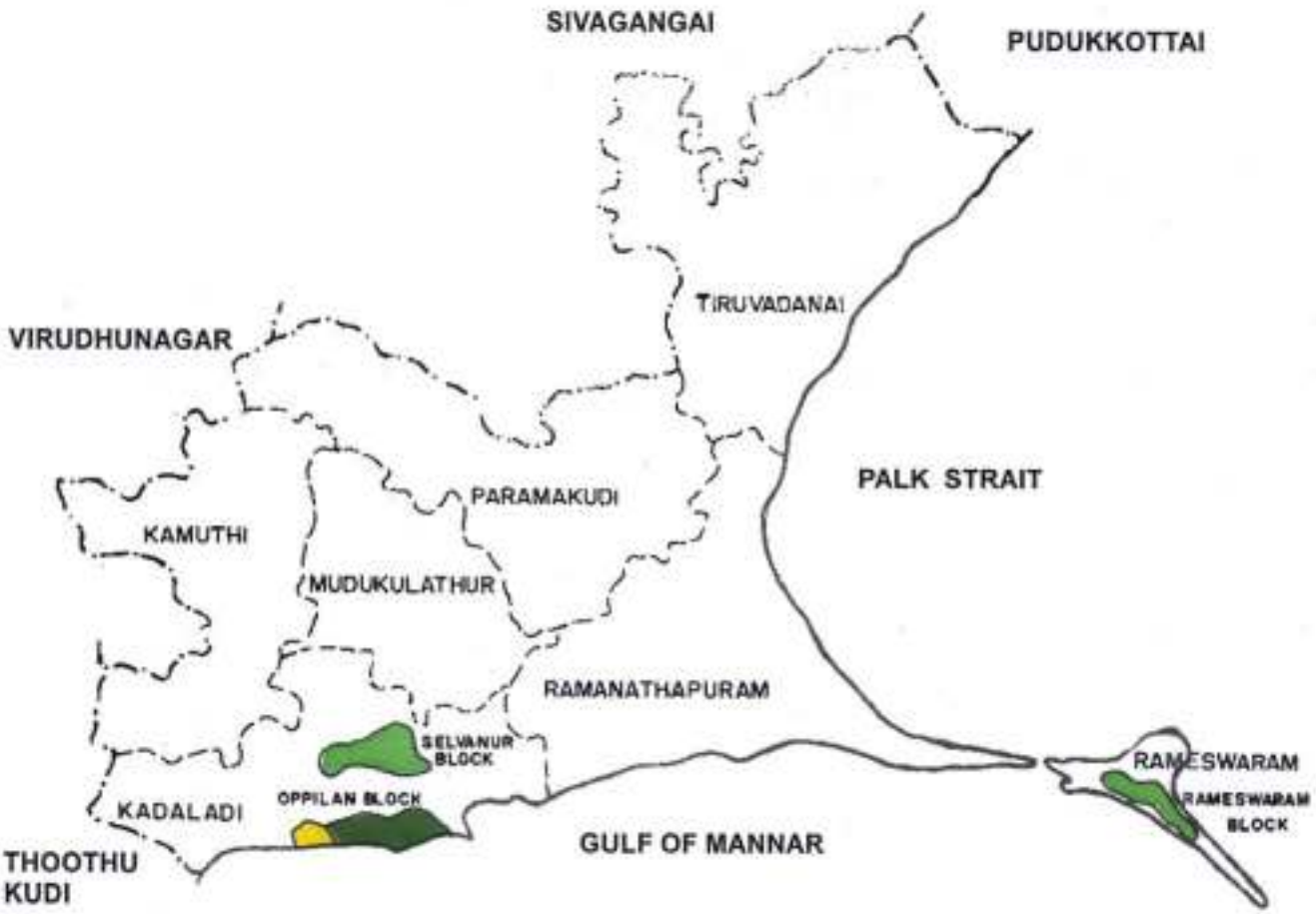
ii) Reserve range (Mariyur and Oppilan forests) where in casurina occupies the most of the area.

iii) Rameswaram range (Pamban pit I and Pamban pit II) with casurina in most of the area.

Tiruvadanai taluk has smaller extent of localised forests.

Taluk	Area	
	ha	%
1. Kadaladi	2,817	62.77
2. Kamuthi	—	—
3. Mudukulathur	—	—
4. Paramakudi	—	—
5. Rameswaram	1,325	29.52
6. Ramanathapuram	—	—
7. Thiruvadanai	346	7.71
Total	**4,488**	100.00

FORESTS
RAMANATHAPURAM DISTRICT



LEGEND

- ODAI WORKING CIRCLE
- CASUARINA WORKING CIRCLE
- CASHEW WORKING CIRCLE

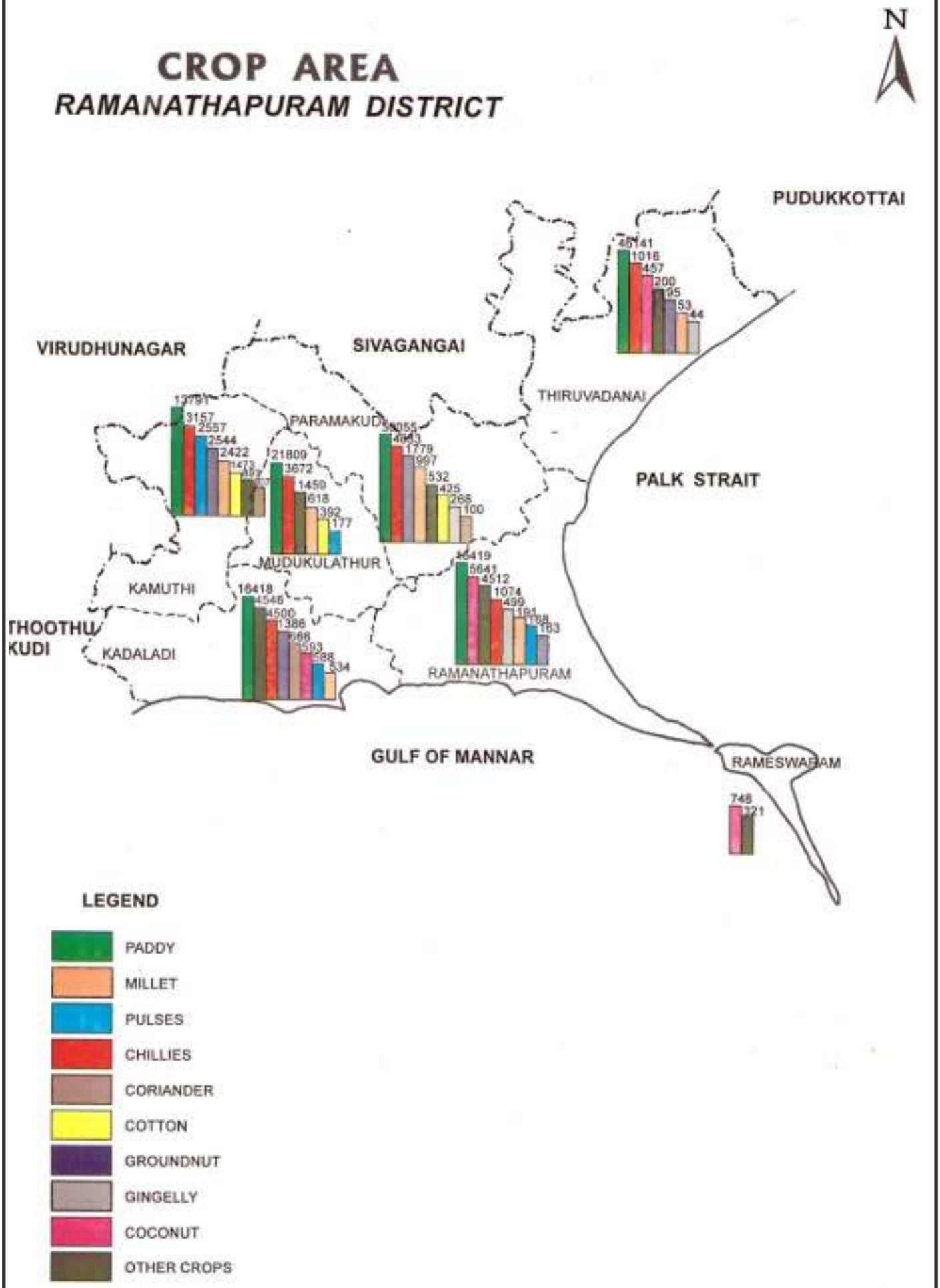
CROP AREA

(Area in hectares)

Crop	Kadaladi	Kamuthi	Madu-kulathur	Parama-kudi	Ramanatha puram	Rames-waram	Thiru-vadanai	Total
1. Paddy	16,418	13,791	21,809	30,055	16,419	—	46,141	1,44,633
2. Millets	534	2,422	618	997	191	—	53	4,815
3. Pulses	588	2,557	177	93	168	—	18	3,601
4. Chillies	4,500	3,157	3,672	4,033	1,074	—	1,016	17,452
5. Coriander	666	807	51	100	39	—	—	1,663
6. Cotton	62	1,473	392	425	—	—	6	2,358
7. Coconut	593	33	15	75	5,641	748	457	7,562
8. Groundnut	1,386	2,541	—	1,779	163	—	95	5,964
9. Gingelly	46	88	71	268	499	—	44	1,016
10. Other crops	4,546	897	1,459	532	4,512	321	200	12,467
Total	**29,339**	27,766	**28,264**	**38,357**	28,706	1,069	**48,030**	**2,01,531**

Other crops include palm, cashew, fruits, vegetables, greens, fodder sorghum, foragecrops, tree crops and miscellaneous non food crops

CROP AREA
RAMANATHAPURAM DISTRICT

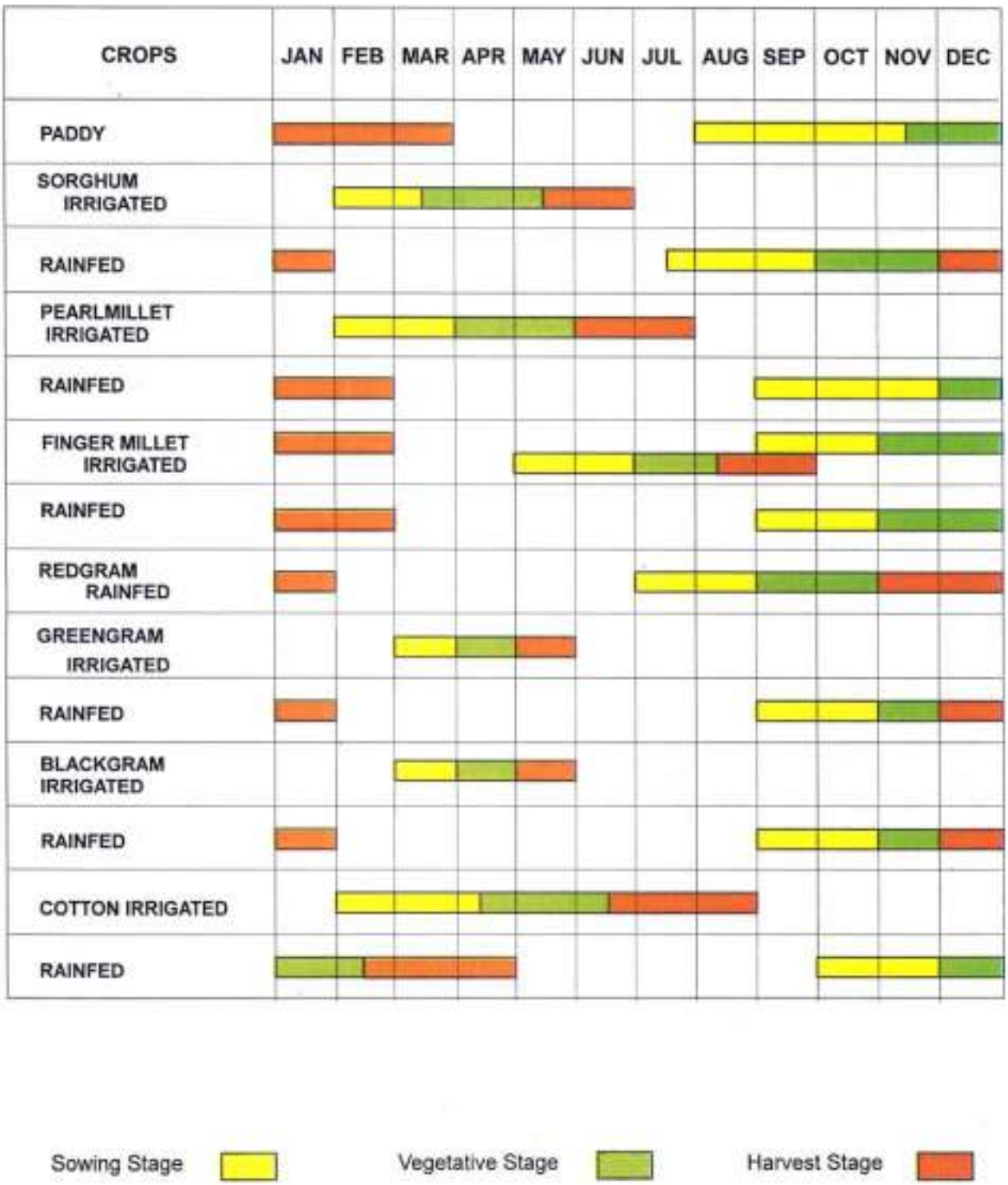


CROPPING CALENDAR

The major crops grown in the district are Paddy, Millets, Pulses, Chillies, Coconut, Groundnut, Cotton, Coriander, Gingelly and other crops. The other crops include palm, cashew, fruits, vegetables, greens, fodder sorghum, forage crops, tree crops and miscellaneous non food crops. The phenologic seasons of the main crops are shown in the chart indicating the various stages of crops during different months.

CROPPING CALENDAR

RAMANATHAPURAM DISTRICT



SOURCES OF IRRIGATION

The area irrigated through tanks is 6054 ha and through wells is 6573ha.

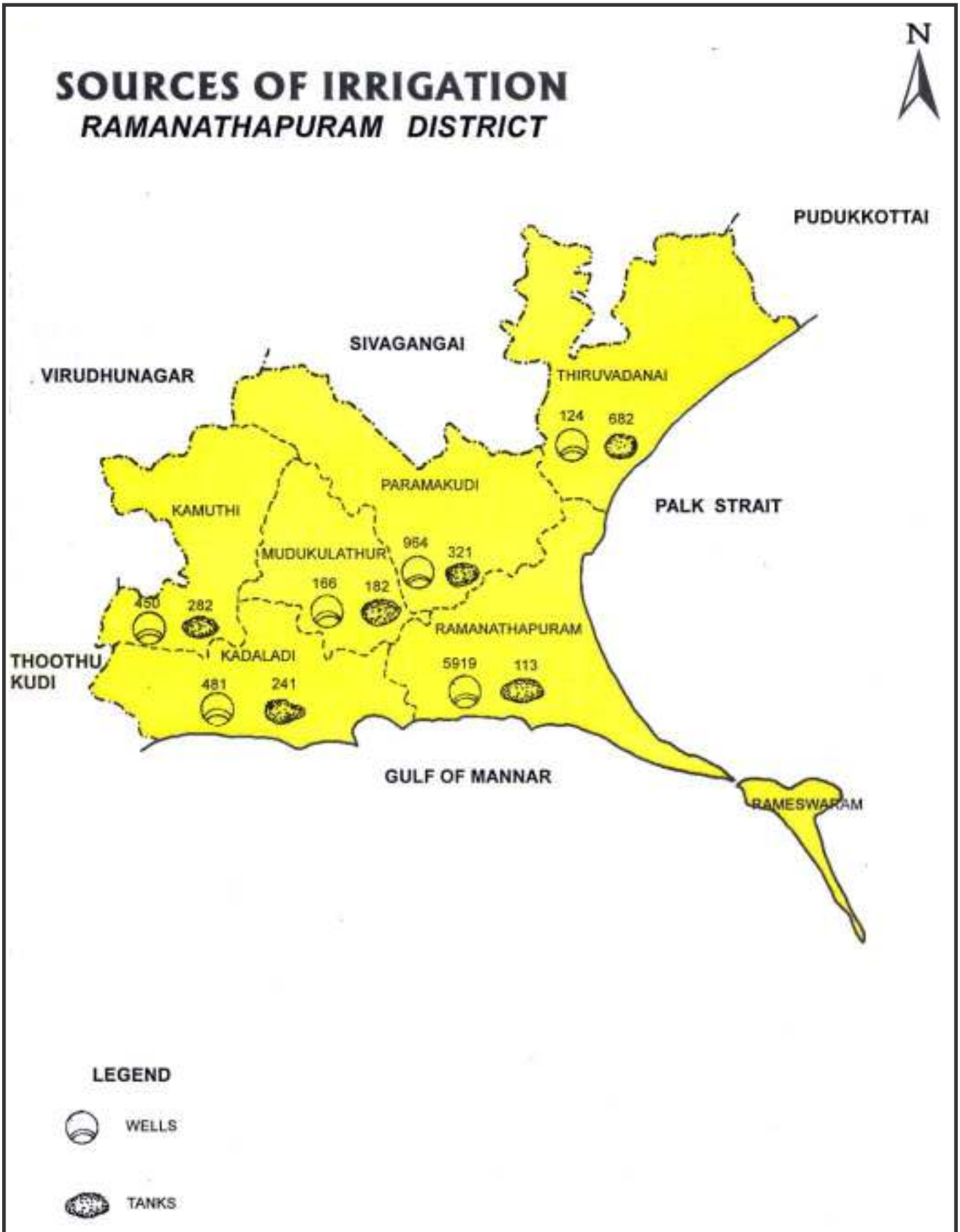
Among the wells, 104 Nos are tube wells and 8000 Nos are open wells.

Taluk	Wells	Tanks
1. Kadaladi	481	241
2. kamuthi	450	282
3. Mudukulathur	166	182
4. Paramakudi	964	321
5. Ramanathapuram	5,919	113
6. Rameswaram	—	—
7. Thiruvadanai	124	682
Total	8,104	1,621

Among the tanks, 203 Nos are Vaigai system tanks and 1618 Nos are rainfed tanks.

SOURCES OF IRRIGATION

RAMANATHAPURAM DISTRICT



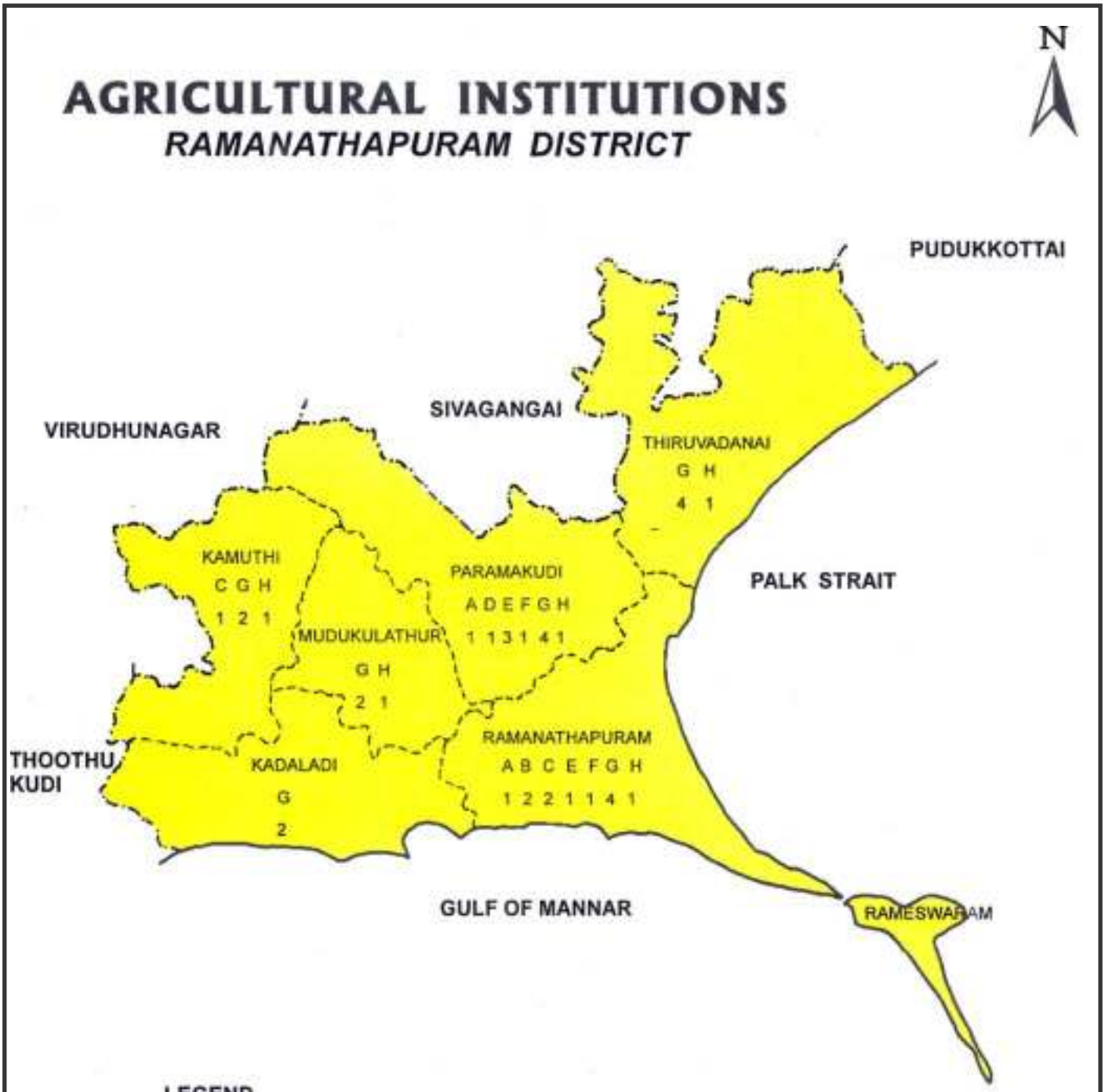
AGRICULTURAL INSTITUTIONS

INSTITUTIONS	Seed processing unit	Coconut Nursery	Hotri-cultural farm	Farmers training centre	Agricultural Laboratary	Agricultural Research Stations	Agricultural Extension centres	Regulated market
1. Kadaladi	—	—	—	—	—	—	2	—
2. Kamuthi	—	—	1	—	—	—	2	1
3. Mudukulathur	—	—	—	—	—	—	2	1
4. Paramakudi	1	—	—	1	3	1	4	1
5. Ramanathapuram	1	2	2	—	1	1	4	1
6. Rameswaram	—	—	—	—	—	—	—	—
7. Thiruvadanai	—	—	—	—	—	—	4	1
Total	**2**	2	3	1	**4**	**2**	**18**	**5**

Among agricultural laboratories one soil testing laboratory, one Mobile soil testing Laboratory and one fertiliser control laboratory are in Paramakudi. Bio fertilizer production unit is in Ramanathapuram. Agricultural Research stations of Tamilnadu Agricultural University are in Ramanathapuram and Paramakudi.

AGRICULTURAL INSTITUTIONS

RAMANATHAPURAM DISTRICT



LEGEND

A - SEED PROCESSING UNIT

B - COCONUT NURSERY

C - HORTICULTURAL FARM

D - FARMERS TRAINING CENTRE

E - AGRICULTURAL LABORATORY

F - AGRICULTURAL RESEARCH STATION

G - AGRICULTURAL EXTENSION CENTRE

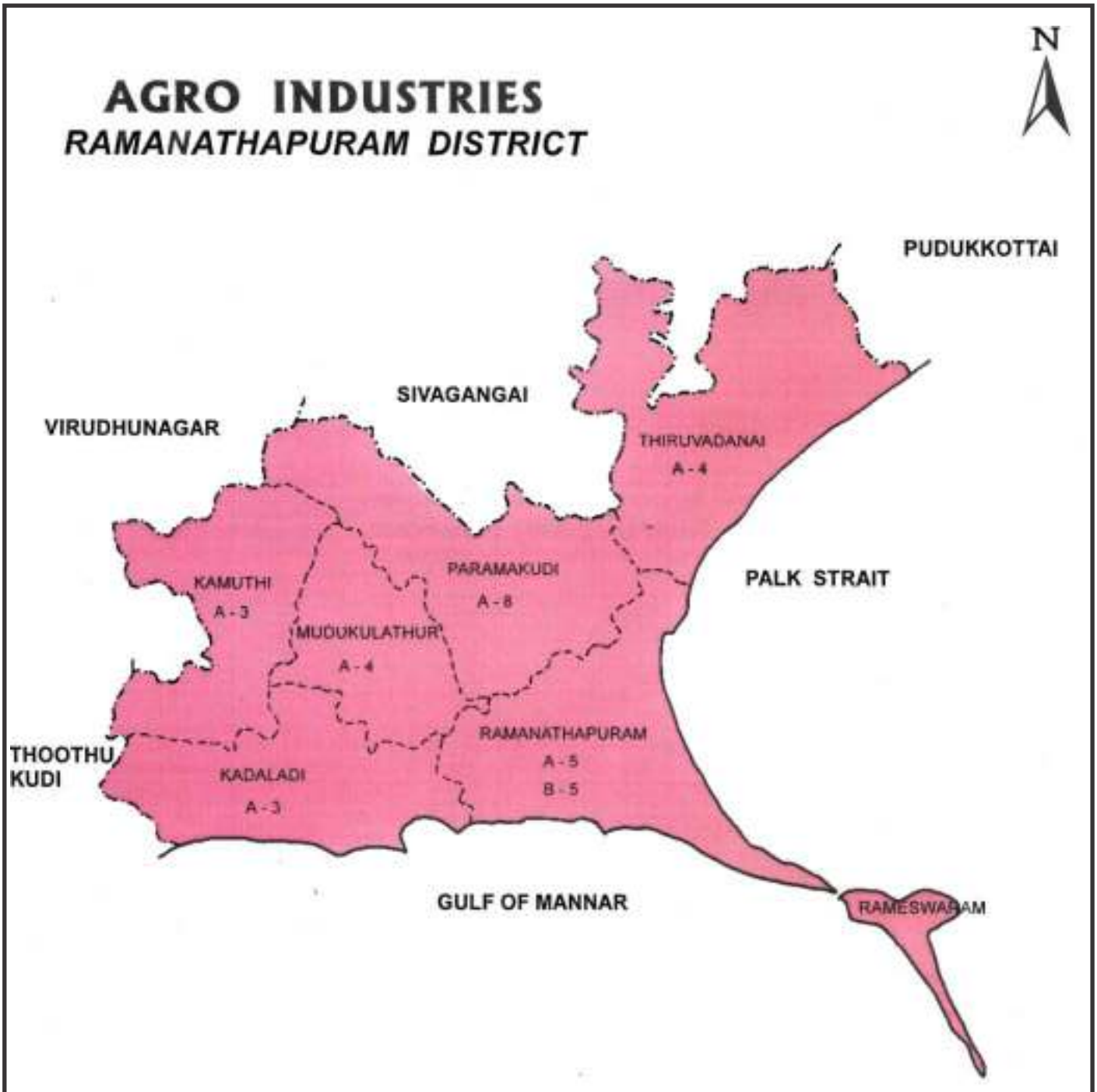
H - REGULATED MARKET

AGRO INDUSTRIES

(Cottage / small / medium scale Industries)

Industry	Number of SSI units	Coir Industries
1. Kadaladi	3	—
2. Kamuthi	3	—
3. Mudukulathur	4	—
4. Paramakudi	8	—
5. Ramanathapuram	5	5
6. Rameswaram	—	—
7. Thiruvadanai	4	—

AGRO INDUSTRIES
RAMANATHAPURAM DISTRICT



LEGEND

A - SMALL SCALE INDUSTRIES

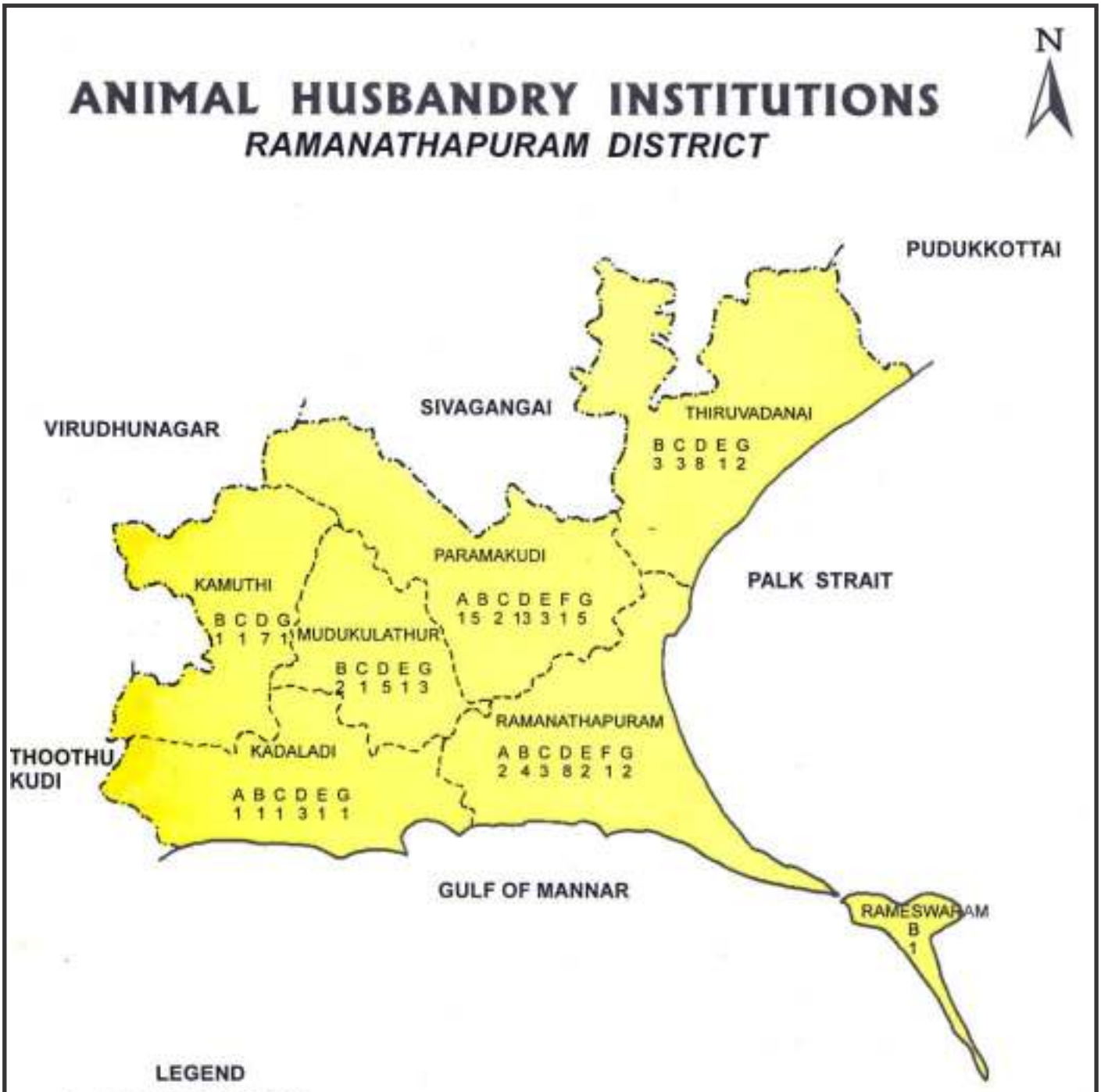
B - COIR INDUSTRIES

ANIMAL HUSBANDRY INSTITUTIONS

Taluk	Veterinary hospital	Veterinary Dispensary	Mobile Unit	Veterinary sub centres (Key village centre)	Artificial insemination centres	Slaughter house	Sheep centre
1. Kadaladi	1	1	1	3	1	—	1
2. Kamuthi	—	1	1	7	—	—	1
3. Mudukulathur	—	2	1	5	1	—	3
4. Paramakudi	1	5	2	13	3	1	5
5. Ramanathapuram	2	4	3	8	2	1	2
6. Ramswaram	—	1	—	—	—	—	—
7. Thiruvadanai	—	3	3	8	1	—	2
Total	4	17	11	44	8	2	14

ANIMAL HUSBANDRY INSTITUTIONS

RAMANATHAPURAM DISTRICT



LEGEND

A - VETERINARY HOSPITAL

B - VETERINARY DISPENSARIES

C - MOBILE UNIT

D - VETERINARY SUB CENTRES

E - ARTIFICIAL INSEMINATION CENTRE

F - SLAUGHTER HOUSE

G - SHEEP CENTRE

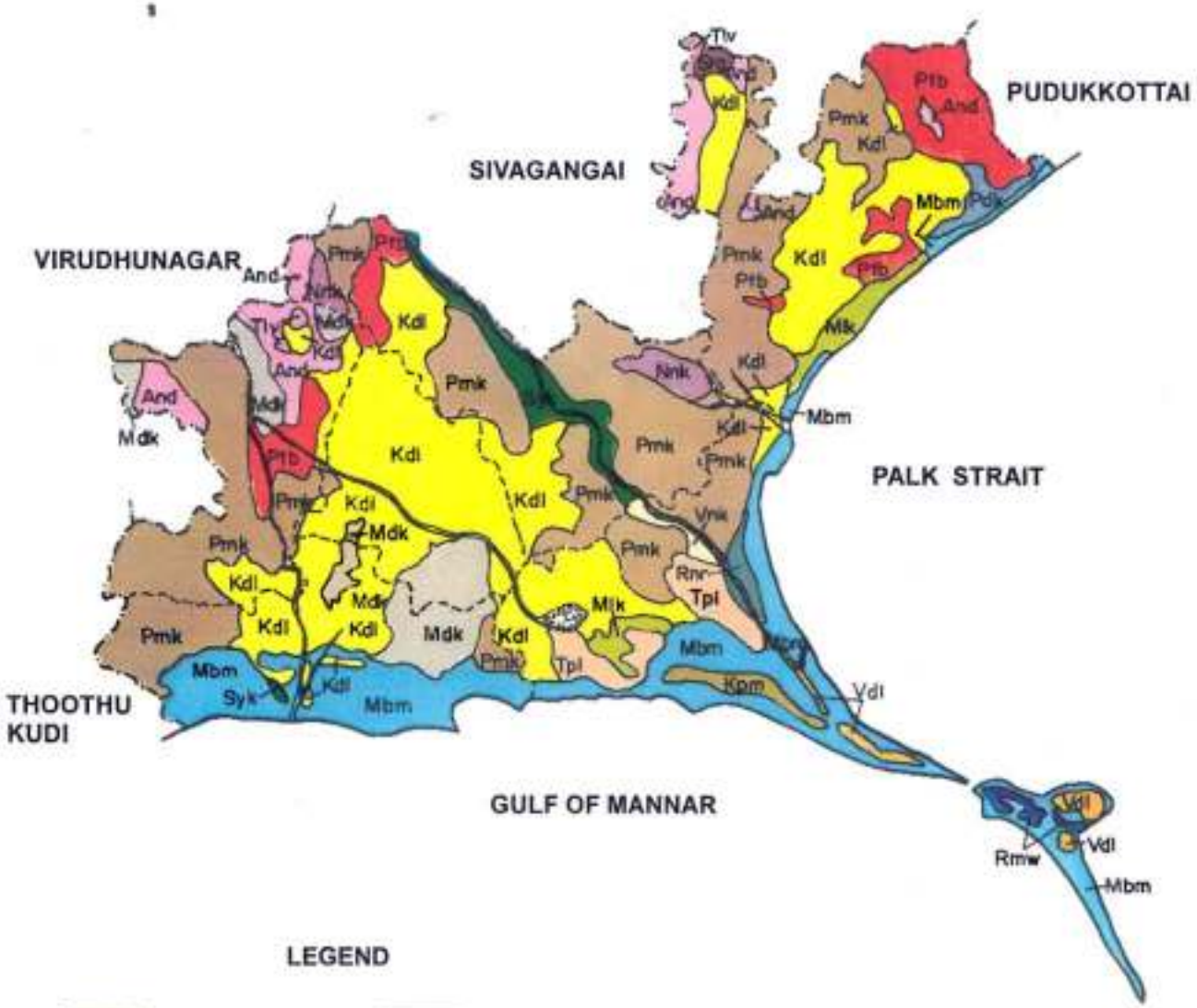
SOILS

RAMANATHAPURAM DISTRICT

Soil series	Symbol	Extent	
		ha	%
1. Kadaladi	Kdl	97,003	22.91
2. Paramakudi	Pmk	93,036	21.98
3. Mandabam	Mbm	42,561	10.05
4. Partibanur	Ptb	27,707	6.54
5. Anandur	And	15,526	3.67
6. Mudukulathur	Mdk	14,621	3.45
7. Mamallakkarai	Mlk	7,294	1.72
8. Tiruppullani	Tpl	6,372	1.51
9. Sayalkudi	Syk	5,713	1.35
10. Pudukudi	Pdk	3,466	0.82
11. Nainarkovil	Nnk	3,408	0.81
12. Keelapavalam	Kpm	3,375	0.80
13. Vedalai	Vdl	2,507	0.59
14. Ramnagar	Rnr	2,090	0.49
15. Vannankundu	Vnk	2,062	0.49
16. Sarugani	Srg	1,004	0.24
17. Thellivayal	Tlv	969	0.23
18. Rameswaram	Rmw	720	0.17
Forests	—	4,488	1.06
Others	—	89,422	21.12
Total Geographical area	—	4, 23,344	100.00

SOILS

RAMANATHAPURAM DISTRICT



LEGEND

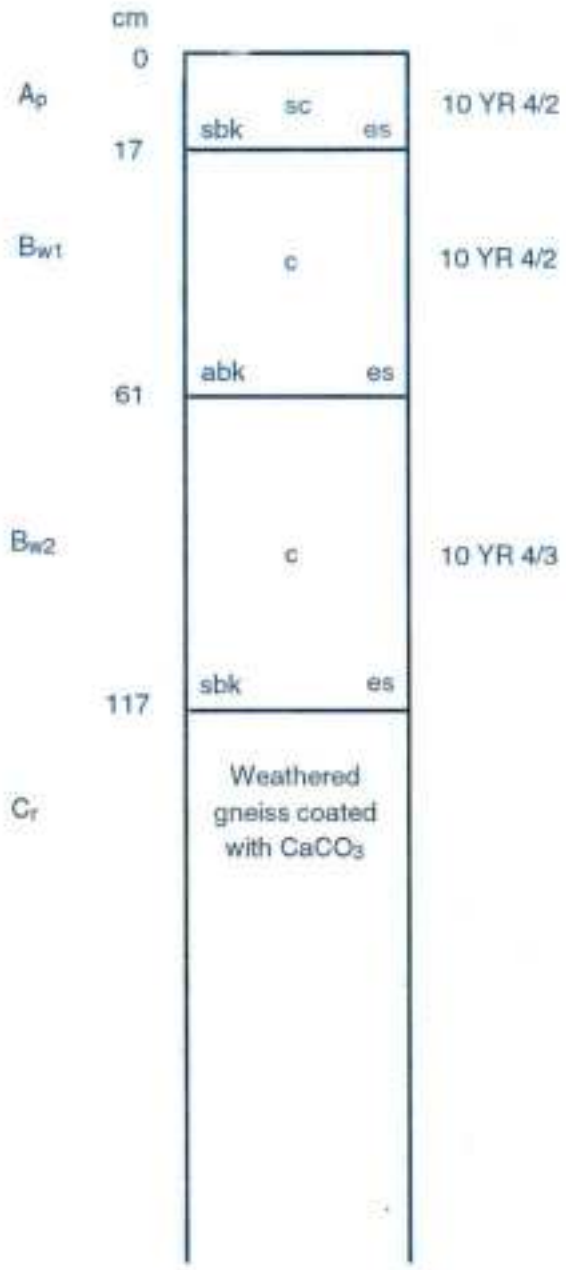
Kdl	KADALADI	Pdk	PUDUKUDI
Pmk	PARAMAKUDI	Nnk	NAINARKOVIL
Mbm	MANDABAM	Kpm	KEELAPAVALAM
Ptb	PARTIBANUR	Vdl	VEDALAI
And	ANANDUR	Rnr	RAMNAGAR
Mdk	MUDUKULATHUR	Vnk	VANNANKUNDU
Mlk	MAMALLAKKARAI	Srg	SARUGANI
Tpl	TIRUPPULLANI	Tlv	THELLIVAYAL
Syk	SAYALKUDI	Rmw	RAMESWARAM

KADALADI SERIES (Kdl)

Physiography	:	Plain
Drainage	:	Imperfectly drained
Parent material	:	Calc gneiss

Horizon	Description :
Ap	0-17cm; dark grayish brown (10 YR 4/2m); sandy clay; moderate, medium sub angular blocky; dry hard, moist firm, wet sticky and plastic; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; many fine roots; very fine pores; slow permeability; gradual, wavy boundary; pH 8.1.
Bw_1	17-61cm; dark grayish brown (10 YR 4/2 m) clay; strong, coarse angular blocky; dry very hard, moist firm, wet sticky and plastic; pressure faces; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; few, fine roots; micropores; very slow permeability; gradual, wavy boundary; pH 8.3.
Bw_2	61-117cm; dark brown (10 YR 4/3m); clay; strong, coarse subangular blocky; dry very hard, moist firm; wet very sticky and plastic; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; very fine pores; slow permeability; pH 8.4
Cr	117^+ cm; weathered gneiss coated with $CaCO_3$

KADALADI SERIES (Kdl)



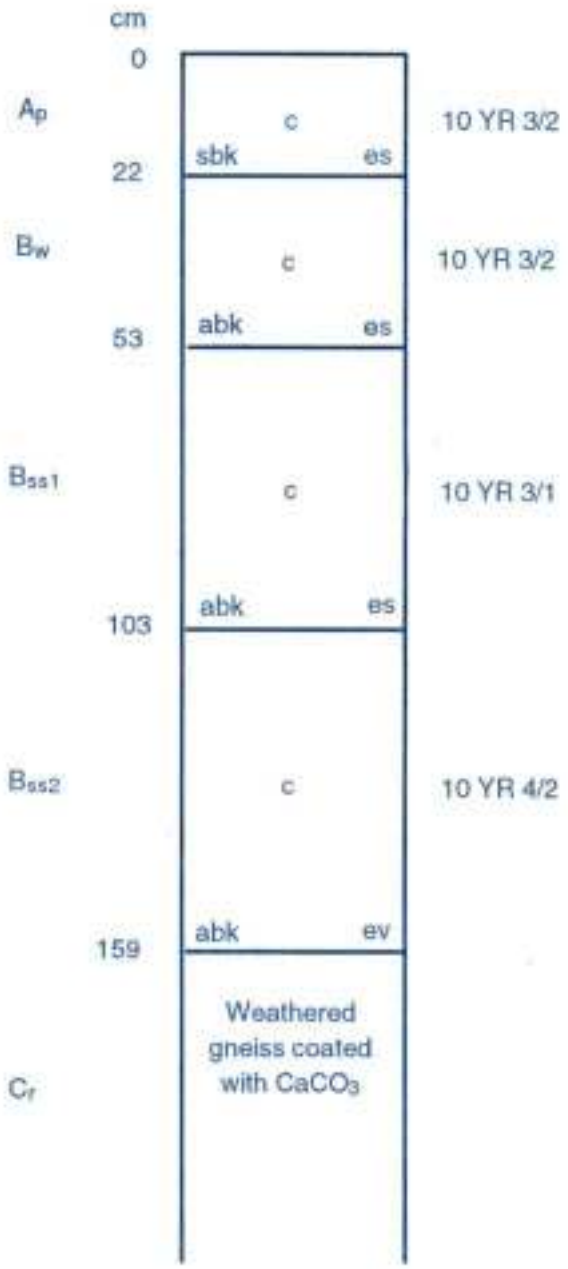
Soil Taxonomy : Fine, mixed, isohyperthermic Vertic Haplustepts

PARAMAKUDI SERIES (Pmk)

Physiography	:	plain
Drainage	:	imperfectly drained
Parent material	:	Calc gneiss

HORIZON	DESCRIPTION
Ap	0-22cm; very dark grayish brown (10 YR 3/2m); clay; moderate, medium subangular to angular blocky; dry hard, moist firm, wet sticky and plastic; strong effervescence to dilute HCl; common; fine to medium, round to irregular conca; many fine roots; very fine pores; very slow permeability; gradual, wavy boundary; pH 8.5
Bw	22-53cm; very dark grayish brown (10 YR 3/2 m); clay; strong, coarse angular blocky; dry very hard, moist firm, wet sticky and plastic; many, thick pressure faces; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; few, fine roots; micro pores; very slow permeability; diffuse, wavy boundary; pH 8.7
Bss_1	53-103cm; very dark gray (10 YR 3/1 m); clay; strong, coarse angular blocky; dry hard, moist firm, wet very sticky and very plastic; prominent slickensides close enough to intersect; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; micro pores; very slow permeability; gradual, wavy boundary; pH 8.7
Bss_2	103-159cm; dark grayish brown (10 YR 4/2m); clay; moderate to strong, medium to coarse angular blocky; dry hard, moist firm, wet very sticky and very plastic; slickensides close enough to intersect; violent effervescence to dilute HCl; many, fine to medium, round to irregular conca; micro pores; slow permeability pH 8.6
Cr	159^{+}cm; weathered gneiss coated with $CaCO_3$

PARAMAKUDI SERIES (Pmk)



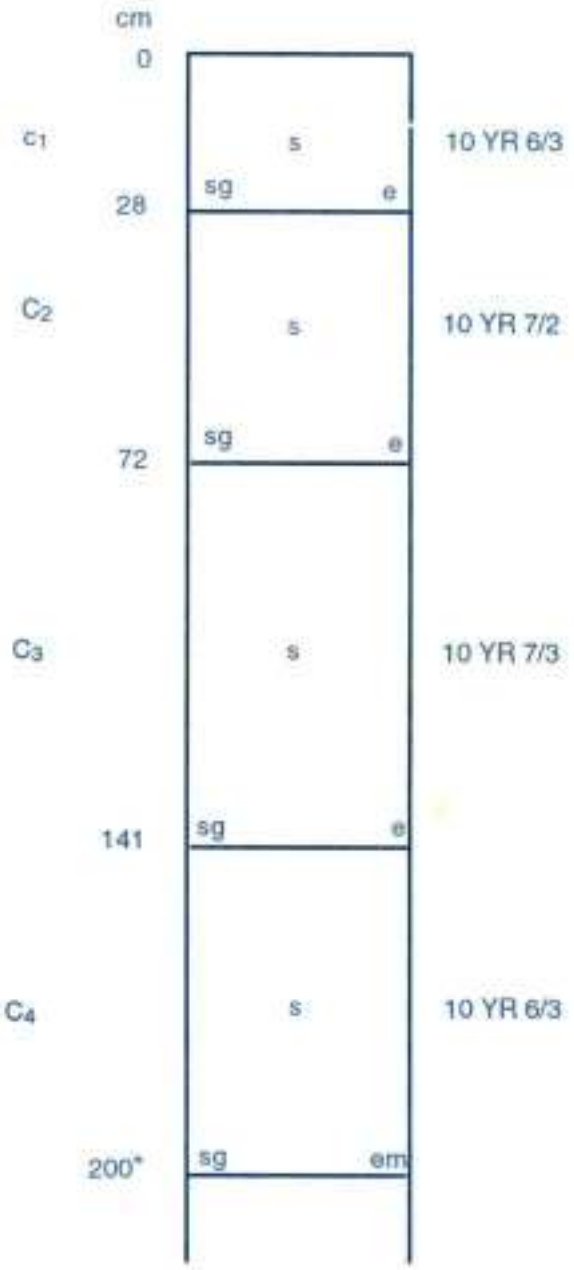
Soil Taxonomy : Fine smectitic, isohyperthermic Typic Haplusterts

MANDABAM SERIES (Mbm)

Physiography	:	Gently sloping coastal plain.
Drainage	:	Excessively drained
Parent material	:	Coastal alluvium

Horizon	Description
C_1	0-28cm; pale brown (10 YR 6/3 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; mild effervescence; few fine roots; very raid permeability; clear, wavy boundary; pH 6.8
C_2	28-72cm; light gray (10 YR 7/2 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; mild effervescence; very rapid permeability; gradual, wavy boundary; pH 7.1
C_3	72-141cm; very pale brown (10 YR 7/3); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; mild effervescence; very rapid permeability; clear, wavy boundary; pH 6.9
C_4	141-200$^+$cm; Pale brown (10 YR 6/3 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; moderate effervescence; very rapid permeability; pH 7.2.

MANDABAM SERIES (Mbm)



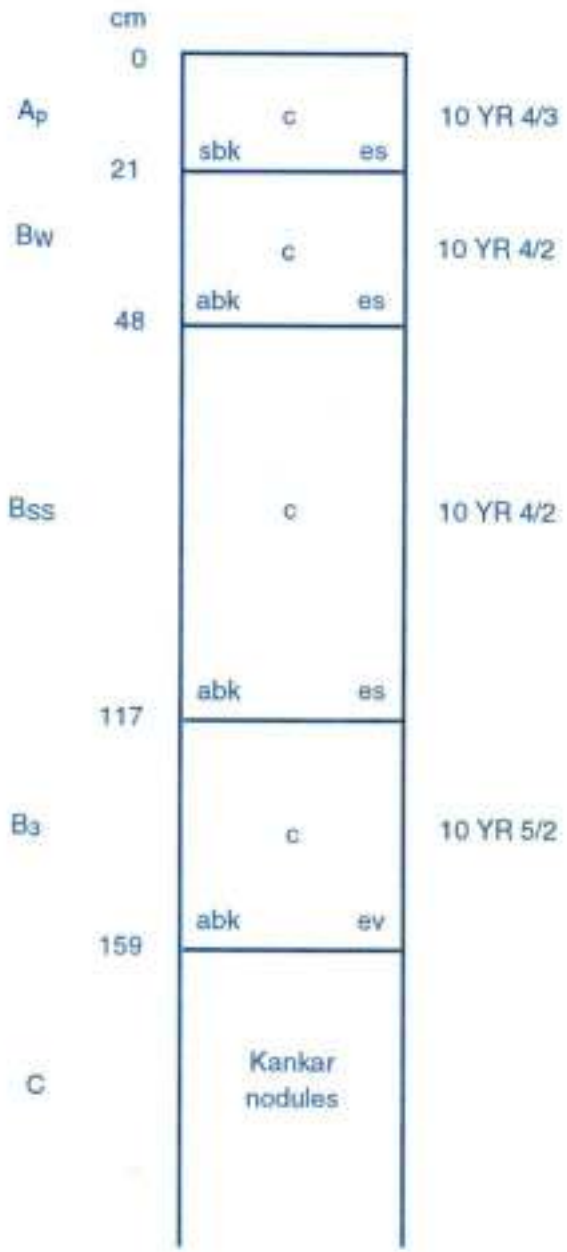
Soil Taxonomy : Siliceous, isohyperthermic Typic Ustipsammen ts

PARTIBANUR SERIES (Ptb)

Physiography	:	Plain
Drainage	:	Imperfectly drained
Parent material	:	Calc gneiss

HORIZON	DESCRIPTION
Ap	0-21cm; dark brown (10 YR 4/3m); clay; moderate, medium sub angular blocky to angular blocky; dry hard, moist firm, wet sticky and plastic; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; common, fine roots; very fine pores; very slow permeability; gradual, wavy boundary; pH 8.1
Bw	21-48cm; dark grayish brown (10 YR 4/2 m); clay; strong, coarse angular blocky; dry very hard, moist firm, wet very sticky and very plastic; pressure faces; strong effervescence to dilute HCl; common; fine to medium, round to irregular conca; few, fine roots; micropores; very slow permeability; diffuse, wavy boundary; pH 8.3
Bss	53-117cm; dark grayish brown (10 YR 4/2 m); clay; strong, coarse angular blocky; dry very hard, moist firm, wet very sticky and very plastic; slickensides close enough to intersect; strong effervescence to dilute HCl; common, fine to medium, round to irregular conca; micropores; very slow permeability; gradual, wavy boundary; pH 8.4.
B_3	117-159cm; grayish brown (10 YR 5/2 m); clay; weak to moderate, fine to medium angular blocky; dry slightly hard, moist friable, wet sticky and plastic; pressure faces; few gypsum crystals; violent effervescence to dilute HCl; many; fine to medium, irregular conca; very fine pores; slow permeability; pH 8.4.
C	159^{+}cm;Kankar nodules.

PARTIBANUR SERIES (Ptb)



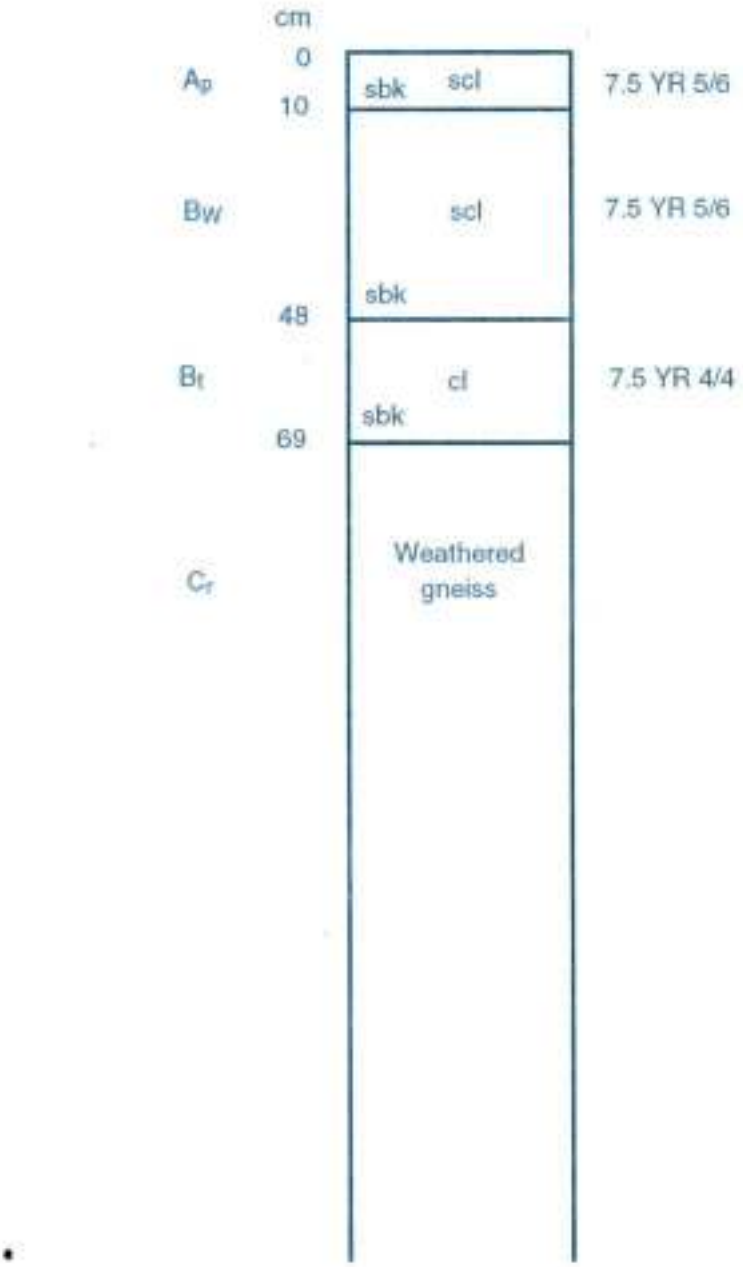
Soil Taxonomy : Fine, smectitic, isohyperthermic Chromic Haplusterts

ANANDUR SERIES (And)

Physiography	:	Plain
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss

Horizon	Description
Ap	0-10cm; strong brown (7.5 YR 5/6 m); coarse sandy clay loam; weak to moderate, fine to medium subangular blocky; dry slightly hard, moist friable, wet slightly sticky and slightly plastic; common fine and few medium roots; many fine, common medium and few coarse pores; moderately rapid permeability; clear, wavy boundary; pH 7.0.
Bw	10-48cm; strong brown (7.5 YR 5/6 m); sandy clay loam; moderate, medium subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; few, fine roots; common fine and few medium pores; moderately slow permeability; clear, smooth boundary; pH 7.2.
Bt	48-69cm; dark brown (7.5 YR 4/4 m); clay loam; strong, coarse subangular blocky; dry very hard, moist firm, wet sticky and slightly plastic; thin, patchy clay films; common fine pores; moderately slow permeability; pH 7.3.
Cr	69^{+}cm; weathered gneiss

ANANDUR SERIES (And)



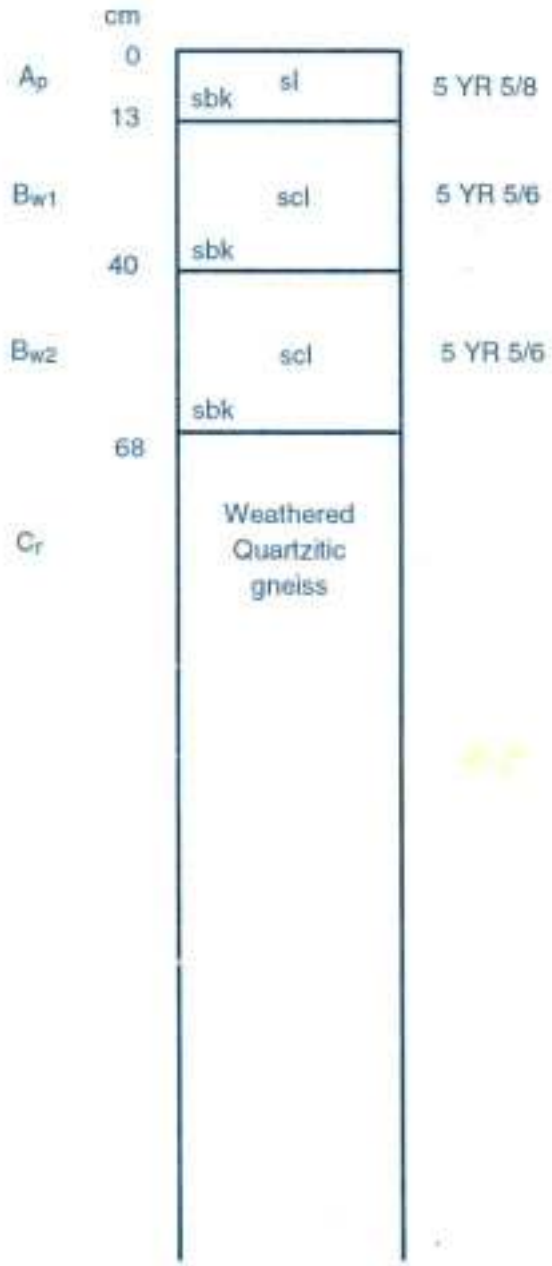
Soil Taxonomy : Fineloamy, mixed, isohyperthermic Typic Haplustalfs

MUDUKULATHUR SERIES (Mdk)

Physiography	:	Plain
Drainage	:	Moderately well drained
Parent material	:	Weathered quartzitic gneiss

HORIZON	DESCRIPTION
Ap	0-13cm; yellowish red (5 YR 5/8 m); sandy loam; weak, fine subangular blocky breaking into crumby; dry slightly hard, moist very friable, wet very slightly sticky and very slightly plastic; common, fine roots; common fine to medium pores; moderately rapid permeability; clear, smooth boundary; pH 6.6.
Bw_1	13-40cm; yellowish red (5 YR 5/6 m); sandy clay loam; moderate, medium subangular blocky; dry hard, moist friable, wet slightly sticky and slightly plastic; few fine roots; common fine and few medium pores; moderately slow permeability; clear, wavy boundary; pH 6.7.
Bw_2	40-68cm; yellowish red (5 YR 5/6 m); sandy clay loam; strong coarse subangular blocky; dry very hard; moist firm, wet slightly sticky and slightly plastic; common fine and few medium pores; moderately slow permeability; pH 6.8.
Cr	68^+cm; weathered quartzitic gneiss.

MUDUKULATHUR SERIES (Mdk)



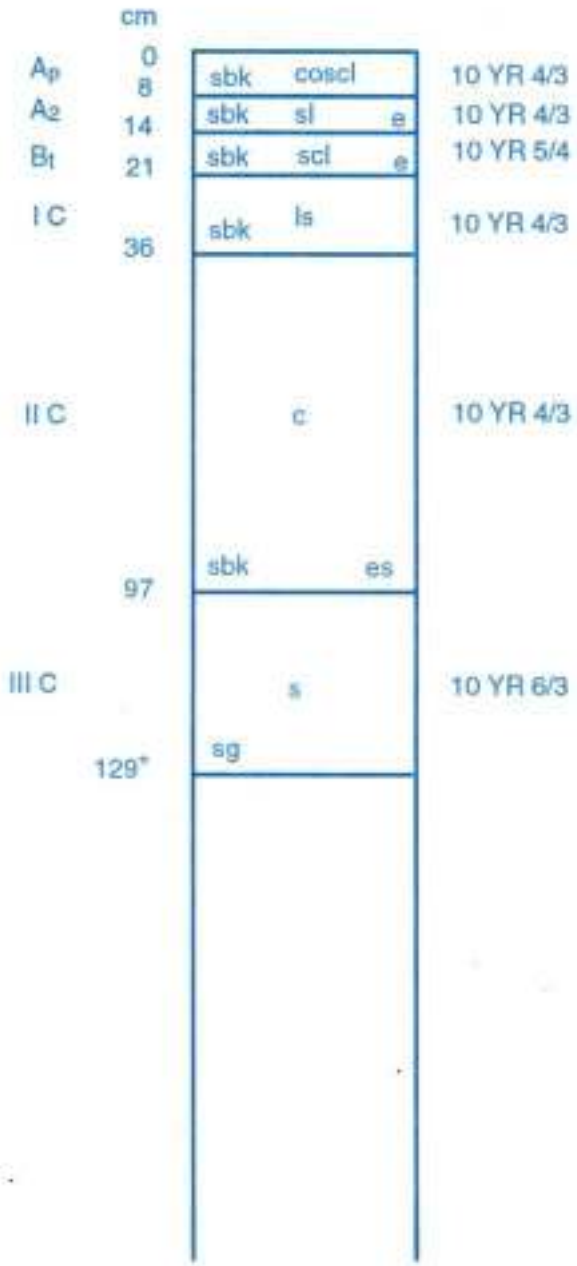
Soil Taxonomy : Fineloamy mixed, isohyperthermic Typic Haplustepts

MAMALLAKKARAI SERIES (Mlk)

Physiography	:	Flood plain
Drainage	:	Moderately well drained
Parent material	:	Alluvium

HORIZON	DESCRIPTION
Ap	0-8cm; dark brown (10 YR 4/3 m); coarse sandy clay loam; weak, fine subangular blocky; dry slightly hard, moist friable, wet slightly sticky and slightly plastic; common fine roots; common fine pores; moderately rapid permeability; clear, smooth boundary; pH 7.4
A_2	8-14cm; dark brown (10 YR 4/3 m); sandy loam; weak, fine sub angular blocky; dry slightly hard, moist friable, wet very slightly sticky and very slightly plastic; mild effervescence to dilute HCl; few fine roots; many fine and few medium pores; rapid permeability; clear, wavy boundary; pH 8.2.
Bt	14-21cm; yellowish brown (10 YR 5/4 m); sandy clay loam; strong, coarse subangular blocky; dry very hard, moist firm, wet slightly sticky and slightly plastic; mild effervescence to dilute HCl; thin, patchy clay films; common fine pores; moderately slow permeability; abrupt, wavy boundary; pH 7.9.
IC	21-36cm; dark brown (10 YR 4/3 m); loamy sand; massive; wet non sticky and non plastic; very rapid permeability; abrupt, wavy boundary; pH 8.1
II C	36-97cm; dark brown (10 YR 4/3 m); clay; strong coarse subangular blocky; dry very hard, moist firm, wet sticky and plastic; few, fine conca and conir; strong effervescence to dilute HCl; fine pores; slow permeability; abrupt, wavy boundary; pH 8.2.
III C	97-129+cm; pale brown (10 YR 6/3 m); sand; single grain; wet non sticky and non plastic; very rapid permeability; pH 7.8.

MAMALLAKKARAI SERIES (Mlk)



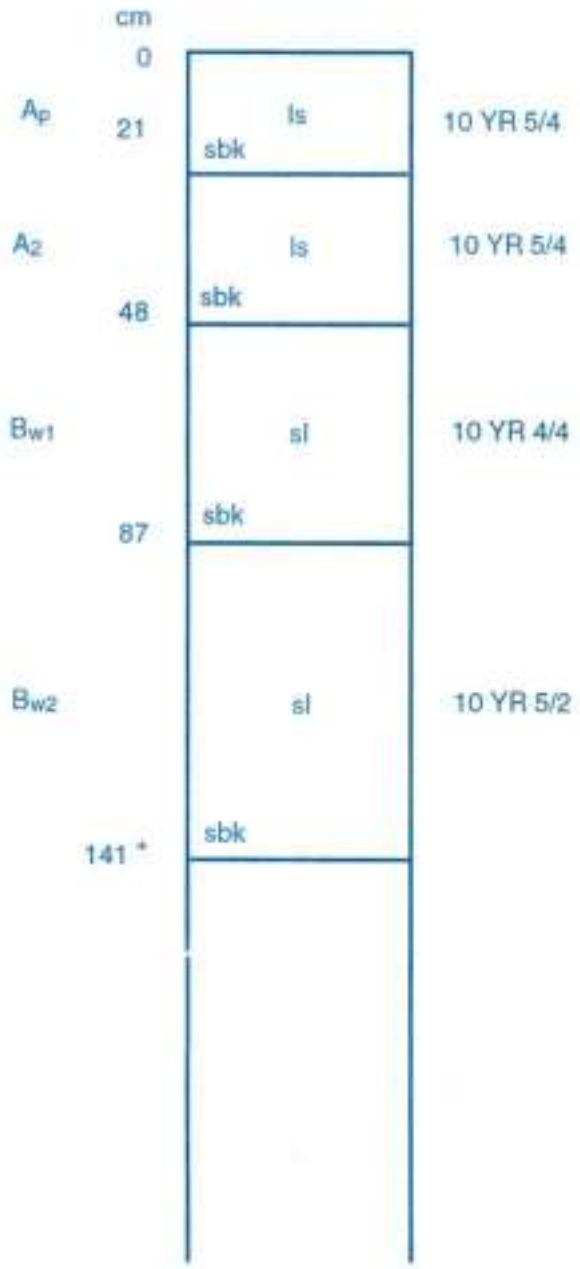
Soil Taxonomy : Loamy over clayey, mixed, isohyperthermic Fluventic Haplustalfs

TIRUPPULLANI SERIES (Tpl)

Physiography	:	Plain
Drainage	:	Moderately well drained
Parent material	:	Gneiss

HORIZON	DESCRIPTION
Ap	0-21cm; yellowish brown (10 YR 5/4 m); loamy sand; weak, fine to medium subangular blocky; dry slightly hard, moist very friable, wet non sticky and non plastic; many fine roots; many fine and few medium pores; rapid permeability; clear, smooth boundary; pH 7.9.
A_2	21-48cm; yellowish brown (10 YR 5/4 m); loamy sand; moderate medium subangular blocky; dry hard, moist friable, wet non sticky and non plastic; few fine roots; many fine and few median pores; rapid permeability. clear, wavy boundary; pH 8.1.
Bw_1	48-87cm; dark yellowish brown (10 YR 4/4 m); sandy loam; strong, coarse subangular blocky; dry extremely hard, moist firm, wet very slightly sticky and very slightly plastic; common, fine and few, medium pores; moderately rapid permeability; clear, smooth boundary; pH 8.3
Bw_2	87-141$^+$cm; grayish brown (10 YR 5/2 m); sandy loam; strong coarse subangular blocky; dry extremely hard, moist firm, wet very slightly sticky and very slightly plastic; common, fine to medium pores; moderately rapid permeability; pH 8.4.

TIRUPPULLANI SERIES (Tpl)



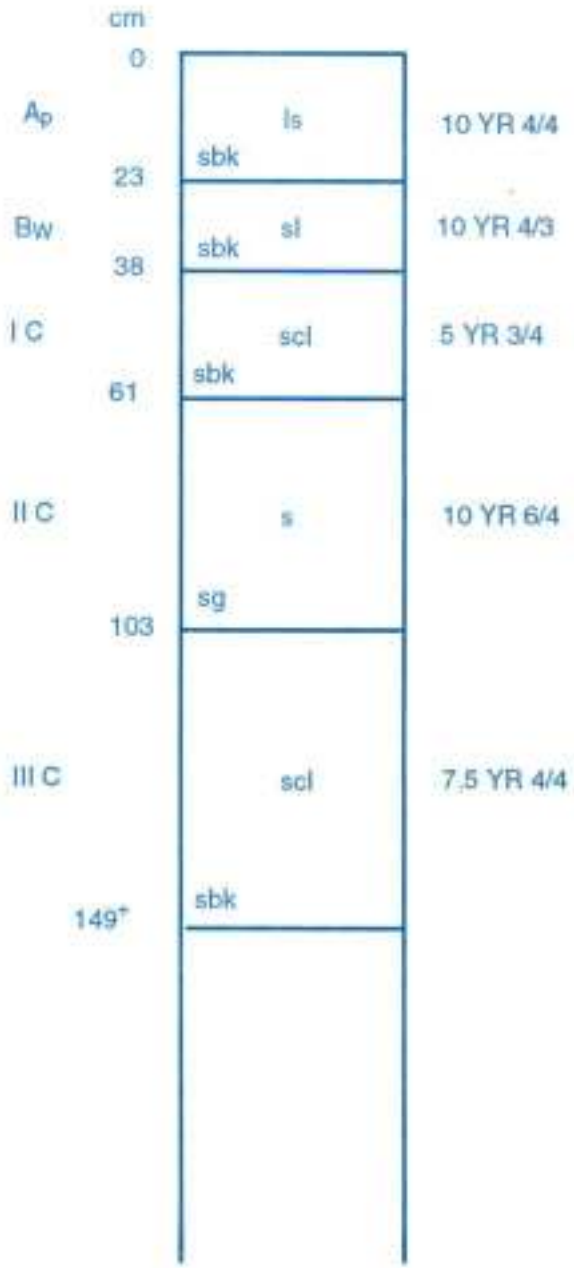
Soil Taxonomy : Coarseloamy, mixed, isohyperthermic Typic Haplustepts

SAYALKUDI SERIES (Syk)

Physiography	:	Flood plain
Drainage	:	Moderately well drained
Parent material	:	River Alluvium

HORIZON	DESCRIPTION
Ap	0-23cm; dark yellowish brown (10 YR 4/4 m); loamy sand; weak, fine subangular blocky; dry very slightly hard, moist very friable, wet non sticky and non plastic; many, fine roots; very rapid permeability; clear, wavy boundary pH 7.4.
Bw	23-38cm; dark brown (10 YR 4/3 m); sandy loam; moderate, medium subangular blocky; dry hard, moist friable, wet very slightly sticky and very slightly plastic; few, fine roots; common, fine to medium pores; rapid permeability; abrupt, wavy boundary; pH 7.5.
IC	38-61cm; dark reddish brown (5 YR 3/4 m); sandy clay loam; moderate, medium, subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; few, fine roots; many, fine and few, medium pores; moderately slow permeability; abrupt, wavy boundary; pH 7.8
II C	61-103cm; light yellowish brown (10 YR 6/4 m); sand; single grain; dry loose, moist loose; wet non sticky and non plastic; very rapid permeability; abrupt, wavy boundary; pH 7.4.
III C	103-149^{+}cm; dark brown(7.5 YR 4/4 m); sandy clay loam; moderate to strong, medium to coarse subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; common fine and medium pores; moderately slow permeability; pH 7.8.

SAYALKUDI SERIES (Syk)



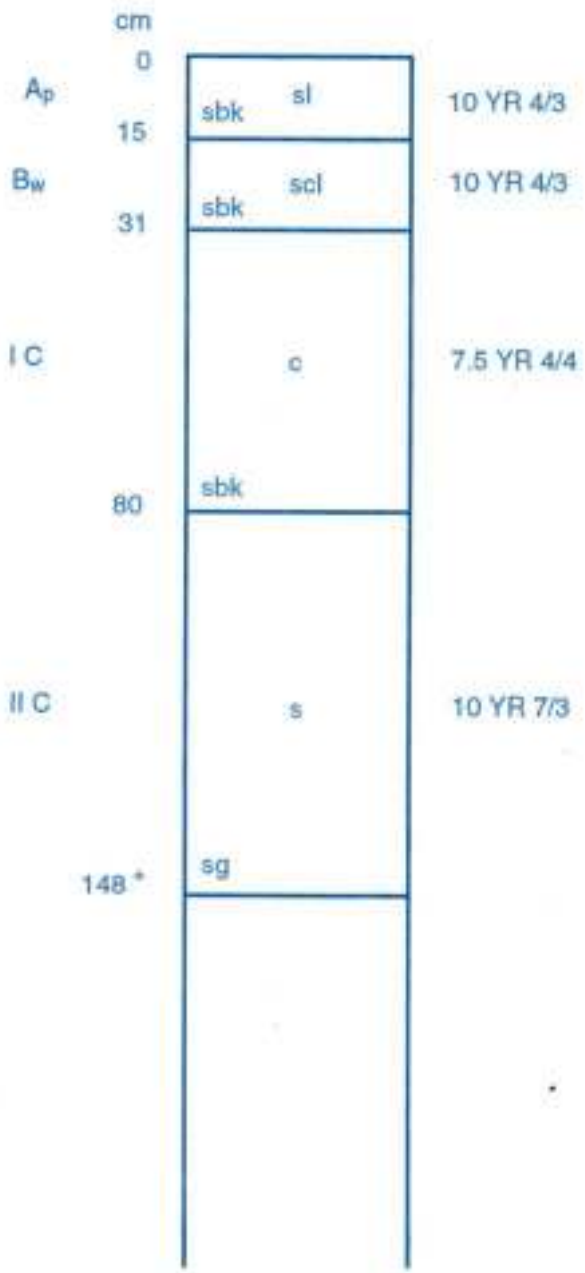
Soil Taxonomy : Loamy over sandy, mixed, isohyperthermic Fluventic Haplustepts

PUDUKUDI SERIES (Pdk)

Physiography	:	Flood plains
Drainage	:	Moderately well drained
Parent material	:	Alluvium

HORIZON	DESCRIPTION
Ap	0-15cm; dark brown (10 YR 4/3 m); sandy loam; weak, fine sub angular blocky; dry slightly hard, moist very friable, wet very slightly sticky and very slightly plastic; few, fine roots; many, fine, common medium and few coarse pores; moderately rapid permeability; clear, smooth boundary; pH 6.9.
Bw	15-31cm; dark brown (10 YR 4/3 m); sandy clay loam; moderate to strong, medium to coarse sub angular blocky; dry hard, moist firm, wet very slightly sticky and very slightly plastic; very few, fine roots; many, fine and few, medium pores; moderately rapid permeability; abrupt, smooth boundary; pH 7.1.
IC	31-80cm; dark brown (7.5 YR 4/4 m); clay; strong, coarse subangular blocky; dry very hard, moist firm, wet sticky and plastic; very fine pores; slow permeability; abrupt, smooth boundary; pH 8.3
II C	80-148^{+}cm; very pale brown (10 YR 7/3); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; very rapid permeability; pH 7.4

PUDUKUDI SERIES (Pdk)



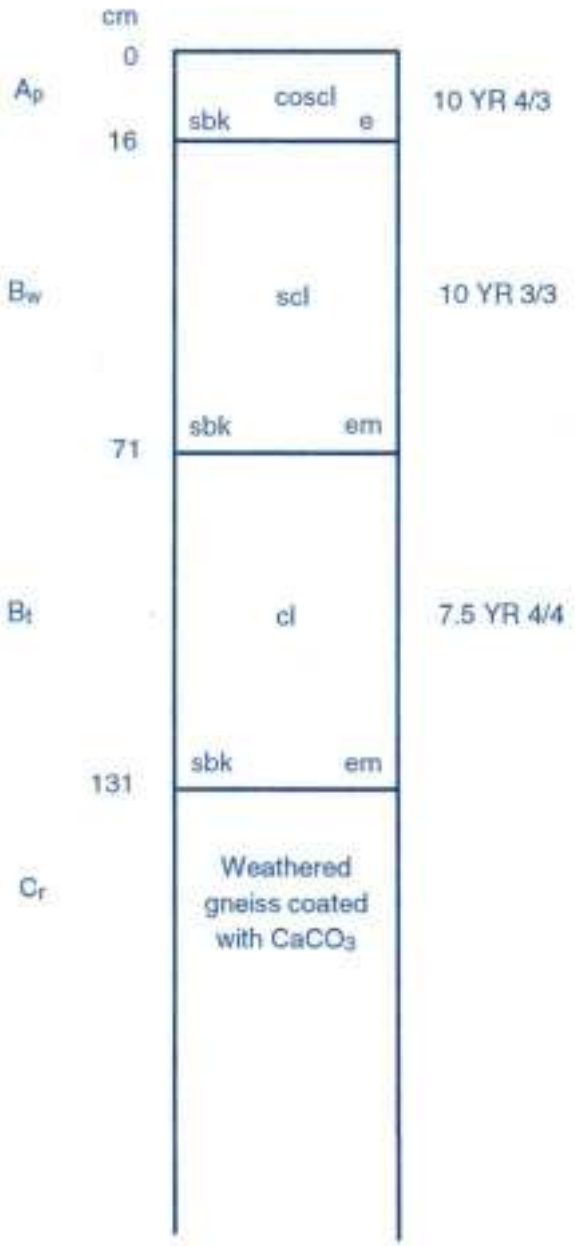
Soil Taxonomy : Clayey over sandy, mixed, isohyperthermic Fluventic Haplustepts

NAINARKOVIL SERIES (Nnk)

Physiography	:	Plain
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss coated with calcium carbonate

HORIZON	DESCRIPTION
Ap	0-16cm; dark brown (10 YR 4/3 m); coarse sandy clay loam; moderate, medium subangular blocky; dry slightly hard to hard, moist friable, wet slightly sticky and slightly plastic; mild effervescence to dilute HCl; many fine roots; many fine and few medium pores; moderately slow permeability; clear, wavy boundary; pH 8.1.
Bw	16-71cm; dark brown (10 YR 3/3 m); sandy clay loam; strong, coarse sub angular blocky; dry very hard, moist firm, wet slightly sticky and slightly plastic; moderate effervescence to dilute HCL; few, fine ferromanganese and calcium carbonate concretions; few fine roots; many fine and few medium pores; moderately slow permeability; clear, smooth boundary; pH 8.3
Bt	71-131cm; dark brown (7.5 YR 4/4 m); clay loam; strong, coarse subangular blocky; dry hard, moist firm, wet sticky and slightly plastic; moderate effervescence to dilute Hcl; few, fine ferromanganese concretions; thin, patchy clay films on ped faces; common, fine to medium conca; common, fine pores; slow permeability; pH 8.4.
Cr	131^{+}cm; weathered gneiss coated with $CaCO_3$.

NAINARKOVIL SERIES (Nnk)



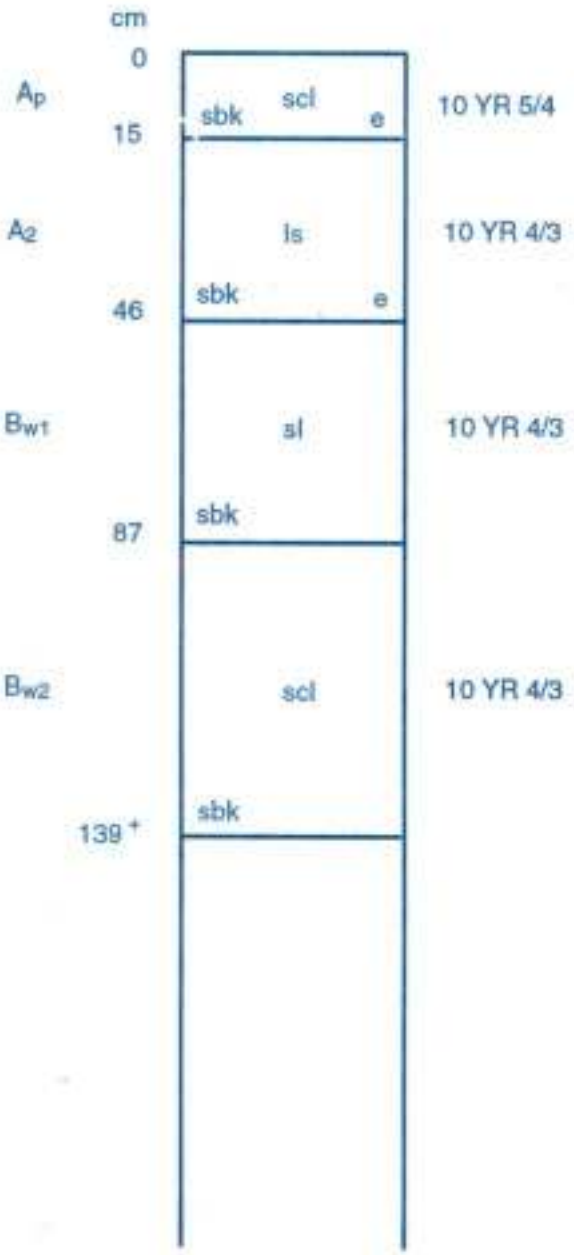
Soil Taxonomy : Fineloamy, mixed, isohyperthermic Typic Haplustalfs

KEELAPAVALAM SERIES (Kpm)

Physiography	:	Plain
Drainage	:	Poorly drained
Parent material	:	Alluvium

Horizon	Description
Ap	0-15cm; yellowish brown (10 YR 5/4 m); sandy clay loam; moderate medium subangular blocky; dry hard, moist slightly firm, wet slightly sticky and slightly plastic, mild effervescence to dilute HCl; common fine roots; many fine and few medium pores; moderately slow permeability; clear, wavy boundary; pH 7.0.
A_2	15-46cm; dark brown (10 YR 4/3 m); loamy sand; weak, fine subangular blocky; dry slightly hard, moist very friable,wet non sticky and non plastic; mild effervescence to dilute HCl; few fine roots; many, fine to medium and few coarse pores; rapid permeability; clear, wavy boundary; pH 7.2
Bw	46-87cm; dark brown (10 YR 4/3 m); sandy loam; moderate medium subangular blocky; dry hard, moist friable, wet very slightly sticky and very slightly plastic; common, medium, faint, very dark gray (10 YR 3/1) mottles; common fine pores; moderately rapid permeability; clear, smooth boundary; pH 7.3.
Bw_2	87-139+cm; dark brown (10 YR 4/3 m); sandy clay loam; moderate to strong, medium to coarse subangular blocky; moist firm, wet slightly sticky and slightly plastic; common, medium, faint, very dark gray (10 YR 3/1) mottles; common fine pores; moderately slow permeability; pH 7.3.

KEELAPAVALAM SERIES (Kpm)



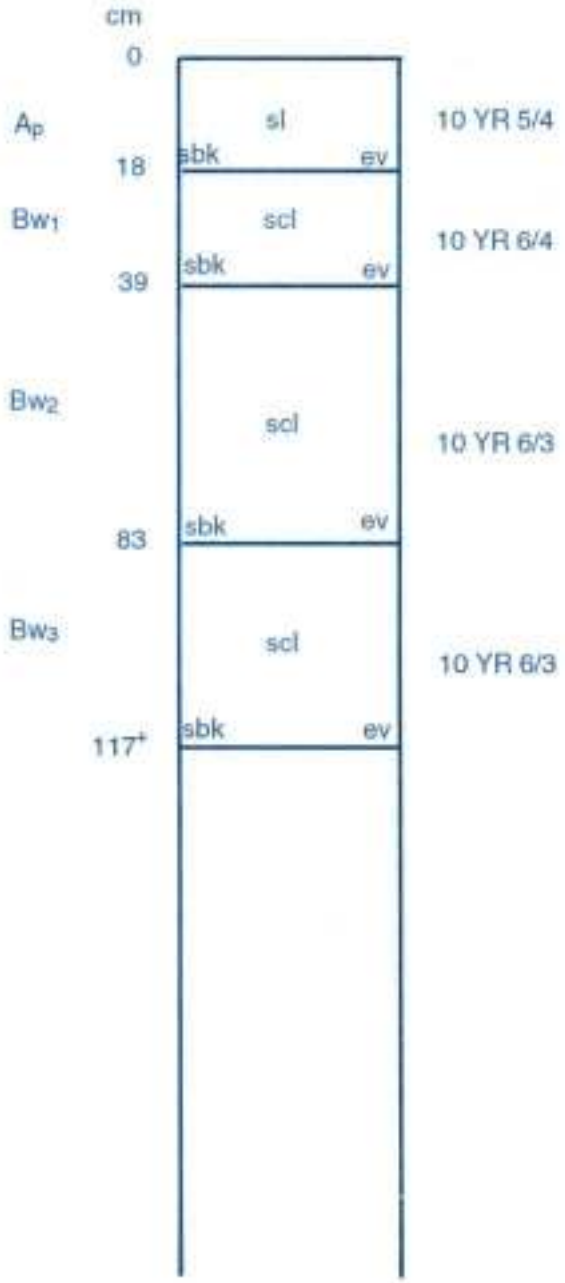
Soil Taxonomy : Coarseloamy, mixed, isohyperthermic Aquic Haplustepts

VEDALAI SERIES (Vdl)

Physiography	:	Gently sloping plain
Drainage	:	Moderately well drained
Parent material	:	Calc gneiss

Horizon	Description
Ap	0-18cm; light yellowish brown (10 YR 5/4 m); sandy loam; moderate, medium subangular blocky; dry hard, moist firm, wet very slightly sticky and very slightly plastic; violent effervescence to dilute Hcl; many, fine to medium conca; common, fine roots; many fine and few medium pores; moderately rapid permeability; clear, smooth boundary; pH 7.8.
Bw_1	18-39cm; light yellowish brown (10 YR 6/4 m); sandy clay loam; moderate, medium subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; violent effervescence to dilute HCl; many, fine to medium conca; few fine roots; common fine and few medium pores; moderately slow permeability; clear wavy boundary; pH 8.0.
Bw_2	39-83cm; pale brown (10 YR 6/3 m); sandy clay loam; strong, coarse subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; violent effervescence to dilute HCl; many, fine to medium conca; common, fine to medium pores; moderately slow permeability; clear, wavy boundary; pH 8.0.
Bw_3	83-117$^+$cm; pale brown (10 YR 6/3 m); sandy clay loam; moderate to strong, medium to coarse subangular blocky; dry hard, moist firm, wet slightly sticky and slightly plastic; violent effervescence to dilute HCl; many, fine to coarse and powdery conca; common fine and few, medium pores; moderately slow permeability; pH 8.3.

VEDALAI SERIES (Vdl)



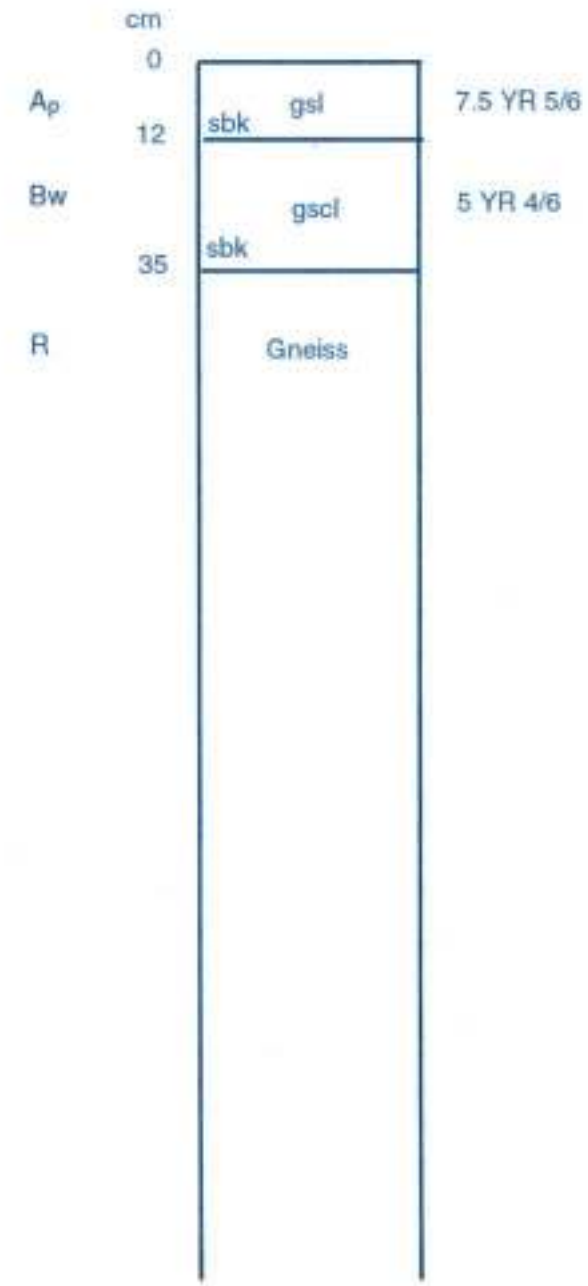
Soil Taxonomy : Fineloamy, mixed, isohyperthermic calcic Haplustepts

RAMNAGAR SERIES (Rnr)

Physiography	:	Gently sloping uplands
Drainage	:	Well drained
Parent material	:	Gneiss

Horizon	Description
Ap	0-12cm; strong brown (7.5 YR 5/6 m); gravelly sandy loam; 35% gravels; moderate, medium sub angular blocky; dry hard, moist friable, wet very slightly sticky and very slightly plastic; few, fine to medium conir; few, fine roots; many, fine and common, medium to coarse pores; moderately rapid permeability; clear, wavy boundary; pH 6.1.
Bw	12-35cm; yellowish red (5 YR 4/6 m); gravelly sandy clay loam; 40% gravels; moderate, medium sub angular blocky; dry hard, moist friable, wet slightly sticky and slightly plastic, few, fine to medium conir; common, fine to medium and few, coarse pores; moderately slow permeability; pH 6.3.
R	35^{+} cm; gneiss.

RAMNAGAR SERIES (Rnr)



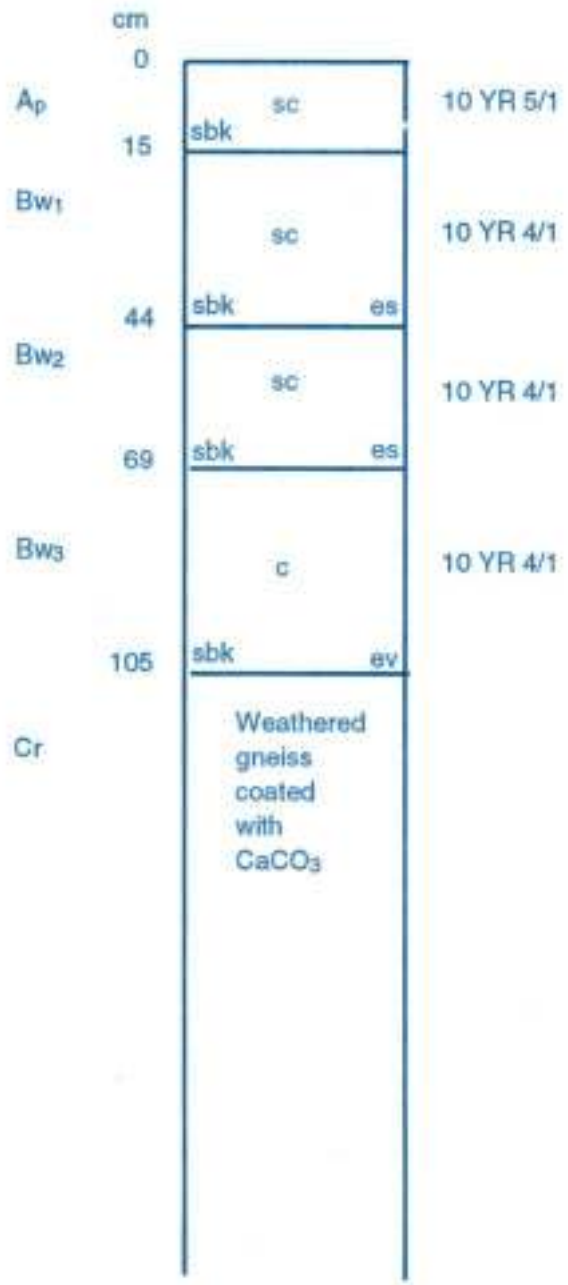
Soil Taxonomy : Loamy skeletal, mixed isohyperthermic Lithic Ustropepts

VANNANKUNDU SERIES (Vnk)

Physiography	:	Plain
Drainage	:	Imperfectly drained
Parent material	:	Calc gneiss

Horizon	Description
Ap	0-15cm; gray (10 YR 5/1 m); sandy clay; moderate, medium sub angular blocky; dry hard, moist firm, wet sticky and plastic; common fine roots; fine pores; slow permeability; diffuse, wavy boundary; pH 7.6
Bw_1	15-44cm; dark gray (10 YR 4/1/ m); sandy clay; strong coarse subangular blocky; dry hard, moist firm, wet sticky and plastic; strong effervescence to dilute Hcl; common fine roots; fine pores; slow permeability; diffuse, wavy boundary; pH 7.8.
Bw_2	44-69cm; dark gray (10 YR 4/1 m); sandy clay; strong, coarse subangular blocky; dry hard, moist firm, wet sticky and plastic; strong effervescence to dilute Hcl; few fine roots; very fine pores; slow permeability; diffuse wavy boundary; pH 7.8.
Bw_3	69-105cm; dark gray (10 YR 4/1 m); clay; strong, coarse subangular blocky; dry hard, moist firm, wet very sticky and very plastic; violent effervescence to dilute Hcl; micro pores; very slow permeability; pH 7.8.
Cr	105^+ cm; weathered gneiss coated with calcium carbonate.

VANNANKUNDU SERIES (Vnk)



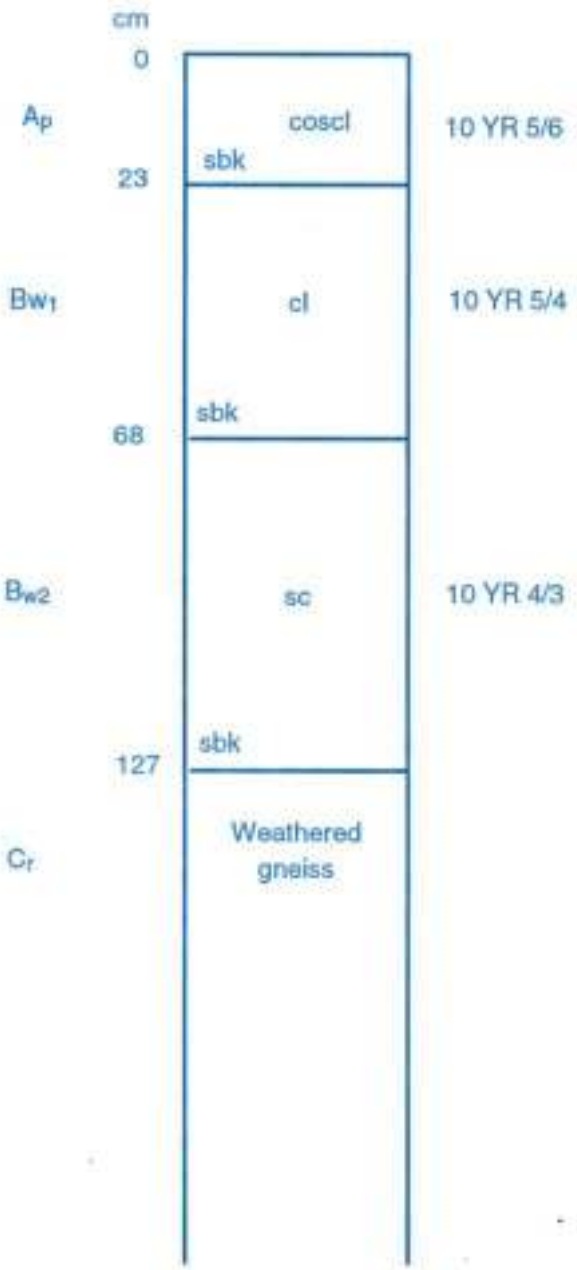
Soil Taxonomy : Fine, mixed, isohyperthermic Vertic Haplustepts

SARUGANI SERIES (Srg)

Physiography	:	Plain
Drainage	:	Moderately well drained
Parent material	:	Weathered gneiss

Horizon	Description
Ap	0-23cm; yellowish brown (10 YR 5/6 m); coarse sandy clay loam; weak to moderate, fine to medium subangular blocky; dry slightly hard, moist friable, wet slightly sticky and slightly plastic; many fine roots; many fine and few, medium pores; moderately rapid permeability; clear, wavy boundary; pH 6.6.
Bw1	23-68cm; yellowish brown (10 YR 5/4 m); clay loam; moderate to strong, medium to coarse subangular blocky; dry hard, moist firm; wet sticky and plastic; few fine roots; common, fine pores; moderately slow permeability; clear, smooth boundary; pH 6.8
Bw_2	68-127cm; dark brown (10 YR 4/3 m); sandy clay; strong, coarse subangular blocky; dry very hard, moist firm, wewt sticky and plastic; common fine pores; slow permeability; pH 6.9.
Cr	127^{+}cm; weathered gneiss.

SARUGANI SERIES (Srg)



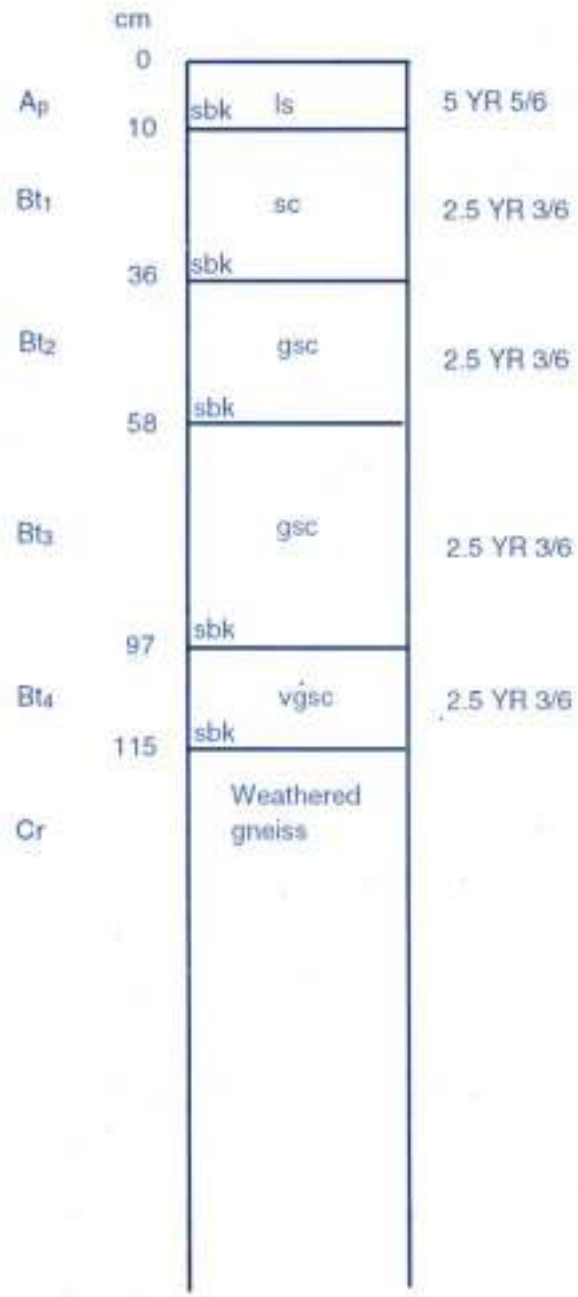
Soil Taxonomy : Fine, mixed, isohyperthermic Typic Haplustepts

THELLIVAYAL SERIES (TIv)

Physiography	:	Very gently sloping plain
Drainage	:	Well drained
Parent material	:	Gneiss

Horizon	Description
Ap	0-10cm; yellowish red (5 YR 5/6 m); loamy sand; weak,fine to medium subangular blocky; dry slightly hard, moist very friable, wet non sticky and non plastic; common fine ferro manganese concretions; many fine roots; common fine to medium and few coarse pores; rapid permeability; clear, smooth boundary; pH 5.6.
Bt_1	10-36cm; dark red (2.5 YR 3/6 m); sandy clay; 20% gravels; moderate, medium subangular blocky; dry hard, moist friable, wet slightly sticky and slightly plastic; thin patchy clay films on ped faces; common fine ferro manganese concretions; few fine roots; common fine and few medium pores; moderately slow permeability; gradual smooth boundary; pH 5.0.
Bt_2	36-58cm; dark red (2.5 YR 3/6 m); gravelly sandy clay; 35% gravels; moderate medium sub angular blocky; dry hard, moist friable, wet sticky and plastic; thin patchy clay films; common, fine, ferro manganese concretions; common fine pores; moderately slow permeability; gradual, wavy boundary; pH 5.2.
Bt_3	58-97cm; dark red (2.5 YR 3.6 m); gravelly sandy clay; 40% gravels; strong coarse sub angular blocky; dry very hard, moist firm, wet sticky and plastic; thin, patchy, clay films; common, fine to medium ferro manganese concretions; common fine pores; moderately slow permeability; gradual wavy boundary; pH 5.6.
Bt_4	97-115cm; dark red (2.5 YR 3/6 m); Very gravelly sandy clay; 55% gravels; strong coarse subangular blocky; dry hard, moist friable, wet sticky and plastic; thin, patchy, clay films; common fine to medium ferro manganese concretions; common fine and few medium pores; moderately slow permeability; pH 6.2.
Cr	115^+ cm; weathered gneiss.

THELLIVAYAL SERIES (TIv)



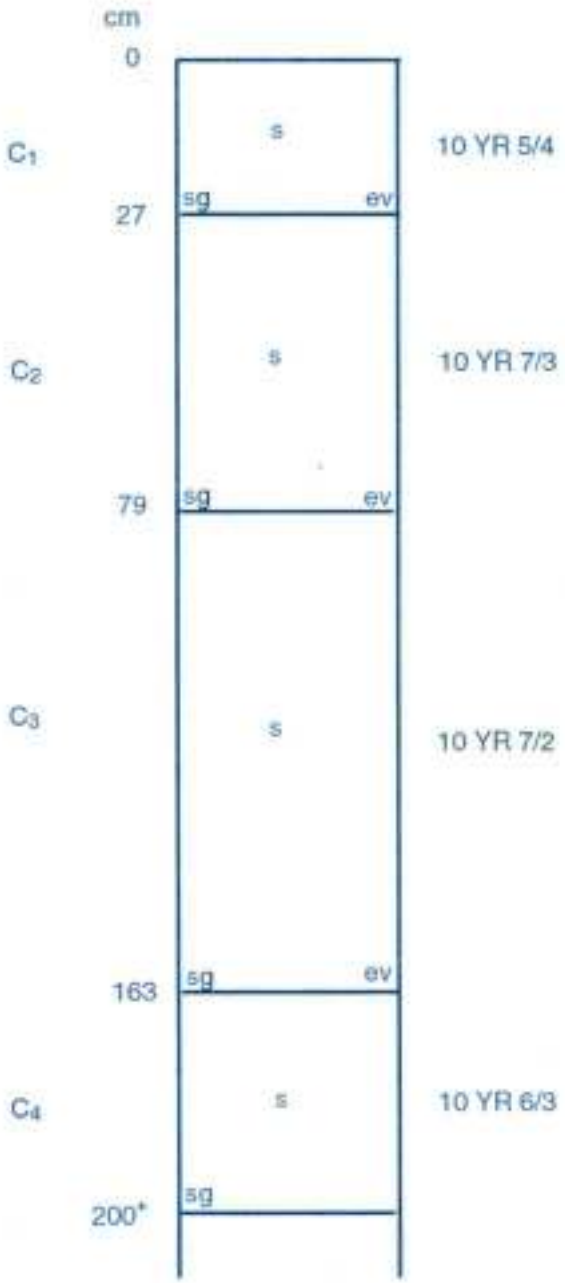
Soil Taxonomy : Clayey skeletal, mixed, isolyperthermic Rhodic Paleustalfs

RAMESWARAM SERIES (Rmw)

Physiography	:	Gently sloping plains
Drainage	:	Excessively drained
Parent material	:	Coastal alluvium

Horizon	Description
C_1	0-27cm; yellowish brown (10 YR 5/4 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; violent effervescence to dilute Hcl; few fine roots; very rapid permeability; clear wavy boundary; pH 7.9.
C_2	27-79cm; very pale brown (10 YR 7/3 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; violent effervescence to dilute Hcl; very rapid permeability; clear, wavy boundary; pH 8.0.
C_3	79-163cm; Light gray (10 YR 7/2 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; violent effervescence to dilute Hcl; very rapid permeability; clear, wavy boundary; pH 8.0.
C_4	163-200$^+$cm; pale brown (10 YR 6/3 m); sand; single grain; dry loose, moist loose, wet non sticky and non plastic; violent effervescence to dilute Hcl; shells present; very rapid permeability; pH 7.9.

RAMESWARAM SERIES (Rmw)



Soil Taxonomy : Siliceous, Isohyperthermic calcic Ustipsamments

LAND CAPABILITY

Land capability classification	Soil series	Extemt (ha)	Limitation	Needs
III s	Sayalkudi Nainarkovil Mudukulathur Sarugani Pudukudi Mamallakkarai Thellivayal Anandur	52001	Surface coarse texture, Low CEC & WHC, Low organic matter staus, Low fertility	Liberal addition of organic manures, Addition of tank silt of neutral reaction, Fertility management
III sw	Paramakudi Kadaladi Partibanur Keelapavalam Vannankundu	223183	Alkalinity, Strong calcareousness, Wetness, Low organic matter status	Selection of crops, Application of iron pyrites, Drainage, Addition of organic manures
IV s	Tiruppullani Vedalai	8879	Surface coarse texture, Severe crusting, Low WHC & CEC, Low fertility	Liberal addition of organic manures, Fertility management
IV se	Ramnagar	2090	Shallow depth, Coarse texture, Low WHC & CEC, Severe erosion, Low fertility	Selection of crops, Liberal addition of organic manures, Soil conservation
V se	Mandabam Rameswaram	43281	Sandy texture, Very low CEC & WHC, Excessive drainage, Severe erosion, Very low fertility	Agro forestry
	Total	329434		

Class

III *Lands that have severe limitations for sustained use under agriculture*

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

V *Currently non arable lands*

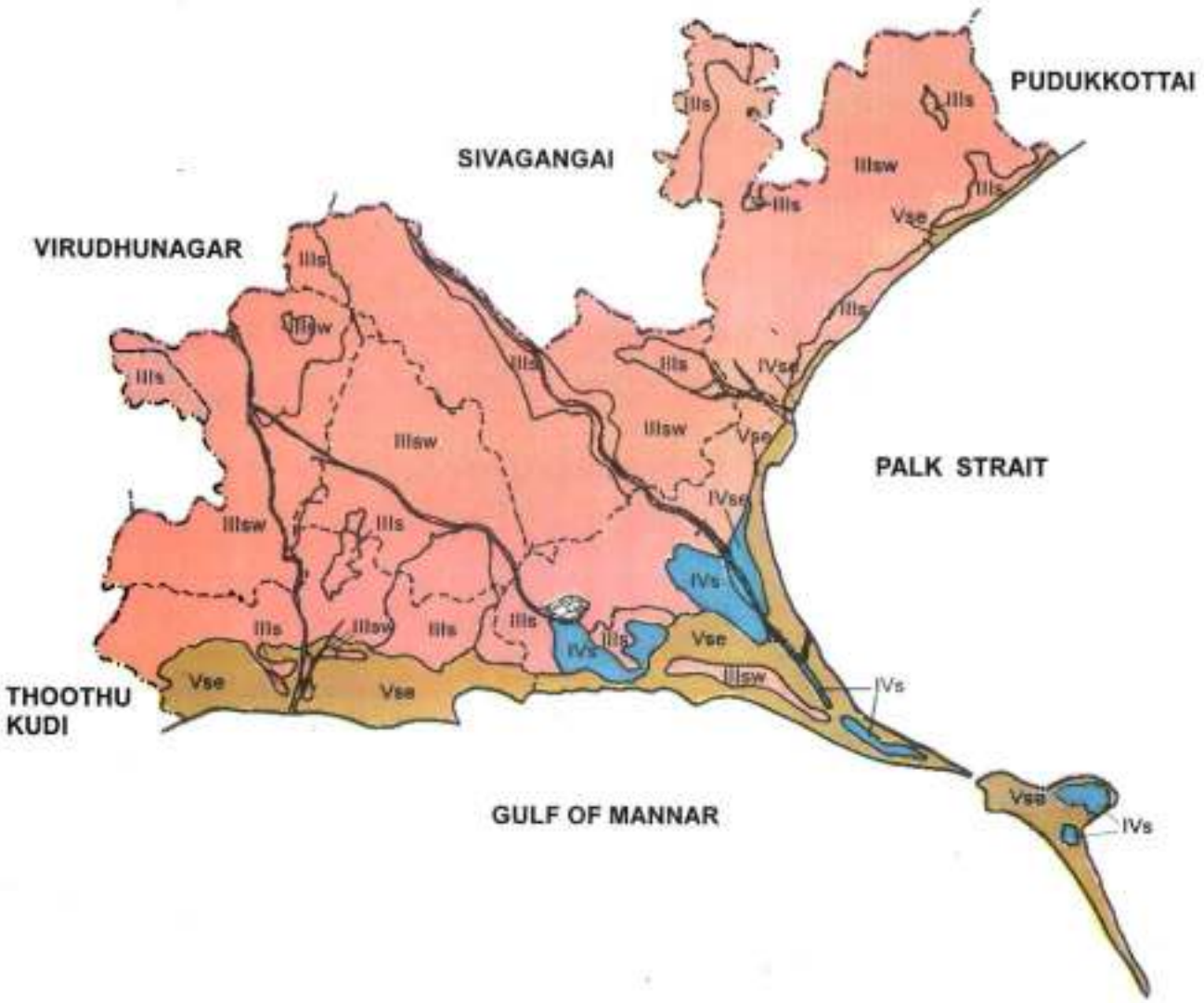
Subclass

s *Root zone limitation*

e *Erosion hazards*

w *Wetness*

LAND CAPABILITY
RAMANATHAPURAM DISTRICT



LEGEND

CLASS

- III MODERATELY GOOD CULTIVABLE LANDS THAT HAVE SEVERE LIMITATIONS FOR SUSTAINED USE UNDER AGRICUTURE
- IV LANDS THAT HAVE SEVERE LIMITATIONS FOR SUSTAINED USE UNDER AGRICUTURE
- V CURRENTLY NON ARABLE LANDS

SUB CLASS

- s - ROOT ZONE LIMITATION
- e - EROSIONAL HAZARDS
- w - WETNESS

LAND IRRIGABILITY

Irrigability classification	Soil series	Extent (ha)	Limitation
3 s	Sayalkudi, Nainarkovil, Mudukulathur, Sarugani, Pudukudi, Mamallakkarai, Thellivayal, Anandur	52,001	Surface coarse texture, Low CEC & WHC, Crusting
3 sd	Paramakudi, Kadaladi, Partibanur, Keelapavalm, Vannankundu	2,23,183	Alkalinity, Strong calcareousness, Drainage hazards
4 s	Tiruppullani, Vedalai	8,879	Surface coarse texture, severe crusting, Low WHC & CEC
4 st	Ramnagar, Mandabam, Rameswaram	45,371	Coarse texture, Low WHC & CEC, Topography
	Total	**329434**	

Class

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

4 *Lands that have very severe limitations for sustained use under irrigation*

Subclass

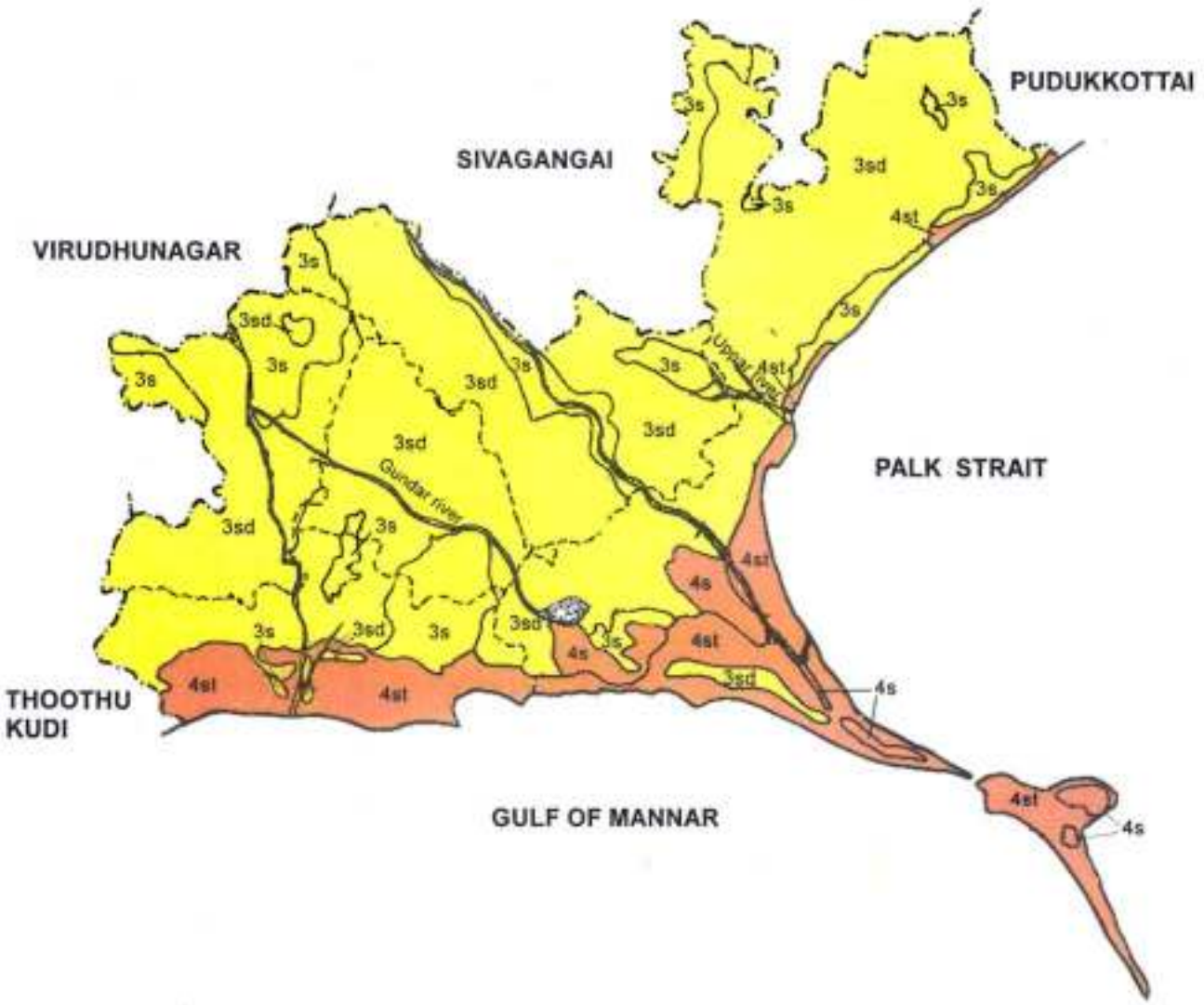
s *soil limitation*

t *topographical limitation*

d *drainage hazard*

LAND IRRIGABILITY

RAMANATHAPURAM DISTRICT



LEGEND

CLASS

3 LANDS THAT HAVE SEVERE LIMITATIONS FOR SUSTAINED USE UNDER IRRIGATION

4 LANDS THAT HAVE VERY SEVERE LIMITATIONS FOR SUSTAINED USE UNDER IRRIGATION

SUB CLASS

s - SOIL LIMITATION

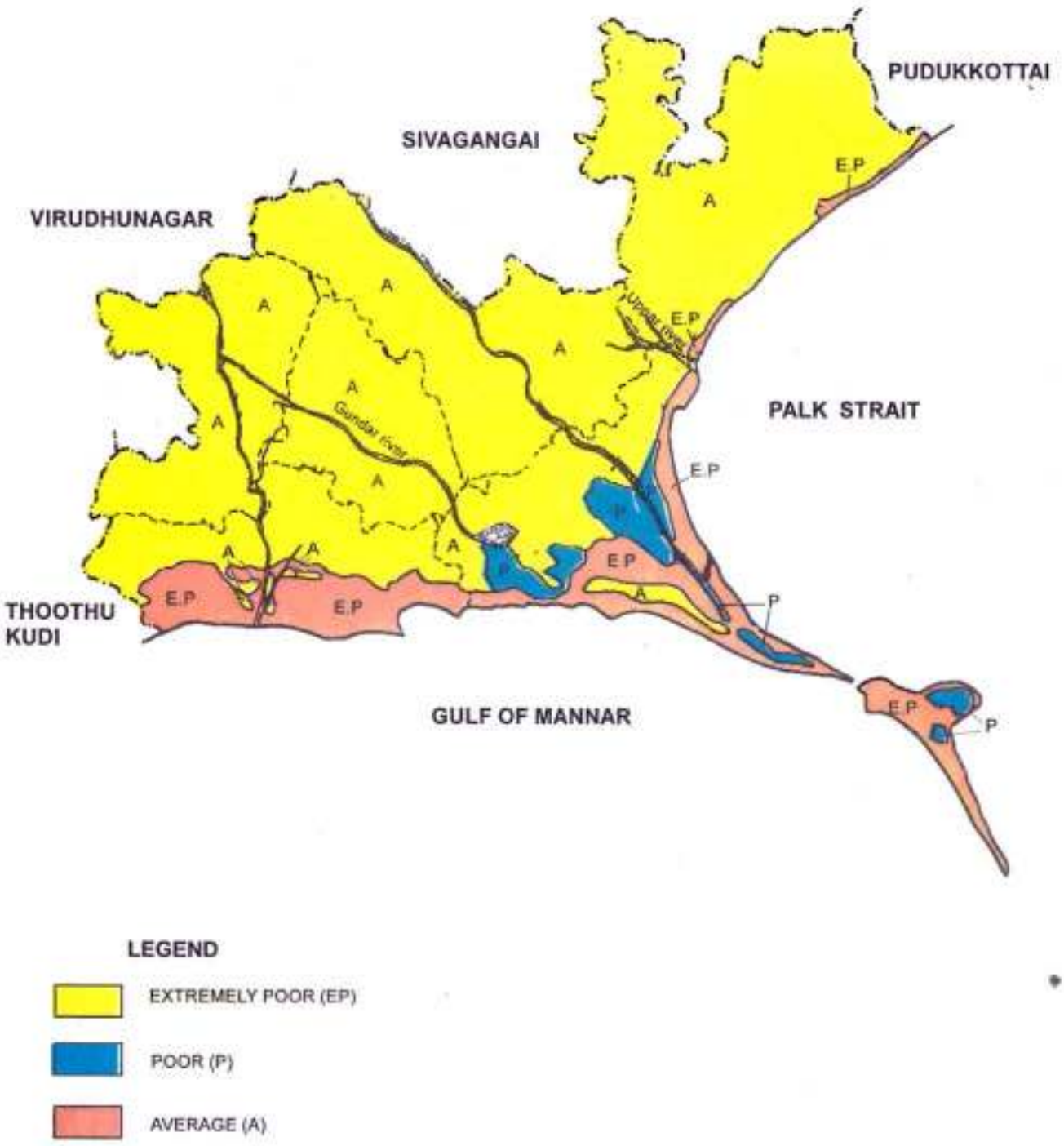
d - DRAINAGE

t - TOPOGRAPHICAL LIMITATION

SOIL PRODUCTIVITY

Productivity		Soil series	Area (ha)
Rating	Grouping		
0 - 7	Extremely Poor	Mandabam Rameswaram	43,281
8 - 19	Poor	Tiruppullani Vedalai, Ramnagar	10,969
20 - 34	Average	Paramakudi Kadaladi, Partibanur, Sayalkudi, Nainarkovil, Mudukulathar Pudukudi, Sarugani, Mamallakkarai, Keelapavalam, Thellivayal, Vannankundu, Anandur	2,75,184
		Total	329434

SOIL PRODUCTIVITY
RAMANATHAPURAM DISTRICT

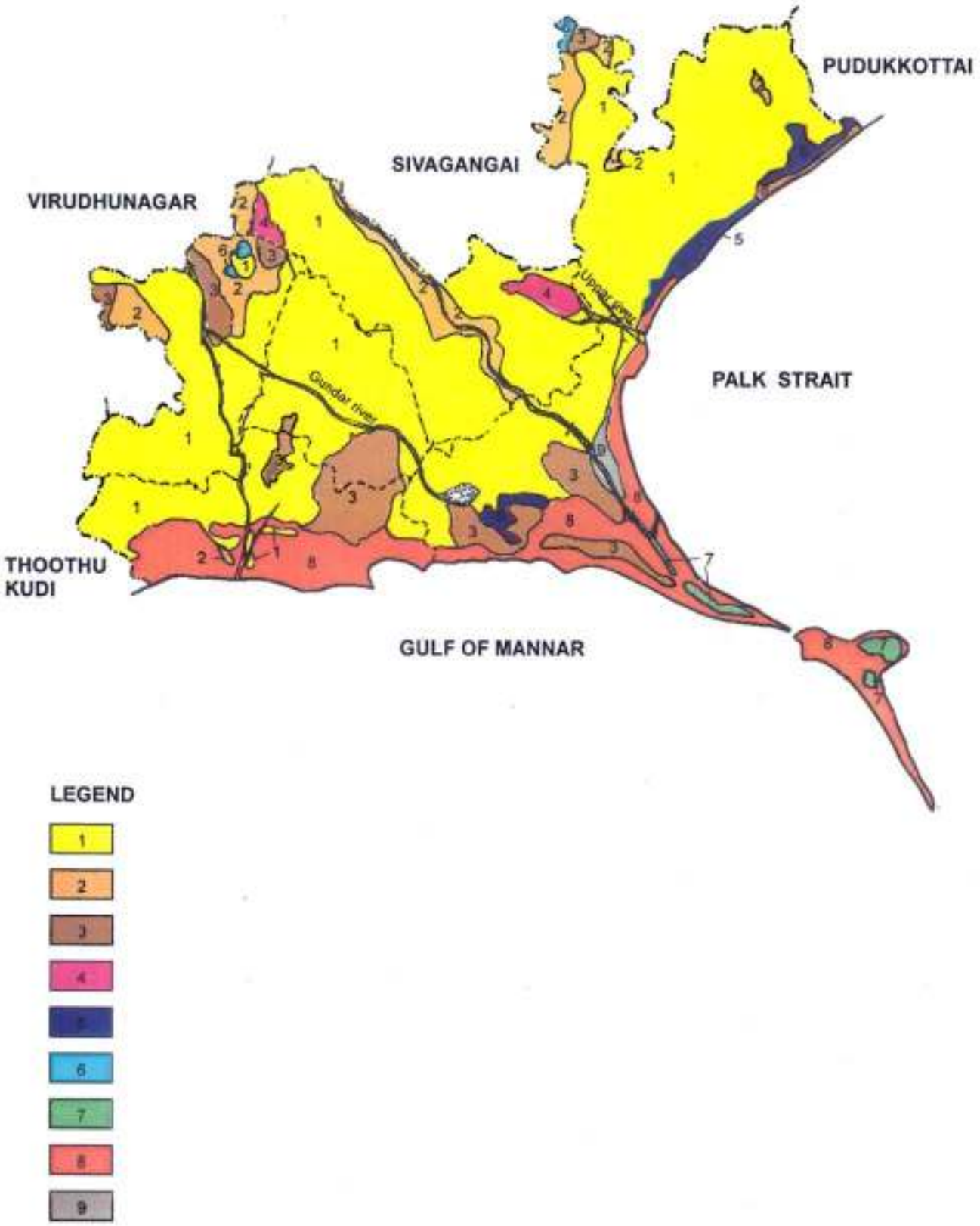


CROPS GROWN

Map symbol	Soil series	Crops grown	
		Rainfed	Irrigated
1	Paramakudi Partibanur Kadaladi Vannankundu	Millets, Cotton, Chillies, Pulses, Coriander, Sunflower	Paddy, Cotton, Chillies
2	Anandur Sayalkudi	Millets, Groundnut, Pulses	Millets, Groundnut, Chillies
3	Mudukulathur Sarugani Keelapavalam Tiruppullani	Millets, Cotton, Chillies	Paddy, Cotton
4	Nainarkovil	Millets, Chillies, Cotton, Groundnut	Paddy, Vegetables
5	Pudukudi Mamallakkarai	Pulses, Millets	Paddy
6	Thellivayal	Groundnut, Millets, Pulses	Orchard crops, Groundnut, Millets, Chillies
7	Vedalai	—	Coconut
8	Rameswaram Mandabam	Palmyrah	Coconut
9	Ramnagar	Millets	Millets

CROPS GROWN

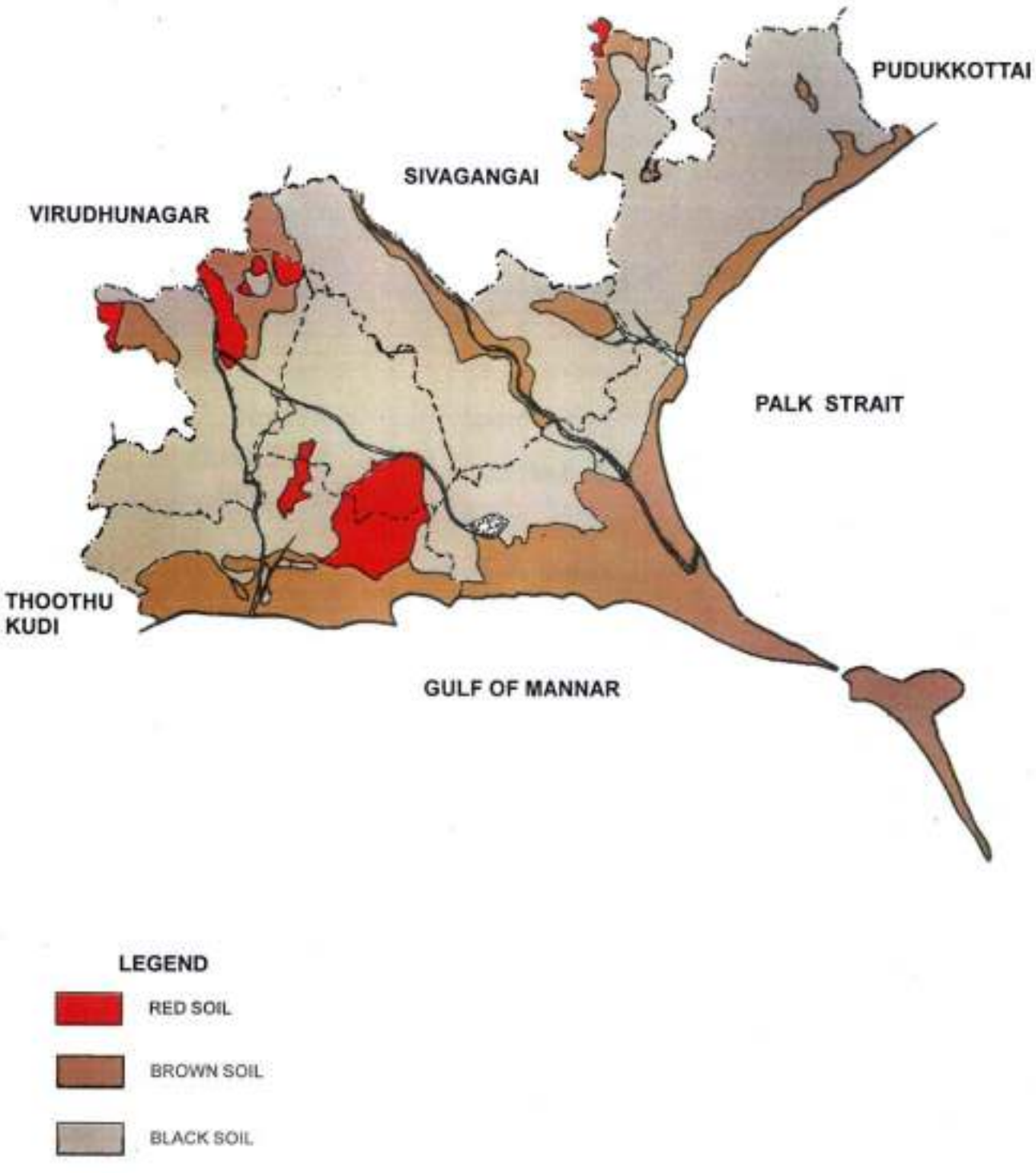
RAMANATHAPURAM DISTRICT



SOIL COLOUR

Soil Colour	Soil series	Extent (ha)
Red	Thellivayal, Mudukulathur	15,590
Brown	Mandabam, Anandur, Sayalkudi, Nainarkovil, Pudukudi, Tiruppullani, Sarugani, Mamallakkarai, Keelapavalam, Vedalai, Rameswaram, Ramnagar	94,036
Black	Paramakudi, Kadaladi, Partibanur, Vannankundu	2,19,808
	Total	**329434**

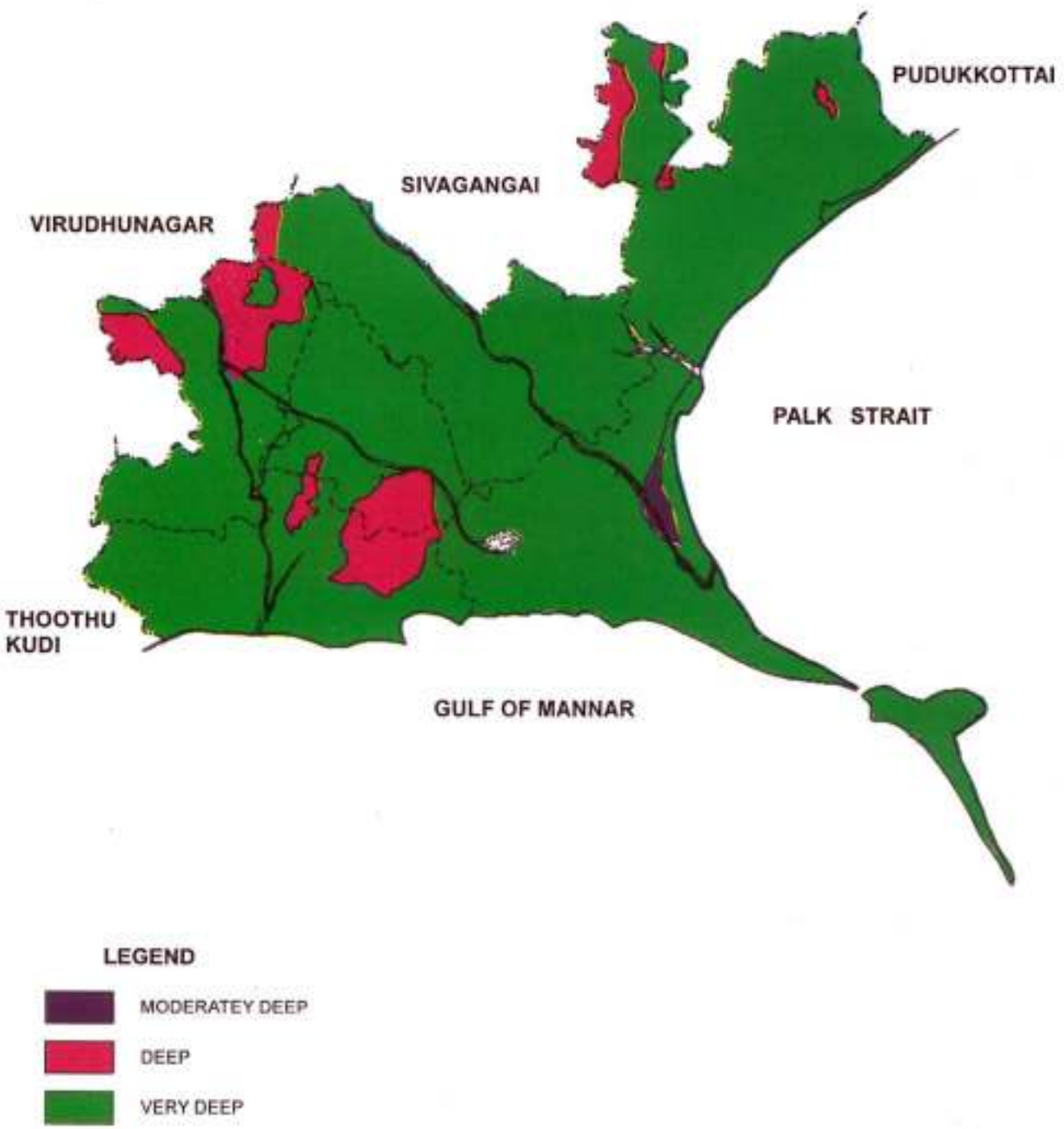
SOIL COLOUR
RAMANATHAPURAM DISTRICT



SOIL DEPTH

Effective soil depth	Soil series	Extent (ha)
1. Moderately deep (26 to 50 cm)	Ramnagar	2,090
2. Deep (51 to 100 cm)	Anandur Mudukulathur	30,147
3. Very deep (More than 100 cm)	All other series	2,97,197
	Total	3,29,434

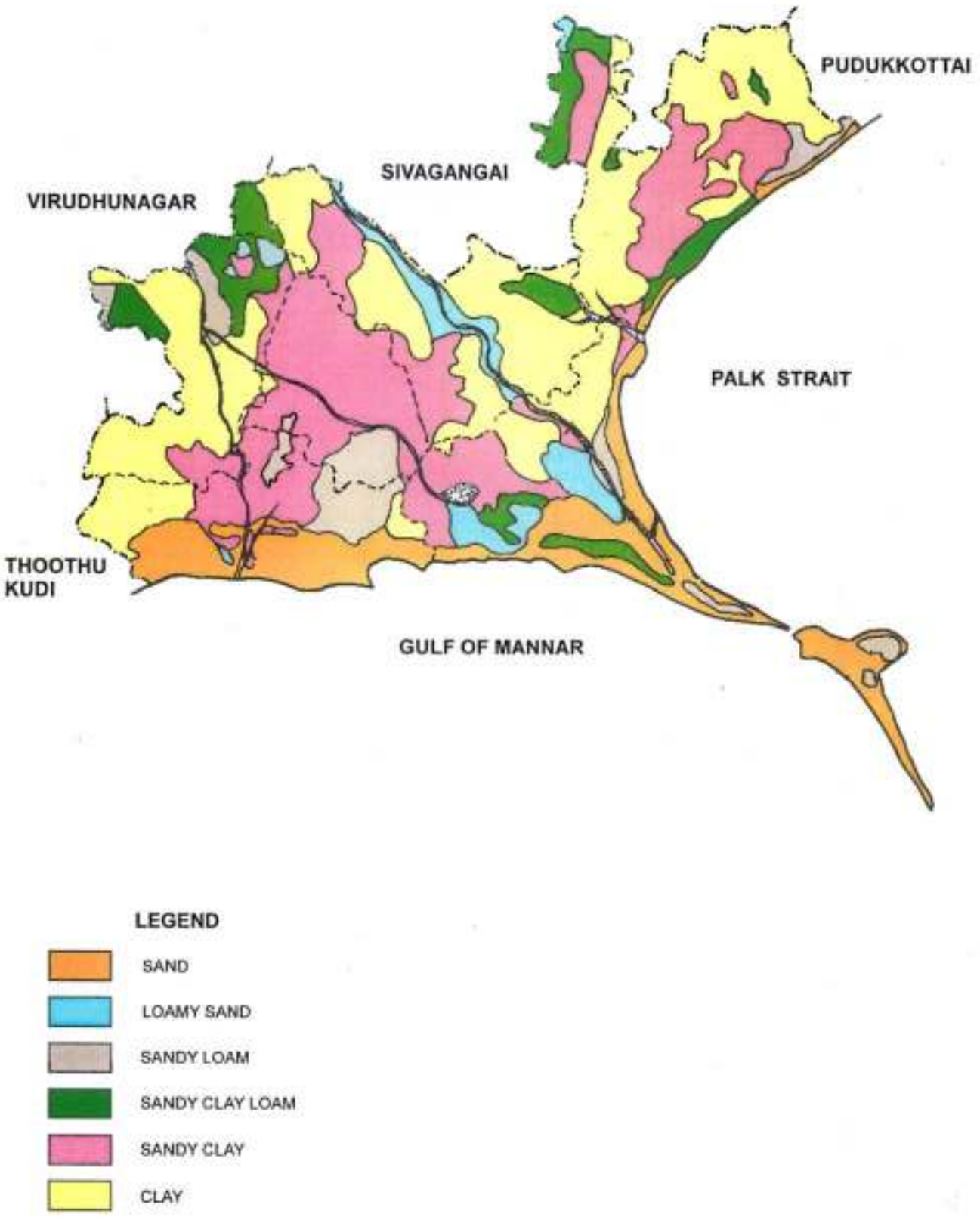
EFFECTIVE SOIL DEPTH
RAMANATHAPURAM DISTRICT



SOIL TEXTURE

Textural class	Soil series	Extent (ha)
Sand	Mandabam, Rameswaram	43281
Loamy sand	Sayalkudi, Tiruppullani, Thellivayal	13054
Sandy loam	Mudukulathur, Pudukudi, Vedalai, Ramnagar	22684
Sandy clay loam	Anandur, Nainarkovil, Sarugani, Mamallakkarai, Keelapavalam	30607
Sandy clay	Kadaladi, Vannankundu	99065
Clay	Paramakudi, Partibanur	120743
	Total	**329434**

SOIL TEXTURE
RAMANATHAPURAM DISTRICT

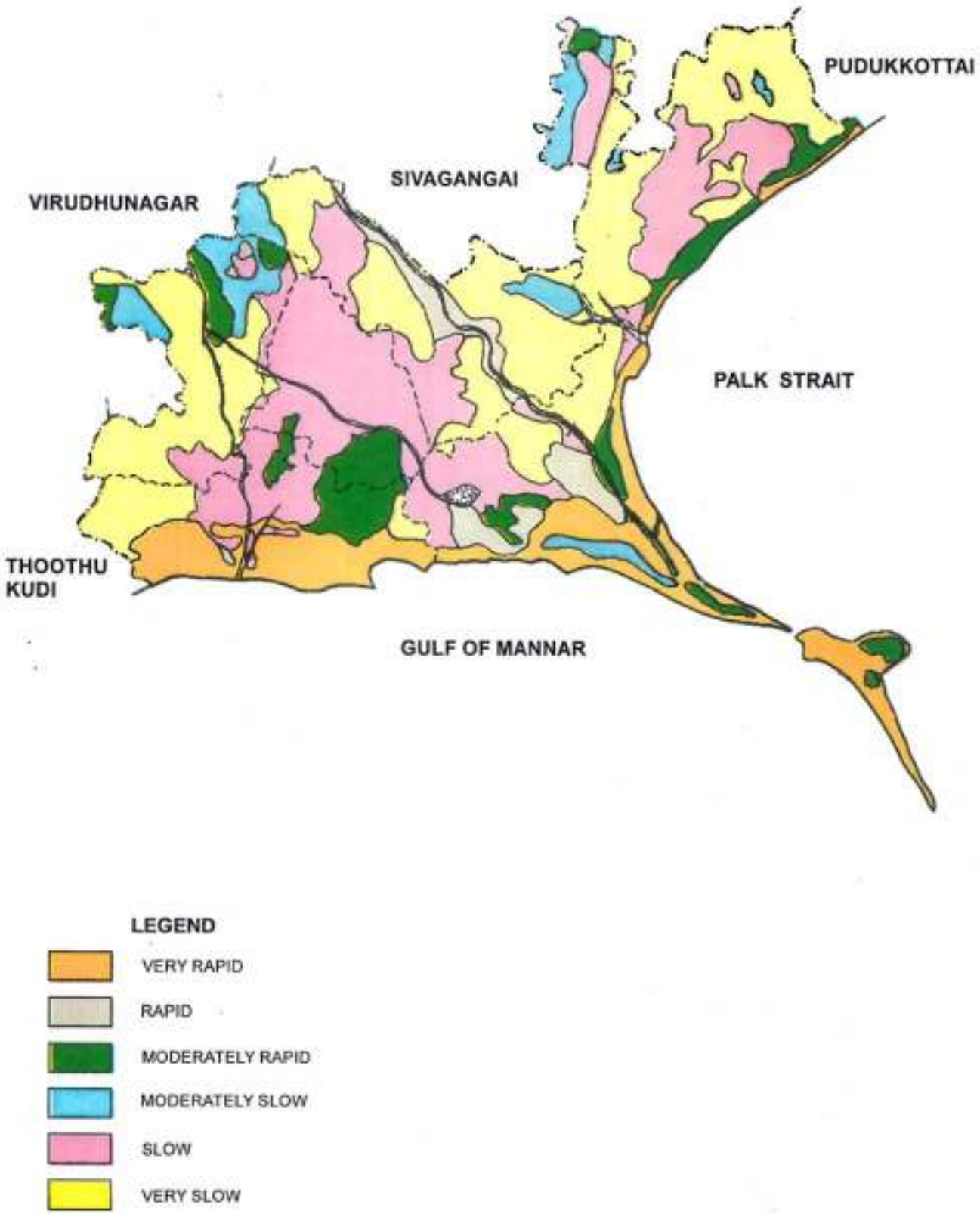


PERMEABILITY

Class	Soil series	Extent (ha)
Very rapid	Mandabam, Rameswaram	43281
Rapid	Sayalkudi, Tiruppullani, Thellivayal	13054
Moderately rapid	Mudukulathur, Pudukudi, Sarugani, Mamallakkarai, Vedalai, Ramnagar	30982
Moderately slow	Anandur. Nainarkovil, Keelapavalam	22309
Slow	Kadaladi, Vannankundu	99065
Very slow	Paramakudi, Partibanur	120743
	Total	329434

PERMEABILITY

RAMANATHAPURAM DISTRICT

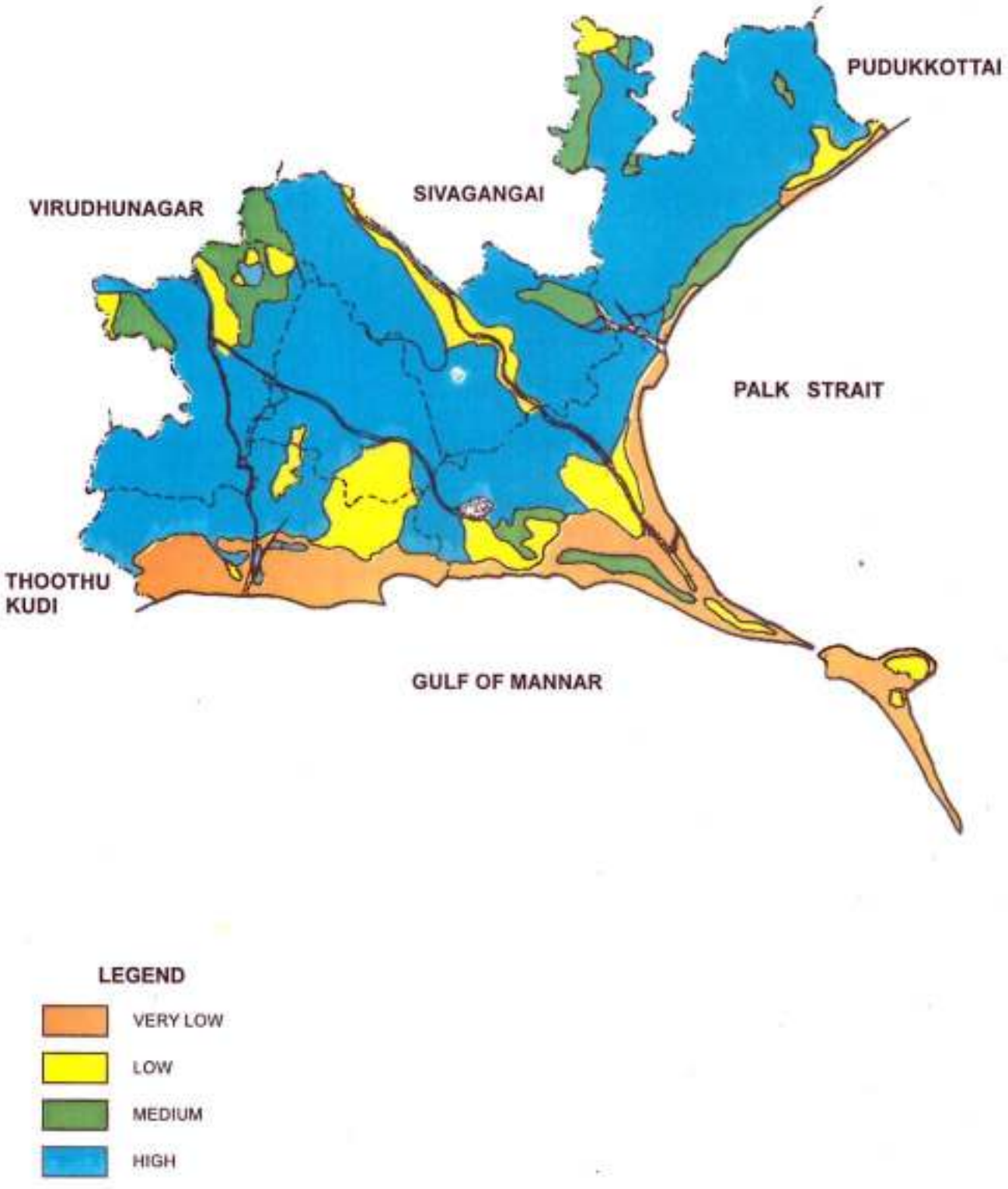


WATER HOLDING CAPACITY

WHC category	Soil series	Extent (ha)
Very low	Mandabam, Rameswaram	43,281
Low	Sayalkudi, Mudukulathur, Pudukudi, Tiruppullani, Sarugani, Vedalai, Thellivayal, Ramnagar	36,742
Medium	Anandur, Nainarkovil, Mamallakkarai, Keelapavalam	29,603
High	Paramakudi, Kadaladi, Partibanur, Vannankundu	2,19,808
	Total	3,29,434

WATER HOLDING CAPACITY

RAMANATHAPURAM DISTRICT



SOIL EROSION

Erosion type	Soil series	Extent (ha)
Slight erosion	Paramakudi, Kadaladi, Anandur, Partibanur, Sayalkudi, Nainarkovil, Mudukulathur, Pudukudi, Tiruppullani, Sarugani, Mamallakkarai, Keelapavalam, Vannankundu	280587
Moderate erosion	Vedalai, Thellivayal	3476
Severe erosion	Mandabam, Rameswaram, Ramnagar	45371
	Total	329434

EROSION

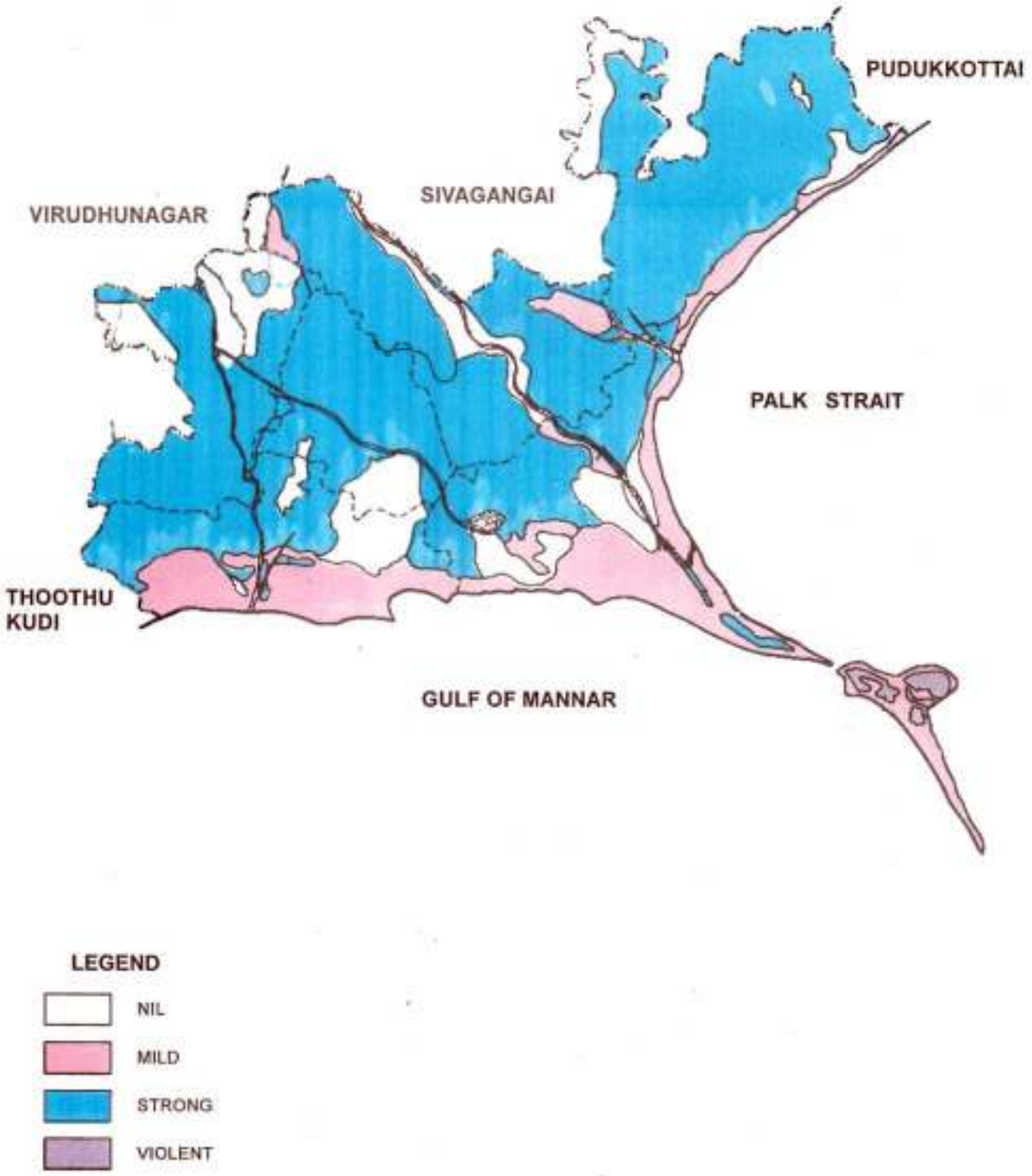
RAMANATHAPURAM DISTRICT

CALCAREOUSNESS

Calcareousness class	Soil series	Extent (ha)
Violent	Vadalai, Rameswaram	3,227
Strong	Paramakudi, Kadaladi, Partibanur, Vannankundu	2,19,808
Mild	Mandabam, Nainarkovil, Mamallakkarai, Keelapavalam	56,638
Nil	Anandur, Saya!kudi, Mudukulathur, Puduudi, Tiruppullani, Sarugani, Thellivaya!, Ramnagar	49,761
	Total	3,29,434

CALCAREOUSNESS

RAMANATHAPURAM DISTRICT



SALINITY

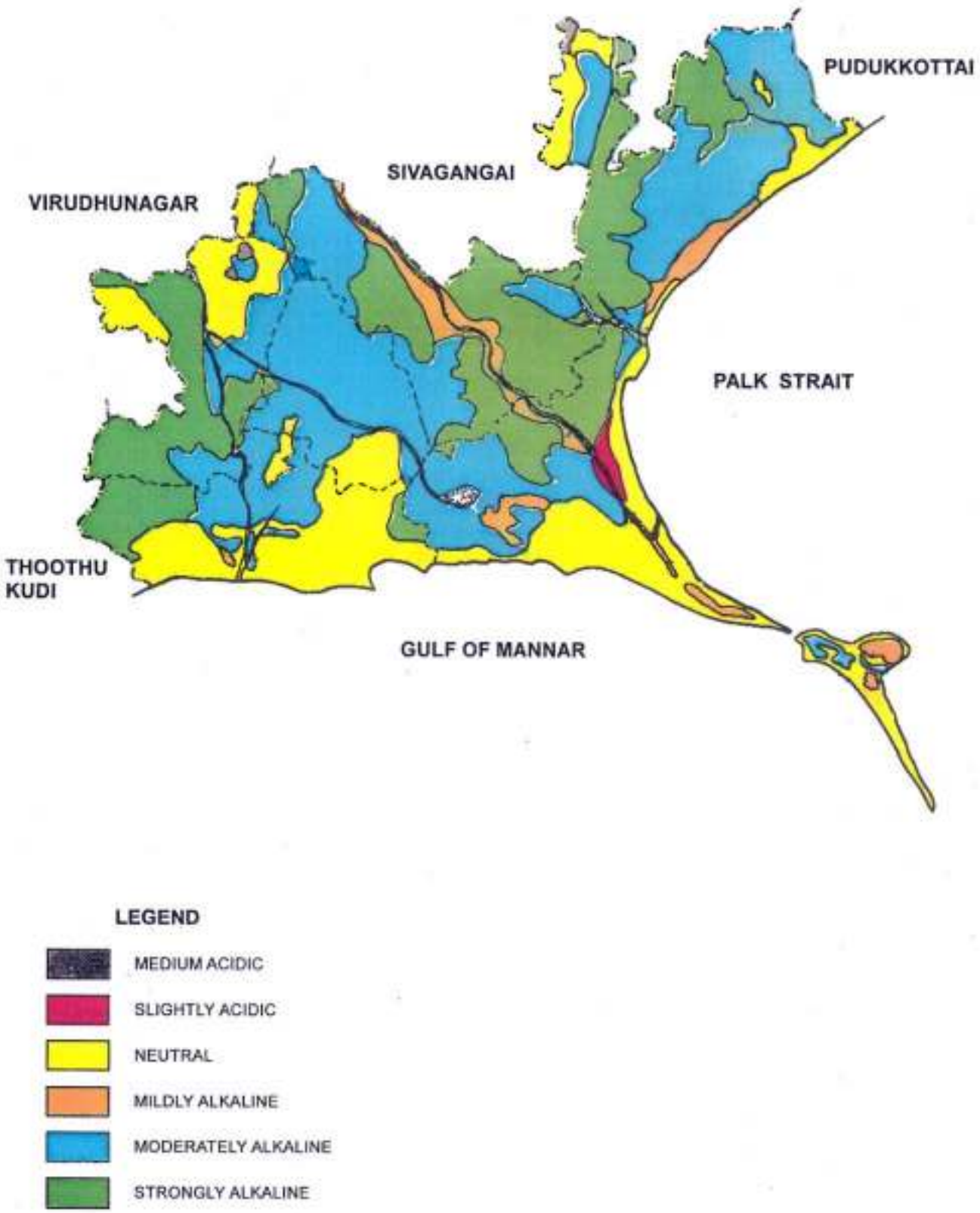
Salinity category	Soil series	Extent (ha)
Saline	Mamallakkarai, Vedalai, Vannankundu	11863
Non-saline	All other series	317571
	Total	**329434**

SALINITY
RAMANATHAPURAM DISTRICT

SOIL REACTION

PH range	Soil series	Extent (ha)
Medium acidic (5.6 to 6.0)	Thellivayal	969
Slightly acidic (6.1 to 6.5)	Ramnagar	2090
Neutral (6.6 to 7.3)	Mandabam, Anandur, Pudukudi, Mudukulathur, Sarugani, Keelapavalam	80553
Mildly alkaline (7.4 to 7.8)	Sayalkudi, Mamallakkarai, Vedalai, Vannankundu	17576
Moderately alkaline (7.9 to 8.4)	Kadaladi, Partibanur, Nainarkovil, Tiruppullani, Rameswaram	135210
Strongly alkaline (8.5 to 9.0)	Paramakudi	93036
	Total	**329434**

SOIL REACTION
RAMANATHAPURAM DISTRICT

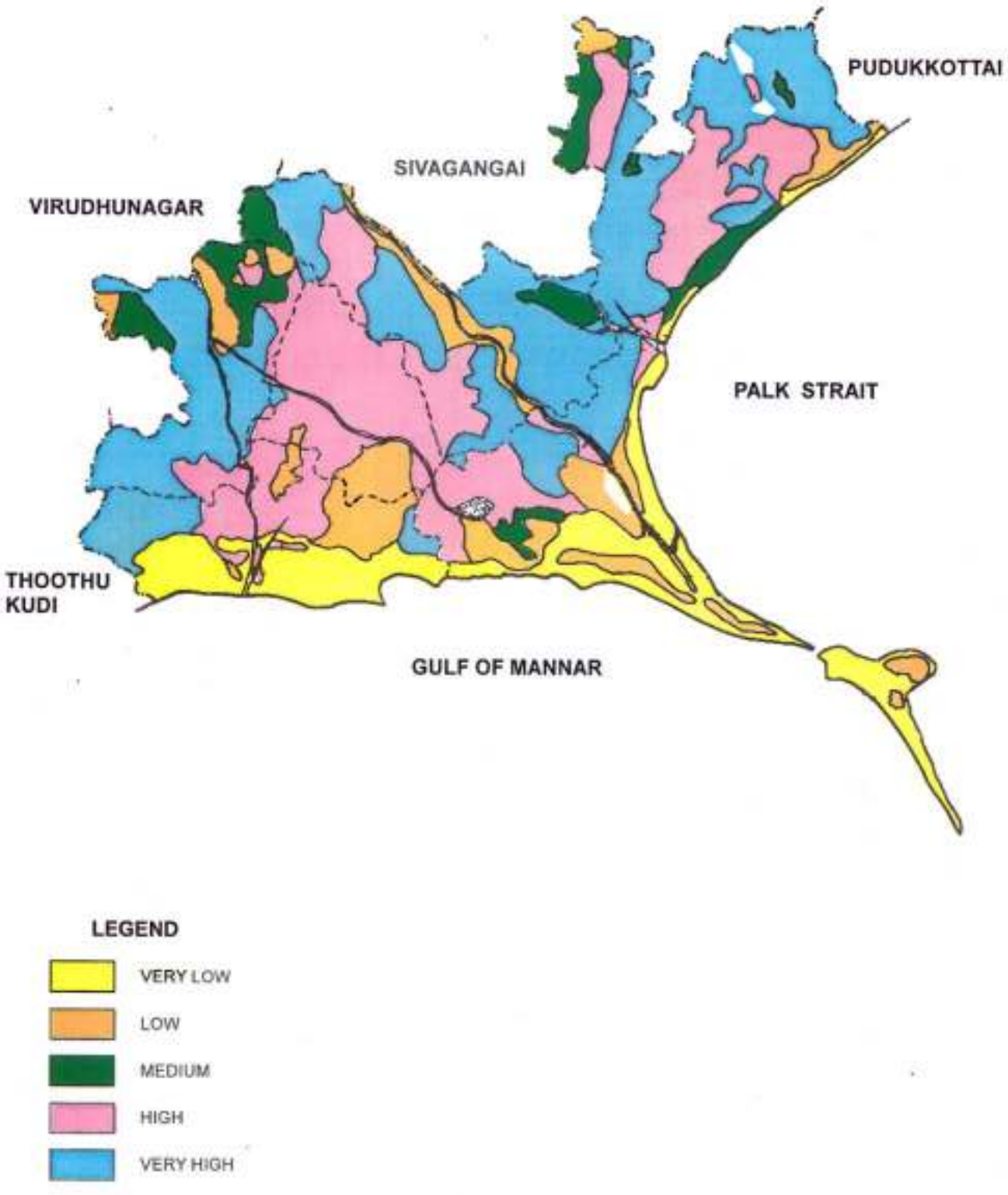


CATION EXCHANGE CAPACITY

CEC category	Soil series	Extent (ha)
Very low	Mandabam, Rameswaram	43,281
Low	Sayalkudi, Pudukudi, Mudukulathur, Tiruppullani, Sarugani, Keelapavalam, Vedalai, Thellivayal, Ramnagar	40,117
Medium	Nainarkovil, Mamallakkarai, Anandur	26,228
High	Kadaladi, Vannankundu	99,065
Very high	Paramakudi, Partibanur	1,20,743
	Total	3,29,434

CATION EXCHANGE CAPACITY

RAMANATHAPURAM DISTRICT



MICRONUTRIENT STATUS

Taluk	Micronutrient Status			
	Zn	Cu	Fe	Mn
1. Paramakudi	L	H	H	H
2. Ramanathapuram	UD to	UD to L	L to M	H
3. Kamuthi	L	H	H	H
4. Mudukulathur	L	L	L to M	L
5. kadaladi	L	H	H	H
6. Thiruvadanai	L	L	L to M	H
7. Rameswaram	ND	ND	ND	ND

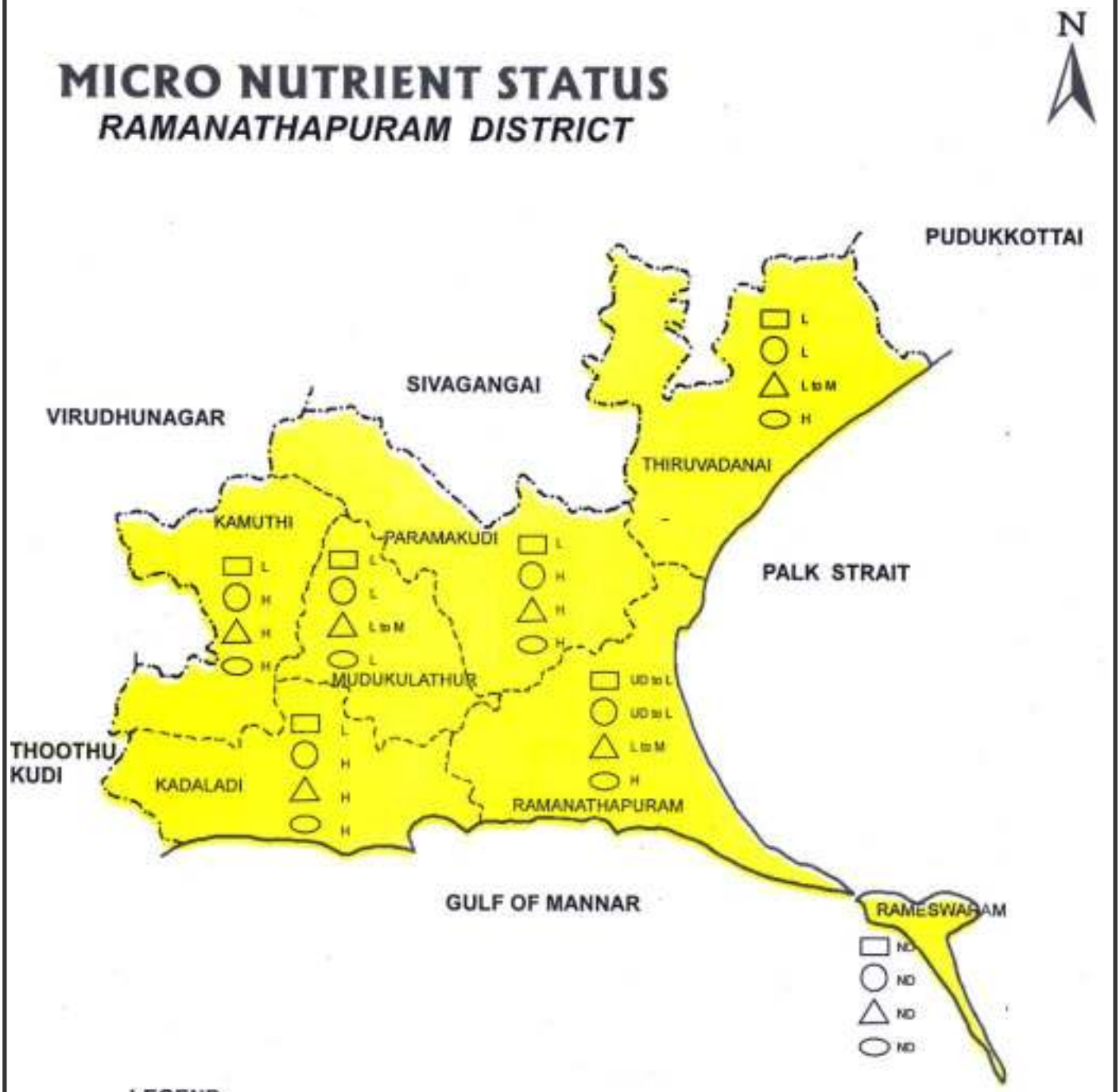
CRITICAL LIMITS

Sl.No.	*Nutrients (ppm)*	*Low*	*Medium*	*High*
1.	***Zinc***	< 1.2	1.21-2.4	2.5-5.0
2.	***Copper***	< 1.2	1.2-2.4	2.5-5.0
3.	***Iron***	< 4.0	4.1-8.0	8.1-24.0
4.	***Manganese***	< 2.0	2.1-4.0	4.1.12.0

L - Low
M - Medium
H - High
UD - Undetectable limit
ND - Not done

MICRO NUTRIENT STATUS

RAMANATHAPURAM DISTRICT



LEGEND

- Zn (Zinc)
- Cu (Copper)
- Fe (Iron)
- Mn (Manganese)

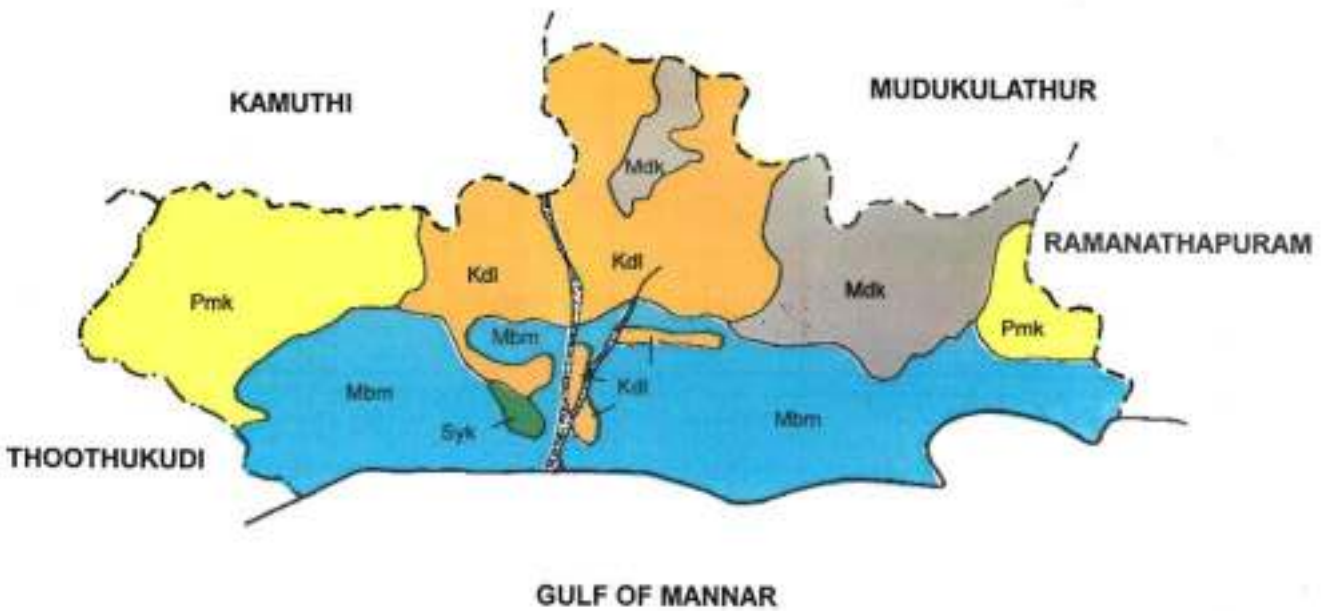
L - LOW
M - MEDIUM
H - HIGH
UD - UNDETECTABLE LIMIT
ND - NOT DONE

SOILS

KADALADI TALUK

S. No.	Soil series	Symbol	Extent (ha)	%
1.	Mandabam	Mbm	20,516	44.63
2.	Kadaladi	Kdl	10,415	22.65
3.	Paramakudi	Pmk	8,754	19.04
4.	Mudukulathur	Mdk	5,975	13.00
5.	Sayalkudi	Syk	313	0.68
	Total		**45,973**	**100.00**

SOILS
KADALADI TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

KADALADI TALUK

Name of the village	Fertility status (kg / Ac)			
	Nitrogen	Phosphorus	Potassium	Soil series
(1)	(2)	(3)	(4)	(5)
MUDUKULATHUR (S)				
1. Kandalan	—	—	—	Mdk, Pmk
2. Keelachirapathu	—	—	—	Kdl
3. Melacherupothu	—	—	—	Kdl
4. Chanthaneri	—	—	—	Kdl, Mdk
5. Chithirangudi	—	—	—	Kdl
6. Sonaipriyankottai	—	—	—	Kdl
7. Oruvanendal	—	—	—	Mdk, Kdl
8. Ilanchembur	—	—	—	Syk, Mdk
9. Enathi	—	—	—	Kdl, Mdk
10. Appanur	233	40	602	Kdl
SIKKAL				
1. Aathankottangudi	—	—	—	Kdl, Mdk
2. Keeranthai	—	—	—	Kdl, Mdk
3. Peyakkulam	—	—	—	Kdl
4. Panivasal	—	—	—	Kdl
5. Sikkal - I	217	45	63	Kdl, Pmk
6. Sikkal - II	217	45	63	Kdl, Pmk
7. Ithambadal	—	—	—	Pmk
8. Kiraikkulam	—	—	—	Kdl, Pmk
9. Valinokkam	—	—	—	Mbm
10. Eruvadi	—	—	—	Mbm
KEEZHA CHELVANUR				
1. Periyakulam	—	—	—	Kdl, Mdk
2. Mariyur	—	—	—	Mbm
3. Pirammanagulam	—	—	—	Mdk
4. Chippikulam	—	—	—	Mdk

(1)	(2)	(3)	(4)	(5)
5. Alavangulam	—	—	—	Mdk
6. Keezakkidaram	—	—	—	Mbm Kdl
7. Melakkidaram	—	—	—	Mbm Kdl
8. Kurichikulam	—	—	—	Kdl
9. Keezhzchelvavur	—	—	—	Kdl
10. Melachelvanur	—	—	—	Mbm Kdl
11. Thanichillam	—	—	—	Mbm Kdl
KADALADI				
1. Maranthai	—	—	—	Kdl
2. A-Pumavasal	—	—	—	Kdl Mdk
3. M. Karisalkulam	—	—	—	Kdl
4. S. Vagaikkulam	—	—	—	Mbm Kdl
5. M. Karisalkulam	—	—	—	Kdl
6. A. Usilangulam	—	—	—	Kdl Mbm
7. Kadaladi	224	42	681	Kdl Mbm
8. Kaduguchandhal	—	—	—	Mbm Kdl
9. Mechangudi	—	—	—	Kdl Mbm
10. Thoorivayal	—	—	—	Kdl Mdk
SAYALKUDI				
1. Thirumalukanthamkottai	—	—	—	Pmk
2. T. Karisalkulam	—	—	—	Pmk
3. Kokkarangottai	—	—	—	Pmk
4. Kendunallanpatti	—	—	—	Pmk
5. S. Tharaikudi	—	—	—	Pmk Mbm
6. Kannirajapuram	—	—	—	Mdk
7. Narippaiyur	—	—	—	Mbm
8. Kuthiraimoli	—	—	—	Mdk
9. Mookaaiyur	—	—	—	Mbm Kdl
10. Sayalkudi	239	11	705	Syk Mbm
11. Iruveli	—	—	—	Mbm Kdl
12. A. Nedungulam	—	—	—	Pmk Mbm
13. Therkkuveppangulam	—	—	—	Pmk
14. Agathandai	—	—	—	Pmk Kdl

LAND CAPABILITY

KADALADI TALUK

Soil series	Land capability classification	Extent (ha)	Soil limitation	Special needs
Mudukulathur Sayalkudi	III s	6,288	Coarse texture Low WHC & CEC Low organic matter status and low fertility	Addition of tank sitt & organic manures Fertility Management
Kadaladi Paramakudi	III sw	19,169	Alkalinity, strong calcareousness, wetness, Low organic matter status	Selection of Crops Application of Iron pyrites Drainage Addition of organic manures
Mandabam	V se	20,516	Sandy texture, very low WHC & CEC, Excessive drainage, severe erosion, very low fertility, Very low organic matter status	Agro forestry

Class

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

V *Currently non arable lands*

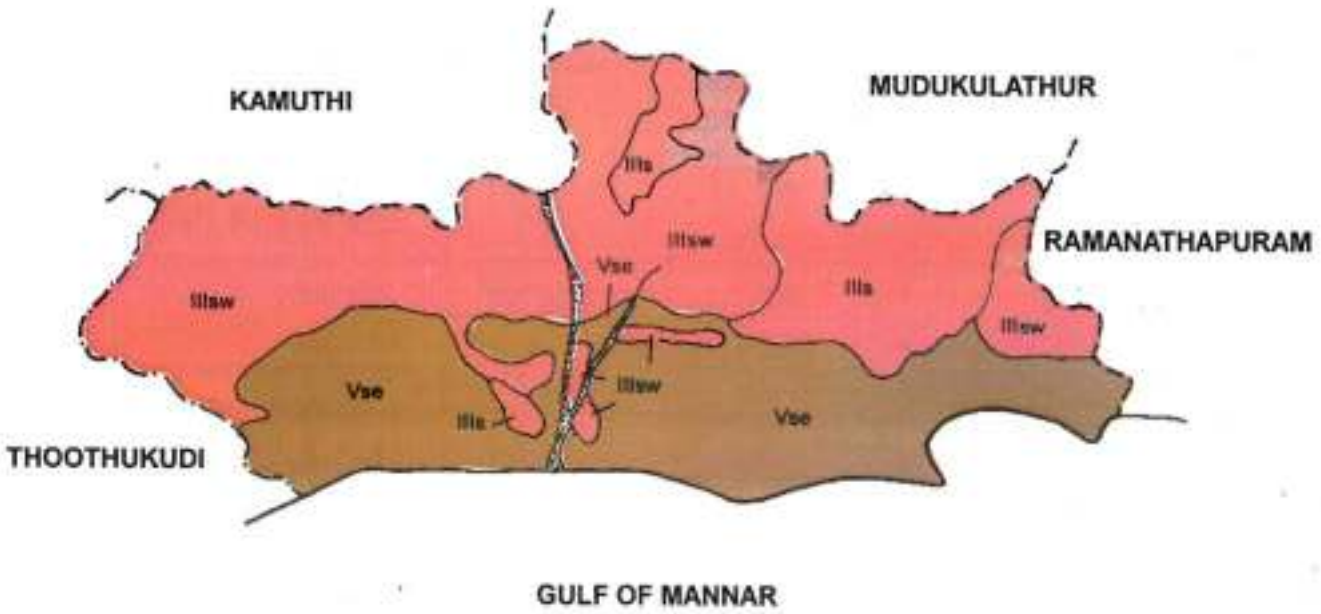
Subclass

s *- Rootzone limitation*

w *- Excess water*

e *- Erosional hazards*

LAND CAPABILITY
KADALADI TALUK



LEGEND

CLASS

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

V — Currently non arable lands

LEGEND

s - Root zone limitation

w - Excess water

e - Erosional hazards

LAND IRRIGABILITY

KADALADI TALUK

Soil series	Land Irrigability classification	Extent (ha)	Soil limitation
Mudukulathur Sayalkudi	3s	6,288	Coarse texture Low WHC & CEC
Kadaladi Paramakudi	3sd	19,169	Alkalinity strong calcareousness Drainage hazards
Mandabam	4st	20,516	Sandy texture, very low CEC & WHC Excessive drainage Topography

Class

3 Lands that have severe limitations for sustained use under irrigation

4 Lands that have very severe limitations for sustained use under irrigation

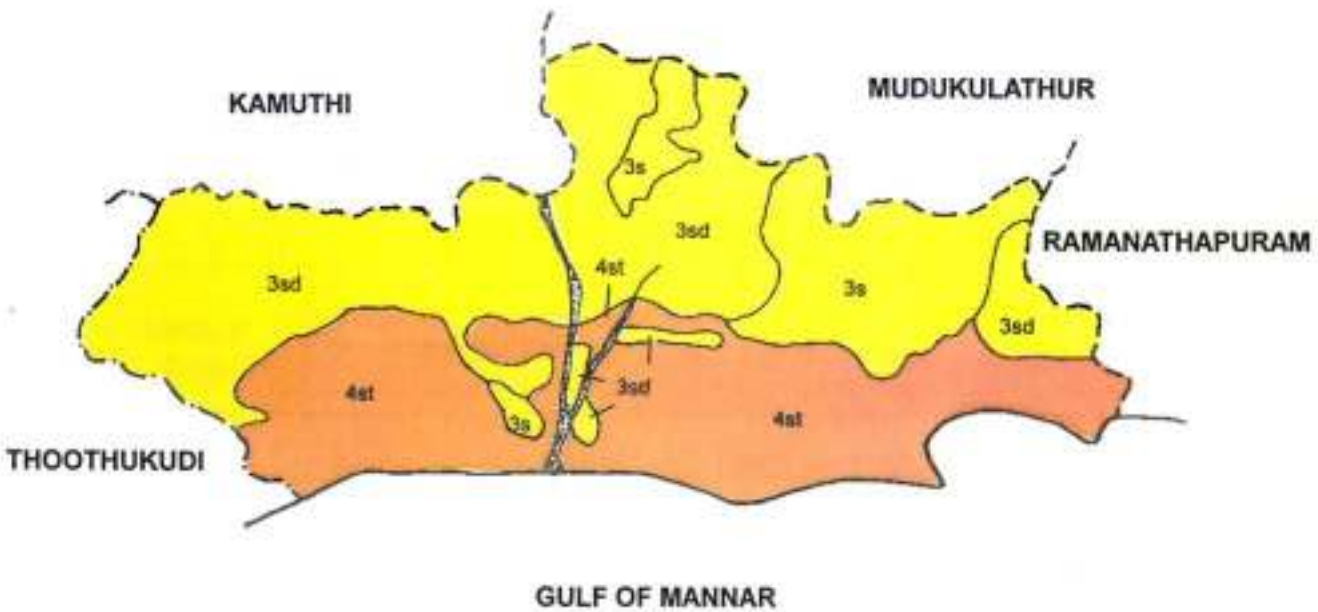
Subclass

s - Soil limitation

d - Drainage hazards

t - Topographical limitation

LAND IRRIGABILITY
KADALADI TALUK



LEGEND

CLASS

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

LEGEND

s - Soil limitation

d - Drainage hazards

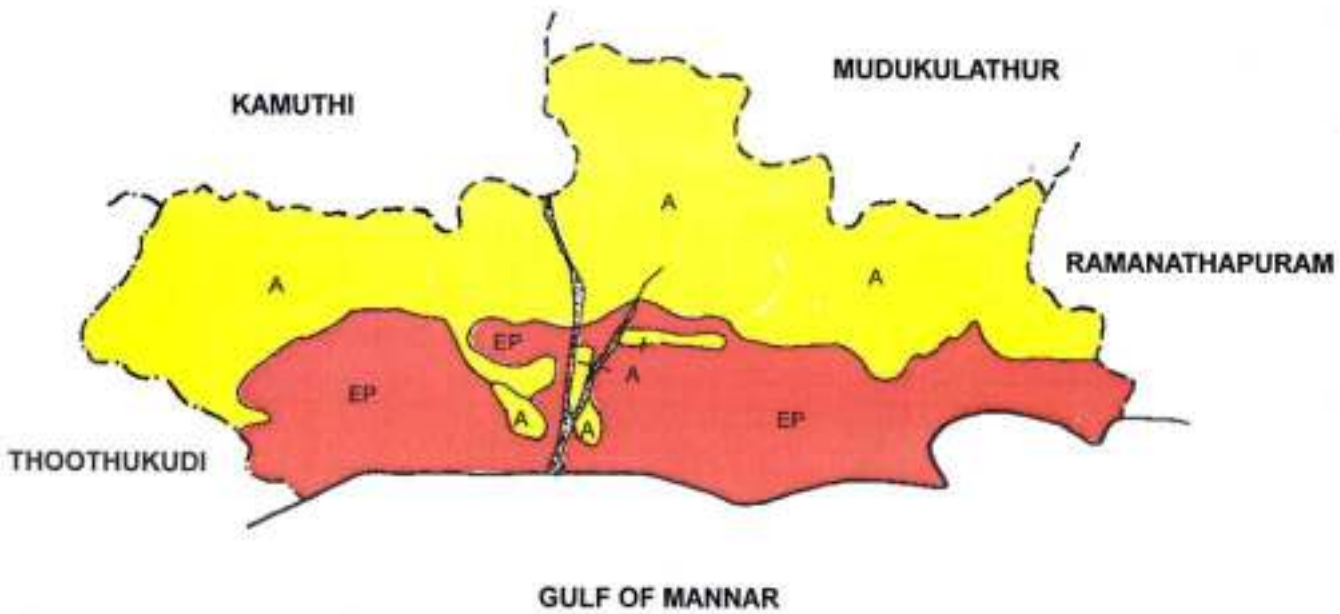
t - Topographical limitation

SOIL PRODUCTIVITY

KADALADI TALUK

Rating	Grouping	Soil series	Extent (ha)
0 - 7	Extremely poor	Mandabam	20,516
20 - 34	Average	Kadaladi Mudukulathur Paramakudi Sayalkudi	25,457

SOIL PRODUCTIVITY
KADALADI TALUK

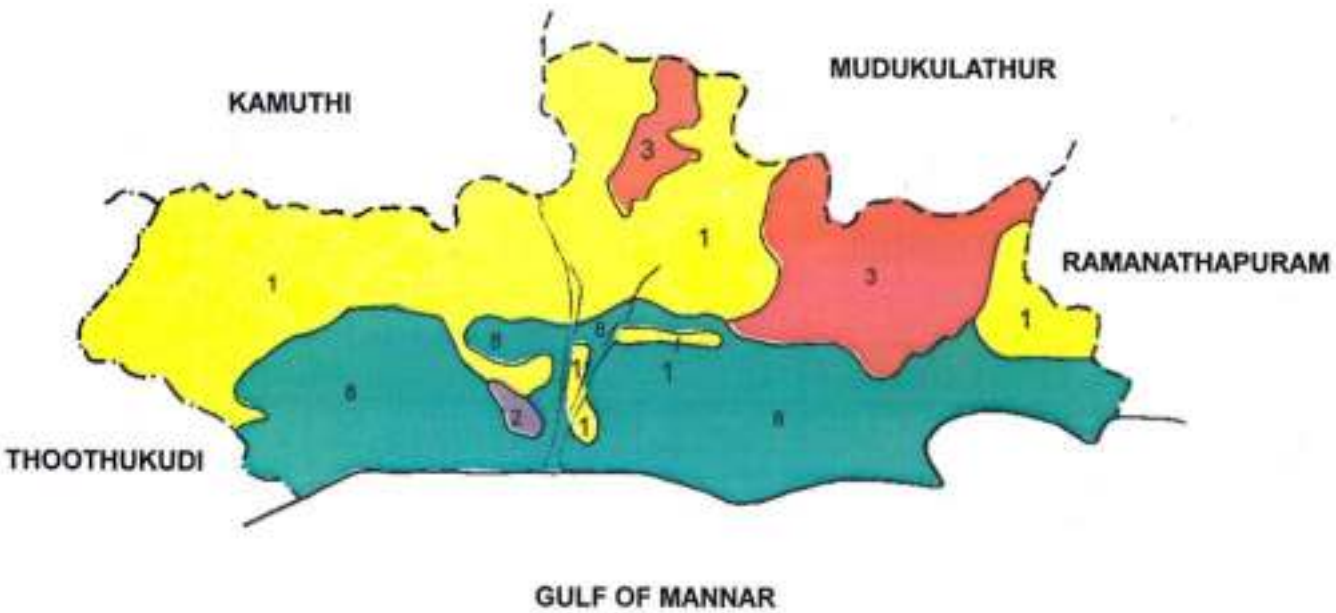


CROPS GROWN

KADALADI TALUK

Crops grown		Map symbol	Soil series
Rainfed	Irrigated		
Millets Cotton Chillies Pulses Coriander Sunflower	Paddy Cotton Chillies	1	Paramakudi Kadaladi
Millets Groundnut Pulses	Millets Groundnut Chillies	2	Sayalkudi
Millets Cotton Chillies	Paddy Cotton	3	Mudukulathur
Palmyrah	Coconut	8	Mandabam

CROPS GROWN
KADALADI TALUK

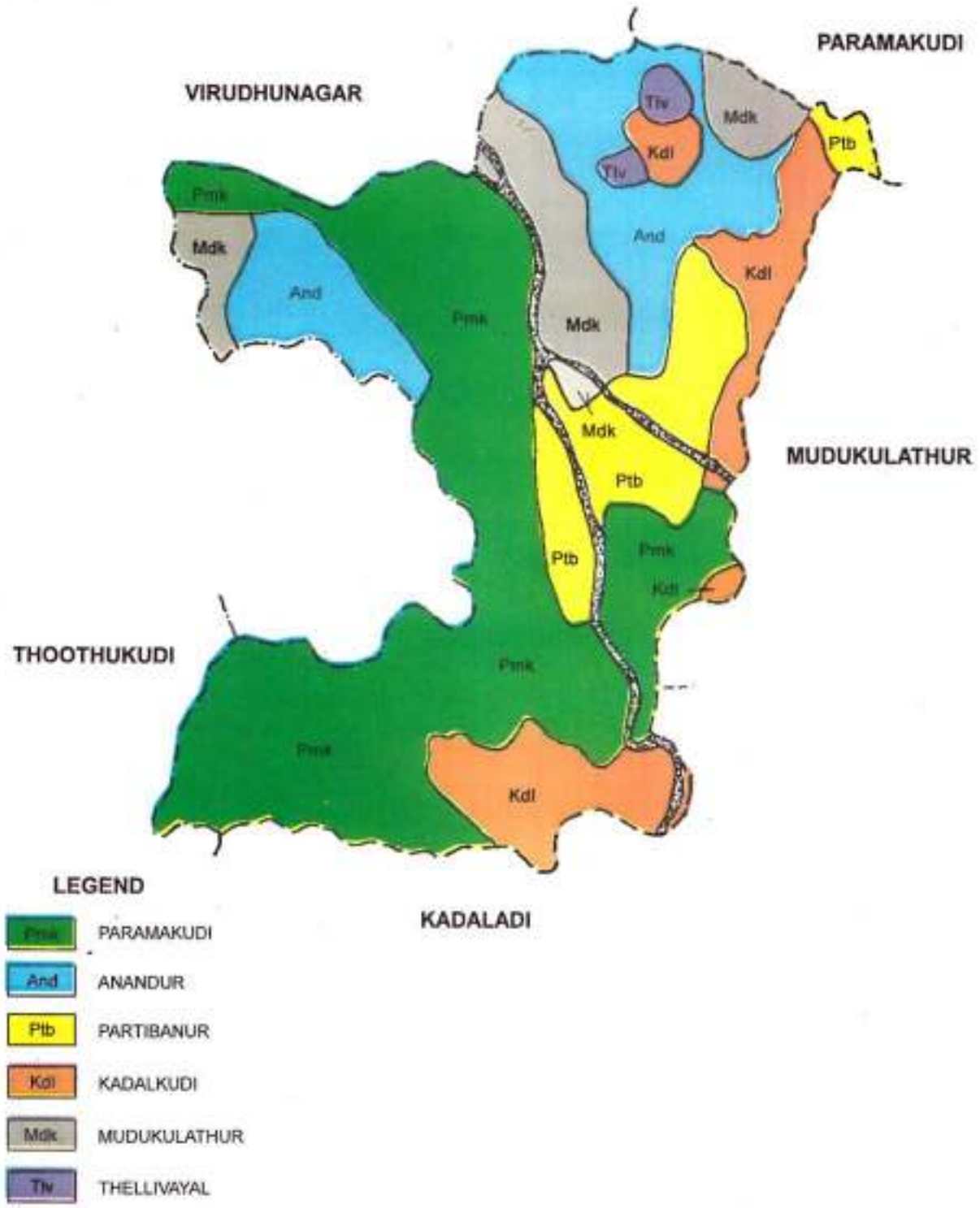


SOILS

KAMUTHI TALUK

S. No.	Soil series	Symbol	Extent (ha)	%
1.	Paramakudi	Pmk	20,431	42.00
2.	Anandur	And	7,620	15.67
3.	Partibanur	Ptb	7,440	15.29
4.	Kadaladi	Kdl	6,902	14.19
5.	Mudukulathur	Mdk	5,893	12.11
6.	Thellivayal	Tlv	361	0.74
	Total		**48,647**	**100.00**

SOILS
KAMUTHI TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

KAMUTHI TALUK

Name of the village	Fertility status (kg / Ac)			
	Nitrogen	Phosphorus	Potassium	Soil series
(1)	(2)	(3)	(4)	(5)
1. Abiraman	202	44	547	And Ptb
2. Achankulam	—	—	—	And Kdl
3. Anaiyur	—	—	—	Ptb Pmk
4. Ariyamangalam	—	—	—	Pmk Kdl
5. Eluvanur	—	—	—	And
6. Idivilagi	—	—	—	Kdl Pmk
7. Kadmankulam	—	—	—	Pmk Kdl
8. Kakkudi	—	—	—	Mdk
9. Kallikulam	188	10	571	Pmk
10. Kamuthi	232	11	601	Pmk
11. Kariaalkulam .N.	—	—	—	Kdl Pmk
12. Karisalkulam. O.	—	—	—	Pmk Ptb
13. Keelaramanathi	—	—	—	And Pmk
14. Kombudi	—	—	—	Kdl Pmk
15. Kovilangulam	—	—	—	Pmk
16. Kuddakkulam	—	—	—	Mdk
17. Madalamanickam	—	—	—	Pmk Ptb
18. Maraikkulam	203	12	768	Pmk
19. Mavilangai	—	—	—	Pmk
20. Melramanathi	212	11	900	And Pmk
21. Mudalnadu	—	—	—	Pmk

(1)	(2)	(3)	(4)	(5)
22. Keela Madimannar kottai	—	—	—	Pmk Kdl
23. Musitakkurichi	244	11	702	And
24. Muthuramalingapuram. P.	—	—	—	Pmk
25. Nagaratttakurichi	—	—	—	And
26. Nattam	—	—	—	Pmk, Kdl
27. Nedungulam. K.	199	12	579	Pmk, And
28. Neeravi	—	—	—	Pmk Kdl
29. Pakkuvetti	—	—	—	Kdl Pmk
30. Paramanendal	—	—	—	Pmk
31. Paraiyur	—	—	—	Pmk Ptb
32. Periyanaikkulam	—	—	—	Pmk Kdl
33. Perunali	—	—	—	Pmk
34. Pendampali	—	—	—	Pmk
35. Pudukottai	230	11	567	Pmk Ptb
36. Pudukkulam. M.				Kdl
37. Punavasal. T.	157	10	344	And
38. Sadaiyanendal	—	—	—	Kdl Pmk
39. Sambakkulam	—	—	—	Mdk
40. Sengappadai	—	—	—	Pmk Ptb
41. Simanendal	—	—	—	Pmk
42. Taraikkudi. A.	—	—	—	Kdl
43. Tavasikkurichi	—	—	—	Mdk Kdl
44. Timmanadhapuram	229	12	874	Pmk
45. Valamadai	—	—	—	Tlv And
46. Valasubramaniapuram	—	—	—	Pmk
47. Vangarupuram	—	—	—	Mdk And
48. Veppankulam. K.	—	—	—	Pmk
49. Villannendal	—	—	—	Kdl

LAND CAPABILITY

KAMUTHI TALUK

Soil series	Land capability classification	Extent (ha)	Soil limitation	Special needs
Anandur Mudukulathur Thellivayal	III s	13,874	Surface coarse texture, Crusting, low organic matter status Low fertility	Liberal addition of organic manures Fertility management
Kadaladi Paramakudi Partibanur	III sw	34,773	Alkalinity strong calcareousness wetness Low organic matter status	Selection of crops Application of iron pyrites Drainage addition of organic manners

Class

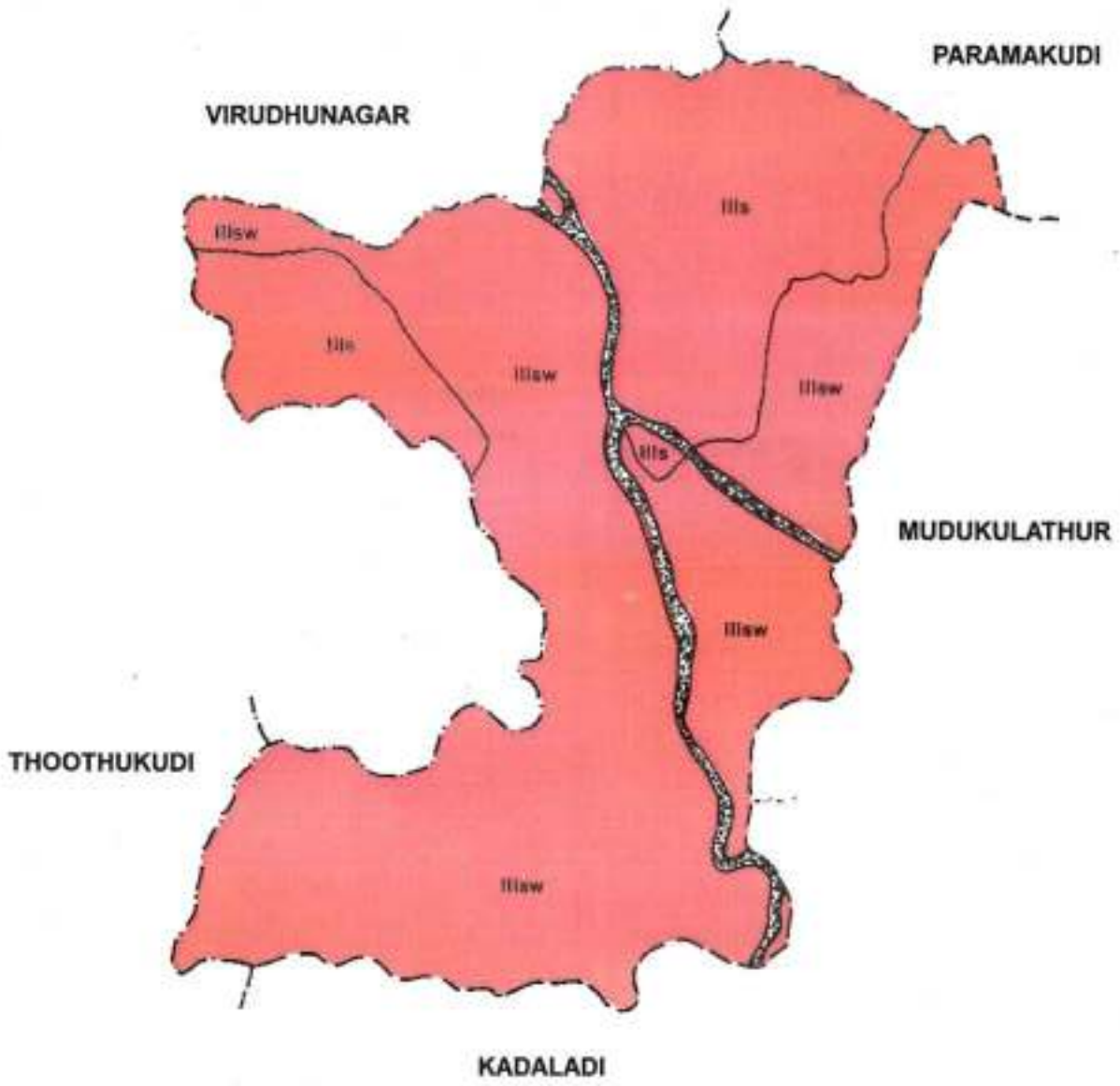
III *Moderately good cultivable lands That have severe limitations for sustained use under agriculture*

Subclass

s *- Rootzone limitation*

w *- Excess water*

LAND CAPABILITY
KAMUTHI TALUK



LEGEND

CLASS

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

SUBCLASS

s - Root zone limitation

w - Excess water

LAND IRRIGABILITY

KAMUTHI TALUK

Soil series	Land Irrigability classification	Extent (ha)	Soil limitation
Anandur Mudukulathur Thellivayal	3 s	13,874	Surface coarse texture Crusting
Kadaladi Paramakudi Partibanur	3 sd	34,773	Alkalinity Strong calcareousness Drainage hazards

Class

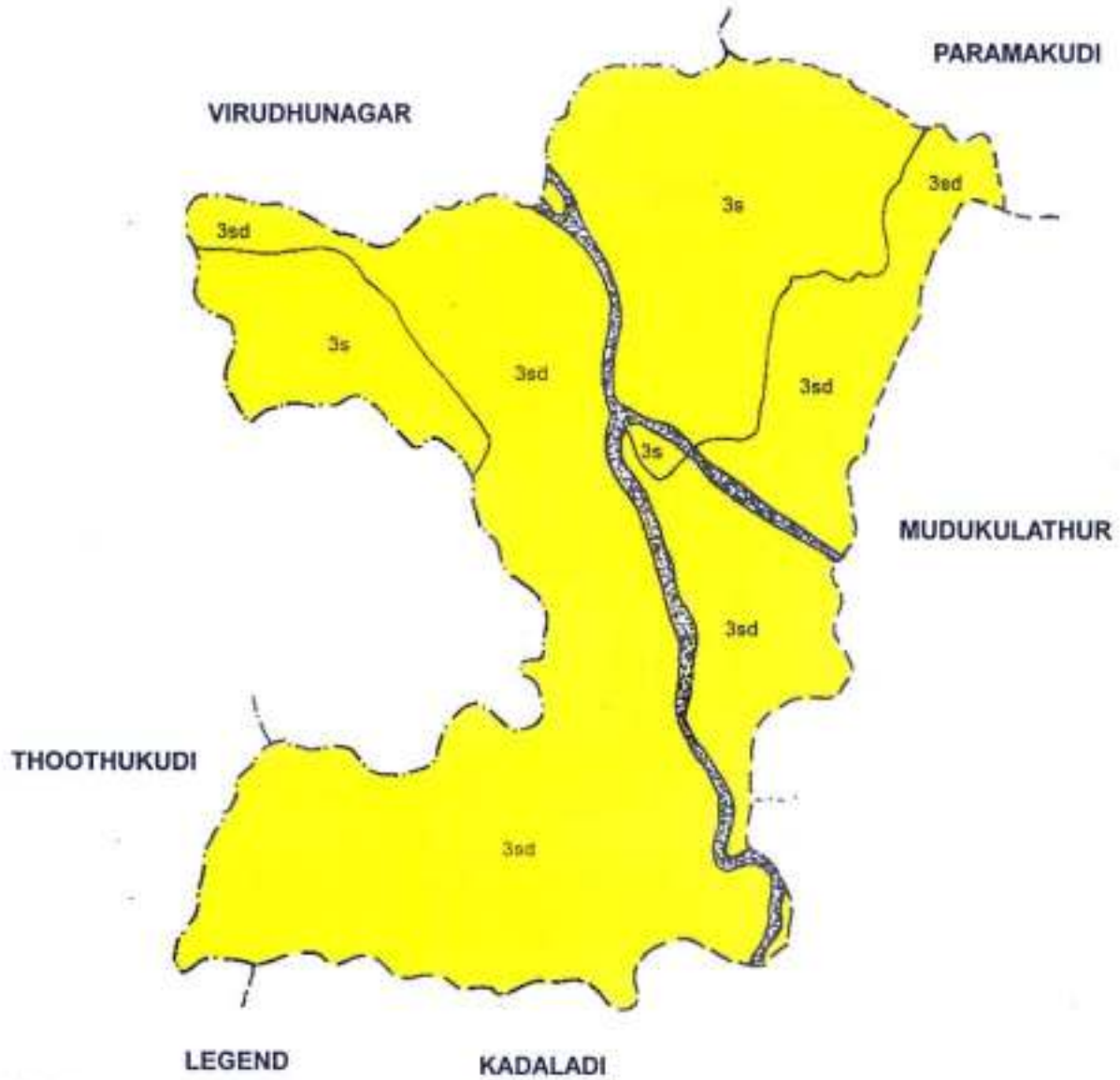
3 Lands that have severe limitations for sustained use under irrigation

Subclass

s - Soil limitation

d - Drainage hazards

LAND IRRIGABILITY
KAMUTHI TALUK



CLASS

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

SUBCLASS

s - Soil limitation

d - Drainage hazards

SOIL PRODUCTIVITY

KAMUTHI TALUK

Rating	Grouping	Soil series	Extent (ha)
20-34	Average	Anandur Kadaladi Mudukulathur Paramakudi Partibanur Thellivayal	48,647

SOIL PRODUCTIVITY

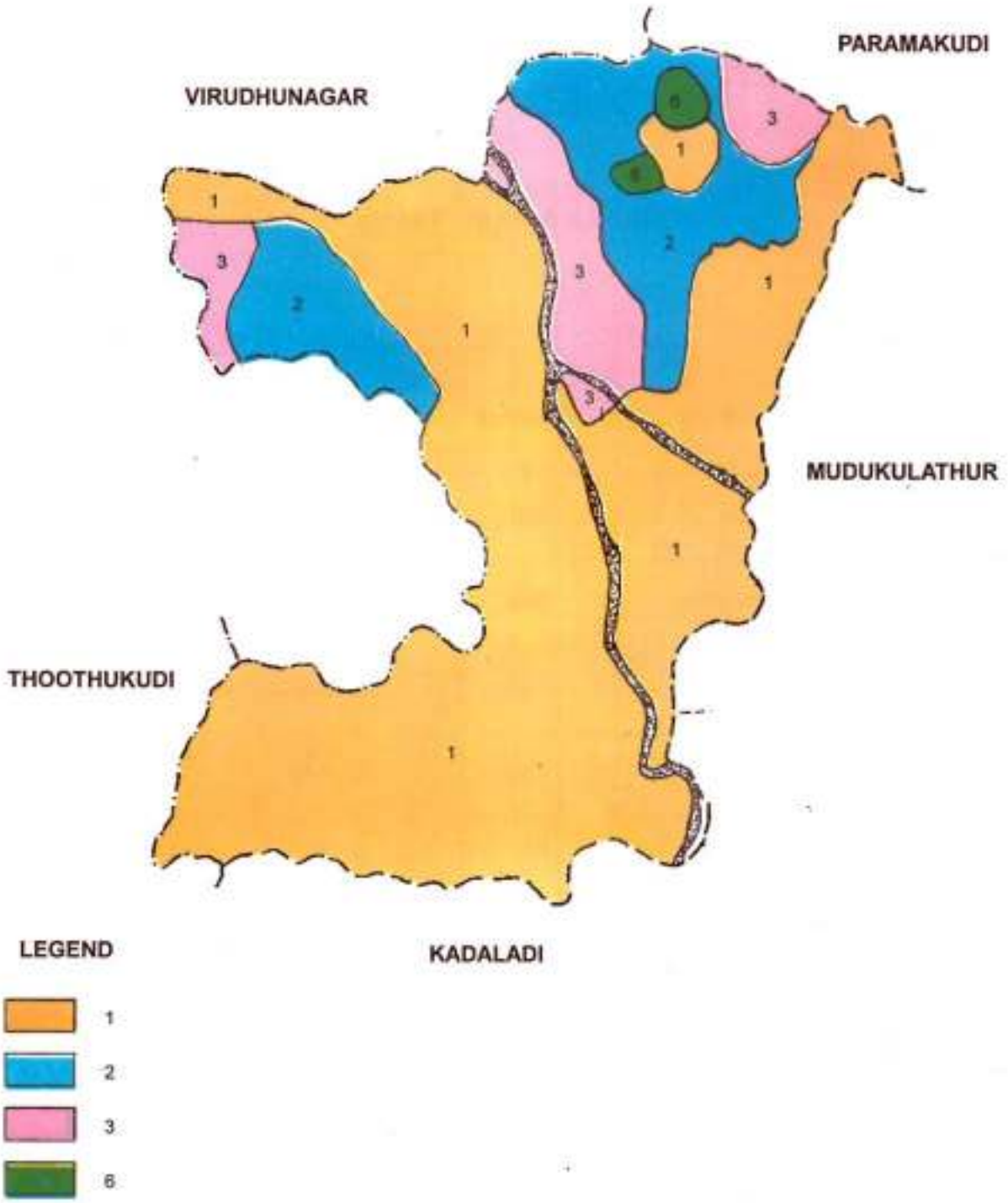
KAMUTHI TALUK

CROPS GROWN

KAMUTHI TALUK

Crops grown		Map symbol	Soil series
Rainfed	Irrigated		
Millets Cotton Chillies Pulses Coriander Sunflower	Paddy Cotton Chillies	1	Paramakudi Partibanur Kadaladi
Millets Groundnut Pulses	Millets Groundnut Chillies	2	Anandur
Millets Cotton Chillies	Paddy Cotton	3	Mudukulathur
Groundnut Millets Pulses	Orchard crops Groundnut Millets Chillies	6	Thellivayal

CROPS GROWN
KAMUTHI I TALUK

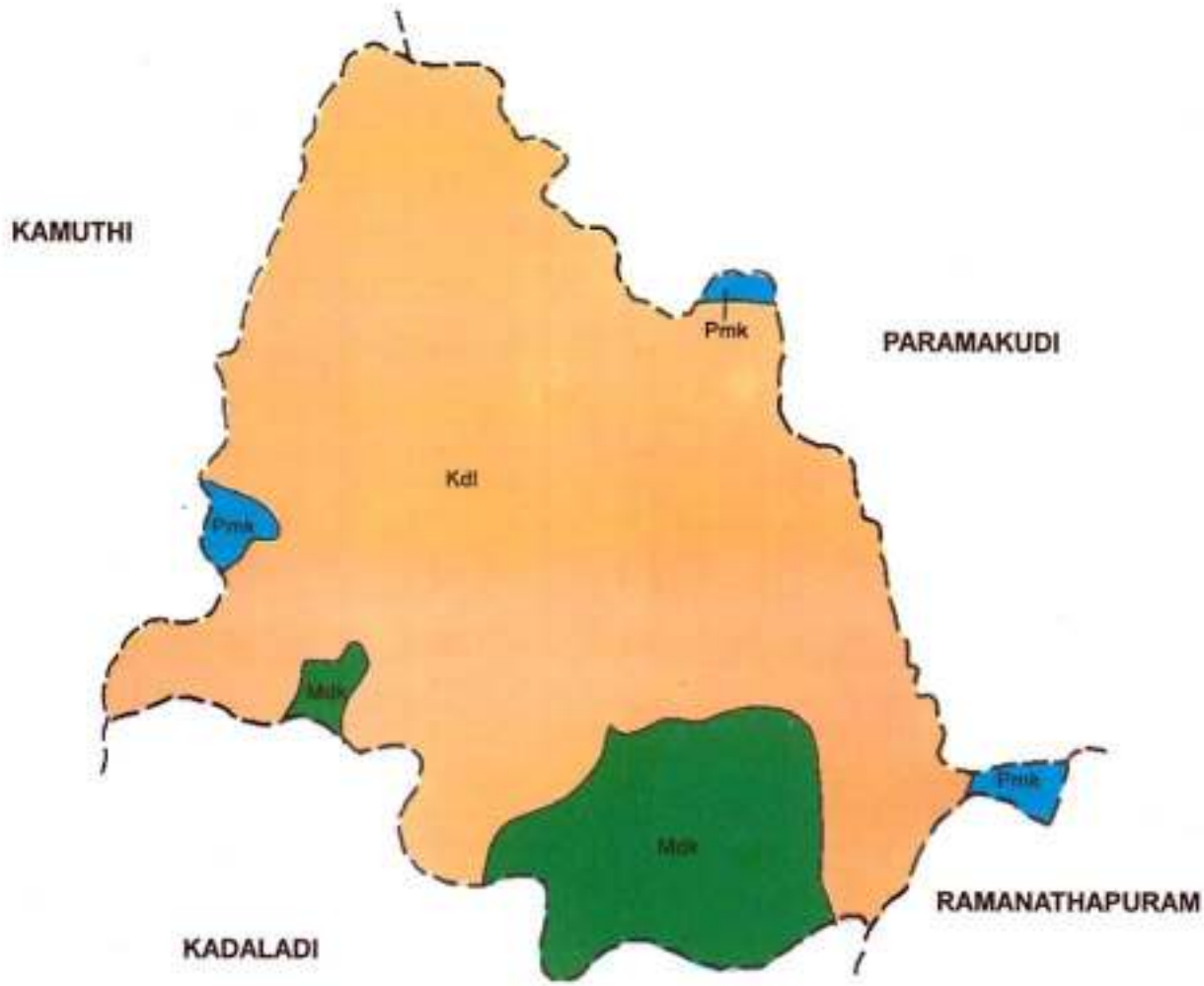


SOILS

MUDUKULATHUR TALUK

S. No.	Soil series	Symbol	Extent (ha)	%
1.	Kadaladi	Kdl	37,246	91.64
2.	Mudukulathur	Mdk	2,753	6.77
3.	Paramakudi	Pmk	646	1.59
	Total		**40,645**	**100.00**

SOILS
MUDUKULATHUR TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

MUDUKULATHUR TALUK

Name of the village	Fertility status (kg / Ac)			
	Nitrogen	Phosphorus	Potassium	Soil series
(1)	(2)	(3)	(4)	(5)
MUDUKULATHUR				
1. Pulmaikkulam	227	11	587	Kdl
2. Keelamudukulathur	192	11	43	Kdl Mdk
3. Melamudukulathur	—	—	—	Kdl
4. Kumarakurichi	—	—	—	Kdl Mdk
5. Kakkoor	—	—	—	Kdl
6. Puliyangudi	—	—	—	Kdl
7. Manaloor	211	10	594	Kdl
8. Annaiseri	—	—	—	Kdl
9. Keeranur	—	—	—	Kdl
10. Nallur	—	—	—	Kdl
KEELATHOVAL	—	—	—	
1. Melakodumanur	—	—	—	Kdl
2. Sadaikkanendal	—	—	—	Kdl
3. Koothdiyendal	201	11	625	Kdl Pmk
4. Keelakkodomaloor	—	—	—	Kdl Pmk
5. Vikkiramapandiyapuram	—	—	—	Kdl
6. Keezhakulam	—	—	—	Kdl
7. Merkkukottakudi	—	—	—	Kdl
8. Melathooval	—	—	—	Kdl

(1)	(2)	(3)	(4)	(5)
9. Keelathoval	—	—	—	Kdl
10. Vilangalathur	226	12	627	Kdl
11. Vengalakurichi	—	—	—	Kdl
12. Chellur	—	—	—	Kdl
13. Sathanur	—	—	—	Kdl
14. Posukkudi	—	—	—	Kdl
THERIRUVELI				
1. Suvathan	—	—	—	Kdl
2. Thiruvarangam	—	—	—	Kdl
3. Kozhunthurai	—	—	—	Kdl
4. Ulalyur	—	—	—	Kdl
5. Pirakkalur	—	—	—	Kdl
6. Poocheri	235	42	467	Kdl Mdk
7. Karumal	—	—	—	Kdl Mdk
8. Ilankakur	226	12	627	Kdl Mdk
9. Valanadu	—	—	—	Kdl Mdk
10. Thaniarendal	—	—	—	Kdl Mdk
11. Theriruveli	—	—	—	Kdl Mdk

LAND CAPABILITY

MUDUKULATHUR TALUK

Soil series	Land capability classification	Extent (ha)	Soil limitation	Special needs
Mudukulathur	III s	2,753	Surface coarse texture Low WHC & CEC Low organic matter status Low fertility	Addition of tank sitt & organic manures Fertility Management
Kadaladi Paramakudi	III sw	37,892	Alkalinity strong calcareousness wetness Low organic matter status	Selection of Crops Application of Iron pyrites Drainage Addition of organic manures

Class

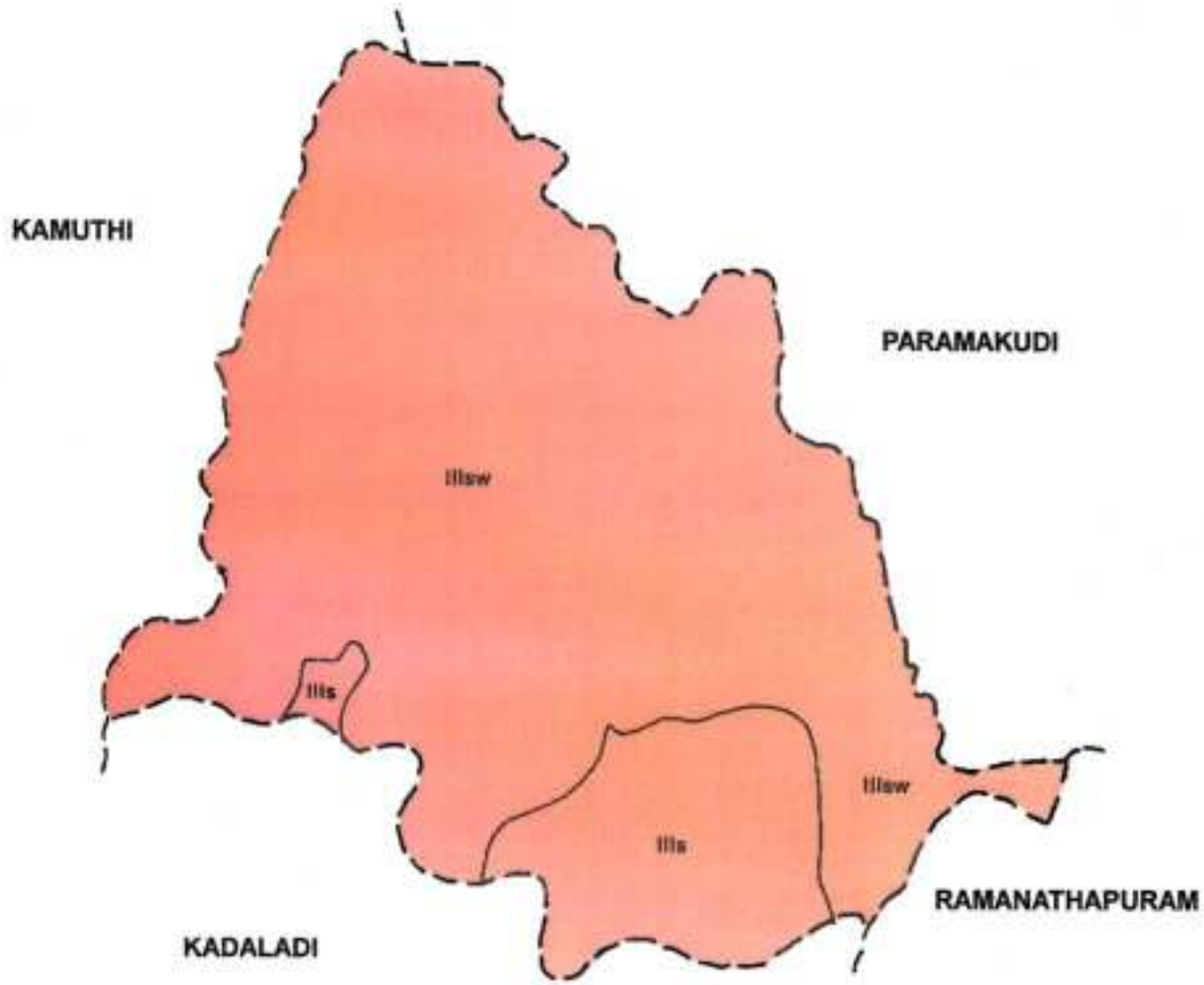
III *Moderately good cultivable lands that have severe limitations for sustained use under agriculture*

Subclass

s *- Rootzone limitation*

w *- Excess water*

LAND CAPABILITY
MUDUKULATHUR TALUK



LEGEND

CLASS

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

SUBCLASS

s - Root zone limitation

w - Excess water

LAND IRRIGABILITY

MUDUKULATHUR TALUK

Soil series	Land Irrigability classification	Extent (ha)	Soil limitation
Mudukulathur	3 s	2,753	Surface coarse texture Low WHC & CEC
Kadaladi Paramakudi	3 sd	37,892	Alkalinity Strong calcareousness Drainage hazards

Class

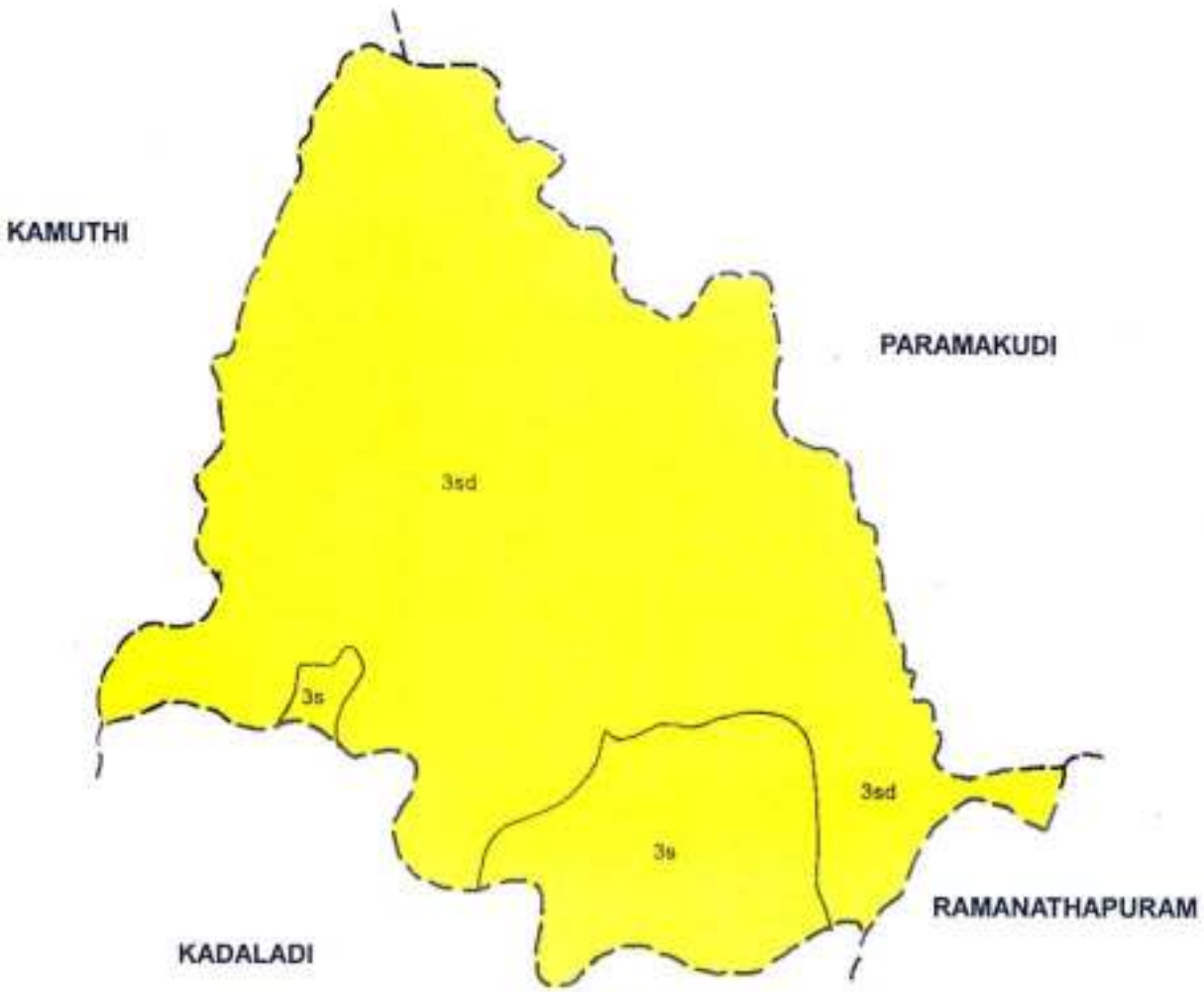
3 Lands that have severe limitations for sustained use under irrigation

Subclass

s - Soil limitation

d - Drainage hazards

LAND IRRIGABILITY
MUDUKULATHUR TALUK



LEGEND

CLASS

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

SUBCLASS

s - Soil limitation

d - Drainage hazards

SOIL PRODUCTIVITY

MUDUKULATHUR TALUK

Rating	Grouping	Soil series	Extent (ha)
20 - 34	Average	Kadaladi Mudukulathur Paramakudi	40,645

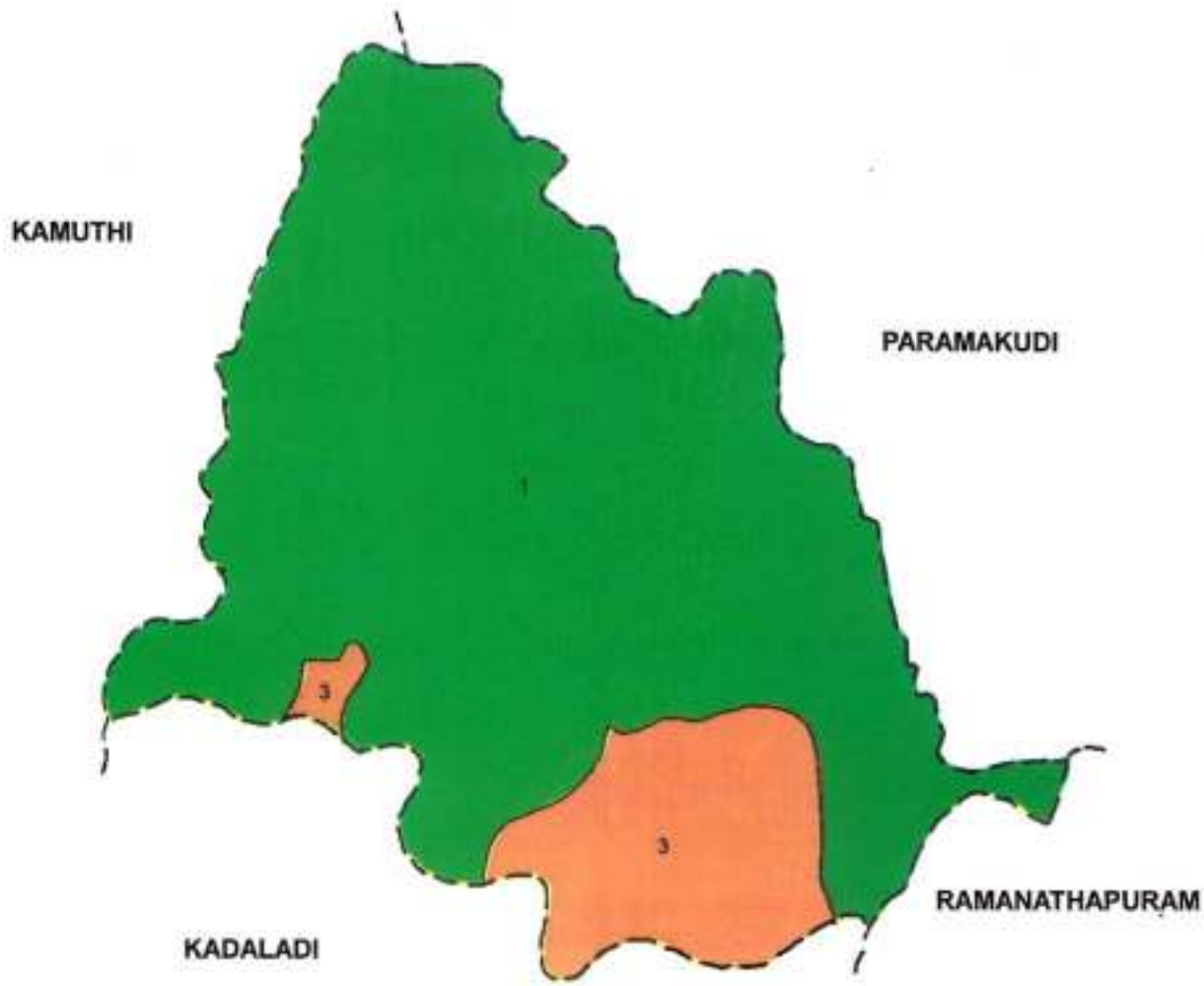
SOIL PRODUCTIVITY
MUDUKULATHUR TALUK

CROPS GROWN

MUDUKULATHUR TALUK

Crops grown		Map symbol	Soil series
Rainfed	Irrigated		
Millets Cotton Chillies Pulses Coriander Sunflower	Paddy Cotton Chillies	1	Kadaladi Paramakudi
Millets Cotton Chillies	Paddy Cotton	3	Mudukulathur

CROPS GROWN
MUDUKULATHUR TALUK

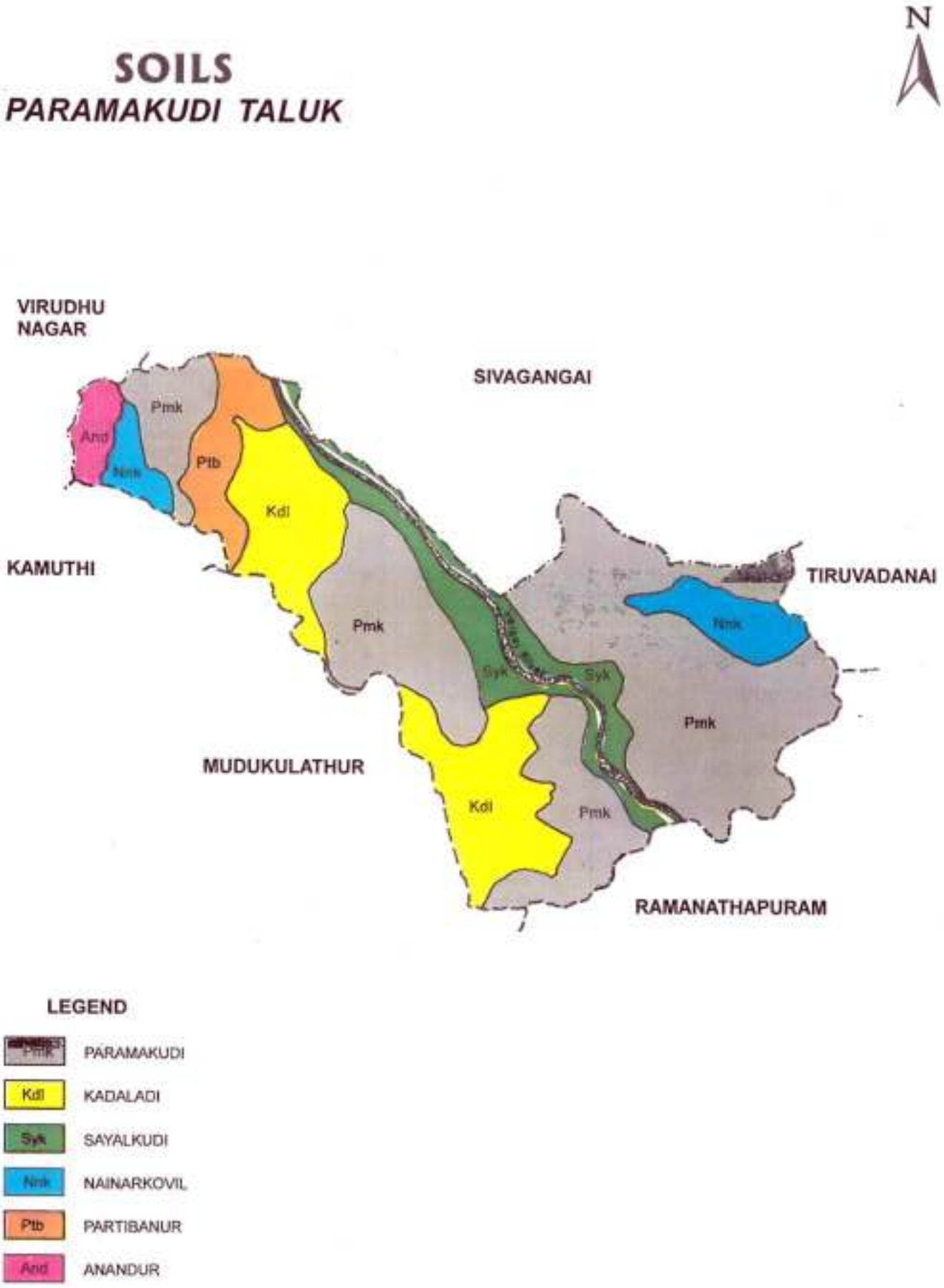


SOILS

PARAMAKUDI TALUK

S.No.	Soil series	Symbol	Extent (ha)	%
1.	Paramakudi	Pmk	29156	52.56
2.	Kadaladi	Kdl	13260	23.90
3.	Sayalkudi	Syk	5400	9.74
4.	Nainarkovil	Nnk	3408	6.14
5.	Partibanur	Ptb	2974	5.36
6.	Anandur	And	1276	2.30
Total			**55474**	**100.00**

SOILS
PARAMAKUDI TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

PARAMAKUDI TALUK

Name of the village		Fertility status (Kg/Ac)			Soil series
		Nitrogen	Phosphorus	Potassium	
(1)		(2)	(3)	(4)	(5)
1.	Akkirammesi	78	3	182	Pmk Syk
2.	Andakkudi. S.	—	—	—	Kdl Pmk
3.	Anjamadal	—	—	—	Pmk
4.	A. Puddur	67	4	211	Kdl Pmk
5.	Arasanur	—	—	—	Pmk
6.	Ariyakudi	70	5	249	Kdl Pmk
7.	Ariyanendal	73	4	223	Pmk Syk
8.	Ariyankottai	68	4	212	Kdl Nnk
9.	Attangudi	60	4	256	Pmk Kdl
10.	Bogalur	205	36	505	Pmk Syk
11.	Chittanendal	—	—	—	Syk
12.	Ettivayal	—	—	—	Pmk Kdl
13.	Gangaikondan	94	4	273	Pmk Kdl
14.	Karanental	—	—	—	Kdl Syk
15.	Kalaiyur	—	—	—	Pmk
16.	Kalaiyur	—	—	—	Pmk
17.	Kamankottai	85	4	226	Pmk Kdl
18.	Kallikudi	219	37	888	Pmk Kdl
19.	Kamudakkudi	181	26	562	Kdl Pmk
20.	Karadaraithakudi	238	11	493	Pmk Kdl
21.	Kattuparamakudi	74	4	237	Pmk Syk
22.	Keelakottai	—	—	—	Kdl Pmk
23.	Kilaparithiyur	—	—	—	Kdl Nnk
24.	Kiliyur	96	4	283	Pmk syk
25.	K. Karungulam	—	—	—	Pmk Kdl

(1)		(2)	(3)	(4)	(5)
26.	Koluyur	—	—	—	Pmk
27.	Kooenankulam	—	—	—	Pmk
28.	Keraikulam	—	—	—	And Pmk
29.	Kothankulam	94	5	278	Kdl Nnk
30.	Kottagudi	—	—	—	Pmk
31.	Kulandapurai	—	—	—	Kdl Nnk
32.	Kulathur	178	11	751	Syk Pmk
33.	Kumukottai	—	—	—	Kdl Pmk
34.	Madandai	—	—	—	kdl Nnk
35.	Manakkudi	—	—	—	Pmk
36.	Manjakellai	—	—	—	Syk Kdl
37.	Manjur	49	3	196	Pmk
38.	Melaparthibanur	—	—	—	Kdl Nnk
39.	Melavkudi	72	4	204	Pmk Kdl
40.	Meenenthi	—	—	—	Pmk Kdl
41.	Monukudi	84	9	258	Pmk Kdl
42.	Mudalur	71	4	162	Pmk Syk
43.	Nummudisathan	225	9	527	Syk Pmk
44.	Nagachi	—	—	—	Pmk Syk
45.	Nagaram	100	6	138	Pmk Nnk
46.	Nagaram angalam	—	—	—	Pmk Nnk
47.	N. Pethanenthal	—	—	—	Pmk
48.	Pambur	71	13	204	Pmk Kdl
49.	Pandikanmai	—	—	—	Pmk Kdl
50.	Panaiyur	70	12	247	Pmk Kdl

(1)		(2)	(3)	(4)	(5)
51.	Pandiyur	—	—	—	Pmk
52.	Panthappenendal	—	—	—	Pmk Syk
53.	Perianendal	—	—	—	Pmk Syk
54.	Perungalur	—	—	—	Pmk Kdl
55.	Perungarai	82	4	223	kdl Pmk
56.	Pidariseri	82	4	236	Pmk
57.	P. Kodikulam	—	—	—	Pmk
58.	Peduvakudi	51	4	213	Pmk Kdl
59.	Pettagavayal	205	14	713	Pmk
60.	Radhapuli	—	—	—	Pmk Syk
61.	Saduravedamangalam	—	—	—	Pmk Syk
62.	Samanur	—	—	—	Kdl Pmk
63.	Sathukkal	222	10	626	Pmk
64.	Sevvoor	—	—	—	Pmk Kdl
65.	Seyyalur	—	—	—	Pmk Kdl
66.	Sirakikottai	—	—	—	Pmk Syk
67.	Siruvayal	64	4	256	Pmk
68.	S. Karanur	—	—	—	Pmk
69.	S. Kodikulam	—	—	—	Kdl Pmk
70.	Sudiyar	82	4	226	Kdl Syk
71.	Tagaduthalankottai	213	42	579	Kdl Nnk
72.	Thalayadikottai	96	3	259	Pmk Syk
73.	Thavalaikulam	—	—	—	Pmk
74.	Thenpoduvakudi	—	—	—	Kdl Pmk
75.	Thethangal	—	—	—	Pmk Kdl

(1)		(2)	(3)	(4)	(5)
76.	Thiyagavaneri	—	—	—	Pmk Ptb
77.	Thiyanur	—	—	—	Pmk Ptb
78.	Thelur	188	10	700	Pmk Ptb
79.	Urappuli	225	10	533	Syk Pmk
80.	Urathur	—	—	—	Kdl Pmk
81.	Vadhavaneri	197	11	895	Kdl Pmk
82.	Vagavayal	95	14	264	Pmk
83.	Valimarichan	—	—	—	Pmk And
84.	Vallakulam	—	—	—	Pmk Kdl
85.	Vallam	—	—	—	Syk Pmk
86.	Vaniavallam	—	—	—	Pmk Syk
87.	Veeravanur	—	—	—	Pmk Kdl
88.	Velangudi	198	11	598	Kdl Nnk
89.	Vendeni	—	—	—	Pmk
90.	Vengalur	98	4	179	Kdl Nnk
91.	Veppangulam	—	—	—	Nnk Pmk
92.	Vilathur	96	5	293	Pmk Ptb

LAND CAPABILITY

PARAMAKUDI TALUK

Soil series	Land Capability class	Extent (ha)	Soil Limitations	Special Needs
Anandur Nainarkovil Sayalkudi	III s	10084	Surface coarse texture, surface crusting, low organic matter status, low fertility	Liberal addition of organic manures and fertility management
Kadaladi Paramakudi Partibanur	III sw	45390	Alkalinity, strong calcareousness, wetness, low organic matter status	Selection of crops, application of Iron pyrites, Drainage, Addition of organic manures

Class

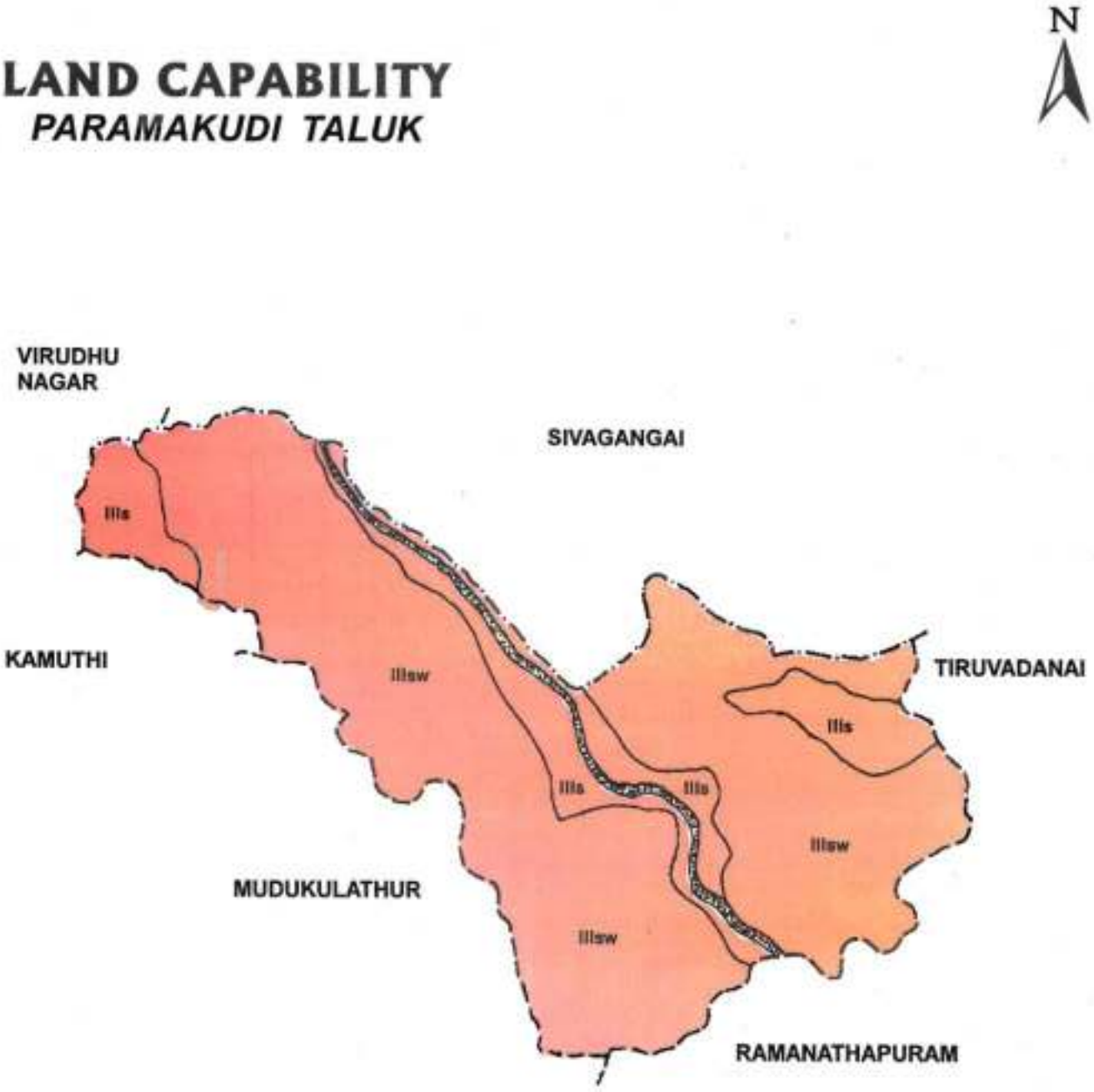
III- *Moderately good cultivable lands that have severe limitations for sutained use under agriculture*

Sub Class

s - *Root zone limitation*

w - *Excess water*

LAND CAPABILITY
PARAMAKUDI TALUK



LEGEND

CLASS

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

SUB CLASS

s - Root zone limitation

w - Excess water

LAND IRRIGABILITY

PARAMAKUDI TALUK

Soil series	Land irrigability class	Extent (ha)	Soil Limitations
Anandur Nainarkovil Sayalkudi	3 s	10084	Surface coarse texture, crusting
Kadaladi Paramakudi Partibanur	3 sd	45390	Alkalinity, strong calcareousness, drainage hazards

Class

3 - *lands that have severe limitations for sutained use under irrigation*

Sub Class

s - *Soil limitation*
d - *Drainage hazards*

LAND IRRIGABILITY
PARAMAKUDI TALUK

LEGEND

CLASS

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

SUB CLASS

s - Soil limitation

d - Drainage hazards

SOIL PRODUCTIVITY

PARAMAKUDI TALUK

Rating	Grouping	Soil series	Extent (ha)
20 - 34	Average	Anandur Kadaladi Nainarkovil Paramakudi Partibanur Sayalkudi	55474

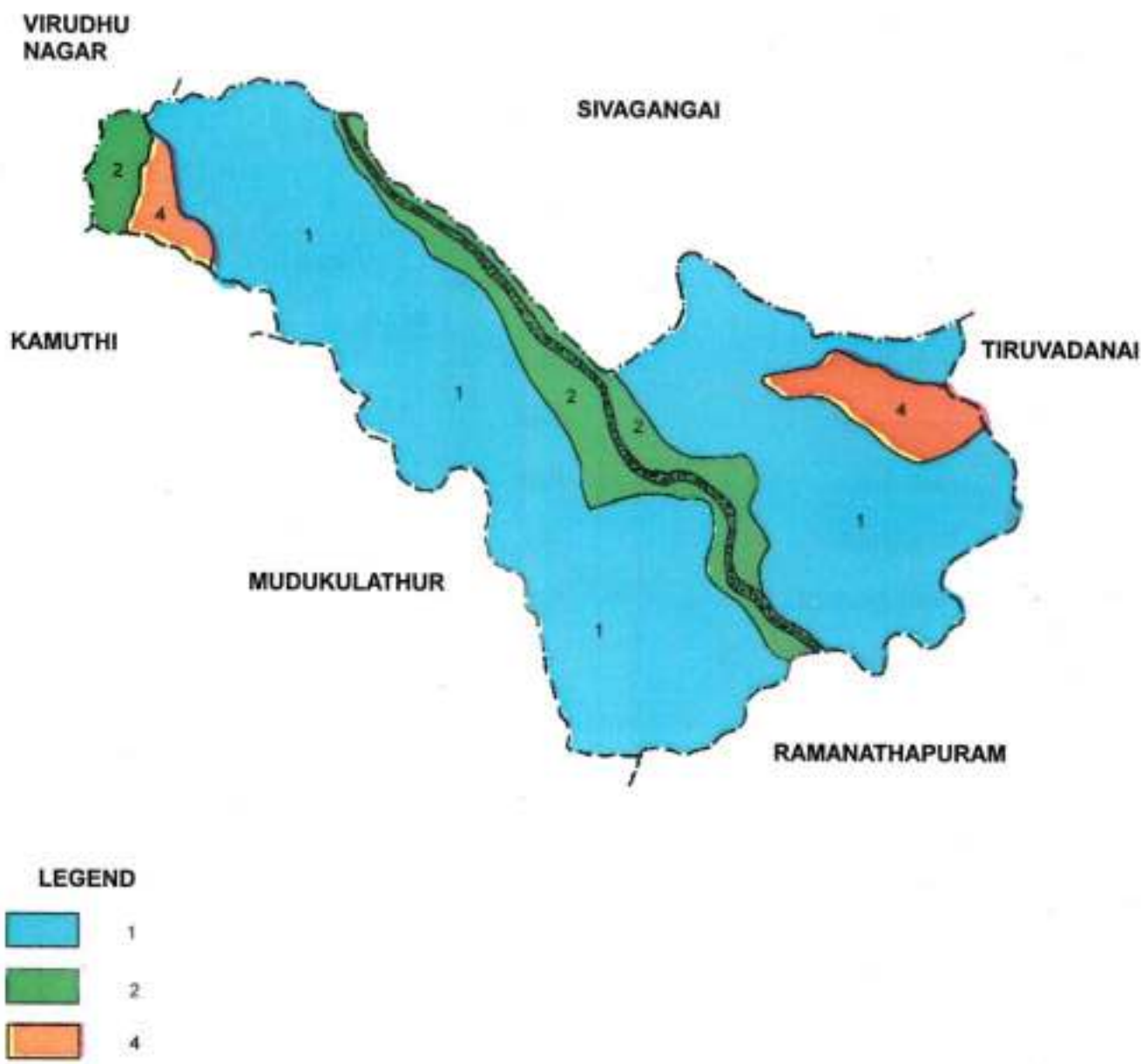
SOIL PRODUCTIVITY
PARAMAKUDI TALUK

CROPS GROWN

PARAMAKUDI TALUK

Crops Grown		Map symbol	Soil series
Rainfed	Irrigated		
Millets, cotton, chillies, pulses, coriander, sunflower	Paddy, cotton, chillies	1	Paramakudi Kadaladi Partibanur
Millets, groundnut, pulses	Millets, groundnut, chillies	2	Sayalkudi Anandur
Millets, chillies, cotton, groundnut	Paddy, vegetables	4	Nainarkovil

CROPS GROWN
PARAMAKUDI TALUK

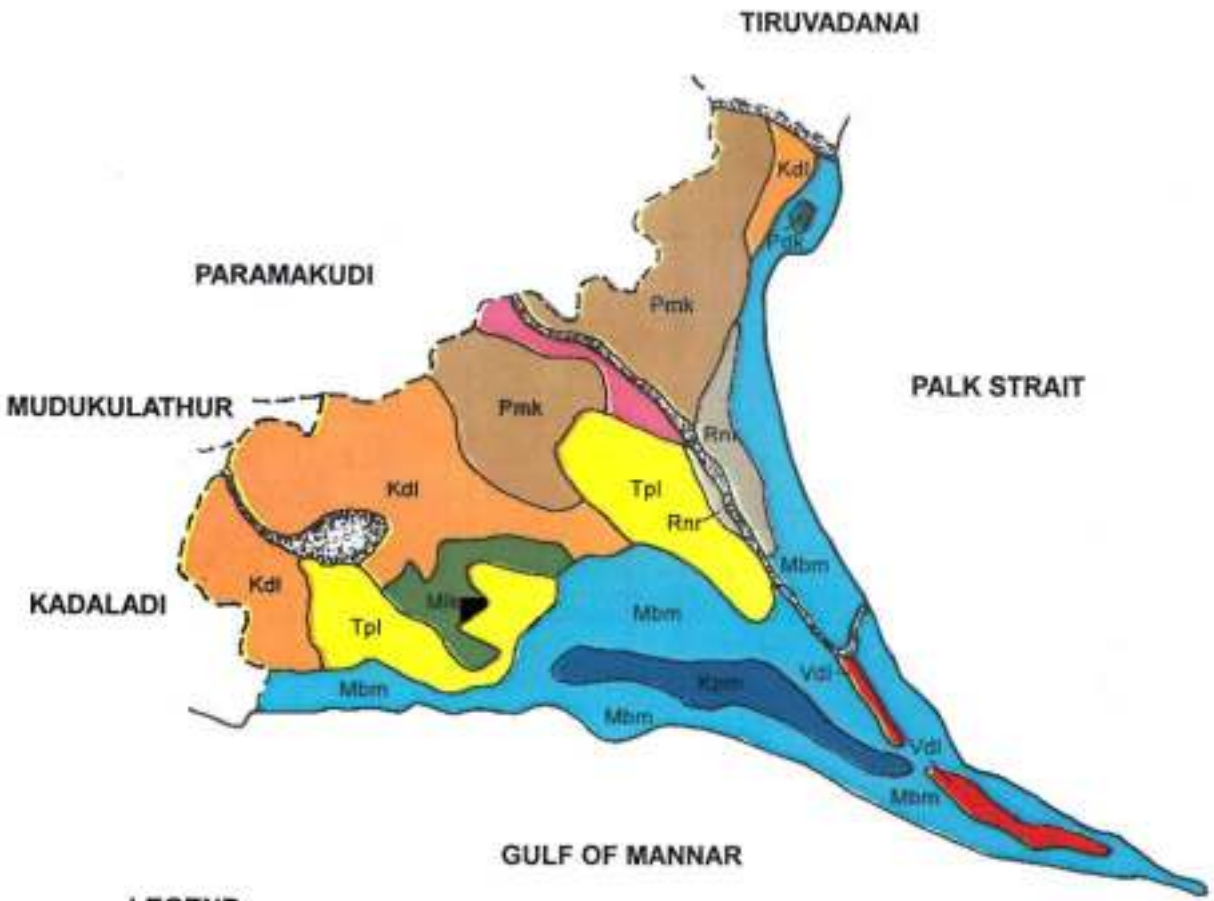


SOILS

RAMANATHAPURAM TALUK

S.No.	Soil series	Symbol	Extent (ha)	%
1.	Mandabam	Mbm	17820	32.11
2.	Parmakudi	Pmk	9754	17.58
3.	Kadaladi	Kdl	9290	16.74
4.	Tiruppullani	Tpl	6372	11.48
5.	Keelapavalam	Kpm	3375	6.08
6.	Mamallakkarai	Mlk	2590	4.67
7.	Ramnagar	Rnr	2090	3.77
8.	Vannankundu	Vnk	2062	3.71
9.	Vedalai	Vdl	1840	3.31
10.	Pudukudi	Pdk	306	0.55
Total			**55499**	**100.00**

SOILS
RAMANATHAPURAM TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

RAMANATHAPURAM TALUK

Name of the village	Fertility status (Kg/Ac)			Soil series
	Nitrogen	Phosphorus	Potassium	
(1)	(2)	(3)	(4)	(5)
1. Achadipirambu	—	—	—	Pmk Mlk
2. Achudanvayal	—	—	—	Pmk
3. Alagangulam	—	—	—	Tpl kpm
4. Alamalandal	—	—	—	Pmk Kdl
5. Alangulam	186	10	32	Kdl
6. Andichiyendal	—	—	—	Kdl
7. Athankarai	98	4	377	Mbm
8. Athiyothu	—	—	—	Mbm Pmk
9. Chittarkottai	99	4	243	Pmk Vnk
10. Devipattanam	60	3	247	Pmk Mbm
11. Ekkakudi	81	4	234	Kdl
12. Eamanakondan	79	4	165	Mbm
13. Kalari	53	4	190	Kdl Mlk
14. Kalimengundu	—	—	—	Mbm Kpm
15. Kalugoorani	—	—	—	Tpl Vnk
16. Kanjirangudi	—	—	—	Tpl Mbm
17. Karan	—	—	—	Kpm Mbm
18. Karendal	—	—	—	Pmk
19. Kavanur	76	13	128	Pmk
20. Keelakarai	235	8	605	Tpl Mbm
21. Keeriyur	—	—	—	Pmk
22. Kudakottai	—	—	—	Tpl Mlk
23. Kulapatham	—	—	—	Tpl Mlk
24. Kumbaram	208	6	565	Mbm Kpm
25. Kusavangudi	—	—	—	Tpl Mbm
26. Ladanendal	—	—	—	Kdl
27. Landai	—	—	—	Pmk Kdl
28. Malangudi	51	3	349	Kdl Pmk
29. Mallai	—	—	—	Pmk Kdl
30. Mandapam	69	4	87	Mbm Vdl

(1)		(2)	(3)	(4)	(5)
31.	Maniekaneri	—	—	—	Tpl
32.	Mayakulam	—	—	—	Kdl Mbm
33.	Magachi	235	9	551	Mbm
34.	Nallirukkai	—	—	—	Kdl
35.	Naranamangalam	60	13	178	Pmk
36.	Nochiyurani	65	14	148	Mbm Kpm
37.	Palangulam	—	—	—	Tpl Vnk
38.	Pallamerkulam	—	—	—	Mlk Tpl
39.	Panaikulam	236	12	654	Kdl
40.	Paniyadiyendal	210	12	580	Kdl
41.	Pandamangalam	—	—	—	Kdl
42.	Pathanaendal	—	—	—	Mbm Pmk
43.	Pattanamkathan	—	—	—	Tpl Pmk
44.	Periyapattanam	214	10	326	Mbm Kpm
45.	Perangulam	—	—	—	Mbm Tpl
46.	Peruvayal	—	—	—	Pmk
47.	Pirappanvalasai	163	7	31	Mbm
48.	Pudumadam	—	—	—	Mbm
49.	Pullandal	67	4	237	Kdl
50.	Pullangudi	—	—	—	Pmk
51.	Regunathapuram	72	3	192	Mbm Kpm
52.	Rajanooriyammdai	—	—	—	Pmk
53.	Rettaiyoorani	59	13	104	Mbm Kpm
54.	Sakkarakottai	—	—	—	Kdl Mbm
55.	Sathakenevalasai	—	—	—	Mbm Vdl
56.	Seerankottai	81	3	217	Pmk
57.	Therbegi	—	—	—	Vdl Mbm
58.	Thirupullani	77	14	176	Tpl Mlk
59.	T.V. Mangai	70	12	172	Pmk
60.	Theruvalur	166	6	658	Pmk Kdl
61.	Valantharavai	66	3	77	Tpl Mbm
62.	Vannangudu	95	4	395	Vnk Kpm
63.	Vanivayal	—	—	—	Pmk
64.	Valanur	95	4	340	Kdl Tpl
65.	Vellamarichikatti	—	—	—	Kdl
66.	Vennathur	221	11	700	Pmk Kdl

LAND CAPABILITY

RAMANATHAPURAM TALUK

Soil series	Land Capability class	Extent (ha)	Soil Limitations	Special Needs
Mamallakkarai Pudukudi	III s	2896	Surface coarse texture, crusting, low organic matter status, low fertility	Liberal addition of organic manures, fertility mangement
Kadaladi Keelapavalam Paramakudi Vannankundu	III sw	24481	Alkalinity, strong caleareousness, wetness, low organic matter status	Selection of crops, Application of iron pyrites, Drainage, Addition of organic manures
Tiruppullani Vedalai	IV s	8212	Surface coarse texture, severe crusting, low WHC & CEC, low organic matter stauts, low fertility	Liberal addition of organic manures, fertility Management
Ramnagar	IV se	2090	Shallow depth, coarse texture, low WHC & CEC, severe erosion, low organic matter status, low fertility	Selection of crops, liberal addition of organic manures, soil conservation fertility mangement
Mandabam	V se	17820	Sandy texture, very low CEC & WHC, Excessive drainage, severe erosion very low fertility and organic matter status	Agro forestry

Class

III - *Moderately good cultivable lands that have severe limitations for sutained use under agriculture*

IV - *Lands that have very servere limitations for sustatined use under agriculture*

V - *Currently non arable lands*

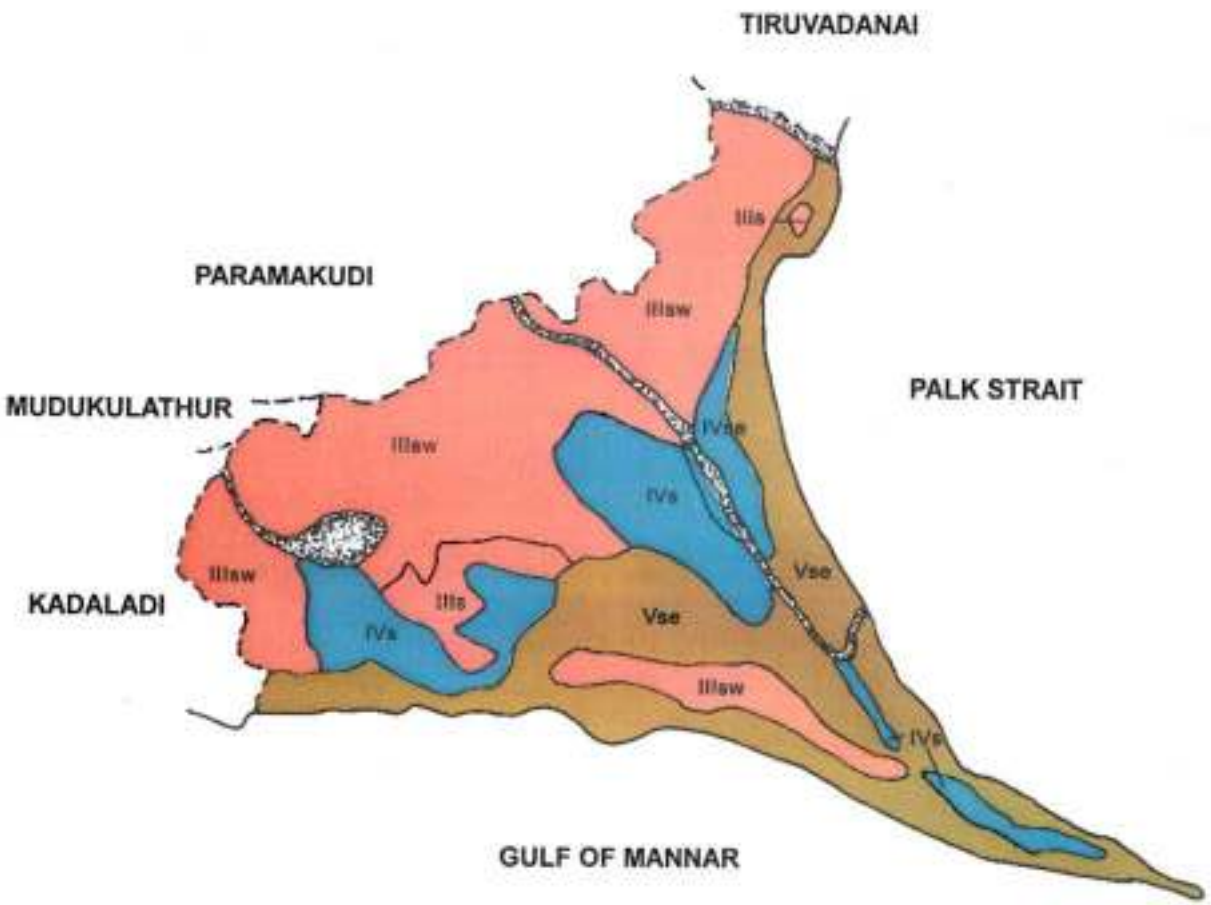
Sub Class

s - *Root zone limitation*

w - *Excess water*

e - *Erosion hazards*

LAND CAPABILITY
RAMANATHAPURAM TALUK



LEGEND

CLASS

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.

V — Currently non arable lands

SUB CLASS

s - Root zone limitation

w - Excess water

e - Erosional hazards

LAND IRRIGABILITY

RAMANATHAPURAM TALUK

Soil series	Land irrigability class	Extent (ha)	Soil Limitations
Mamallakkarai Pudukudi	3 s	2896	Surface coarse texture, crusting,
Kadaladi Keelapavalam Paramakudi Vannankundu	3 sd	24481	Alkalinity, strong calcareousness, drainage hazards
Tiruppullani Vedalai	4 s	8212	Surface coarse texture, severe crusting, low WHC & CEC
Mandabam Ramnagar	4 st	19910	Coarse texture, low WHC & CEC, Topography

Class

3 - *lands that have severe limitations for sutained use under irrigation*

4 *Lands that have very servere limitations for sustatined use under irrigation*

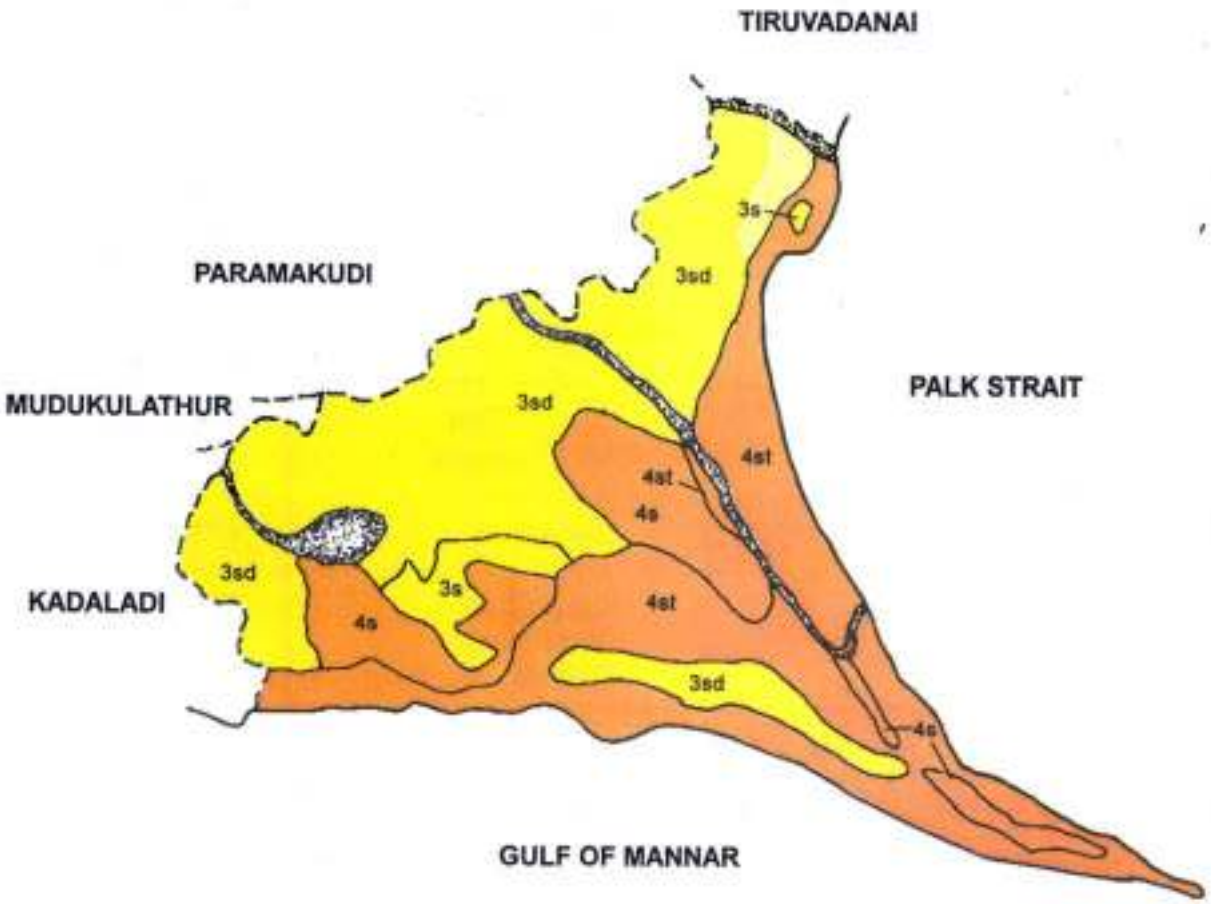
Sub Class

s - *Soil limitation*

d - *Drainage hazards*

t - *Topographical limitation*

LAND IRRIGABILITY
RAMANATHAPURAM TALUK



LEGEND

CLASS

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

4 — Lands that have very severe limitations for sustained use under irrigation.

SUB CLASS

s - Soil limitation

d - Drainage hazards

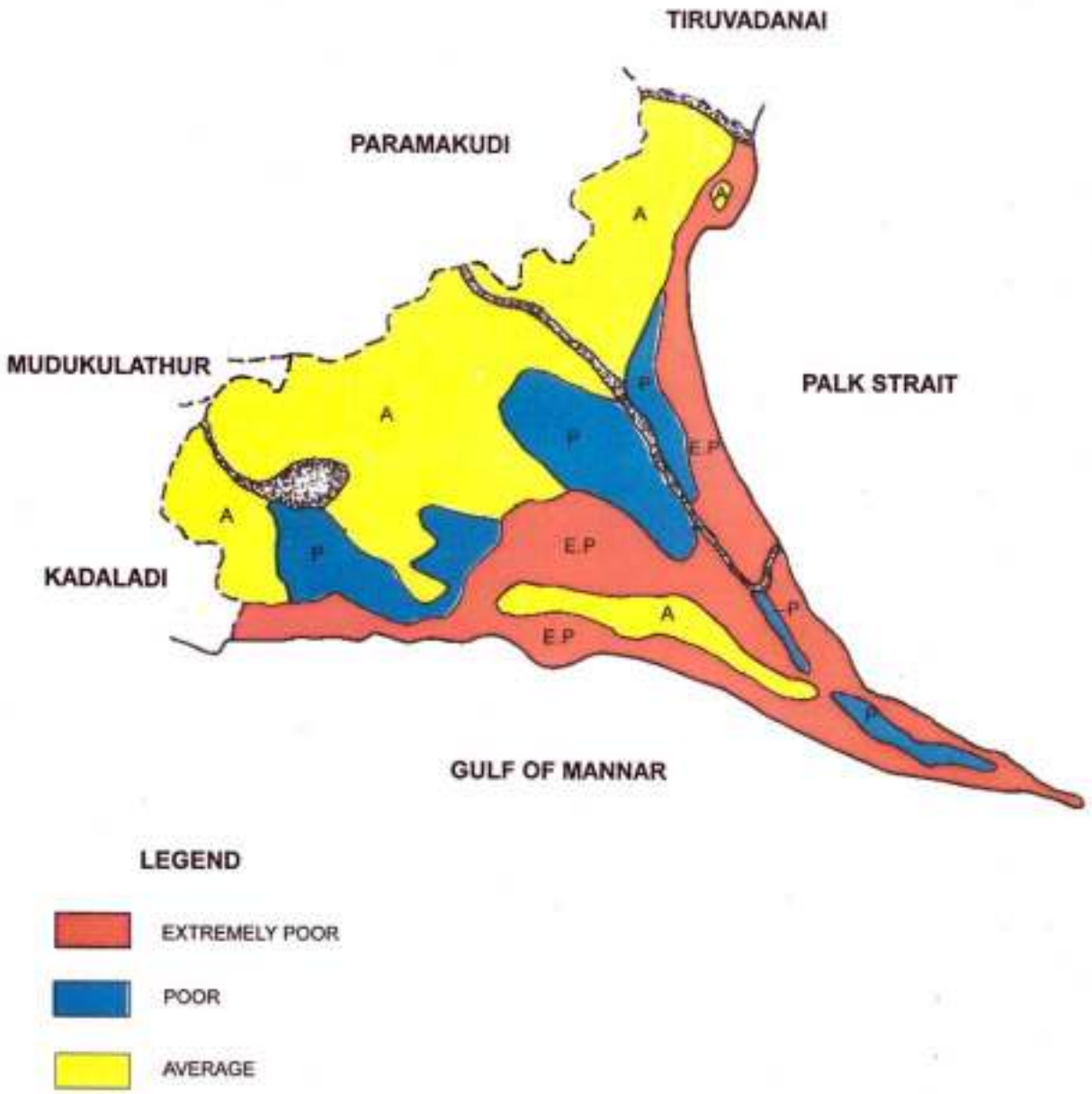
t - Topographical limitation

SOIL PRODUCTIVITY

RAMANATHAPURAM TALUK

Rating	Grouping	Soil series	Extent (ha)
0 - 7	Extermely Poor	Mandabam	17820
8 - 19	Poor	Ramnagar Tiruppullani Vedalai	10302
20 - 34	Average	Kadaladi keelapavalam Mamallakkarai Paramakudi Pudukudi Vannankundu	27377

SOIL PRODUCTIVITY
RAMANATHAPURAM TALUK

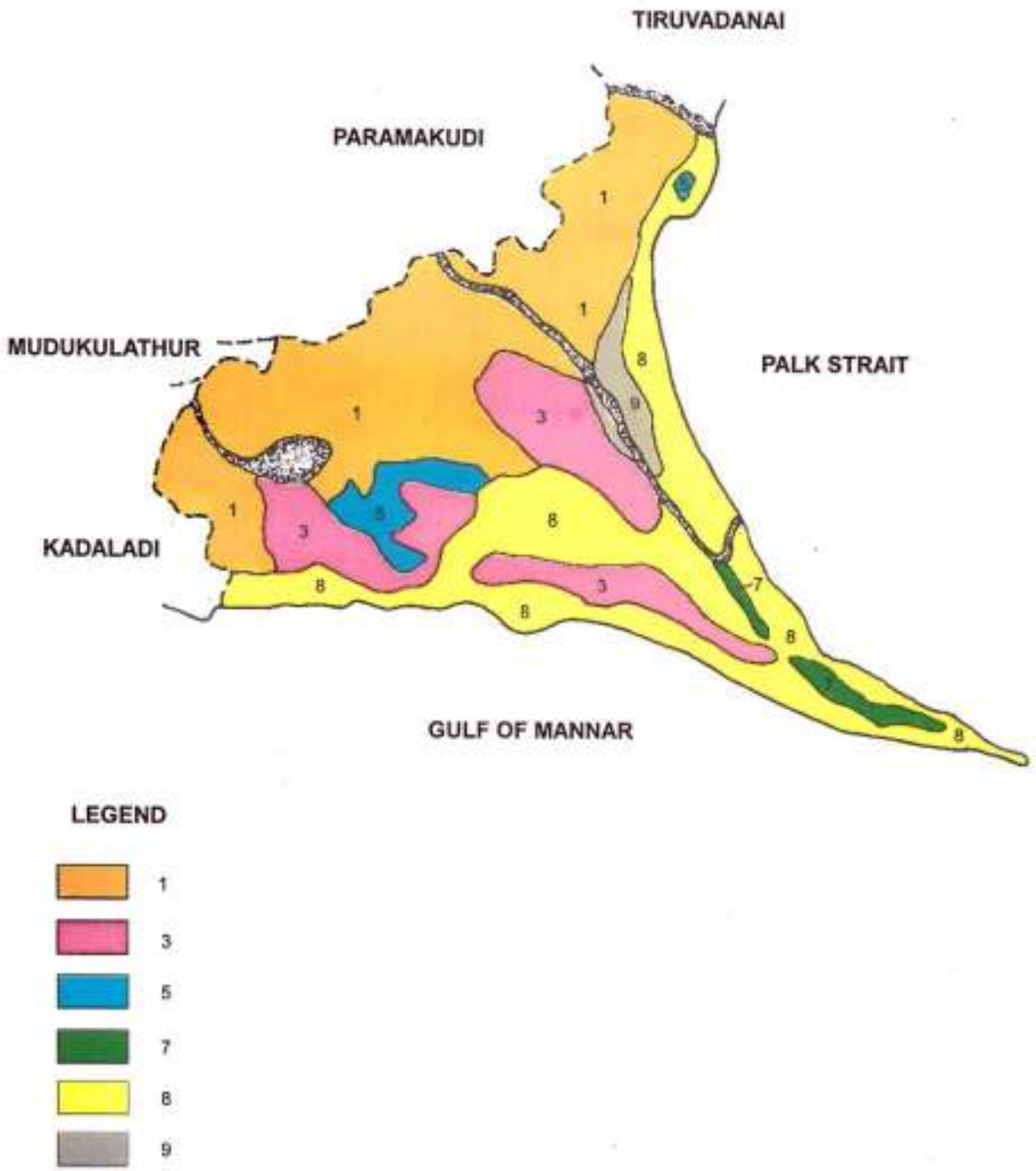


CROPS GROWN

RAMANATHAPURAM TALUK

Rainfed	Irrigated	Map symbol	Soil series
Millets, cotton, chillies, pulses, coriander, sunflower	Paddy, cotton, chillies	1	Paramakudi Kadaladi Vannamkundu
Millets, cotton, chillies	Paddy, cotton	3	Keelapavalam Tiruppullani
Pulses, millets	Paddy	5	Pudukudi Mamallakkarai
—	Coconut	7	Vedalai
Palmyrah	Coconut	8	Mandabam
Millets	Minor millets	9	Ramnagar

CROPS GROWN
RAMANATHAPURAM TALUK

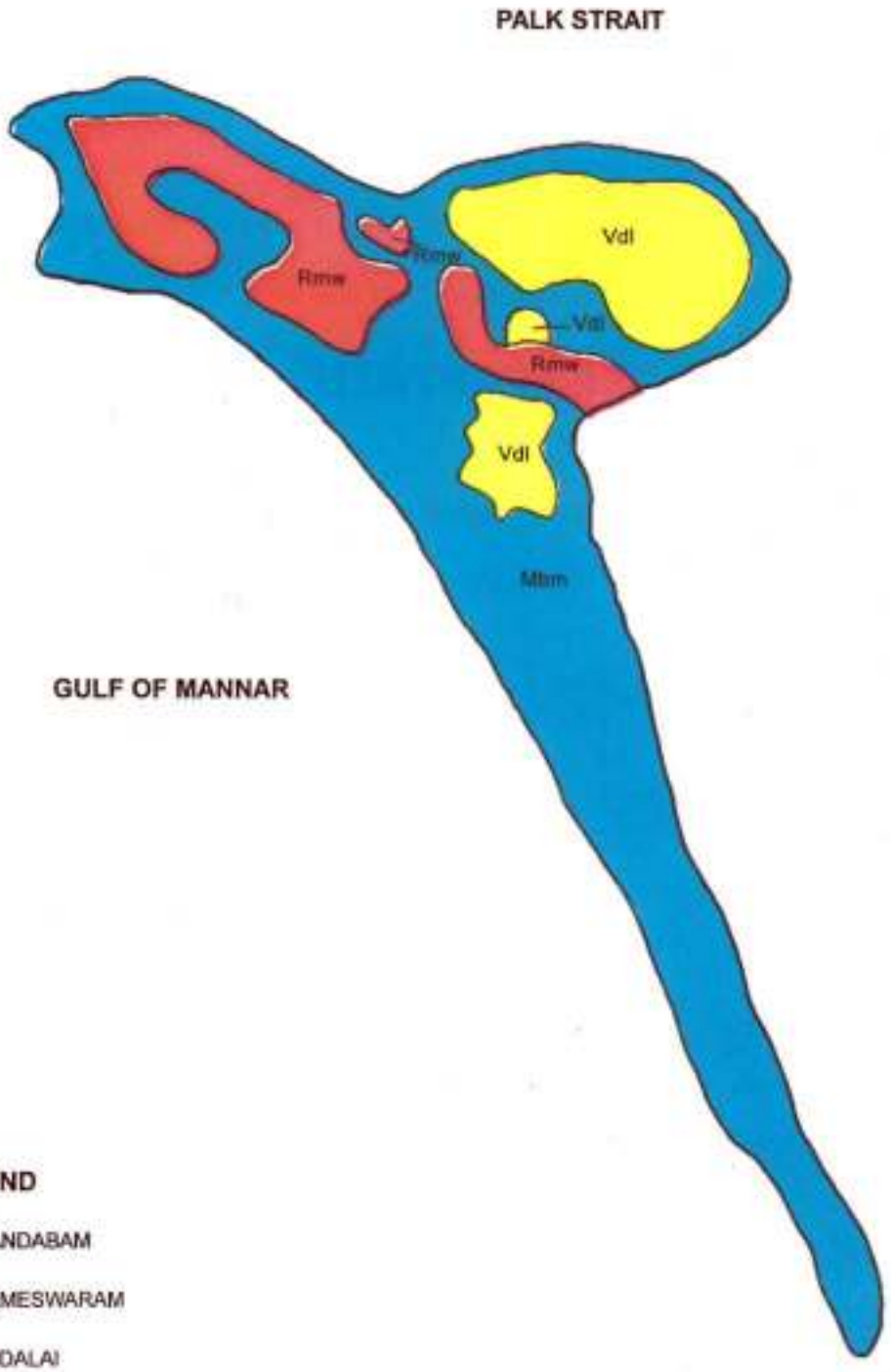


SOILS

RAMESWARAM TALUK

S.No.	Soil series	Symbol	Extent (ha)	%
1.	Mandabam	Mbm	2361	62.99
2.	Rameswaram	Rmw	720	19.21
3.	Vadalai	Vdl	667	17.80
	Total		**3748**	**100.00**

SOILS
RAMESWARAM TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

RAMESWARAM TALUK

Name of the village		Fertility status (Kg/Ac)			Soil series
		Nitrogen	Phosphorus	Potassium	
(1)		(2)	(3)	(4)	(5)
1.	Pamban	—	—	—	Mbm Rmw
2.	Rameswaram	89	4	244	RmwMbm

VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

RAMESWARAM TALUK

Name of the village		Fertility status (Kg/Ac)			Soil series
		Nitrogen	Phosphorus	Potassium	
(1)		(2)	(3)	(4)	(5)
1.	Pamban	—	—	—	Mbm Rmw
2.	Rameswaram	89	4	244	Rmw Mbm

LAND CAPABILITY

RAMESWARAM TALUK

Soil series	Land Capability class	Extent (ha)	Soil Limitations	Special Needs
Vedalai	IV s	667	Coarse texture, low WHC & CEC, strong calcareousness, salinity hazard, low organic matter status	Liberal addition of organic manures Irrigations with good quality water and providing drainage
Mandabam Eameswaram	V se	3081	Sandy texture, very low WHC & CEC, excssive drainage, very low fertility, very low organic matter status severe erosion	Agro forestry

Class

IV- *Moderately good cultivable lands that have severe limitations for sutained use under agriculture*

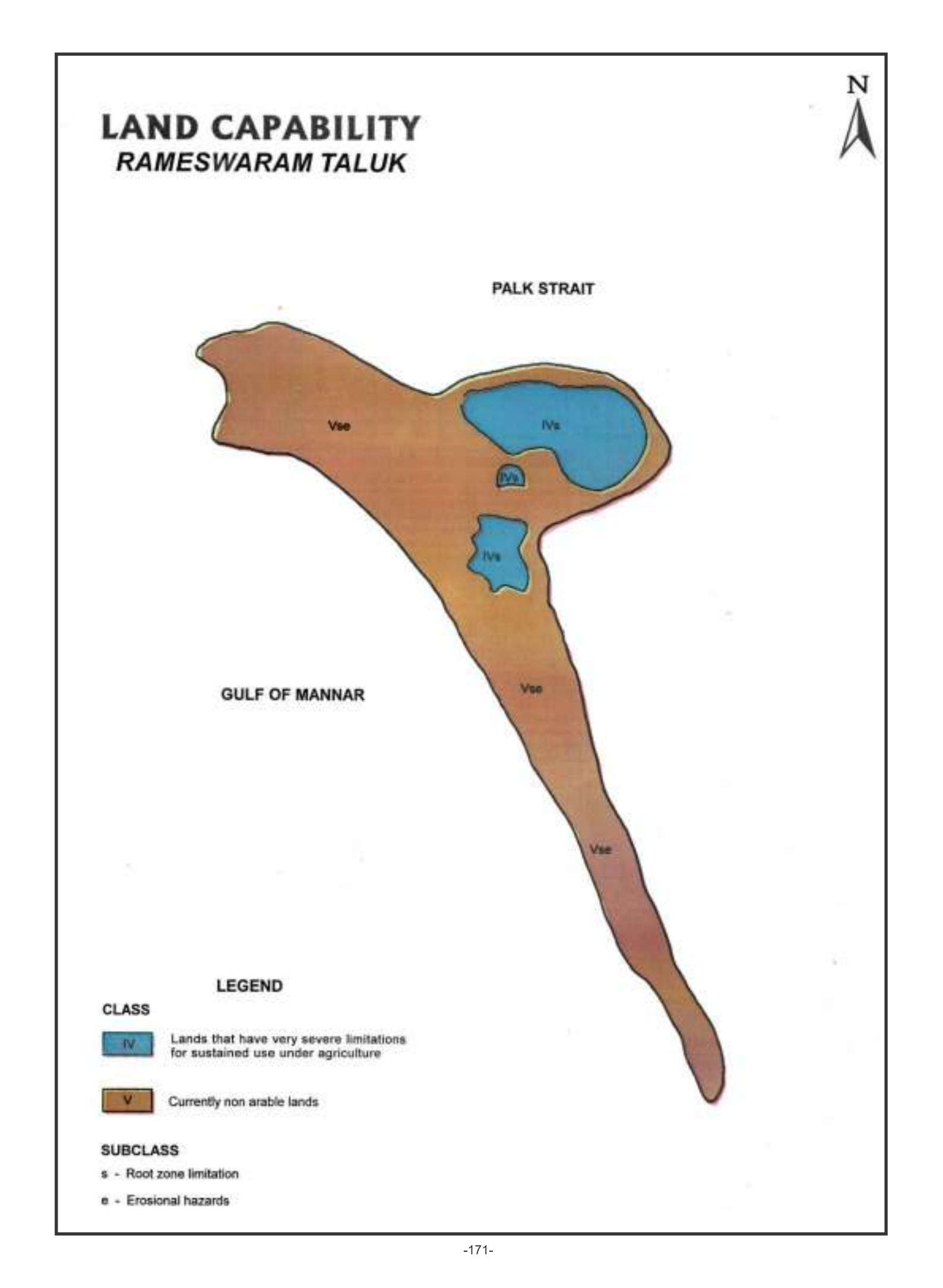
V - *Currertly non arable lands*

Sub Class

s - *Root zone limitation*

e - *Erosion hazards*

LAND CAPABILITY
RAMESWARAM TALUK



LAND IRRIGABILITY

RAMESWARAM TALUK

Soil series	Land irrigability class	Extent (ha)	Soil Limitations
Vedalai	4 s	667	Coarse texture, low WHC & CEC, strong calcareousness, salinity hazard
Mandabam Rameswaram	4 st	3081	Sandy texture, very low WHC & CEC, excessive drainage, Topography

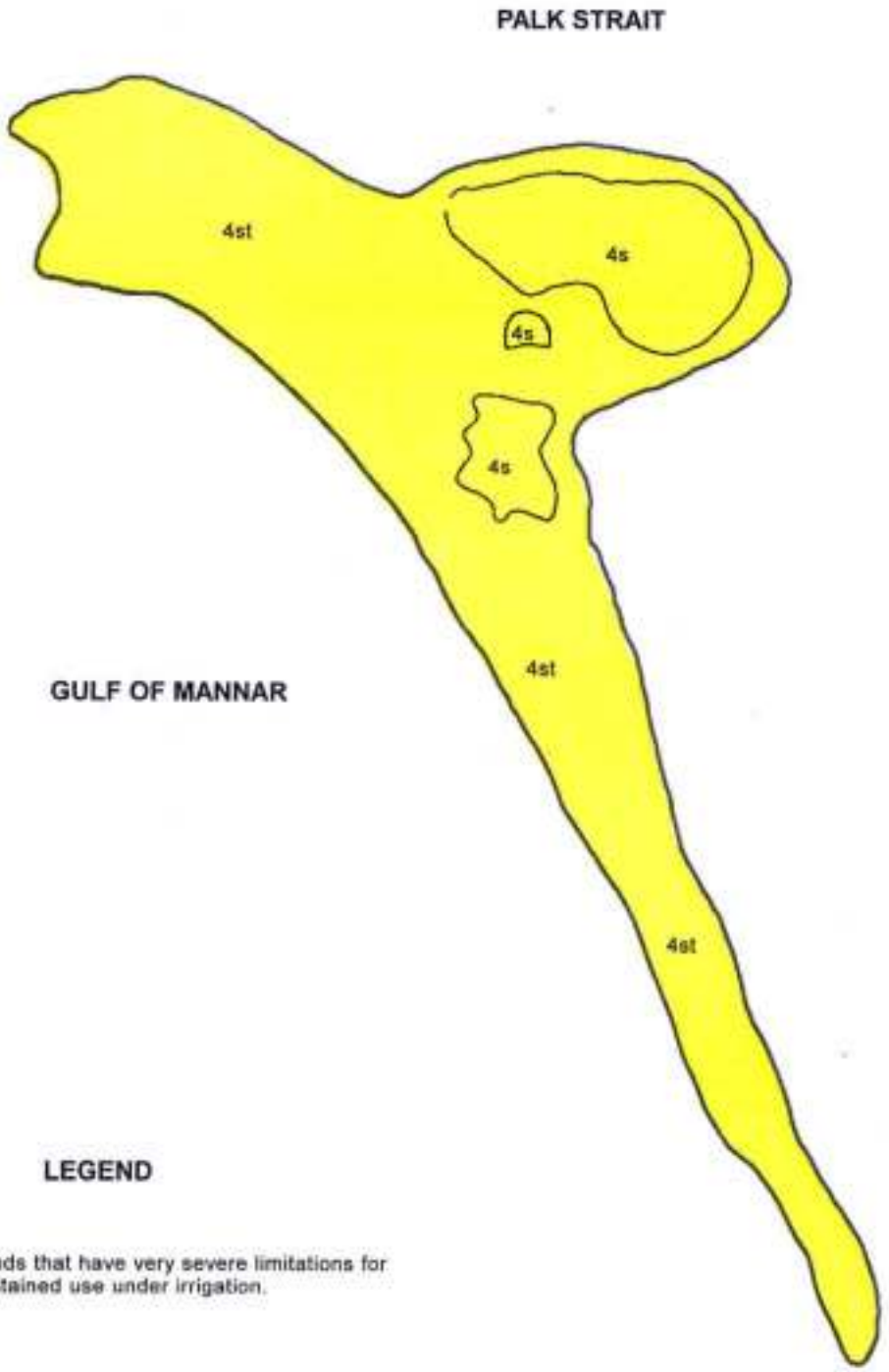
Class

4 - *lands that have severe limitations for sutained use under irrigation*

Sub Class

s - *Soil limitation*
t - *Topographical limitation*

LAND IRRIGABILITY
RAMESWARAM TALUK



LEGEND

CLASS

4	Lands that have very severe limitations for sustained use under irrigation.

SUBCLASS

s - Soil limitation

t - Topographical limitation

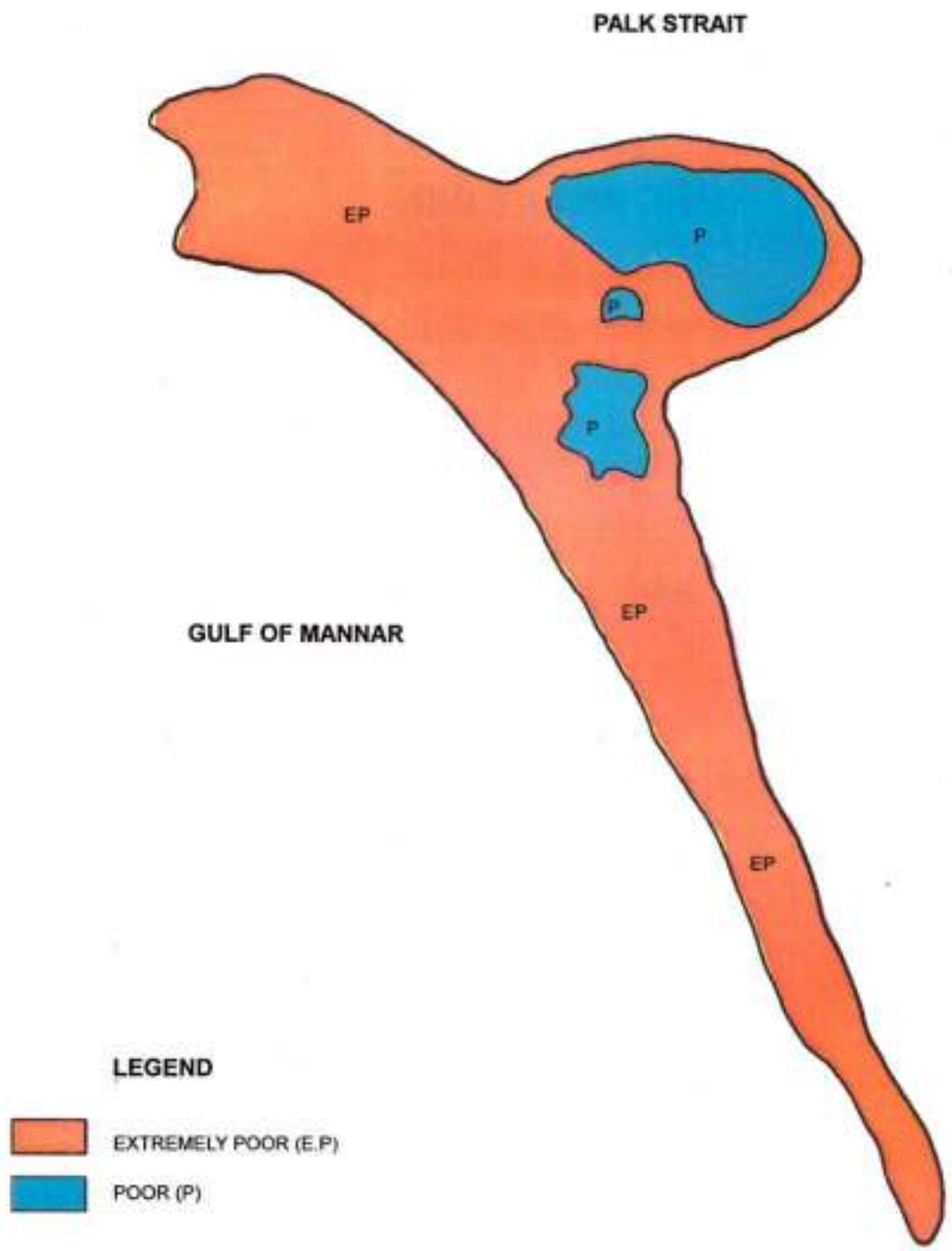
SOIL PRODUCTIVITY

RAMAESWARAM TALUK

Rating	Grouping	Soil series	Extent (ha)
0 - 7	Extermely Poor	Mandabam Rameswaram	3081
8 - 19	Poor	Vedalai	667

SOIL PRODUCTIVITY

RAMESWARAM TALUK

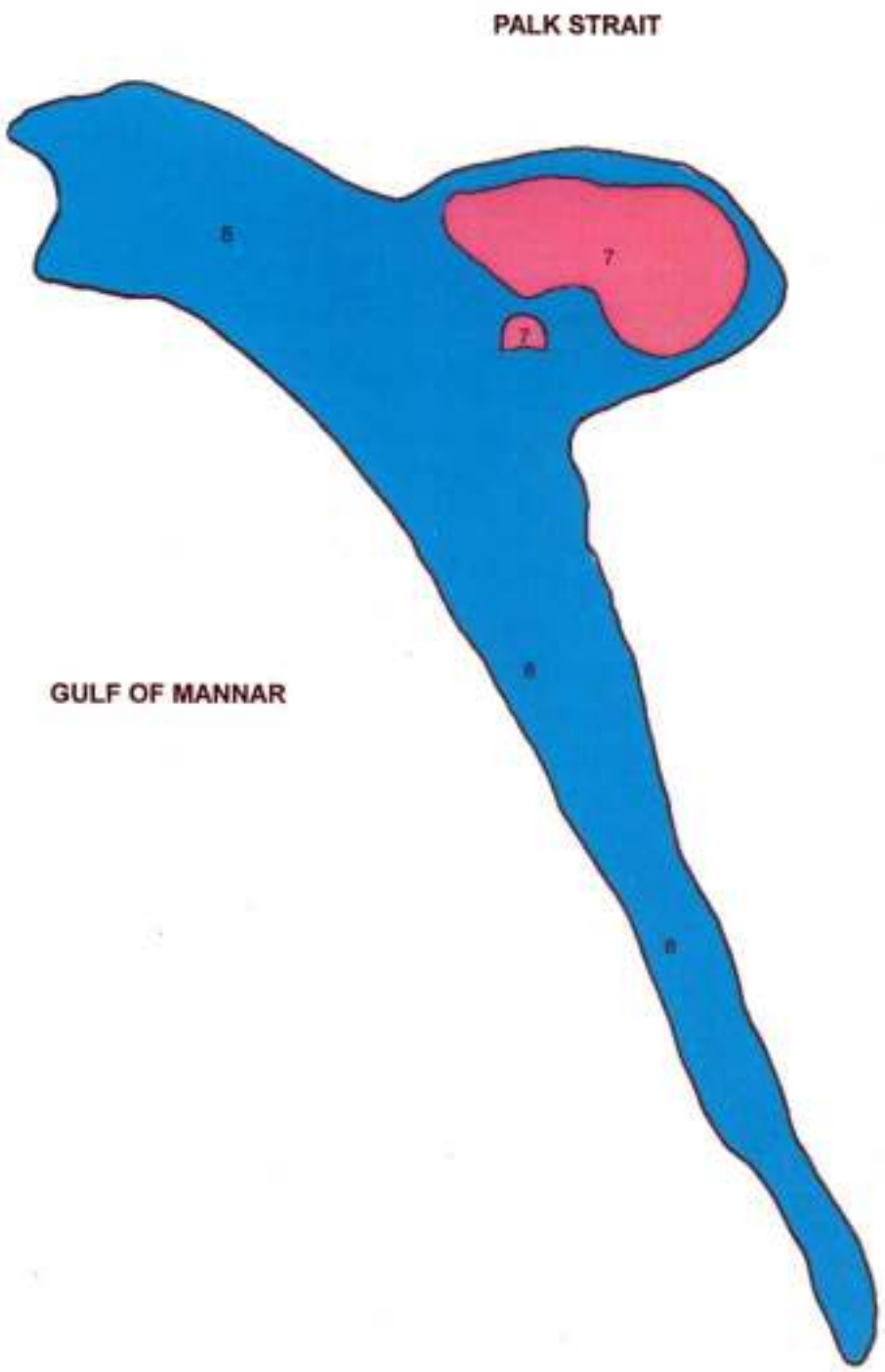


CROPS GROWN

RAMAESWARAM TALUK

Crops Grown		Map symbol	Soil series
Rainfed	Irrigated		
—	Coconut	7	Vedalai
Palmyrah	Coconut	8	Mandabam Rameswaram

CROPS GROWN
RAMESWARAM TALUK

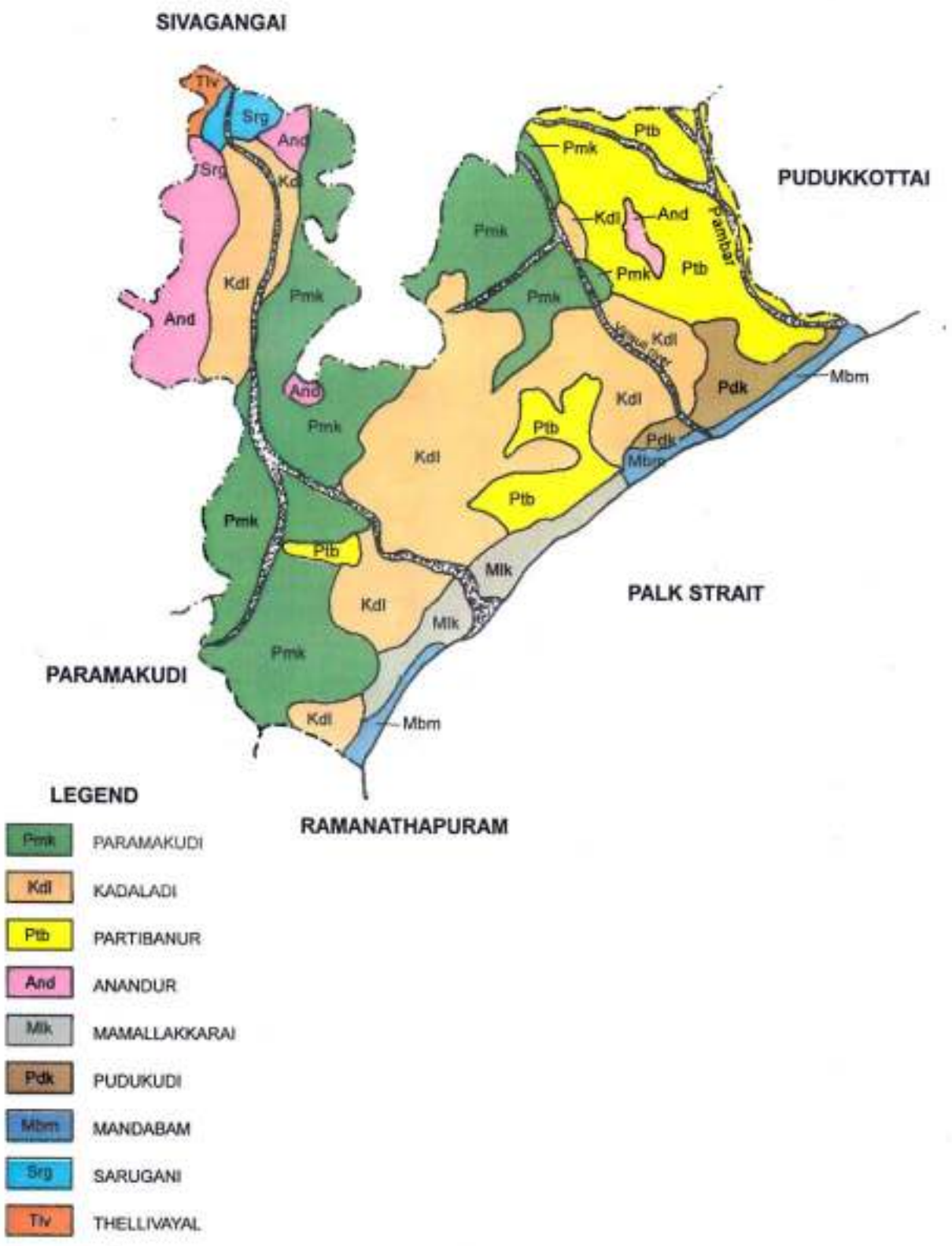


SOILS

THIRUVADANAI TALUK

S.No.	Soil series	Symbol	Extent (ha)	%
1.	Paramakudi	Pmk	24295	30.58
2.	Kadaladi	Kdl	19890	25.03
3.	Partibanur	Ptb	17293	21.77
4.	Anandur	And	6630	8.34
5.	Mamallakkarai	Mlk	4704	5.92
6.	Pudukudi	Pdk	3160	3.98
7.	Mandabam	Mbm	1864	2.35
8.	Sarugani	Srg	1004	1.26
9.	Thellivayal	Tlv	608	0.77
	Total		**79448**	100.00

SOILS
TIRUVADANAI TALUK



VILLAGE WISE FERTILITY STATUS AND SOIL SERIES

THIRUVADANAI TALUK

Name of the village	Fertility status (Kg/Ac)			Soil series
	Nitrogen	Phosphorus	Potassium	
(1)	(2)	(3)	(4)	(5)
1. Akkalur	—	—	—	Kdl
2. Alagardvenkettai	—	—	—	Pmk Kdl
3. Alikudi	—	—	—	Kdl Mlk
4. A. Manakkudi	—	—	—	Mlk Kdl
5. Anaiyankottai	—	—	—	And Kdl
6. Anandur	—	—	—	And Kdl
7. Anjukottai	—	—	—	Kdl Pmk
8. Arasoor	—	—	—	Kdl
9. A.R. Mangalam	—	—	—	Kdl Pmk
10. Athiyur	—	—	—	Kdl Pmk
11. Athoor	—	—	—	Kdl
12. Attankudi	—	—	—	Pmk
13. Ragavathlmangalam	—	—	—	Kdl
14. Chinnathondi	—	—	—	Pmk Kdl
15. Citamangalam	—	—	—	Ptb
16. Chiturvadi	—	—	—	Kdl Mlk
17. Govindamangalam	—	—	—	Pmk And
18. Ilayathanvayal	—	—	—	kdl
19. Irubuvayal	—	—	—	And Kdl
20. Kadambakudi	—	—	—	Kdl Ptb
21. Kadambanendal	192	38	674	Kdl Srg
22. Kadamboor	201	32	571	Ptb Pmk
23. Kadanjudi	—	—	—	Ptb Kdl
24. Kalankapuli	—	—	—	Kdl
25. Kaliyanagarai	—	—	—	Pdk
26. Kalikudi	—	—	—	Kdl Pdk
27. Kanattangudi	—	—	—	Pdk
28. Karungaliakudy	—	—	—	Kdl Pdk

(1)		(2)	(3)	(4)	(5)
29.	Karungudi	—	—	—	Pmk And
30.	Karungudi	—	—	—	Pmk Kdl
31.	Kattavilagam	—	—	—	Ptb
32.	Kattinamangalam	—	—	—	Ptb Pmk
33.	Kavoor	232	35	638	Pmk Kdl
34.	keelponnaniyur	—	—	—	Kdl
35.	Kilarumbar	—	—	—	Ptb Kdl
36.	Kiliyoor	—	—	—	Kdl Ptb
37.	Kodikulam	—	—	—	Kdl
38.	Kodipangu	—	—	—	Pdk Mlk
39.	Kokoorani	—	—	—	Pmk
40.	Koodalur	—	—	—	Pmk Kdl
41.	Kockudi	205	36	739	Ptb Pdk
42.	Kulamanickam	—	—	—	Kdl
43.	Kulathur	176	28	596	Kdl Ptb
44.	Kumani Athanchatram	—	—	—	Pmk
45.	Machur	—	—	—	Pdk Kdl
46.	Mallanur	—	—	—	Kdl Pdk
47.	Mangalakudi	78	17	274	Ptb Kdl
48.	Marungur	224	43	677	Mlk Pdk
49.	Mavoor	—	—	—	Ptb Kdl
50.	Minathankudi	—	—	—	Kdl
51.	M.R. Pattanam	—	—	—	Mlk Mbm
52.	Mutilthagam	—	—	—	Ptb Mbm
53.	Nagamathy	—	—	—	And Pmk
54.	Nagarikathan	—	—	—	Pmk
55.	Nambuthalai	59	19	413	Mlk Mbm
56.	Nedodai	—	—	—	Srg And
57.	Noorkundram	—	—	—	Ptb Pdk
58.	Manakkudi	—	—	—	And Kdl
59.	Neivayal	—	—	—	Pmk Kdl
60.	N.Nangalam	197	33	690	Ptb Kdl

(1)		(2)	(3)	(4)	(5)
61.	Odaikal	—	—	—	Kdl
62.	Odakkarai	—	—	—	Pmk
63.	Orasoor	—	—	—	Pmk
64.	Odavayal	—	—	—	Mbm
65.	Oriyur	—	—	—	Mlk Kdl
66.	Orumaniyendal	—	—	—	Kdl And
67.	Oyikottai	176	45	700	Kdl
68.	Panganur	—	—	—	Ptb
69.	Palangulam	—	—	—	Pmk
70.	Pandukudi	56	16	237	Kdl
71.	Panichakudi	—	—	—	Ptb Pdk
72.	Paranur	95	29	262	Kdl Ptb
73.	Parayanendal	—	—	—	Pmk
74.	Parur	—	—	—	Kdl Pmk
75.	Pattanangalam	—	—	—	Kdl
76.	Pethadevankottai	—	—	—	Pmk
77.	Ponnalikottai	—	—	—	Kdl Mlk
78.	Pudupattinam	—	—	—	Mlk Mbm
79.	Pullamadal	—	—	—	Pmk
80.	Pullur	—	—	—	Kdl Mlk
81.	Ramanathamadai	—	—	—	Ptb Pmk
82.	Radhanoor	—	—	—	Kdl Pmk
83.	R.S. Mangalam	101	19	187	Pmk Kdl
84.	R.V. Vagai	—	—	—	Ptb Pmk
85.	Sarugani	—	—	—	Srg And
86.	Sarvanendal	—	—	—	Kdl Srg
87.	Sathenoor	96	19	248	And Kdl
88.	Seenakudi	—	—	—	Pmk
89.	Seithidal	—	—	—	Pmk
90.	Sokkanthidal	—	—	—	Ptb Kdl

(1)		(2)	(3)	(4)	(5)
91.	Soluvathi	—	—	—	Pmk
92.	Sangudi	—	—	—	Pmk And
93.	Shelandur	—	—	—	Pmk
94.	Siruakbiyur	—	—	—	Ptb Kdl
95.	Sirumalaikottai	—	—	—	Pmk
96.	Sirumallur	—	—	—	Pmk
97.	Siruvatty	—	—	—	Pmk
98.	Thaliramarugur	226	35	613	Kdl Ptb
99.	Thelur	—	—	—	Kdl Ptb
100.	Thirani	—	—	—	Srg
101.	Thirutarvalai	—	—	—	Pmk And
102.	Thiruppalakudi	—	—	—	Kdl Mbm
103.	Thiruvadanai	97	18	262	Kdl
104.	Thiruvagampathu	—	—	—	Pmk Kdl
105.	Thiruvetriyur	—	—	—	Ptb
106.	Thondi	86	15	117	Mbm
107.	Thattamangalam	—	—	—	Kdl
108.	Thumbadakottai	221	35	547	Pmk
109.	Thuthakudi	180	27	456	Pmk
110.	Thuthiyendal	—	—	—	Pmk
111.	T. Nagany	—	—	—	Pmk
112.	Uppoor	—	—	—	Mlk Pmk
113.	Urananakudi	—	—	—	Kdl
114.	Uruvatti	89	18	187	And Tlv
115.	Valawavoor	—	—	—	Kdl Pmk
116.	Valamai	—	—	—	And
117.	Varuvani	89	18	174	Ptb Pmk
118.	Vattanan	—	—	—	Pdk Mlk
119.	Velankudi	—	—	—	Mdk Pdk
120.	Vellikottai	175	34	534	Srg And
121.	Vijayapuram	—	—	—	And Pmk
122.	Virisoor	—	—	—	Pmk

LAND CAPABILITY

THIRUVADANAI TALUK

Soil series	Land Capability class	Extent (ha)	Soil Limitations	Special Needs
Anandur Mamallakkarai Pudukudi Sarugani Thellivayal	III s	16106	Surface coarse texture, crusting, low organic matter status, low fertility	Liberal addition of organic manures, fertility mangement
Kadaladi Paramakudi Partibanur	III sw	61478	Alkalinity, strong calcareousness, wetness, low organic matter status	Selection of crops, Application of iron pyrites, Drainage, Addition of organic manures
Mandabam	IV se	1864	Sandy texture, very Low WHC & CEC, excessive drainage, severe erosion very low fertility very low organic matter status	Agro forestry

Class

III - *Moderately good cultivable lands that have severe limitations for sutained use under agriculture*

V - *Currently non arable lands*

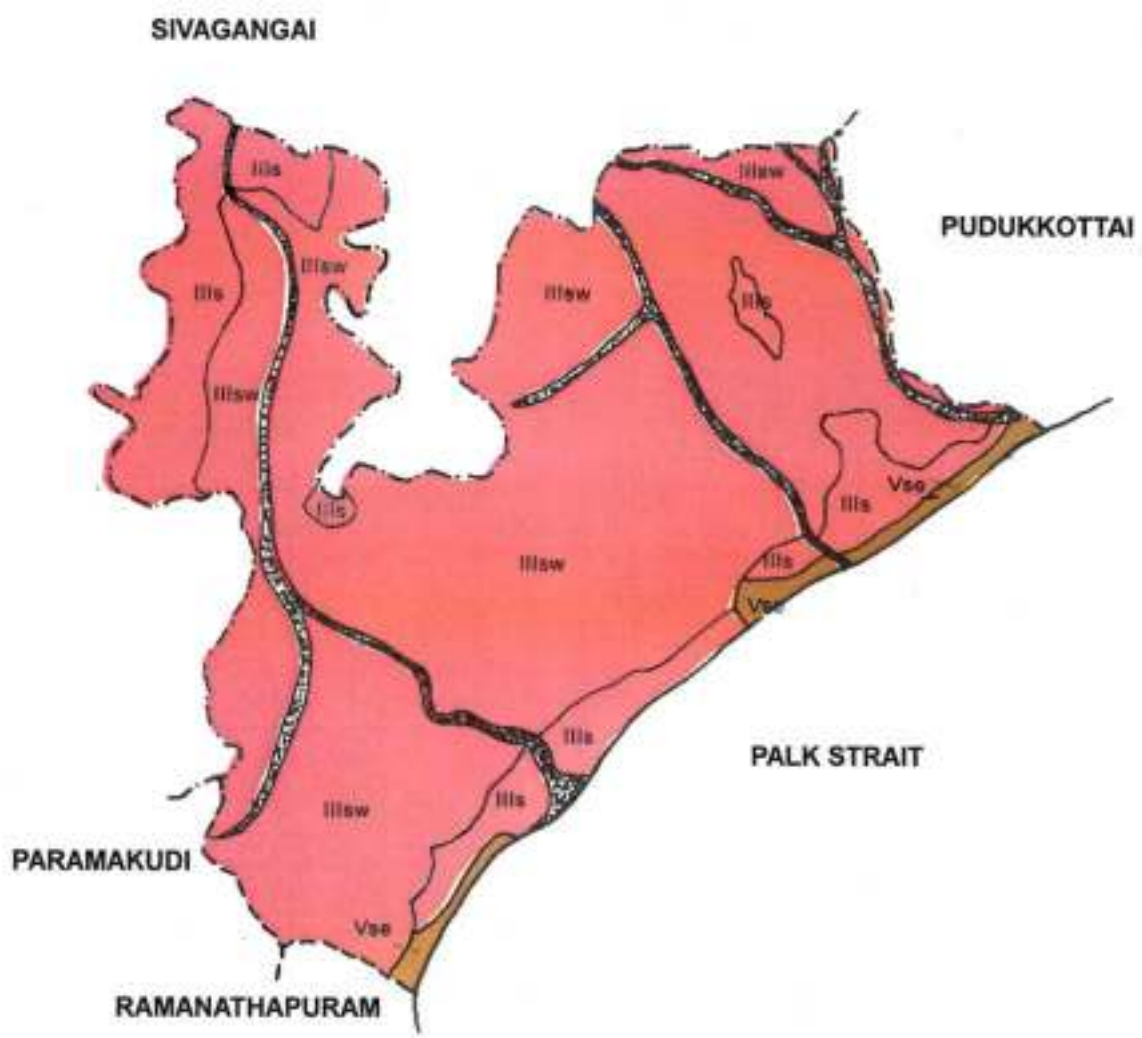
Sub Class

s - *Root zone limitation*

w - *Excess water*

e - *Erosion hazards*

LAND CAPABILITY
TIRUVADANAI TALUK



LEGEND

CLASS

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

V — Currently non arable lands

SUB CLASS

s - Root zone limitation

w - Excess water

e - Erosional hazards

LAND IRRIGABILITY

THIRUVADANAI TALUK

Soil series	Land irrigability class	Extent (ha)	Soil Limitations
Anandur Mamallakkarai Pudukudi Sarugani Thellivayal	3 s	16106	Surface coarse texture, crusting,
Kadaladi Paramakudi Partibanur	3 sd	61478	Alkalinity, strong calcareousness, drainage hazards
Mandabam	4 st	1864	Sandy texture, very low WHC & CEC, excessive drainage, Topography

Class

3 - *lands that have severe limitations for sutained use under irrigation*

4 *Lands that have very severe limitations for sustatined use under irrigation*

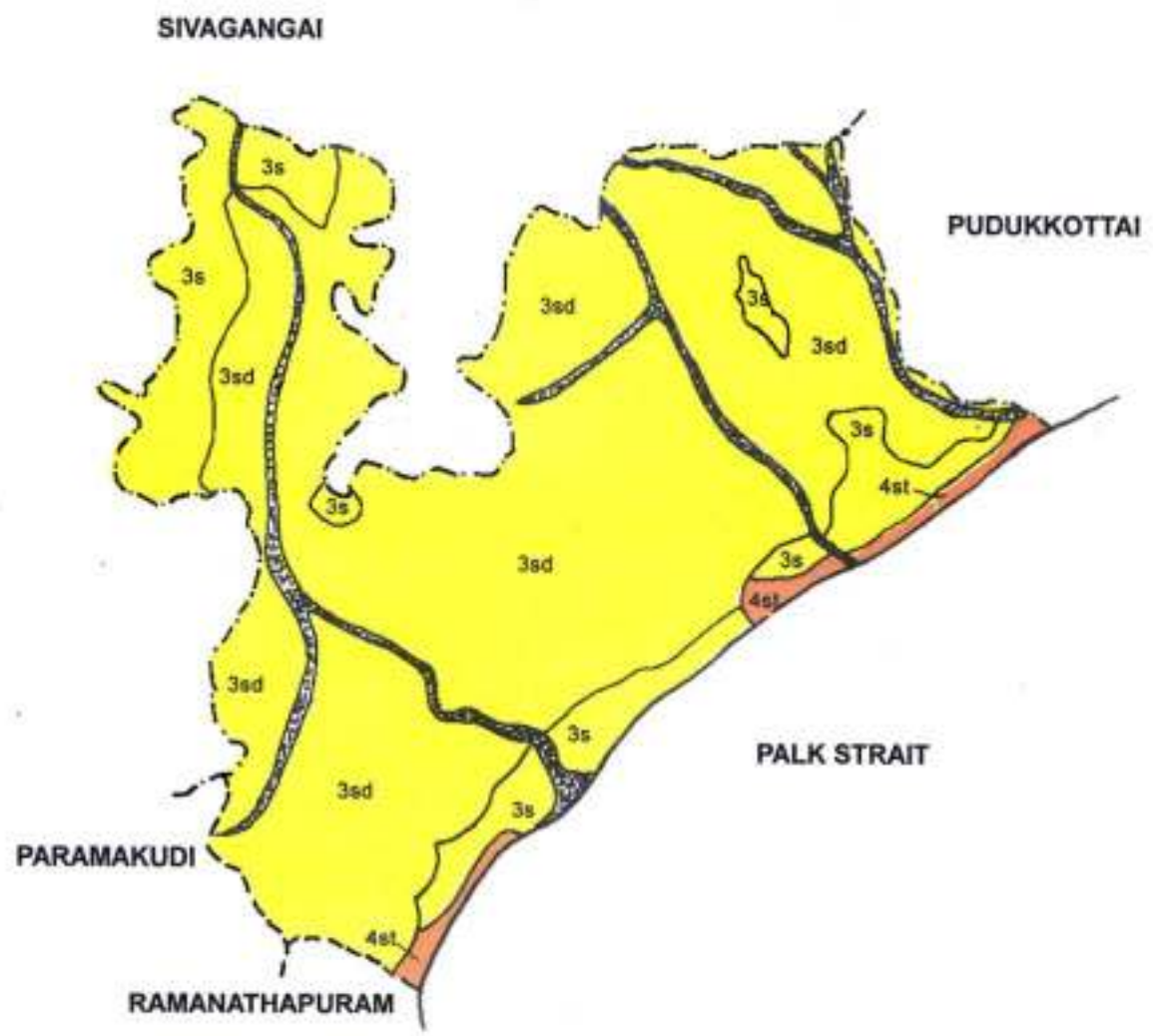
Sub Class

s - *Soil limitation*

d - *Drainage hazards*

t - *Topographical limitation*

LAND IRRIGABILITY
TIRUVADANAI TALUK



LEGEND

CLASS

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

4 — Lands that have very severe limitations for sustained use under irrigation.

LEGEND

s - Soil limitation

d - Drainage hazards

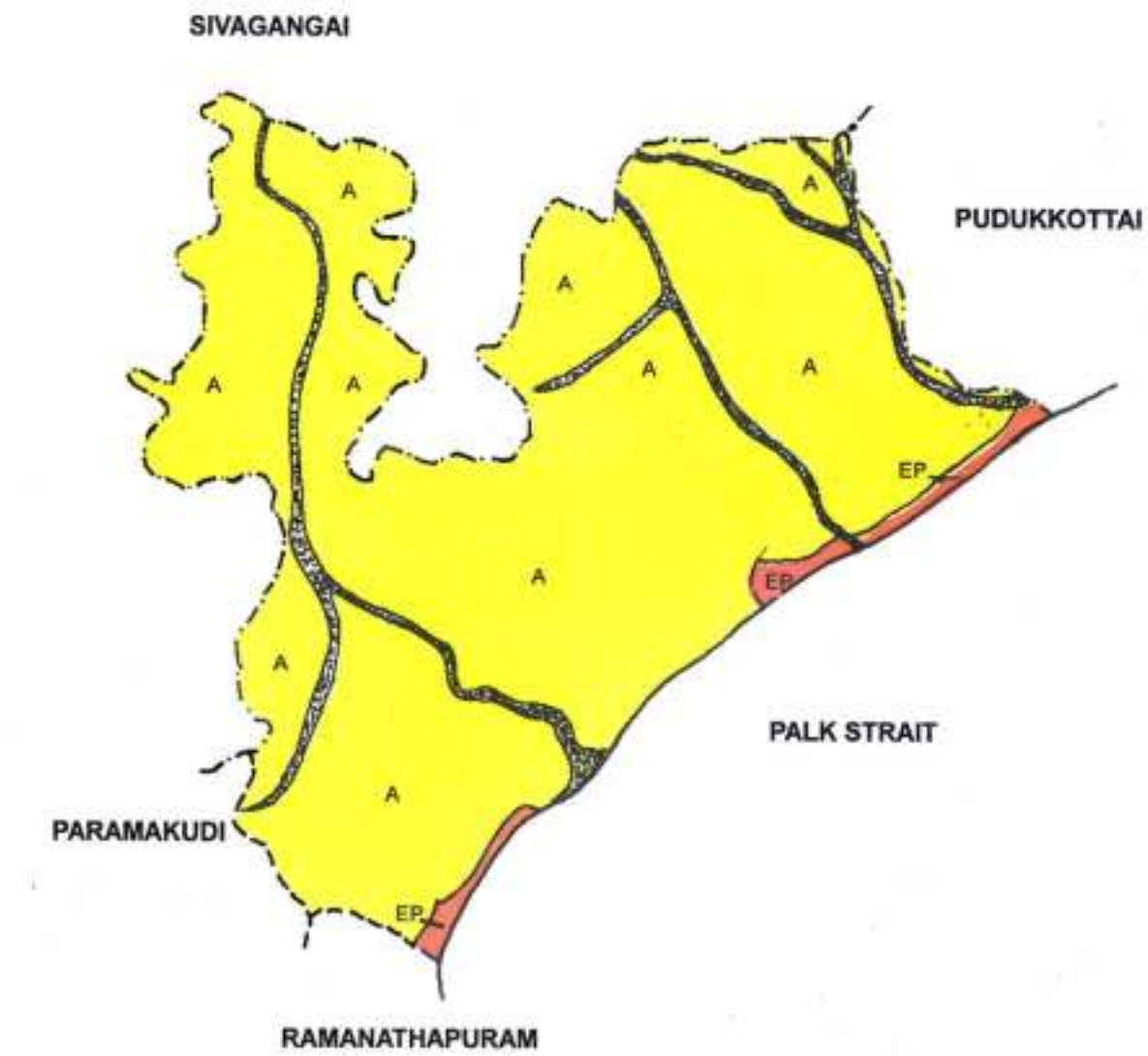
t - Topographical limitation

SOIL PRODUCTIVITY

THIRUVADANAI TALUK

Rating	Grouping	Soil series	Extent (ha)
0 - 7	Extermely Poor	Mandabam	1864
20 - 34	Average	Kadaladi Paramakudi Partibanur Anandur Mamallakkarai Pudukudi Sarugani Thellivayal	77584

SOIL PRODUCTIVITY
TIRUVADANAI TALUK

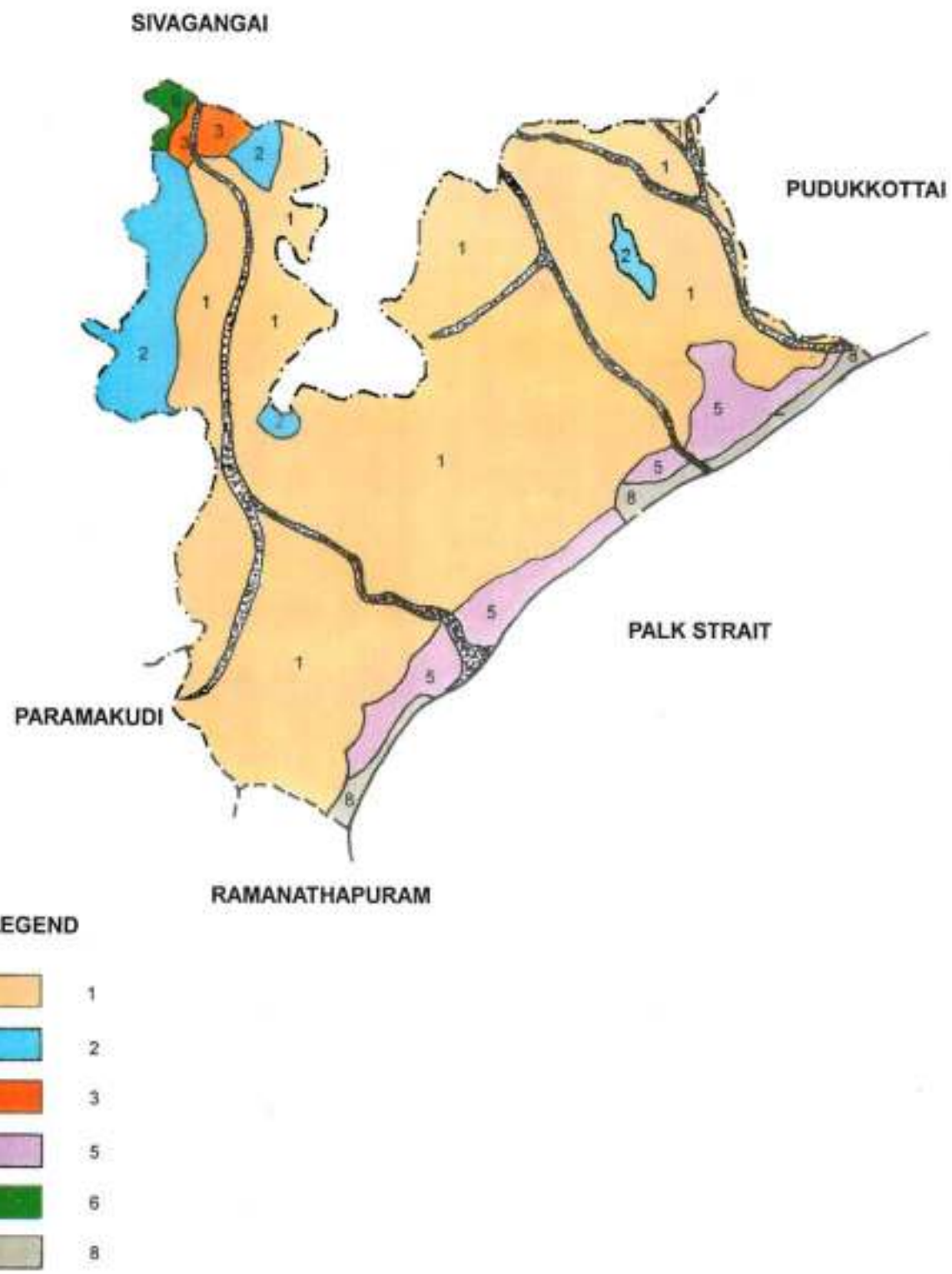


CROPS GROWN

THIRUVADANAI TALUK

Rainfed	Irrigated	Map symbol	Soil series
Millets, cotton, chillies, pulses, coriander, sunflower	Paddy, cotton, chillies	1	Paramakudi Kadaladi Partibanur
Millets, groundnut, pulses	Millets, groundnut, chillies	2	Anandur
Millets, cotton, chillies	Paddy, cotton	3	Sarugani
Pulses, millets	Paddy	5	Pudukudi Mamallakkarai
Groundnut, millets, pulses	Orchard crops, groundnut, millets, chillies	6	Thellivayal
Palmyrah	Coconut	8	Mandabam

CROPS GROWN
TIRUVADANAI TALUK



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   District Report PLC 1/ 93-94, Published by SS & LUO Palayamcottai

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