SOIL ATLAS
PUDUKKOTTAI DISTRICT

SOIL SURVEY AND LAND USE ORGANISATION
(DEPARTMENT OF AGRICULTURE TAMIL NADU)
THANJAVUR 613 001
1998

"CONSERVE SOIL FOR SUSTAINABLE PRODUCTION"

"மண் வளம் காப்போம்"

SOIL ATLAS
PUDUKKOTTAI DISTRICT

SOIL SURVEY AND LAND USE ORGANISATION
(DEPARTMENT OF AGRICULTURE TAMIL NADU)
THANJAVUR 613 001
1998

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 உடுபட்ட அனைத்து அலுவலர்களுக்கும் எனது பாராட்டுக்களையும், வாழ்த்துக்களையும் தெரிவித்துக் கொள்கிறேன்.

அன்புடன்,

24.4.08

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 தேசீய 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 முலம் 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

ந. ஆதிமூலம், இ.ஆ.ப.
அரசு செயலர்

வேளாண்மைத் துறை
சென்னை 600 009

அணிந்துரை

மண்வளமும் மனித வளமும் ஒரு நாட்டிற்கு இன்றியமையாதன ஆகும். இன்னும் சொல்லப்போனால் நிலத்து மண் ஆனது மனிதச்சரிதையின் 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 வானியல் வளமண்டலத் திட்டத்தினைச் சொல்லலாம். இத்திட்டத்தின் முதன்மைச் செயல் அம்சமாக இப்பகுதி நிலங்கள் நெறிப்படுத்தப்பட்டன. இத்தகைய அணுகுமுறையினால் களர்த்தன்மை உடைய இப்பகுதி நிலங்களில் சீர்த்திருத்தம் மேற்கொண்டபின் மகசூலானது எக்டேருக்கு 400 கிலோ முதல் 700 கிலோ வரை உயர்ந்துள்ளது என்பது பெருமைக்குரியதாகும்.

மிக்க 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,

> வாரிபெருக்கி வளம்கூட்டு உற்றவை
> 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

PUDUKKOTTAI

CONTENTS

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

PUDUKKOTTAI DISTRICT

Pudukkottai District is bounded by Thiruchirapplli District in the North and North west, Madurai district in the West and South-west, Ramnad district in the South, Thanjavur district in the East and North-East and Bay of Bengal in the South-East direction.

Geocode

North latitude	8^{o}	30'	to	10^{o}	40'
East longitude	78^{o}	24'	to	79^{o}	40'

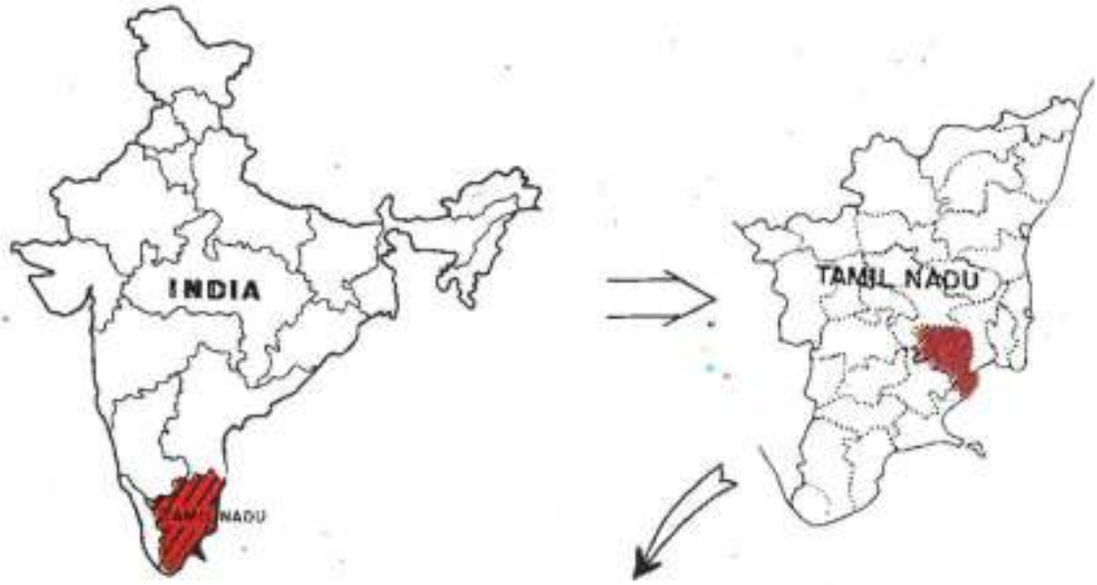
This district comprises of seven taluks

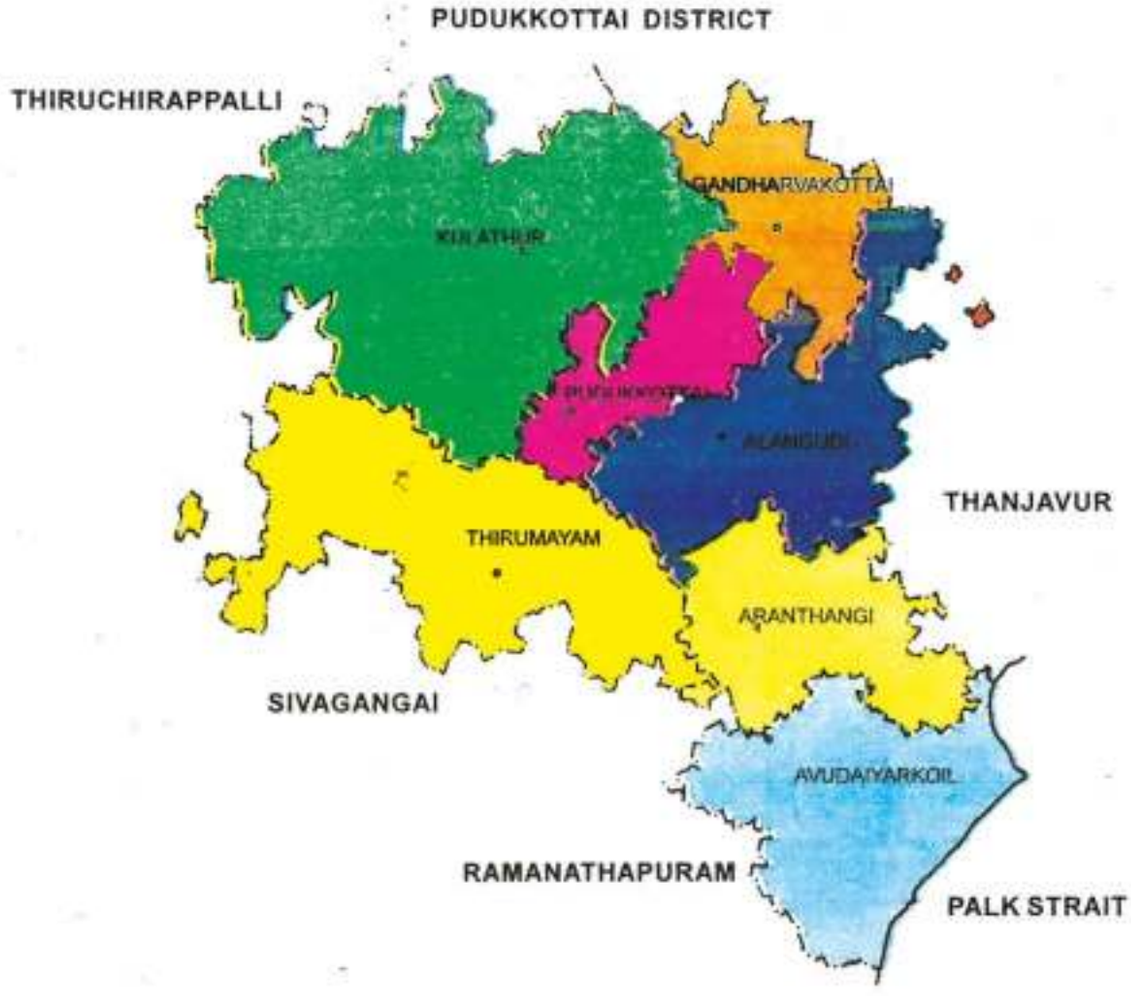
S. No.	Taluks	Extent (Sq.km.)
1.	Alangudi	646.70
2.	Aranthangi	491.61
3.	Avudaiyarkoil	632.22
4.	Gandharvakottai	385.72
5.	Kulathur	1333.92
6.	Pudukkottai	270.61
7	Thirumayam	884.29
	Total	4645.07

Agro Ecological Region :

Region cd 5.5	:	Hot and dry, coastal plain of Tamilnadu including Cauvery delta; moderately large moisture availability.
D 4.4	:	Hot and dry, moderate moisture availability.
Agroclimatic zone	:	Sub zone IV - Cauvery delta zone. Sub zone V - Southern zone.

LOCATION
PUDUKKOTTAI DISTRICT





TALUKS AND PANCHAYAT UNIONS

PUDUKKOTTAI DISTRICT

This district comprises seven taluks and thirteen panchayat unions and they are distributed as given follow.

Sl.No.	Taluks	Panchayat unions
1.	Alangudi	Karambakkudi and Thiruvarankulam
2.	Aranthangi	Aranthangi
3.	Avudaiyarkoil	Avudaiyarkoil and Manamelkudi
4.	Gandharvakottai	Gandharvakottai,
5.	Kulathur	Annavasal, Kunnandarkoil and Viralimalai
6.	Pudukkottai	Pudukkottai
7.	Thirumayam	Arimalam, Ponnamaravathi and Thirumayam

PUDUKKOTTAI DISTRICT

TALUKS AND UNIONS

ROADS AND RAILWAYS

PUDUKKOTTAI DISTRICT

Pudukkottai district is well connected with a net work of roads including State Highways and District roads.

NATIONAL HIGH WAYS : There are no National Highways roads in this district.

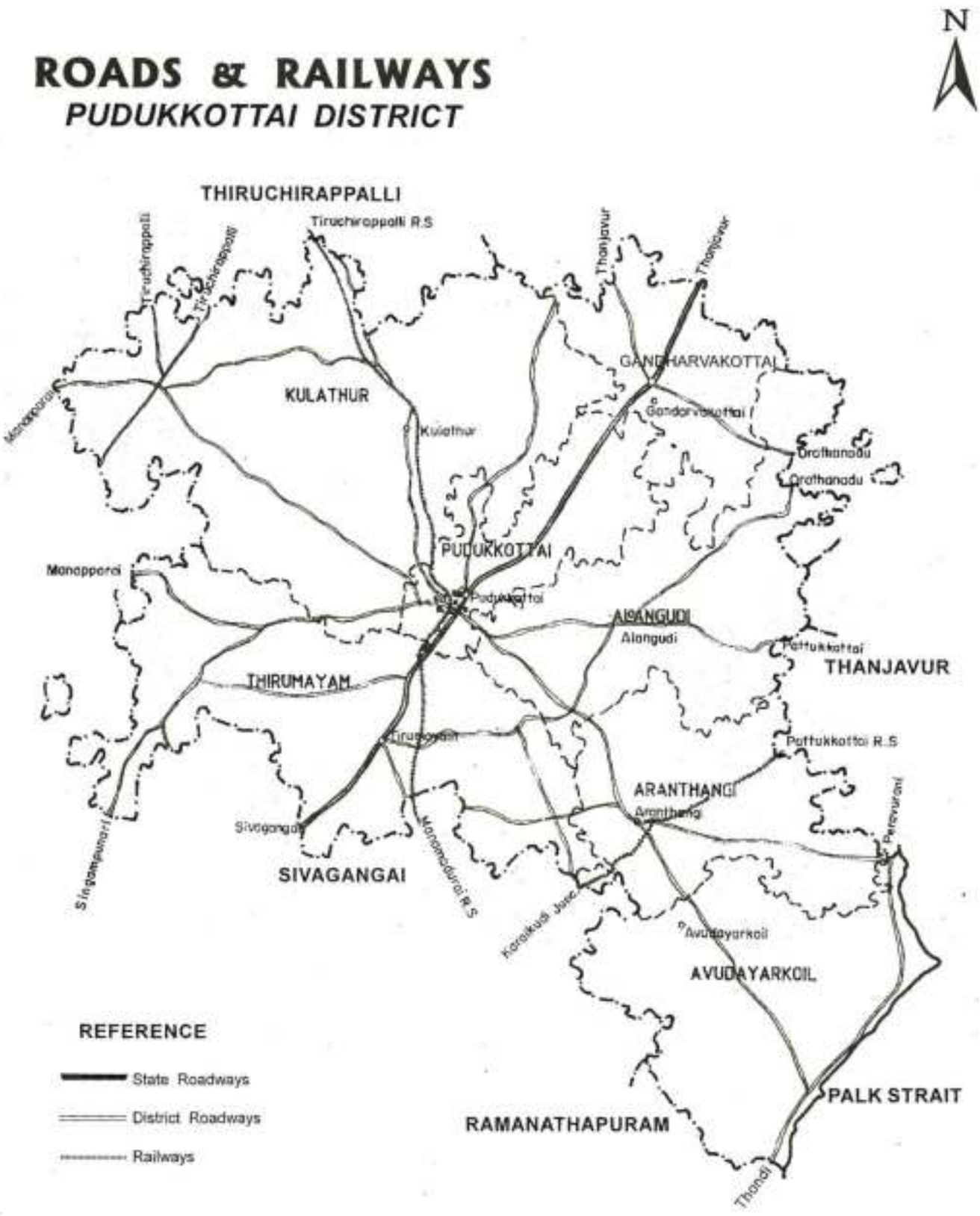
SATE HIGHWAYS : The length of State highways road in the district is 168 K.m. It connects Sivagangai to Thanjavur via., Pudukkoṭṭai.

DISTRICT ROADS : The length of major district roads is 766 Km. and of other district roads is 1180 Km. Total Length of roads in the district is 2126 Km.

RAILWAYS : The total length of railways in the district is 88 Km. meter gauge of Southern Railway connecting Rameswaram to Chennai via Pudukkottai and connecting Karaikkudi to Pattukkottai via Aranthangi. There are 12 (Twelve) railway stations in these lines with only one junction namely Karaikkudi.

ROADS & RAILWAYS

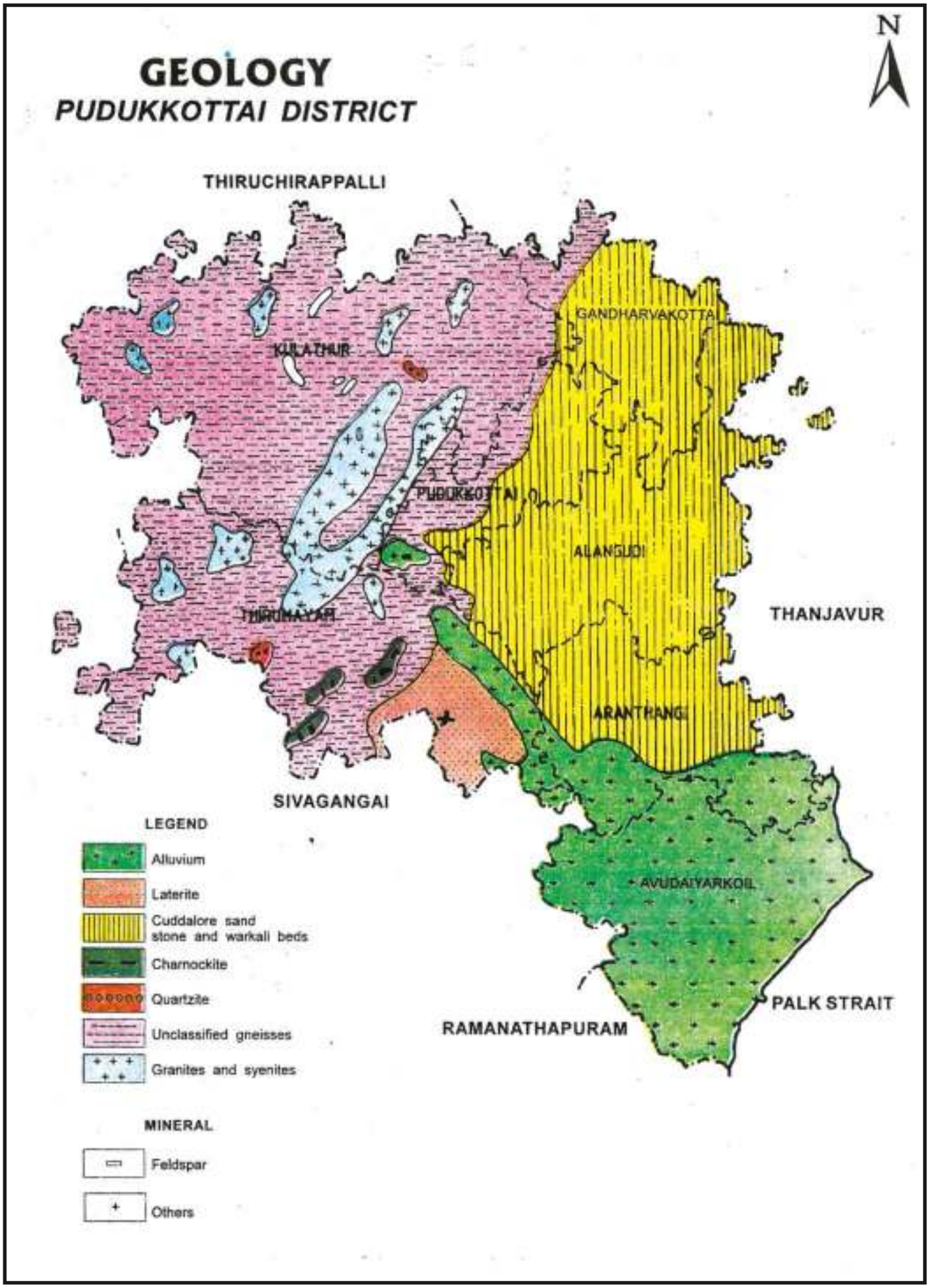
PUDUKKOTTAI DISTRICT



GEOLOGY

PUDUKKOTTAI DISTRICT

1.	**ARCHEAN**	Granites, Gneisses and Charnockites in Kulathur and major parts of Thirumayam.
2.	**CRETACEOUS**	Sand, clay, sandy-clay lying over the crystalline rocks of Archean age in parts of Pudukkottai, Alangudi and Thirumayam taluks.
3.	**MID-PLIOCENE**	Miocene and pliocene formations. Clay bound sand, clay and sandstone in major portions of the district.
4.	**QUARTENARY**	Coastal alluvium along the eastern coast and river alluvium on the sides of Vellar river.


GEOLOGY
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
KULATHUR
GANDHARVAKOTTA
PUDUKKOTTAI
ALANGUDI
THIRUMAYAM
THANJAVUR
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
Alluvium
Laterite
Cuddalore sand stone and warkali beds
Charnockite
Quartzite
Unclassified gneisses
Granites and syenites
MINERAL
Feldspar
Others

PHYSIOGRAPHY

PUDUKKOTTAI DISTRICT

This district is almost a level plain land with residual hills in the northern and south-eastern parts. The western portion is 600 feet above Mean Sea Level and tappers towards the east and reaches the sea level. The land is slightly undulating particularly in Ponnamaravathy area.

Using available thematic maps dealing with geology, physiography, geomorphology and study of literature, first level physiographic division namely p - coastal plain, was established for this district.

The second, and third level subdivisions are accomplished considering regional physiography that expresses the integrated effect of geology, terrain and environmental conditions.

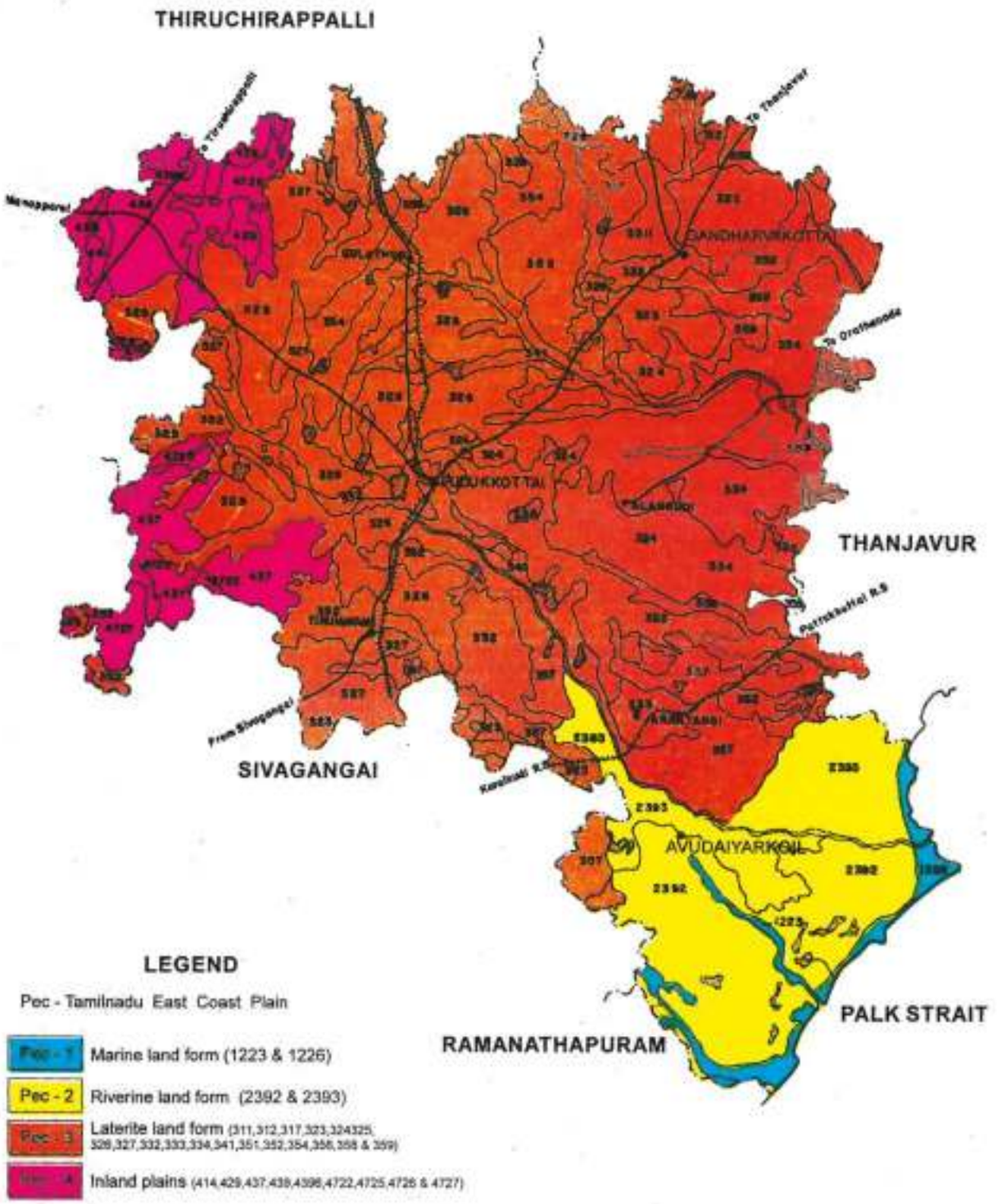
P	coastal plain.
Pe	East coast plain.
Pec	Tamilnadu east coast plain.

Further subdivisions are made on the basis of differences in local conditions such as landscape elements together with image characteristics pertaining to tone, texture, colour, etc.,

Pec 1	Marine land form	1223 & 1226	-	sandy plain.
Pec 2	Riverine land form	2392 & 2393	-	Flat lands / tank irrigated.
Pec 3	Laterite land form	311, 312, 317	-	Laterite,out crops.
		323, 324, 325, 326, 327 - Gently sloping to undulating lands. 332, 333, 334 - Gently sloping lands. 341 - valleys.		
		351, 352, 354, 356, 358, 359 - Low lands (tank irrigated).		
Pec 4	Inland plains	412 - Isolated hills / hillocks. 429 - Undulating upland. 437, 439, 4396 - Gently sloping to undulating uplands. 4722, 4725, 4726, 4727 - Low lands (tank irrigated).		

PHYSIOGRAPHY

PUDUKKOTTAI DISTRICT



RIVER BASINS - WATERSHEDS

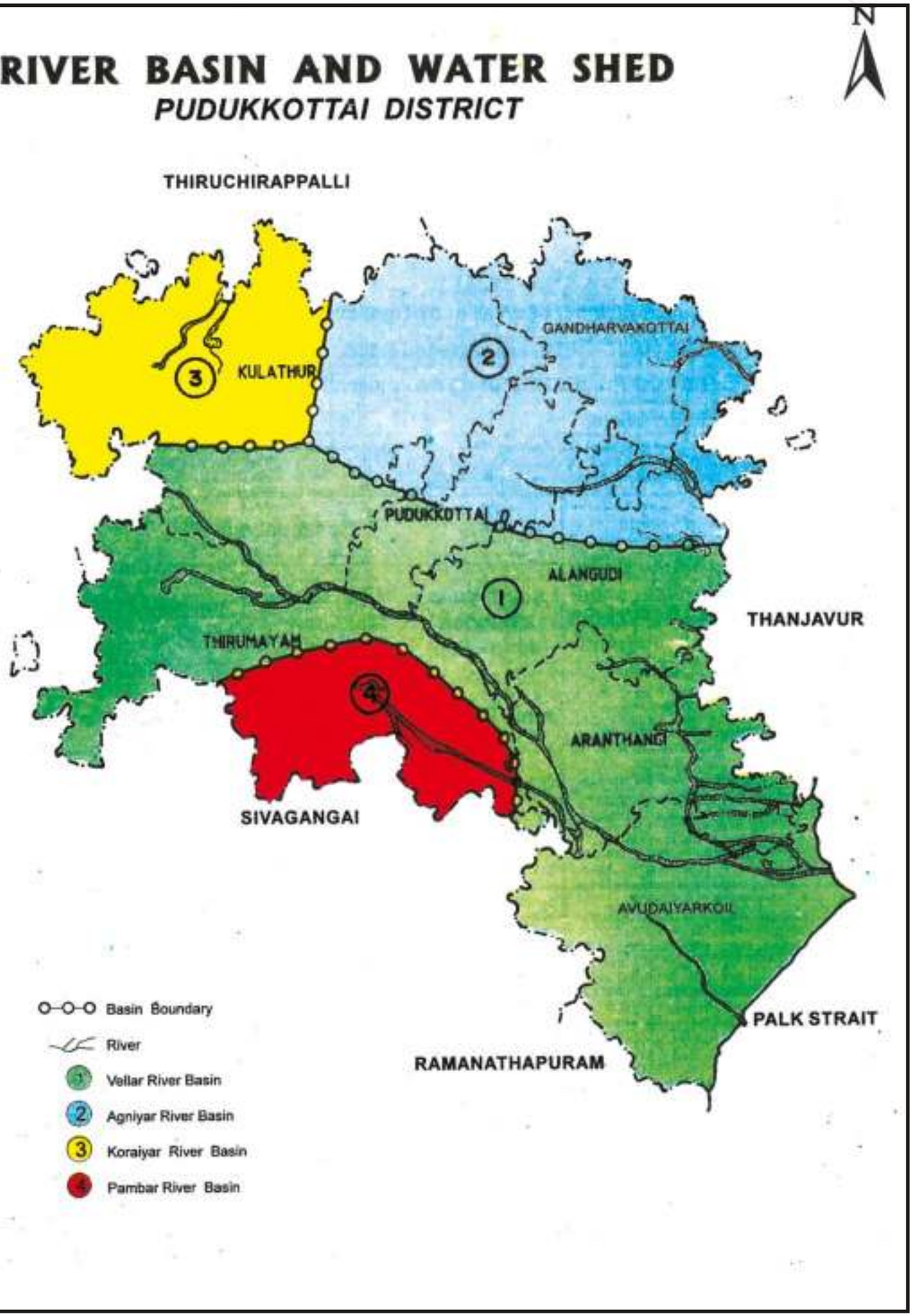
PUDUKKOTTAI DISTRICT

Four river basins are present in this district. They are Vellar, Agniyar, Koraiyar and Pambar. primary irrigation sources in the district are tanks, tube wells and other wells. These sources irrigate 10 percent area only.

River basins	Taluks
1. Vellar	Vellar irrigates parts of Kulathur, Pudukkottai, Alangudi, Thirumayam, Aranthangi and Avudaiyarkoil Taluks
2. Agniyar	Agniyar irrigates parts of Kulathur, Pudukkottai, Alangudi and Gandharvakottai taluks
3. Koraiyar	Irrigating parts of Kulathur taluks
4. Pambar	Irrigating parts of Thirumayam taluks
Grand Anaicut Canal :	Irrigating parts of Aranthangi and Avudaiyarkoil taluks

RIVER BASIN AND WATER SHED

PUDUKKOTTAI DISTRICT

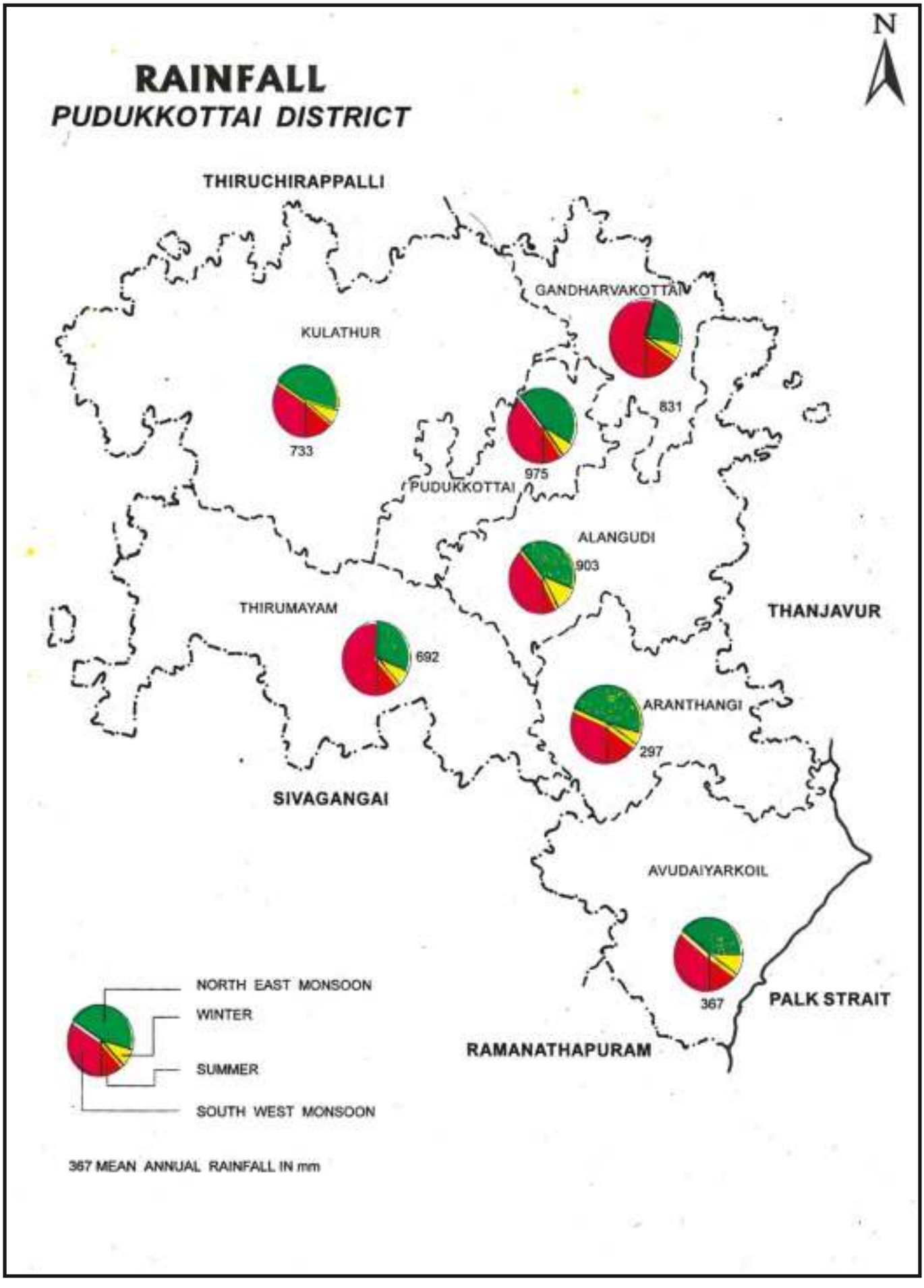


RAINFALL - DISTRIBUTION

PUDUKKOTTAI DISTRICT

The distribution pattern of rainfall in different taluks of Pudukkottai district over a period of 70 years (1927 - 1996) are furnished in this table. The mean annual rainfall of this district is 685 mm. This district receing maximum rainfall district North east monsoon and minmum during Winter

Sl. No.	Taluks	Mean annual rainfall (mm)	Seasonal rainfall							
			South West Monsoon (June - Sep)		North Eest Monsoon (Oct - Dec)		Winter (Jan - Feb)		Summer (Mar - May)	
			mm	Percent	mm	Percent	mm	Percent	mm	Percent
1.	Alangudi	903	334	37	400	44	59	7	110	12
2.	Aranthangi	297	97	33	143	48	21	7	36	12
3.	Avudaiyarkoil	367	141	38	161	44	25	7	40	11
4.	Gandharvakottai	831	383	46	359	43	9	1	80	10
5.	Kulathur	733	280	38	310	42	41	6	102	14
6.	Pudukkottai	975	387	40	401	41	51	5	136	14
7.	Thirumayam	692	303	44	238	34	42	6	109	16


RAINFALL
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
GANDHARVAKOTTAI
KULATHUR
831
733
975
PUDUKKOTTAI
ALANGUDI
903
THIRUMAYAM
THANJAVUR
692
ARANTHANGI
297
SIVAGANGAI
AVUDAIYARKOIL
367
PALK STRAIT
RAMANATHAPURAM
NORTH EAST MONSOON
WINTER
SUMMER
SOUTH WEST MONSOON
367 MEAN ANNUAL RAINFALL IN mm

TEMPERATURE

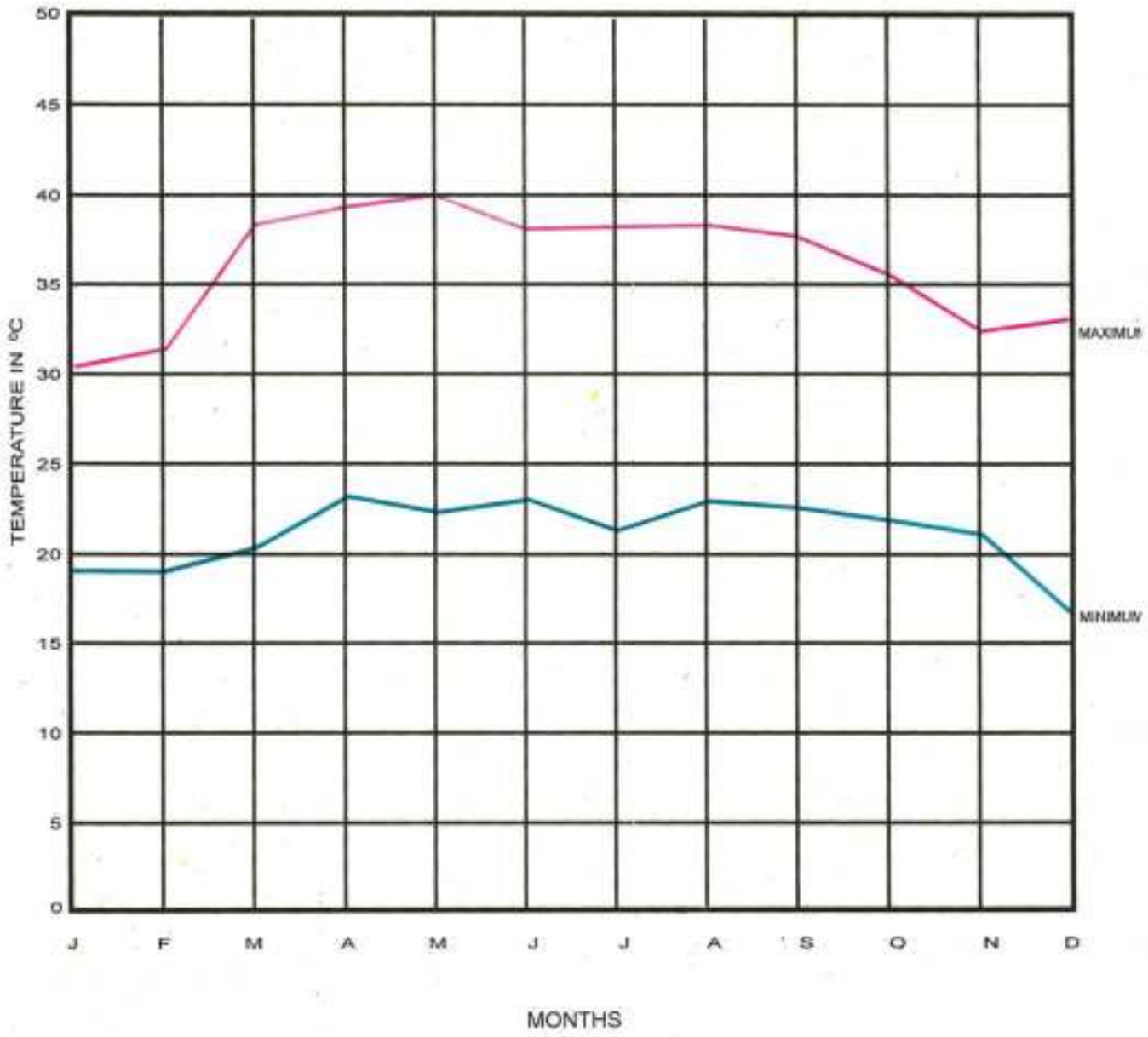
PUDUKKOTTAI DISTRICT

The atmospheric temperature recorded over a period of 70 years (1927 - 1996) was computed. The mean maximum temperature ranging from 38.2 to 40.4°C during March to September and cool months being December to February.

Sl. No.	Months	Temperature (°C)		
		Maximum	Minimum	Mean
1.	January	30.3	19.0	24.7
2.	February	32.0	19.6	25.8
3.	March	38.2	19.8	29.0
4.	April	39.2	23.7	31.5
5.	May	40.4	22.6	31.5
6.	June	38.7	23.1	30.9
7.	July	38.2	21.6	29.9
8.	August	38.7	22.9	30.8
9.	September	37.3	22.8	30.1
10.	October	35.4	22.2	28.8
11.	November	32.5	21.6	27.1
12.	December	32.8	17.3	25.1

TEMPERATURE

PUDUKKOTTAI DISTRICT



OMBROTHERMIC DATA

PUDUKKOTTAI DISTRICT

The mean monthly rainfall for a period of 70 years (1926-1996) and the mean monthly temperature for pudukkottai district are furnished in the form of an Ombrothermic diagram.

Sl. No.	Months	Mean Rainfall (mm)	Mean Temperature (°C)
1.	January	25	25
2.	February	10	26
3.	March	12	29
4.	April	31	32
5.	May	45	32
6.	June	37	31
7.	July	50	30
8.	August	94	31
9.	September	94	30
10.	October	115	29
11.	November	107	27
12.	December	65	25

Season		(mm)
Winter (January - February)	=	35
Summer (March - May)	=	88
South West monsoon (June - September)	=	275
North East Monsoon (October - December)	=	287
Total	=	685

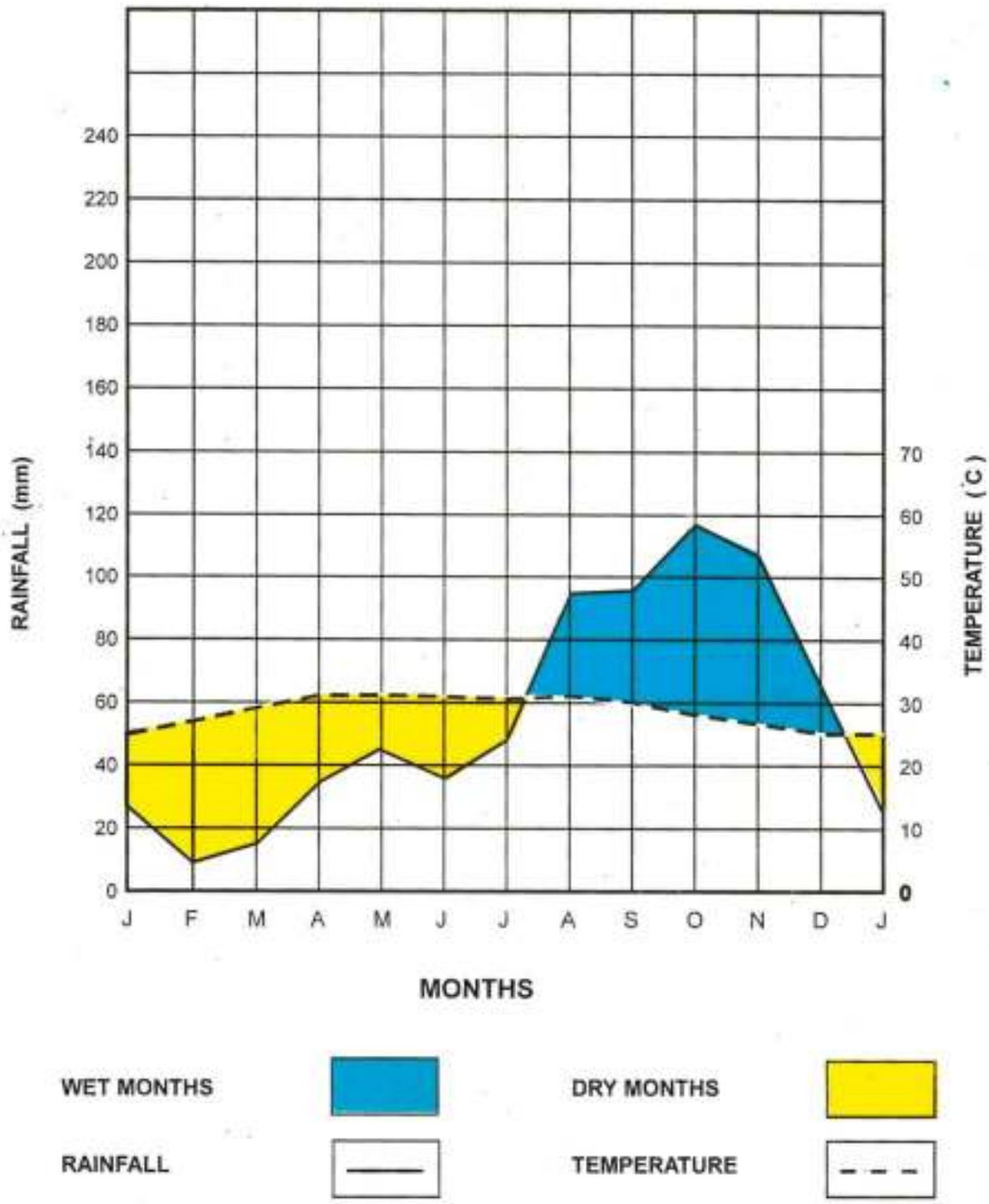
TEMPERATURE REGIME :

Mean annual temperature is above 22°C and the difference between the mean summer (April - June) and the mean winter (November - January) temperature is more than 5°C, thus falling under ***"HYPERTHERMIC"*** Soil temperature regime.

The Ombrothermic diagram reveals the wet and dry periods. Agricultural practices can be programmed accordingly.

OMBROTHERMIC DIAGRAM

PUDUKKOTTAI DISTRICT



TALUK WISE LAND USE PATTERN

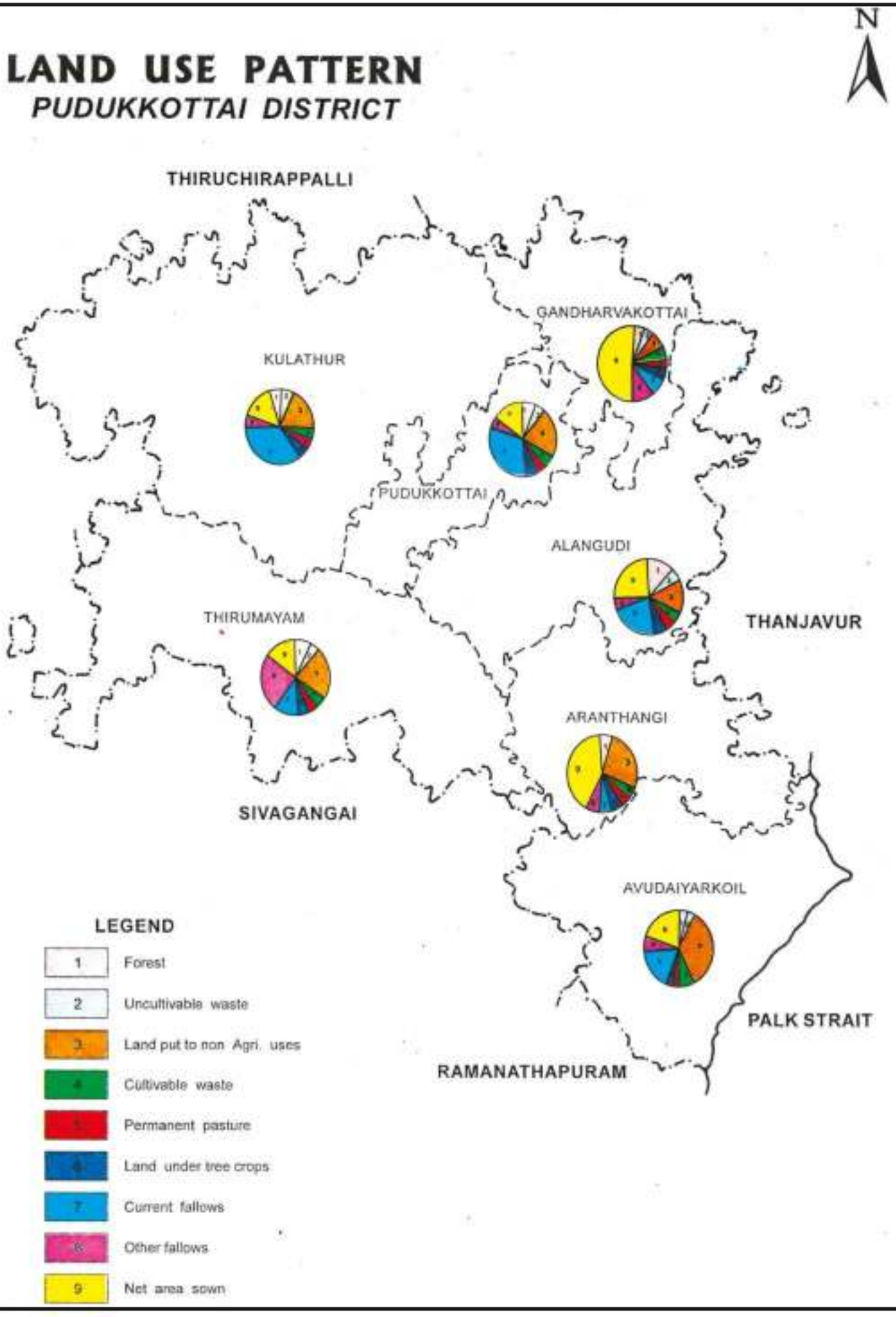
PUDUKKOTTAI DISTRICT

Out of the total geographical area of this district is 4, 64,507 hectares, net area sown are 1,23,496 hectares amounting to 27.87% cultivable waste, uncultivable waste and fallows accounts. 1,65,423 hectares (35.6%)

In this district the cultivators are predominantly concentrating in rural areas and hence the economy is rural. About 60% of hodings are below 0.2 hectares.

Sl. No.	Particuears	Alangudi	Arantha-ngi	Avudai-yarkoil	Gandharva kottai	Kulathur	Pudu kkottai	Thiru mayam	Total Extent (ha)	Percent to total
	Total Geographical Area	64,670	49,161	63,222	38,572	1,33,392	27,061	88,429	4,64,507	100.00
1.	Forests	7,687	473	1,015	602	3,252	1,555	9,519	24,103	5.19
2.	Uncultivable waste	333	—	1,820	485	2,616	2,486	2,323	10,063	2.17
3.	Land put to non Agri. uses	11,108	14,736	26,268	4,278	38,024	6,580	25,968	1,26,962	27.33
4.	Cultivable waste	1,329	725	1,983	1,210	3,358	117	2,981	11,703	2.52
5.	Permanent pasture	473	166	836	390	2,410	369	495	5,139	1.11
6.	Land under trees	6,140	1,936	425	3,216	4,073	2,093	1,501	13,384	2,88
7.	Current Fallows	15,248	3,555	13,154	3,403	43,043	8,660	15,704	1,02,137	21.99
8.	Other allows	1,443	5,536	3,337	4,080	9,119	355	17,650	41,520	8.94
9.	Net area sown	20,909	22,034	14,384	20,908	27,497	4,846	12,918	1,23,496	27.87

LAND USE PATTERN
PUDUKKOTTAI DISTRICT



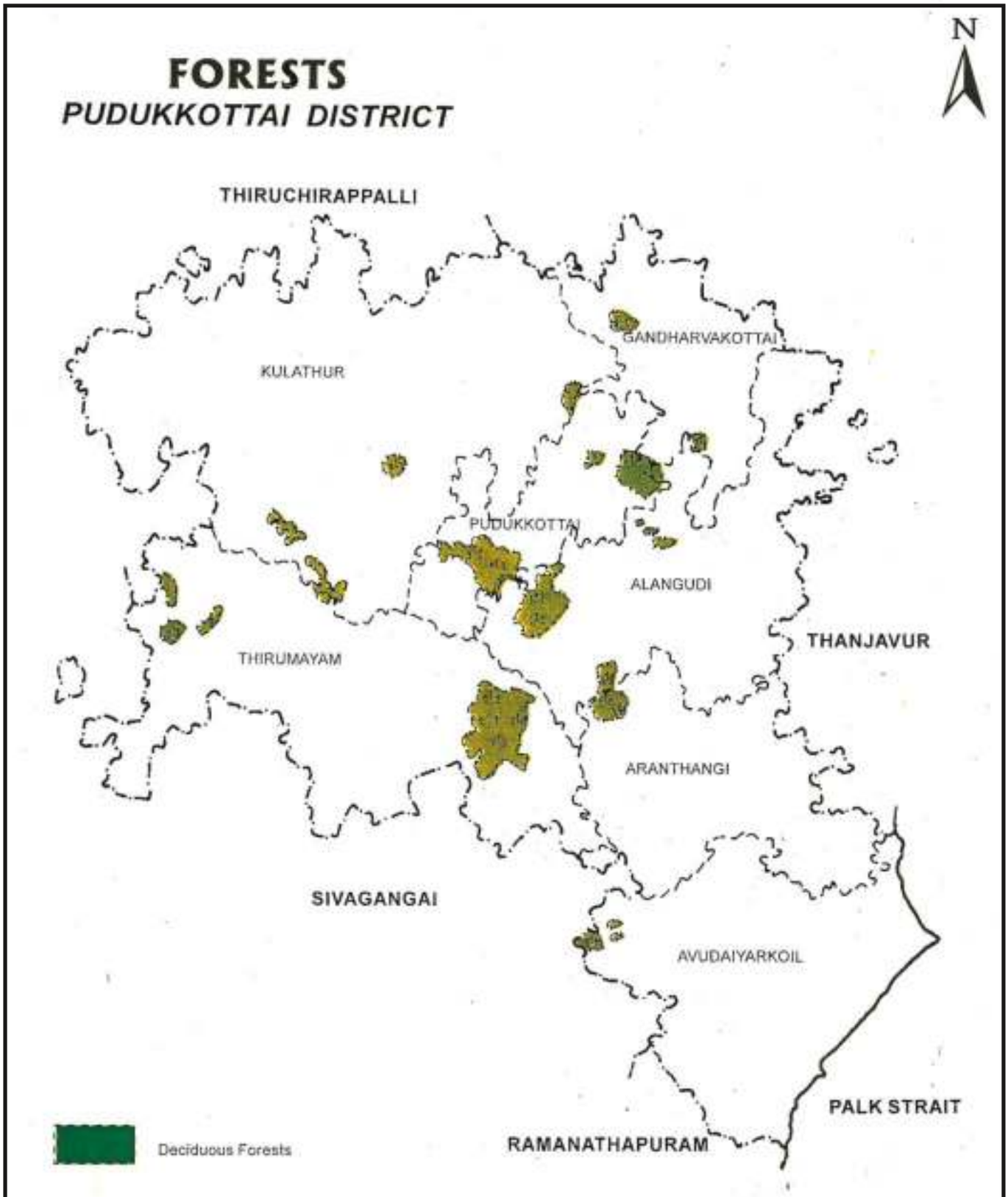
FORESTS

PUDUKKOTTAI DISTRICT

The total forest area of this district is about 24,103 ha. which represents 6.19 per cent of the total area of this district. The type of forest is Tropical deciduous and is distributed in all the taluks. Maximum forest area is lying in Thirumayam (9519 ha) followed by Alangudi taluk. (7687 ha)

EXTENT UNDER FOREST

S. No.	Taluks	Extent (ha)	Percent to total
1.	Alangudi	7687	32.0
2.	Aranthangi	473	2.0
3.	Avudaiyarkoil	1015	4.2
4.	Gandharvakottai	602	2.5
5.	Kulathur	3257	13.5
6.	Pudukkottai	1555	6.4
7	Thirumayam	9519	39.5
	Total	24103	100.0


FORESTS
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
GANDHARVAKOTTAI
KULATHUR
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
Deciduous Forests

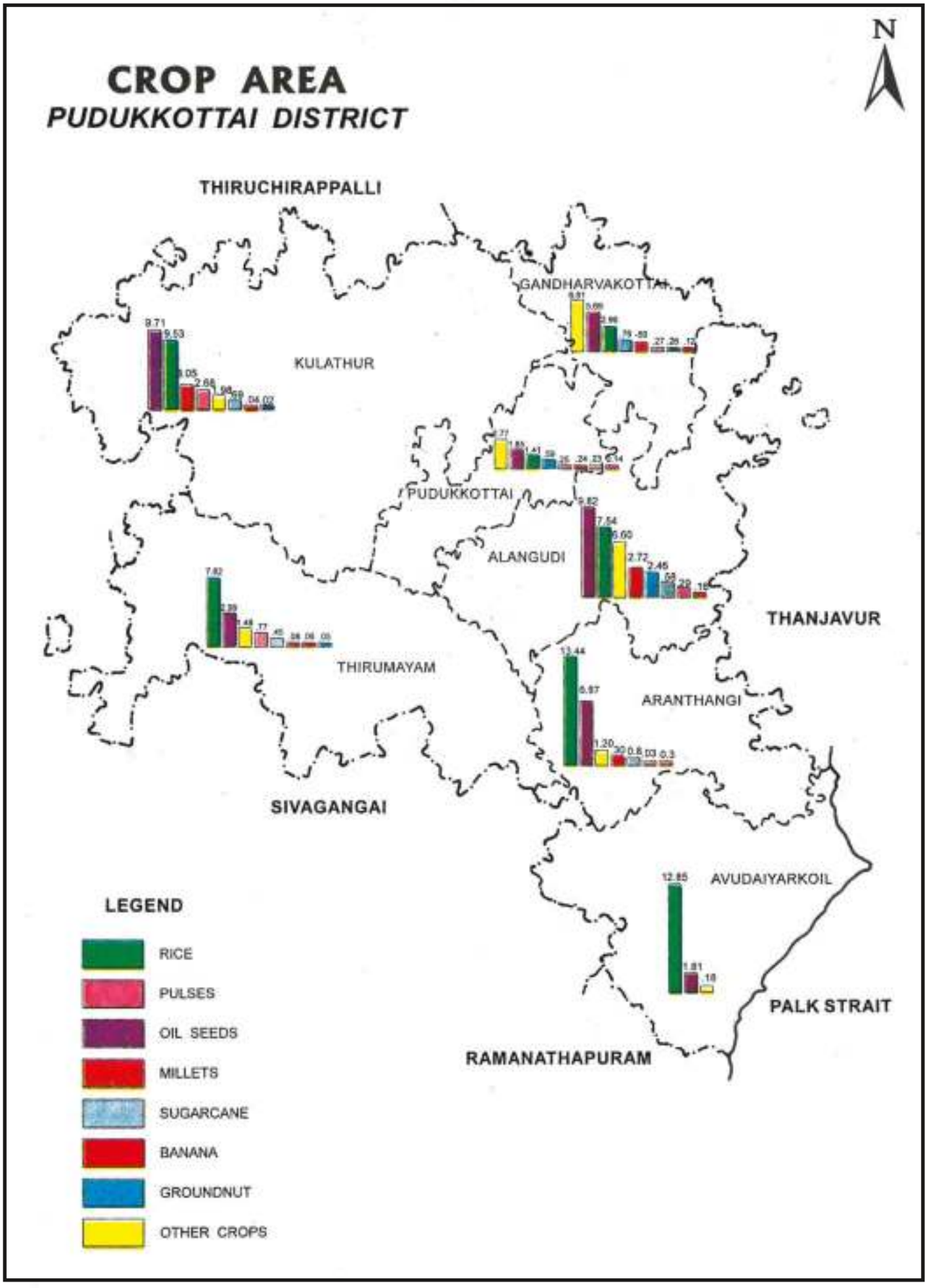
CROP AREA

PUDUKKOTTAI DISTRICT

This district has meagre river irrigation Mostly it is a rainfed track. Tanks and well irrigation are also contemplated, in a larger extent Rice, Oil seeds and Pulses are the major crops grown in this district. Rice depends entirely on tanks which get charged with rain reeipt and hence area under rice flcuctuate defending on monsoon rains.

Extent under different crops (thousand hectares)

Sl. No.	Taluks	Rice	Pulses	Oil seeds	Millets	Sugar cane	Banana	Ground	other crops	Total
1.	Alangudi	7.54	0.29	9.82	0.18	0.58	2.72	2.46	6.60	30.19
2.	Aranthangi	13.44	0.03	6.87	0.03	0.08	0.30	—	1.20	21.95
3.	Avudaiyar koil	12.85	—	1.81	—	—	—	—	0.18	14.84
4.	Gandharvakottai	2.96	0.27	5.69	0.59	0.76	0.12	0.26	6.81	17.46
5.	Kulathur	9.53	2.68	9.71	3.05	0.69	0.04	0.02	1.98	27.70
6.	Pudukkottai	1.41	0.23	1.85	0.14	0.25	0.24	0.59	2.77	7.48
7.	Thirumayam	7.82	0.77	2.99	0.08	0.45	0.06	0.05	1.48	13.70
	Total	55.55	4.27	38.74	4.07	2.81	3.48	3.38	21.02	133.32


N
CROP AREA
PUDUKKOTTAI DISTRICT
THIRUCHIRAPPALLI
GANDHARVAKOTTAI
KULATHUR
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
RICE
PULSES
OIL SEEDS
MILLETS
SUGARCANE
BANANA
GROUNDNUT
OTHER CROPS

CROPPING CALENDER

PUDUKKOTTAI DISTRICT

In Pudukkottai district major crops grown are Rice, groundnut, Pulses, Maize, Ragi and Cholam. Commercial crops such as, Sugarcane, Chillies and cotton are grown in meagrearea.

In Wetlands, under cauvery Mettur project irrigated Rice is grown in twoseasons viz. Kururai and Thaladi. Under Non - cauvery Mettur project in Wetland, single rice, crop is grown in Samba season. In garden land Groundnut, Rice, Millets, Chillies are grown Indryland Groundnut, Gingelly, Blackgram, Ragi etc, are grown.

I. Wetlands :

a) Cauvery - Mettur Project :

i) June to September, October = Kuruvai Rice
October, November to February = Thaladi Rice
ii) July - February = Groundnut or Maize

b) Non Cauvery - Mettur project : Single Crop Wetlands :

i) September - January = Rice

II. Garden lands :

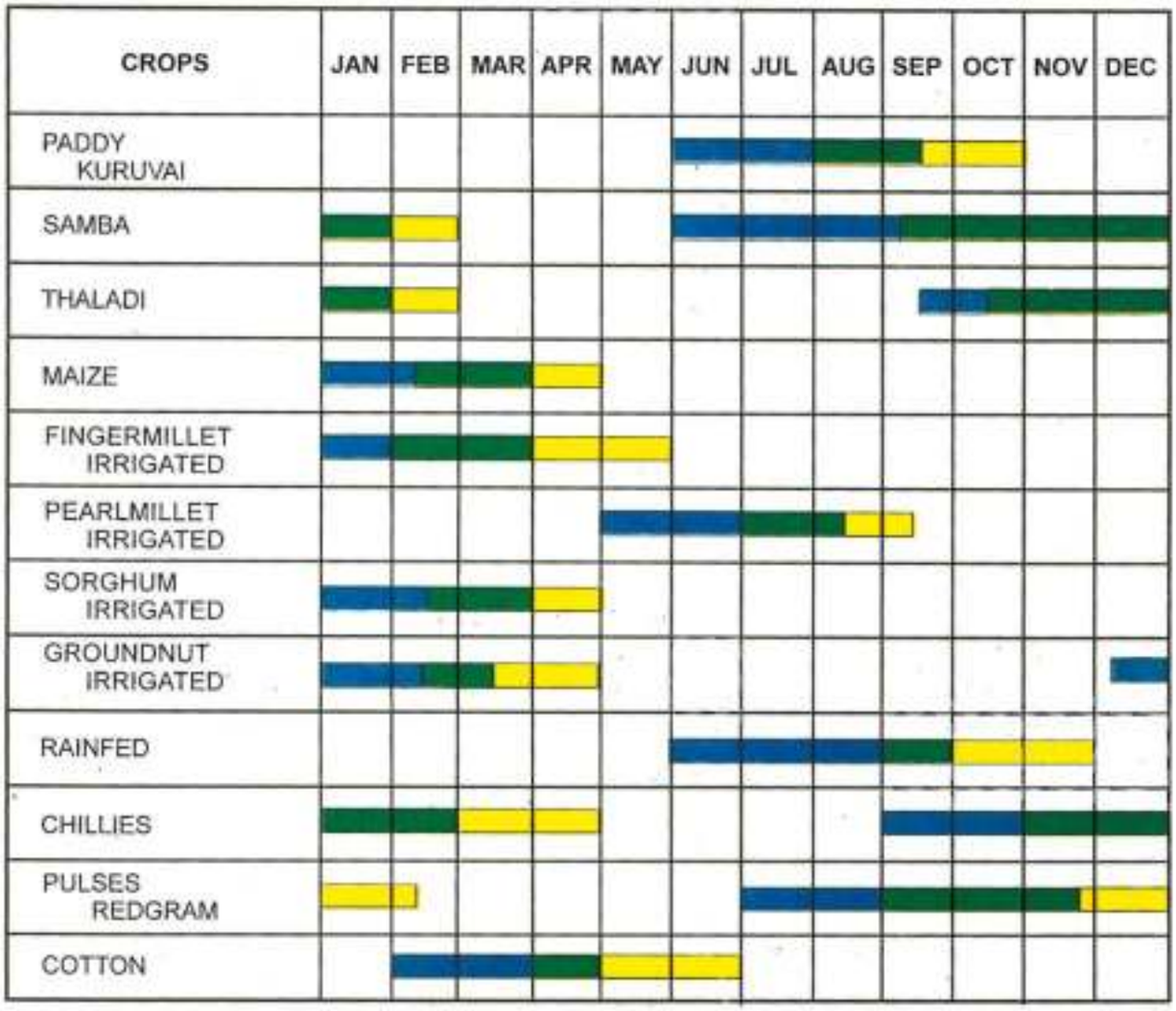
1.	a)	July - September	=	Groundnut
	b)	October - January	=	Rice
	c)	February - May	=	Ragi or Maize or Cumbu
2.	a)	July - October	=	Groundnut or Maize
	b)	October - February	=	Chillies
	c)	March - June	=	Maize
3.	a)	July - November	=	Rice
	b)	November - February	=	Groundnut
	c)	April - July	=	Cumbu or Ragi
4.	a)	July - October	=	Ragi
	b)	October - February	=	Rice
	c)	February - June	=	Cotton

III. Dry Lands :

a)	June - October	=	Groundnut
b)	November - February	=	Gingelly or Black gram
c)	August - November	=	Ragi or Horse gram or Varagu
d)	December - March	=	Gingelly or Horse gram

CROPPING CALENDAR

PUDUKKOTTAI DISTRICT



Sowing Stage Vegetative Stage Harvest Stage

IR IRRIGATED **RF** RAINFED

SOURCES OF IRRIGATION

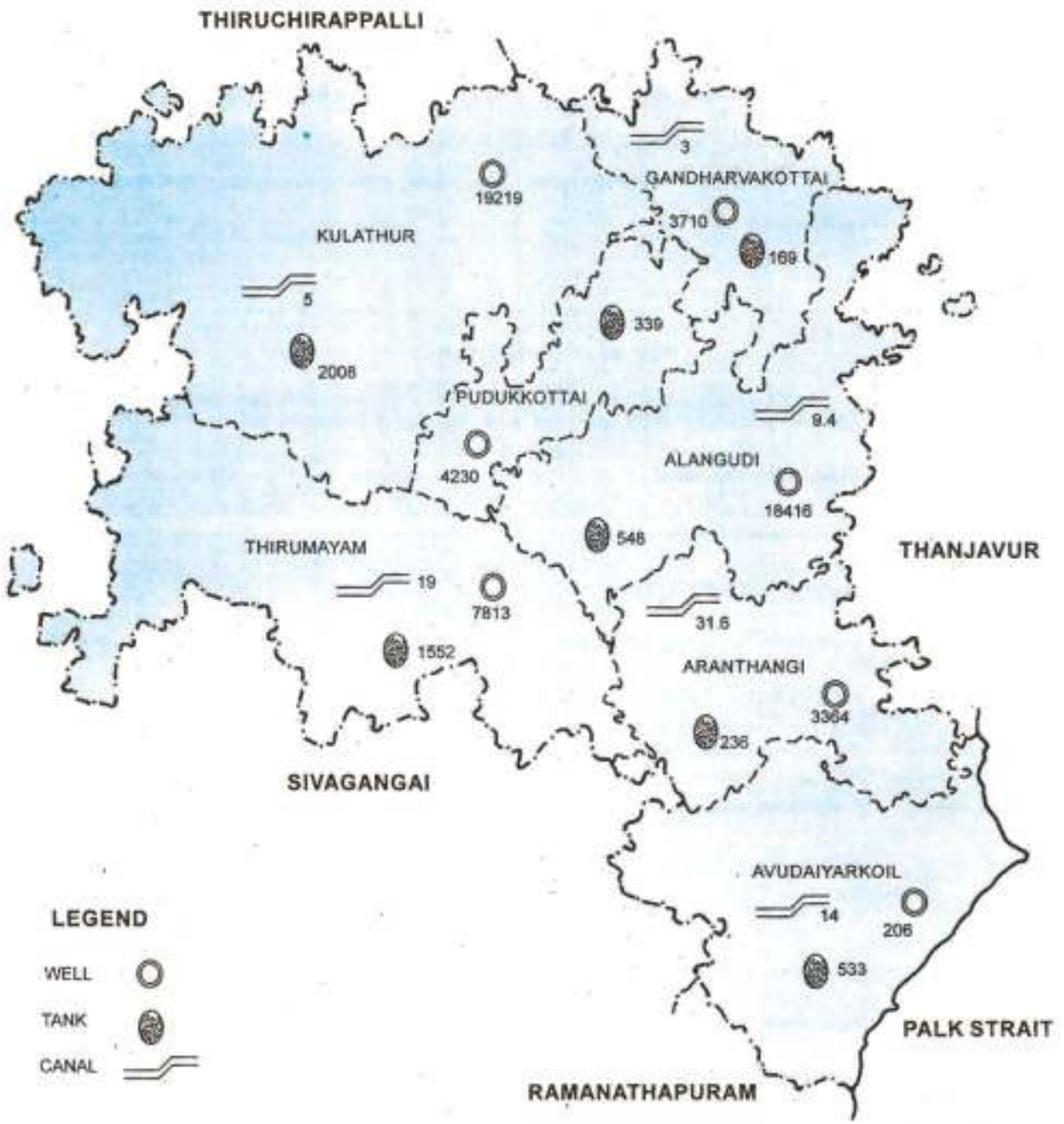
PUDUKKOTTAI DISTRICT

Pudukkottai district is mostly a rain fed track. It has a meagre river, irrigation primary sources of irrigation in this district are tanks (5385 numbers) and tube and other wells (56958 numbers) about 0.9 lakh hectares are irrigated by tanks and wells. irrigation by tanks and wells entirely depends on monsoon rains.

Sl. No.	Taluks	Sources of Irrigation		
		Canal length (km)	Wells (Nos)	Tanks (Nos)
1.	Alangudi	9.4	18,416	548
2.	Aranthangi	31.6	3,364	236
3.	Avudaiyarkoil	14.0	206	533
4.	Gandharvakottai	3.0	3,710	169
5.	Kulathur	5.0	19,219	2,008
6.	Pudukkottai	—	4,230	339
7.	Thirumayam	19.0	7,813	1,552
	Total	82.0	56,958	5,385

SOURCES OF IRRIGATION

PUDUKKOTTAI DISTRICT



AGRICULTURAL INSTITUTIONS

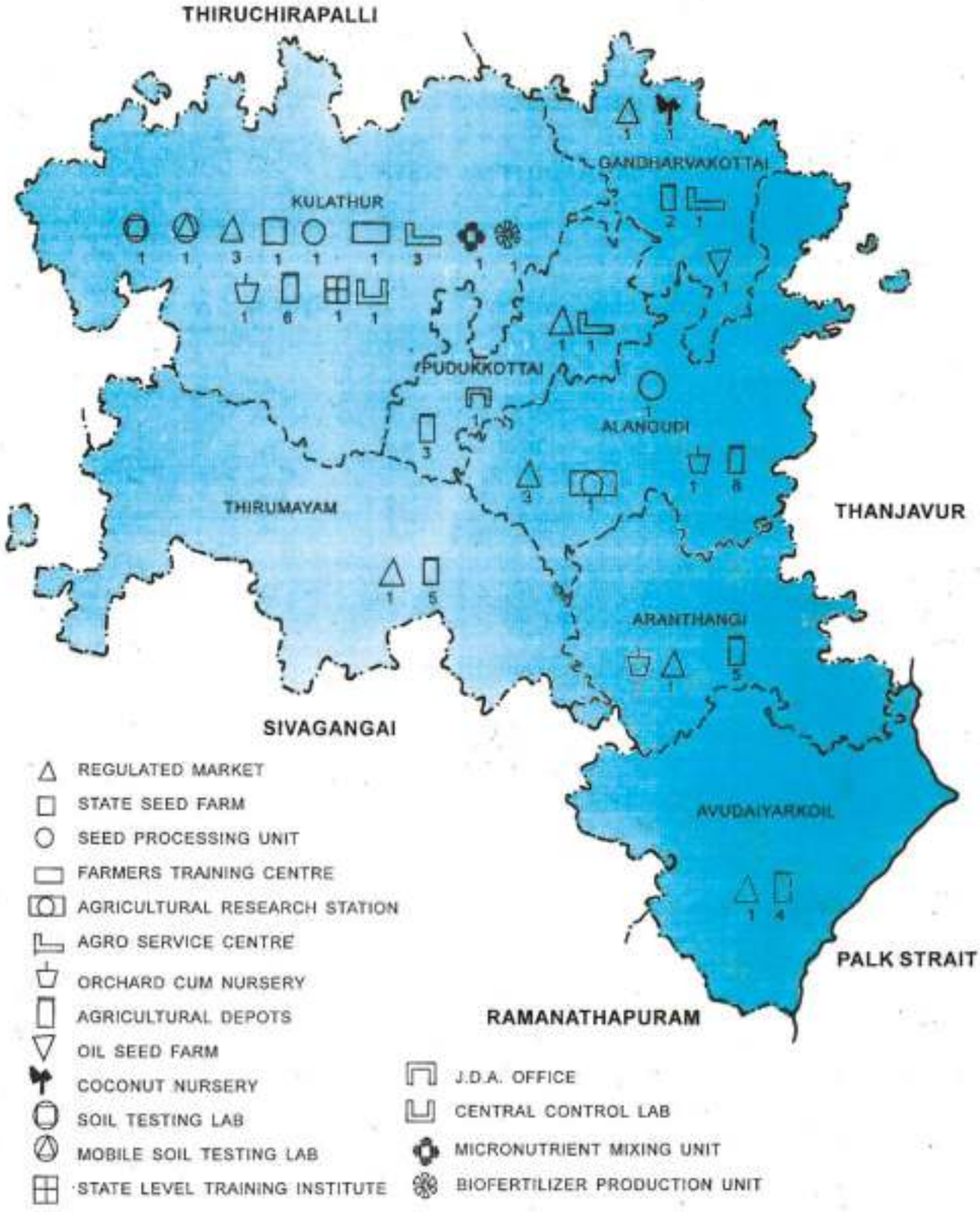
PUDUKKOTTAI DISTRICT

The details of various Agricultural Institutions functioning in this district are furnished below and mostly situated in the backward areas with the objective of educating farming community with latest technologies. They also provide employment to the farm labourers of rural areas.

Sl. No.	Name of Institution	Nos.
1.	Office of the Joint Director of Agriculture, Pudukkottai.	1
2.	Regulated market	11
3.	State seed Farm	1
4.	Seed Processing unit	2
5.	Farmers Training centre	1
6.	Agricultural Research Station	1
7.	Agro Service Centres	5
8.	Orchard cum Nurseries	3
9.	Agricultural Depots	33
10.	Oil seed Farms	1
11.	Coconut Nursery	1
12.	Soil Testing Laboratory	1
13.	Mobile Soil Testing Laboratory	1
14.	State Level Training Institute	1
15.	Central control Laboratory	1
16.	Micronutrient mixing unit	1
17.	Bio Fertilizer Production unit	1

AGRICULTURAL INSTITUTIONS

PUDUKKOTTAI DISTRICT



AGRO INDUSTRIES

PUDUKKOTTAI DISTRICT

Sl. No.	Name of Industries	Symbol	Total Nos.
1.	Flour Mills	A	135
2.	Live stock Feed unit	B	2
3.	Edible Oil Mill	C	105
4.	Dhall Mill	D	5
5.	Coir and Coir product Industries	E	10
6.	Palmarosa oil unit	F	1
7.	Cashew Processing unit	G	2
8.	Chewing Tobacco unit	H	3
9.	Modern Rice Mill	I	22
10.	Miscellaneous	J	29

AGRO INDUSTRIES
PUDUKKOTTAI DISTRICT

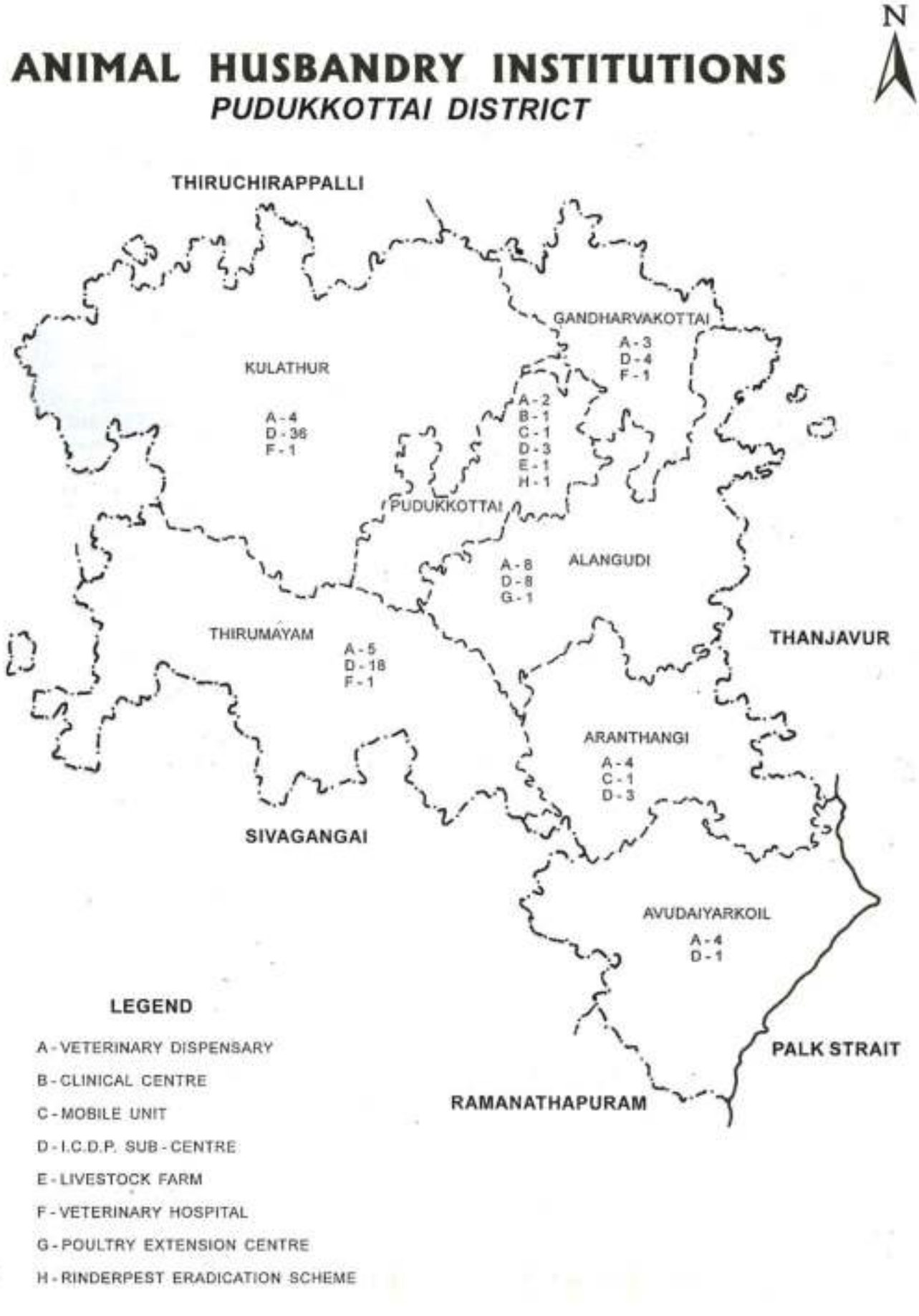
ANIMAL HUSBANDRY INSTITUTIONS

PUDUKKOTTAI DISTRICT

Sl. No.	Name of Institutions	Map Symbol	Total numbers
1.	Veterinary Hospital	A	30
2.	Clinician Centre	B	1
3.	Mobile units	C	2
4.	I.C.D.P. sub centre	D	73
5.	Livestock farm	E	1
6.	Veterinary Hospital	F	3
7.	Poultry Extension centre	G	1
8.	Rinderpest Eradication Scheme	H	1

ANIMAL HUSBANDRY INSTITUTIONS

PUDUKKOTTAI DISTRICT



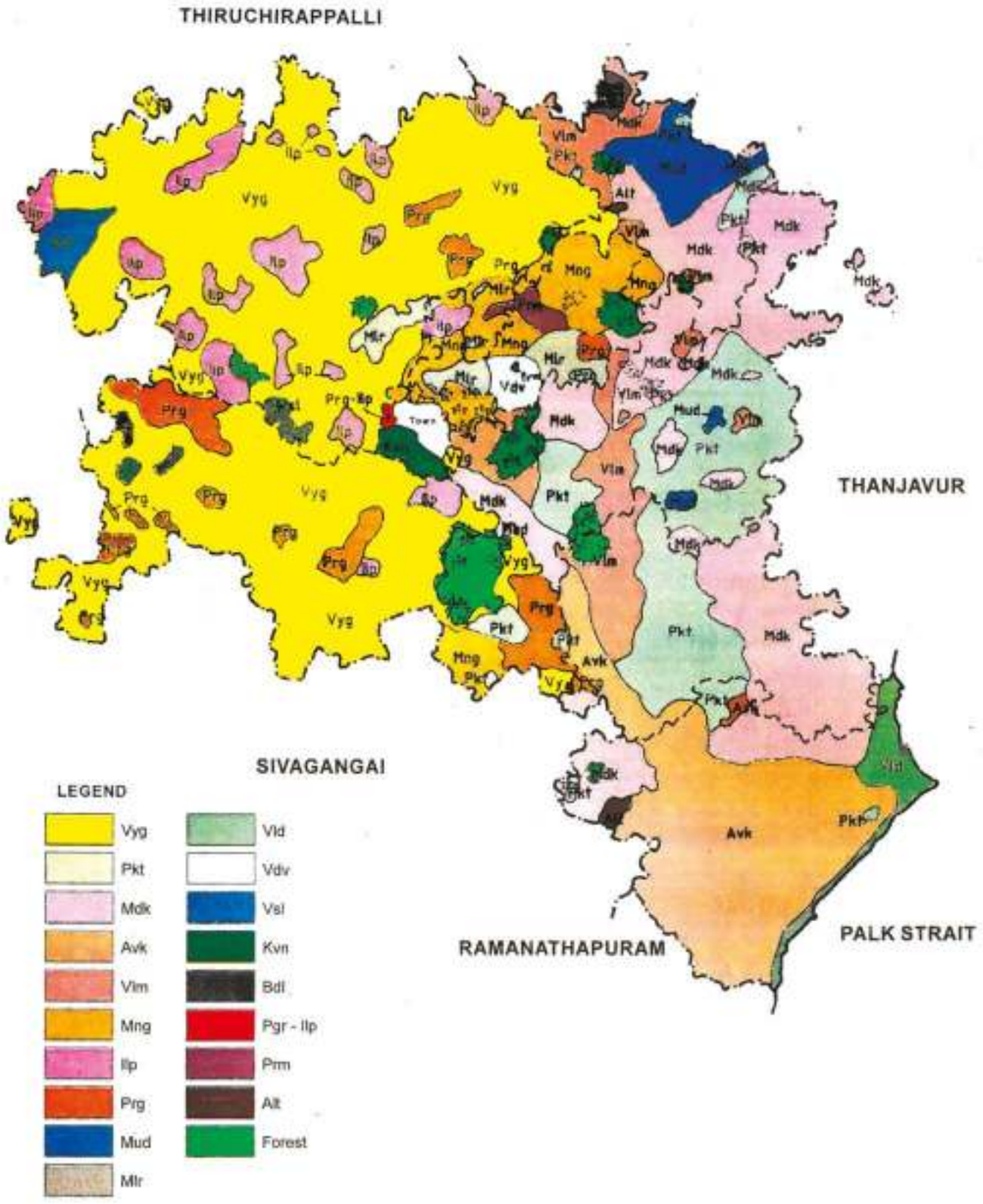
SOILS

PUDUKKOTTAI DISTRICT

In Pudukkottai, Vayalogam is the major soil series occupying an area of 1,69,055 hectares amounting to 37.04% of the total area.

Sl. No.	Soil Series	Map symbol	Extent (ha)	Percent to total
1.	Vayalogam	Vyg	1,69,055	37.04
2.	Madukkur	Mdk	54,550	11.95
3.	Pattukkottai	Pkt	60,497	13.25
4.	Avudaiyarkoil	Avk	49,728	10.89
5.	Vallam	Vlm	27,009	5.92
6.	Mangalathupatti	Mng	25,551	5.60
7.	Iluppur	Ilp	19,422	4.26
8.	Perungalur	Prg	18,307	4.01
9.	Mudukulam	Mud	9,549	2.09
10.	Mullur	Mlr	5,906	1.29
11.	Valuthalagudi	Vld	5,619	1.23
12.	Vadavalam	Vdv	3,514	0.77
13.	Visalur	Vsl	3,418	0.75
14.	Kavinad	Kvn	2,176	0.48
15.	Budalur	Bdl	1,434	0.31
16.	Prg-Ilp association	Prg-Ilp	358	0.08
17.	Poram	Prm	218	0.05
18.	Alathur	Alt	138	0.03
	Total		4,56,449	100.00

SOILS
PUDUKKOTTAI DISTRICT



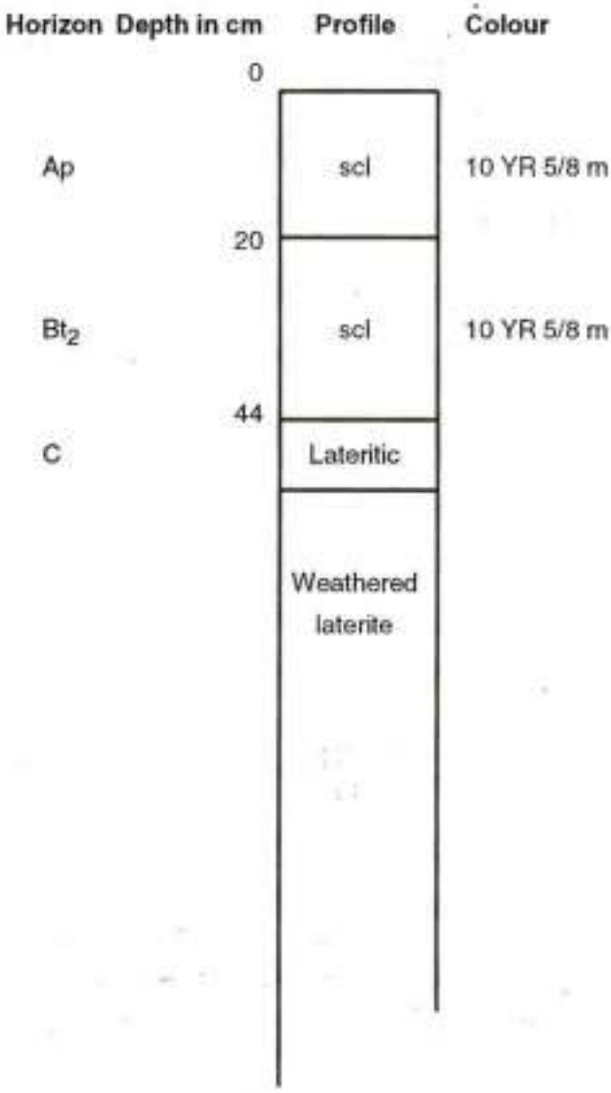
VAYALOGAM SOIL SERIES

Brief Description	:	This consists moderately deep, medium textured, acidic, brown soils. They are non-calcareous in nature derived from laterite parent material.
Physiography	:	Tamilnadu east coast plain-undulating laterite land form. Top portion of the Topo sequence
Drainage	:	Well drained.
Taxonomy	:	Loamy skeletal, kaolinitic, hyperthermic, acidic, moderately deep, Paralithic Haplustalfs.
Typifying pedon	:	Vayalogam sandy clay loam-cultivated.

Profile Description :

Horizon	Depth (cm)	DESCRIPTION :
B_1	0 - 20	Strong brown (10 YR 5/8 m); sandy clay loam; medium moderate subangular blocky; slightly hard firm slightly sticky and nonplastic; few fine discontinuous tubular pores; plenty fine roots; moderately rapid permeability; abrupt smooth boundary; pH 7.5
Bt_2	20 - 44	Strong brown (10 YR 5/8 m); sandy clay loam; medium strong subangular blocky; hard firm sticky and slightly plastic; thin patchy clay films; few fine discountinuous random tubular pores; moderately permeable; abrupt wavy boundary.
C	44 - 54^+	Laterite parent material; pH 6.3

VAYALOGAM SERIES



Vyg

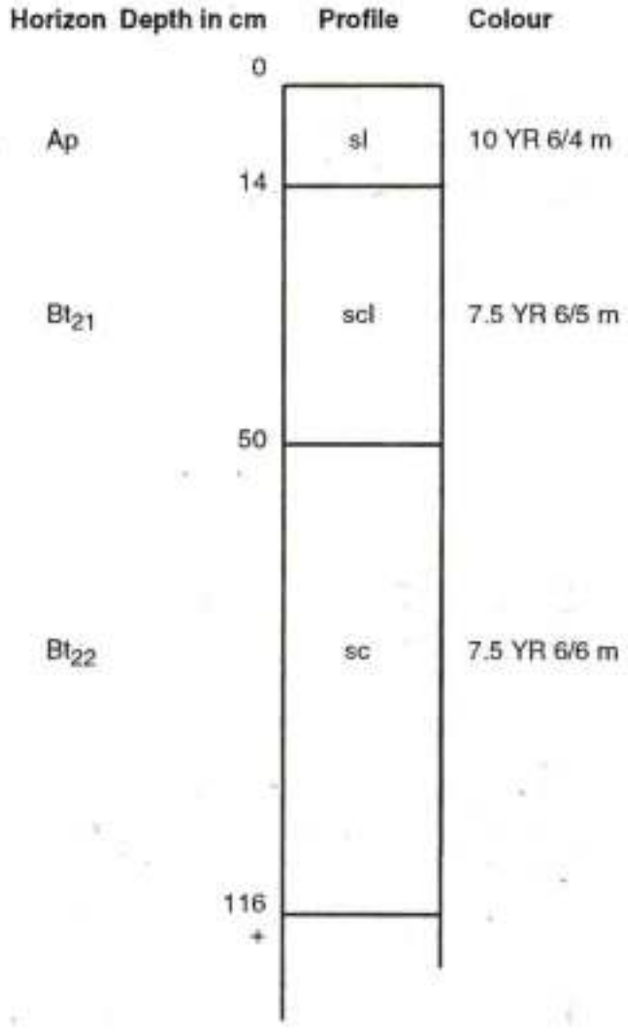
PATTUKKOTTAI SOIL SERIES

Brief Description	:	It comprises extremely deep, yellowish brown, acidic to neutral, loamy soils occupying the upper portion of the catenary sequence.
Physiography	:	Tamilnadu east coast plain-upland of laterite land form.
Drainage	:	Well drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep, Ultic Haplusatlfs.
Typifying pedon	:	Pattukkottai sandy loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 14	Light yellowish brown (10 YR 6/4 m); sandy loam; fine weak subangular blocky; hard friable non-sticky and non-plastic; few fine roots; few very fine discontinuous random interstial pores; very rapid permeability; abrupt smooth boundary; pH 6.6
Bt_{21}	14 - 50	Reddish yellow (7.5 YR 6/5 m); sandy clay; coarse strong subangular blocky; very hard firm slightly sticky and non-plastic; thin patchy clay films; few very fine roots; few fine discontinuous random pores; rapid permeability; clear smooth boundary; pH 7.4
Bt_{22}	50 - 116^{+}	Reddish brown (7.5 YR 6/6 m); sandy clay; coarse strong subangular blocky; very hard firm sticky and slightly plastic; thin patchy clay films; many fine discontinuous random pores; many hard round to irregular black ferro-manganous concretions; moderately rapid permeability; pH 6.0

PUTTUKKOTTAI SERIES



Pkt

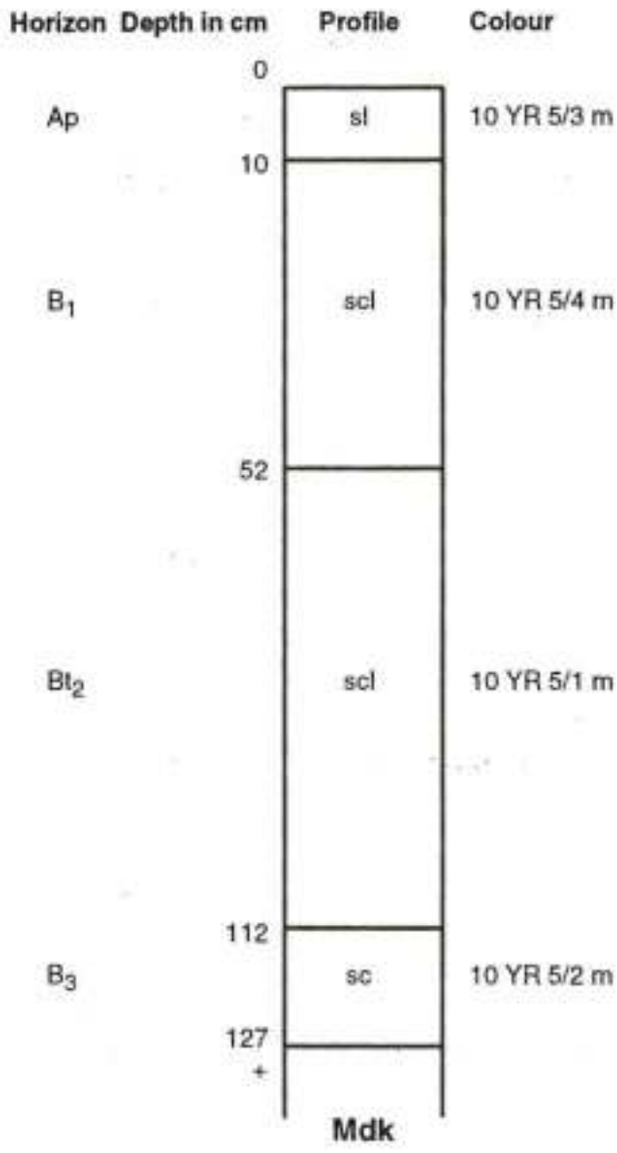
MADUKKUR SOIL SERIES

Brief description	:	It comprises very deep, brown, neutral soils with conspicuously reduced mottles in the sub soil.
Physiography	:	Tamilnadu east coast plain-laterite land form-middle portion of the topo sequence.
Drainage	:	Moderate to poorly drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep Udic Haplustalfs.
Typifying pedon	:	Madukkur sandy loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 10	Brown (10 YR 5/3 m); sandy loam; fine weak subangular blocky; very friable nonsticky and nonplastic; many fine roots; very rapid permeability; abrupt smooth boundary; pH 6.5
B_1	10 - 52	Yellowish brown (10 YR 5/4 m); sandy clay loam; fine weak subangular blocky; slightly hard friable sticky and nonplastic; very few very fine roots; few fine oblique tubular pores; dark greyish brown (10 YR 4/2) few fine faint mottlings; rapid permeability; clear smooth boundary; pH 6.3
Bt_2	52 - 112	Grey (10 YR 5/1m); sandy clay loam; coarse strong subangular blocky; hard firm sticky and plastic; few very fine oblique tubular pores; many medium prominent dark red (10 YR 3/6) mottlings; thin patchy clay films; few hard rounded black to brown ferro manganous concretions; moderately rapid permeability; clear smooth boundary; pH 6.3
B_3	112 - 127^+	Greyish brown (10 YR 5/2 m); sandy clay; coarse strong subangular blocky; firm sticky and plastic; few fine distinct yellowish brown (10 YR 5/6) mottlings; moderately rapid permeability; pH 6.5

MADUKKUR SERIES



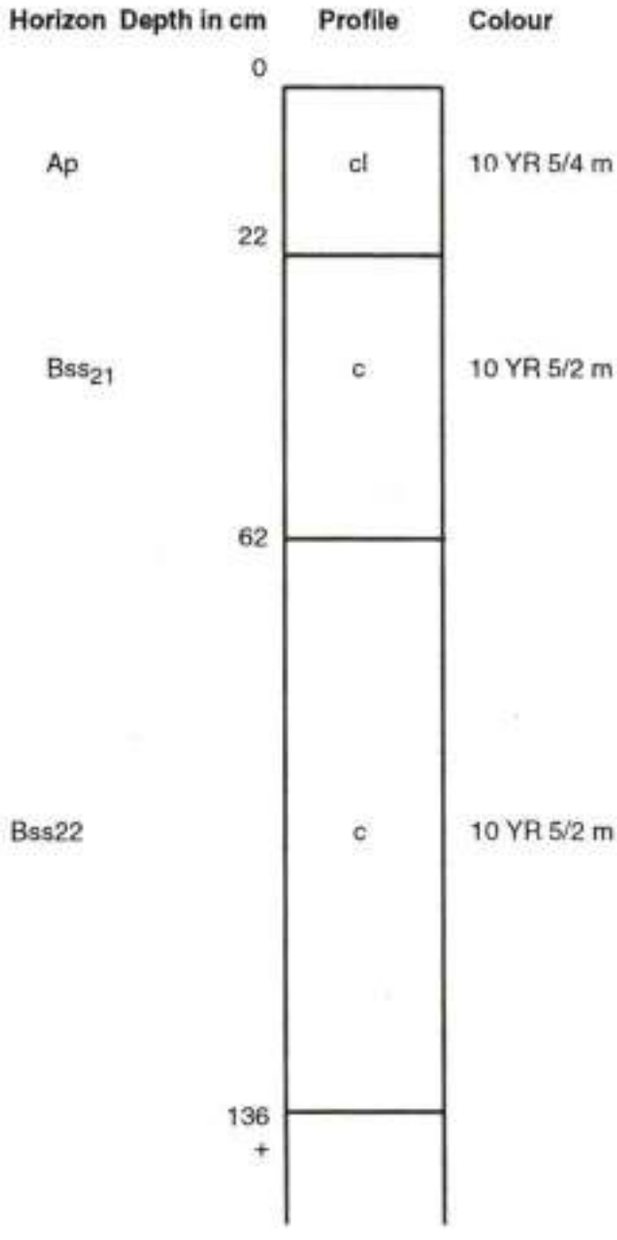
AVUDAIYARKOIL SOIL SERIES

Brief description	:	It comprises very deep, medium textured yellowish brown soils developed from laterite parent material. Lime concretions are very common in this soils and the soils are mildly alkaline in nature.
Physiography	:	Tamilnadu east coast plain-depression of laterite land form.
Drainage	:	Poorly drained.
Taxonomy	:	Fine, montmorillonitic, hyperthermic, alkaline, very deep Typic Haplusterts.
Typifying pedon	:	Avudaiyarkoil-clay loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 22	Yellowish brown (10 YR 5/4 m); clay loam; strong medium subangular blocky; hard firm slightly sticky and nonplastic; many fine roots; few fine and micro tubular pores; moderately slow permeability; gradual smooth boundary; pH 7.6
Bss_{21}	22 - 62	Greyish brown (10 YR 5/2 m); clay; strong coarse angular blocky; very hard very firm sticky and plastic; few fine ferro-manganese concretions and common fine irregular hard calcium concretions; few fine roots; very fine discontinuous tubular and inped micro pores; grey (10YR 5/1) few medium faint mottlings; formation of slickensides; slight effervescence; slow permeability; gradual smooth boundary; pH 9.0
Bss_{22}	62 - 136^{+}	Greyish brown (10 YR 5/2 m); clay; moderate medium subangular blocky; very hard very firm sticky and plastic; few fine ferromanganese concretions; common medium irregular calcium concretions; very fine exped tubular and inped micro pores; grey (10YR 5/1) few medium faint mottlings; intersecting slickensides; slight effervescence; very slow permeability; pH 9.1

AVUDAIYARKOIL SERIES



Avk

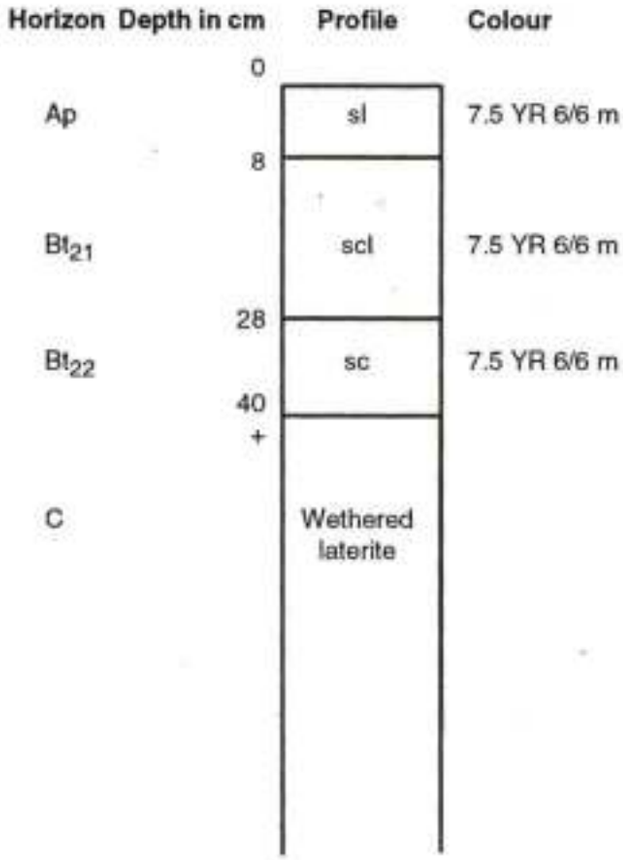
VALLAM SOIL SERIES

Brief description	:	This series comprises moderately deep, light textured, reddish yellow soils occupying top most portion of the laterite cap.
Physiography	:	Tamilnadu east coast plain-upland of laterite land form.
Drainage	:	Excessively drained.
Taxonomy	:	Fine loamy, kaolinitic, hyperthermic, acidic, moderately deep Paralithic Haplustalfs.
Typifying pedon	:	Vallam sandy loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 8	Reddish yellow (7.5 YR 6/6 m); sandy loam; medium moderate subangular blocky; very hard friable nonsticky and nonplastic; few fine roots; few discontinuous random exped and inped micropores; very rapid permeability; abrupt smooth boundary; pH 6.0
Bt_{21}	8 - 28	Reddish yellow (7.5 YR 6/6 m); sandy clay loam; coarse strong subangular blocky; very hard firm sticky and plastic; thin patchy clay films; very few fine roots; many discontinuous random micropores; fine spherical hard black ferro-manganese concretions; rapid permeability; clear smooth boundary; pH 5.5
Bt_{22}	28 - 40	Reddish yellow (7.5 YR 6/6 m); sandy clay; coarse strong subangular blocky; very hard firm sticky and slightly plastic; thin patchy clay films; very few fine roots; many very fine discontinuous random interstial pores; many hard irregular black concretions; rapid permeability; abrupt smooth boundary; pH 4.9
C	40^{+}	Laterite gravels followed by indurated iron stones.

VALLAM SERIES



VIm

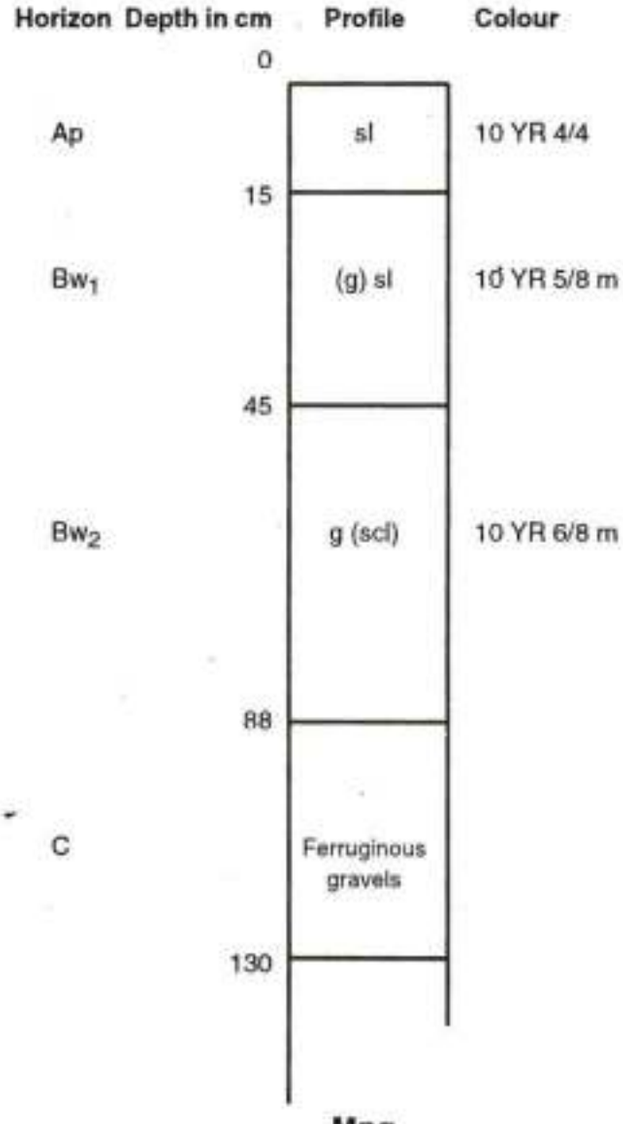
MANGALATHUPATTI SOIL SERIES

Brief description	:	This series consists of dark yellowish brown, deep, acidic, light textured, soil derived from laterite parent material.
Physiography	:	Tamilnadu east coast plain-gently sloping laterite land form.
Drainage	:	Excessively drained.
Taxonomy	:	Coarse loamy, mixed, hyperthermic, acidic, deep Typic Ustropepts.
Typifying pedon	:	Mangalathupatti sandy loam-fallow.

Profile description :

Horizon	Depth (cm)	Description.
A_1	0 - 15	Dark yellowish brown (10 YR 4/4 m); sandy loam; slight medium subangular blocky; loose nonsticky nonplastic; many very fine roots; few medium pores; very rapid permeability; clear wavy boundary; pH 6.2
Bw_1	15 - 45	Yellowish brown (10 YR 5/8 m): gravelly sandy loam; weak medium subangular blocky; slightly hard friable nonsticky nonplastic; common very fine roots; common very fine tubular pores; rapid permeability; gradual wavy boundary; pH 6.6
Bw_2	45 - 88	Brownish yellow (10 YR 6/8 m); gravelly sandy clay loam; weak medium subangular blocky; slightly hard friable slightly sticky and nonplastic; few very fine roots; common very fine tubular pores; slow permeability; abrupt irregular boundary; pH 6.5
C	88 - 130	Ferruginous gravels as parent materials

MANGALATHUPATTI SERIES



Mng

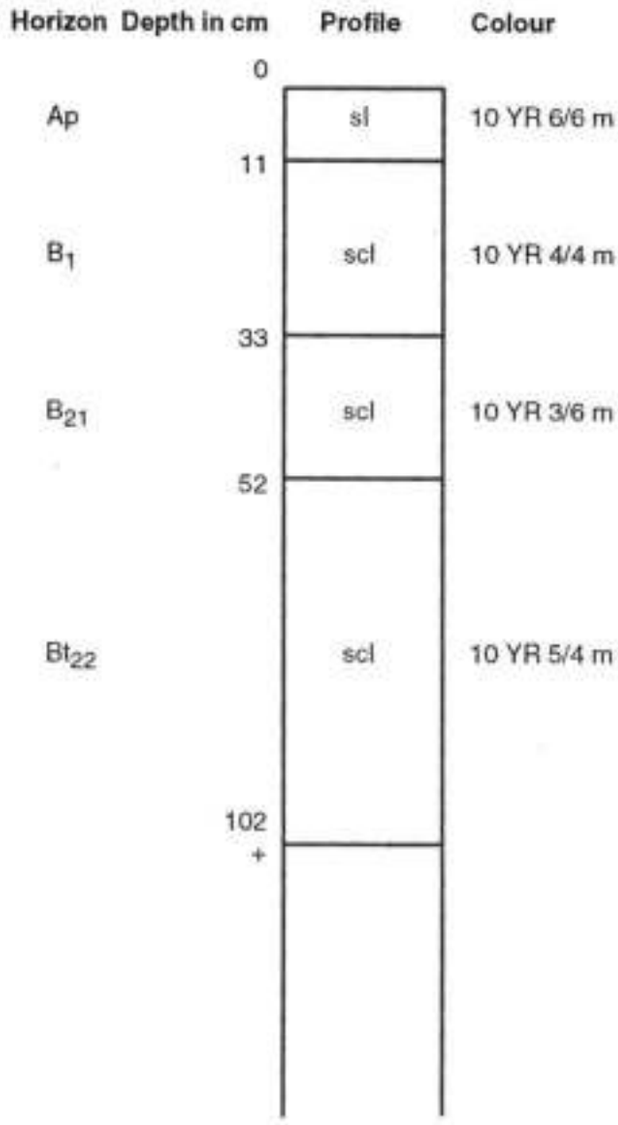
ILUPPUR SOIL SERIES

Brief description	:	This is extremely deep, brownish yellow, very deep, mildly alkaline and calcareous soils derived from laterite over gneissic rock.
Physiography	:	Tamilnadu east coast plain-lowlands of laterite land form.
Drainage	:	Poorly drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, calcareous, very deep, Udic Haplustalfs.
Typifying pedon	:	Iluppur sandy loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 11	Brownish yellow (10 YR 6/6 m); sandy loam; fine weak crumb structure; friable nonsticky and nonplastic; many fine roots; moderate permeability; clear smooth boundary; pH 7.2
B_1	11 - 33	Dark yellowish brown (10 YR 4/4 m); sandy clay loam; medium moderate subangular blocky; slightly hard firm slightly sticky and nonplastic; few fine roots; many fine random tubular pores; slight effervescence; moderate permeability; diffused smooth boundary; pH 9.4
B_{21}	33 - 52	Yellowish brown (10 YR 5/6 m); sandy clay loam; medium strong subangular blocky; hard firm slightly sticky and slightly plastic; few fine random tubular pores; few small soft irregular concretions; slight effervescence; moderate permeability; clear smooth boundary; pH 9.8
Bt_{22}	52 - 102^+	Yellowish brown (10 YR 5/4 m); sandy clay loam; coarse strong subangular blocky; hard firm sticky and slightly plastic; few fine random tubular pores; thin patchy clay films; soft irregular concretions; strong effervescence; moderately slow permeability; pH 9.6

ILLUPUR SERIES



IIp

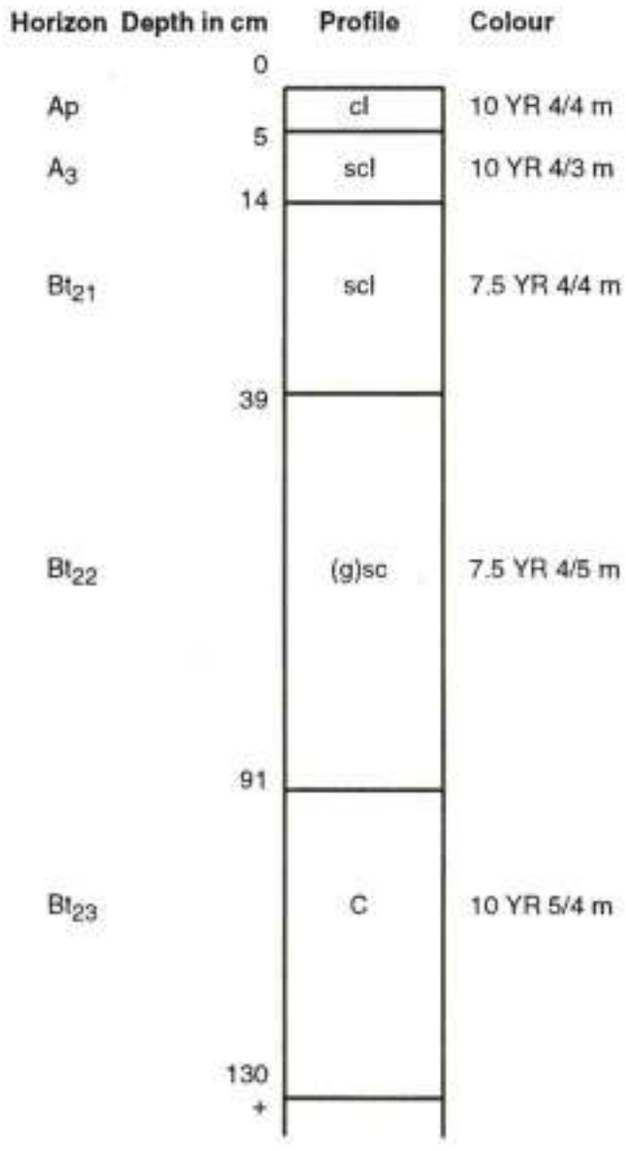
PERUNGALUR SOIL SERIES

Brief description	:	Perungalur series comprises dark yellowish brown, very deep, calcareous soils developed from gneiss.
Physiography	:	Tamilnadu East coast plain-gently sloping land.
Drainage	:	Moderately drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, calcareous, very deep Udic Haplustalfs.
Typifying pedon	:	Perungalur clay loam-cultivated

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 5	Dark yellowish brown (10 YR 4/4 m); clay loam; strong medium subangular blocky; hard firm sticky and plastic; moderately slow permeability; violent effervescence; many fine to medium roots; fine few pores; clear smooth boundary; pH 6.0
A_3	5 - 14	Dark brown (10 YR 4/3 m); sandy clay loam; moderate fine subangular blocky; hard friable slightly sticky and slightly plastic; moderate permeability; violent effervescence; many fine roots; fine common pores; abrupt smooth boundary; pH 7.0
Bt_{21}	14 - 39	Dark brown (7.5 YR 4/4 m); sandy clay loam; massive; very hard firm sticky and slightly plastic; moderate permeability; slight effervescence; very few small irregular iron concretions; thin patchy clay films; many fine roots; fine common pores; clear wavy boundary; pH 7.4
Bt_{22}	39 - 91	Dark brown (7.5 YR 4/5 m); gravelly sandy clay; medium moderate subangular blocky; hard firm sticky and slightly plastic; moderate permeability; slight effervescence; thin patchy clay films; small to large soft to hard irregular iron concretions and quartz gravels; common fine roots; common fine pores; clear irregular boundary; pH 7.8
Bt_{23}	91 - 130^{+}	Yellowish (10 YR 5/4 m); clay; moderate medium subangular blocky; hard firm sticky and plastic; slow permeability; slight effervescence; light brownish grey (10YR 6/2) common medium distinct mottlings; thick patchy clay films on ped faces; small, hard irregular iron concretions; pH 8.2

PERUNGALUR SERIES



Prg

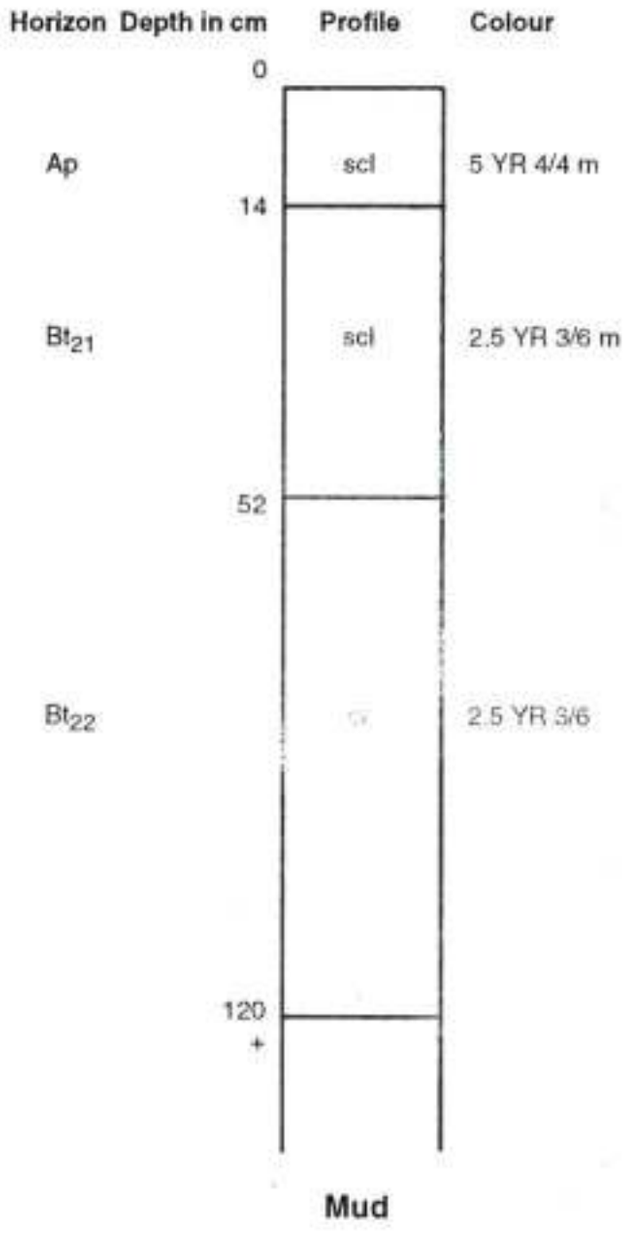
MUDUKULAM SOIL SERIES

Brief Description	:	These are extremely deep, reddish brown to dark red, medium textured soils derived from laterite parent material. These are acidic to neutral, and non-calcareous.
Physiography	:	Tamilnadu east coast plain-gently sloping laterite land form.
Drainage	:	Well drained soils.
Taxonomy	:	Fine loamy, kaolinitic, hyperthermic, acidic to neutral. very deep Udic Rhodustalfs.
Typifying pedon	:	Mudukulam sandy clay loam-cultivated fallow.

Profile description :

Horizon	Depth (cm)	Description.
Ap	0 - 14	Reddish brown (5 YR 4/4 m); sandy clay loam; medium weak subangular blocky; slightly hard friable slightly sticky and slightly plastic; many fine roots; common fine pores; very rapid permeability; abrupt smooth boundary; pH 5.5
Bt_{21}	14 - 52	Dark red (2.5 YR 3/6 m); clay loam; medium moderate subangular blocky; slightly hard slightly firm sticky and slightly plastic; thin patchy clay film; many fine discontinuous random tubular pores; few coarse roots; rapid permeability; gradual smooth boundary; pH 5.3
Bt_{22}	52 - 120^{+}	Dark red (2.5 YR 3/6 m); clay loam; coarse strong subangular blocky; hard firm sticky and plastic; thin patchy clay films; medium few discontinuous random pores; few coarse roots; rapid permeability; pH 5.6

MUDUKULAM SERIES



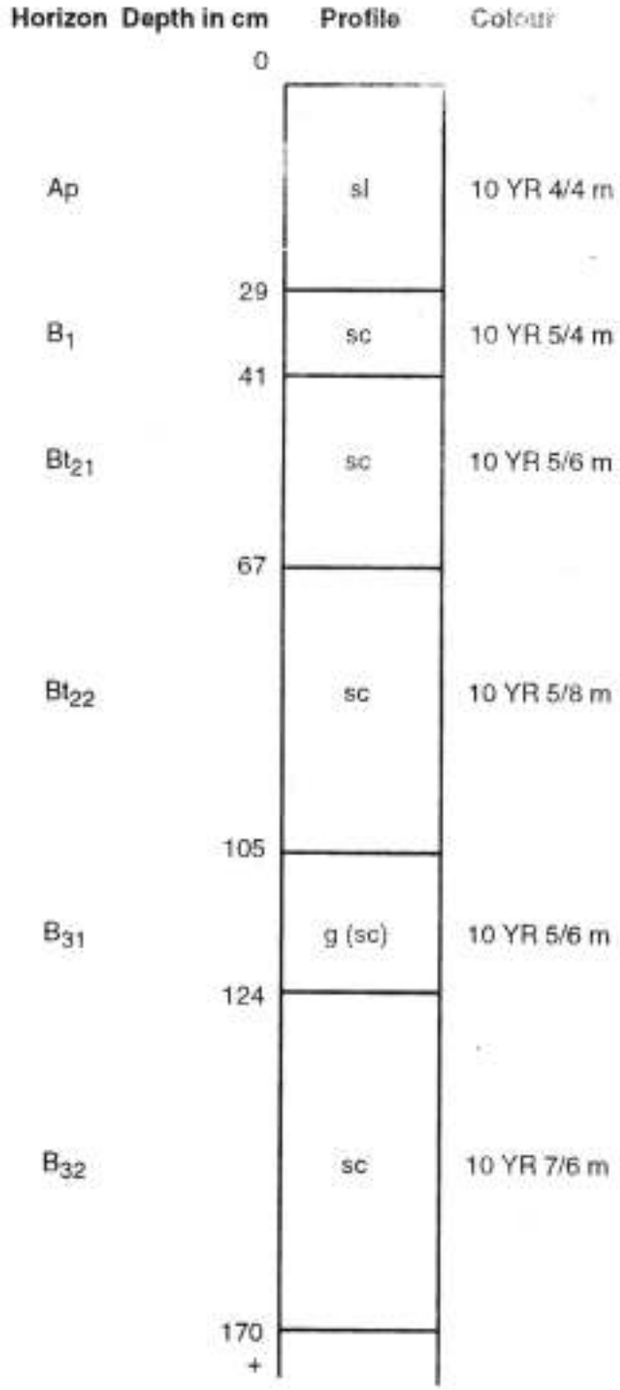
MULLUR SOIL SERIES

Brief description	:	Mullur soil series consists of dark yellowish brown, very deep, light textured soils occuring in nearly level to gently sloping lands in a comparatively higher elevation (summit) subjected to moderate to severe erosion derived from laterite parent material.
Physiography	:	Tamilnadu east coast plain-summit portion of laterite land form.
Drainage	:	Well drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep, Udic Haplustalfs.
Typifying pedon	:	Mullur sandy loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 29	Dark yellowish brown (10 YR 4/4 m); sandy loam; very fine weak subangular blocky; loose very friable non sticky and non plastic; common very fine roots; rapid permeability; clear irregular boundary; pH 6.4
B_1	29 - 41	Yellowish brown (10 YR 5/4 m); sandy clay; fine moderate subangular blocky; very friable slightly sticky and non plastic; small irregular many soft iron concretions; few fine to medium roots; few very fine tubular pores; rapid permeability; clear smooth boundary; pH 6.5
Bt_{21}	41 - 67	Yellowish brown (10 YR 5/6 m); sandy clay; fine moderate subangular blocky; very friable slightly sticky and non plastic; large irregular many hard iron concretions; few fine to medium roots; thin patchy clay films; rapid permeability; clear smooth boundary; pH 6.4
Bt_{22}	67 - 105	Yellowish brown (10 YR 5/8 m); sandy clay; medium moderate subangular blocky; very friable slightly sticky and non plastic; thin patchy clay films; dark yellowish brown (10YR 4/8) many coarse distinct mottlings; large irregular many hard iron concretions; few fine roots; rapid permeability; abrupt smooth boundary; pH 6.7
B_{31}	105 - 124	Strong brown (10 YR 5/6 m); gravelly sandy clay; very fine weak subangular blocky; very friable slightly sticky and non plastic; dark yellowish brown (10YR 4/8) many coarse distinct mottlings; coarse gravels and angular small few hard concretions; white and red colour sandy layers; rapid permeability; clear irregular boundary; pH 6.3
B_{32}	124-170+	Yellow (10YR 7/6m); sandy clay; medium strong subangular blocky; friable slightly sticky and non plastic; dark yellowish brown (10YR 4/8) coarse distinct mottlings; white and red colour sandy layers; rapid permeability; pH 6.5

MULLUR SERIES



Mlr

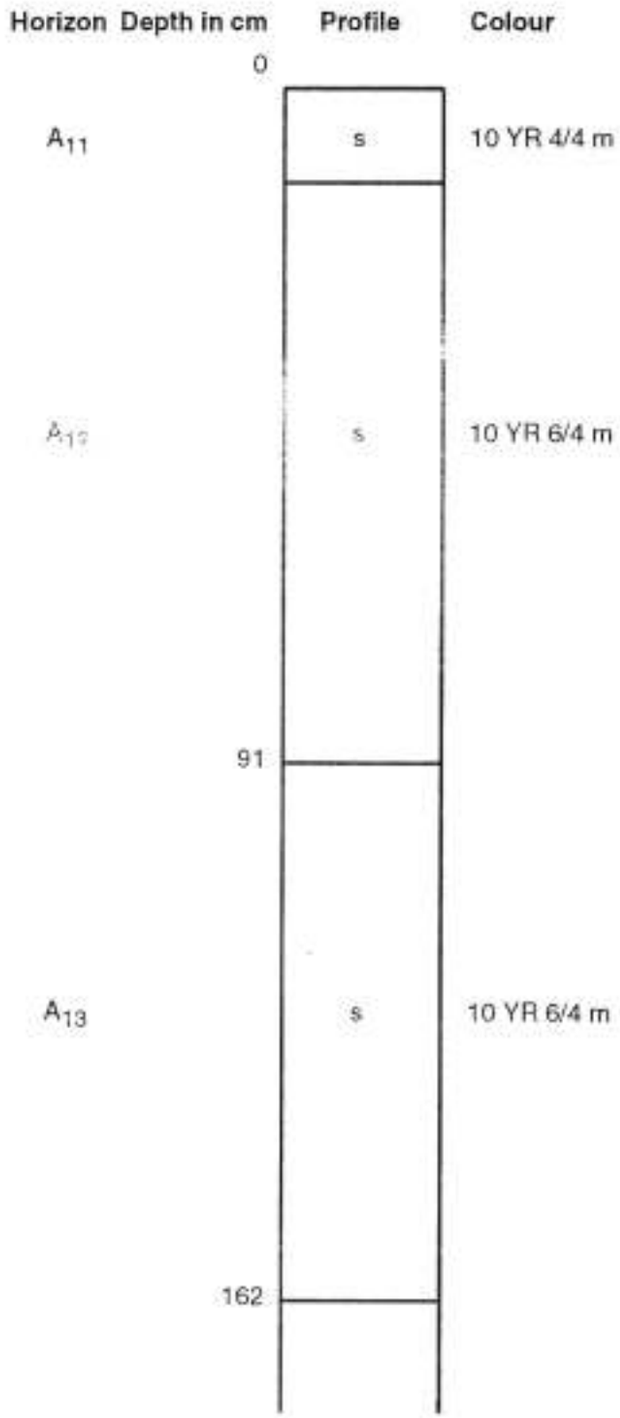
VALUTHALAGUDI SOIL SERIES

Brief description	:	This series comprises very deep dark yellowish brown light textured soils formed by the tidal deposits. Shells are present in the bottom layers.
Physiography	:	Tamilnadu east coast plain-marine land form-sandy plain.
Drainage	:	Excessively drained.
Taxonomy	:	Sandy, hyperthermic, very deep, Typic Udipsamments.
Typifying pedon	:	Valuthalagudi-sand-fallow.

Profile description :

Horizon	Depth (cm)	Description.
A_{11}	0 - 12	Dark yellowish brown (10 YR 4/4 m); sand; single grained; loose non sticky non plastic; many medium and fine grass roots; common fine distinct black (10YR 2/1) mottlings; few spherical hard iron concretions; very rapid permeability; clear smooth boundary; pH 7.2
A_{12}	12 - 91	Light yellowish brown (10 YR 6/4 m); sand; single grained; loose non sticky non plastic; many medium roots; few fine faint black (10YR 2/1) mottlings; few spherical hard iron concretions; very rapid permeability; clear smooth boundary; pH 7.8
A_{13}	91 - 162	Light yellowish brown (10 YR 6/4 m); sand; single grained; loose non sticky non plastic; shells present; slight effervescence; very rapid permeability; pH 8.0

VALUTHALAGUDI SERIES



VId

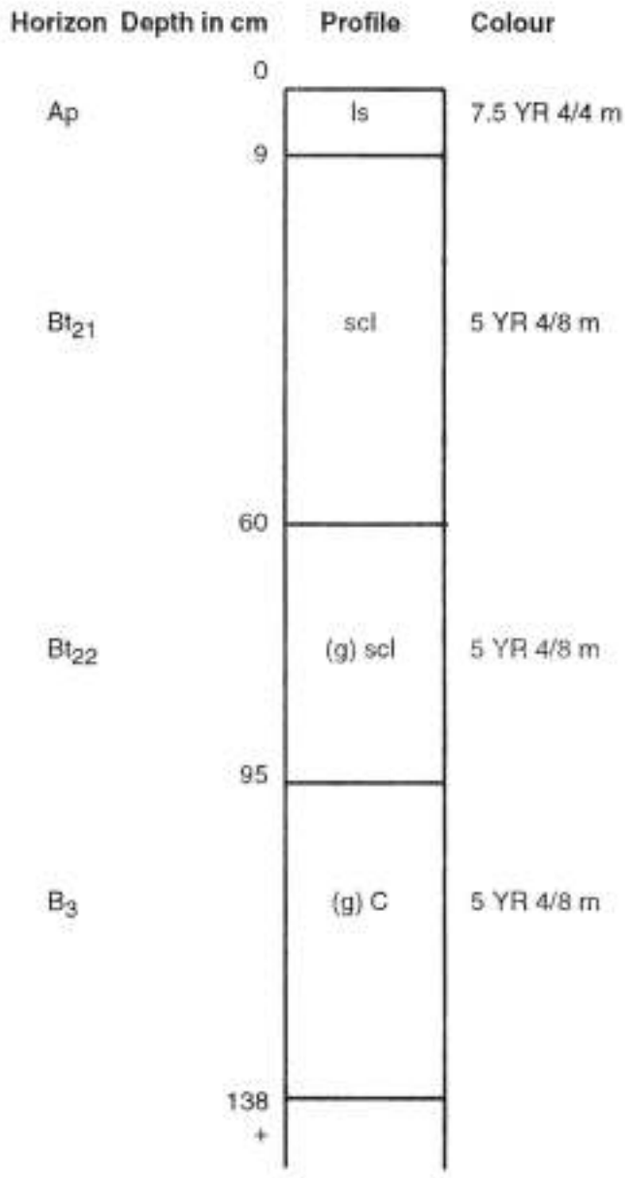
VADAVALAM SOIL SERIES

Brief description	:	Vadavalam soil series consists of dark brown to brown, very deep acidic to neutral soils derived from laterite parent materials.
Physiography	:	Tamilnadu east coast plain-laterite land form.
Drainage	:	Well drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep, Udic Haplustalfs.
Typifying pedon	:	Vadavalam loamy sand-cultivated;

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 9	Dark brown (7.5 YR 4/4 m); loamy sand; fine weak subangular blocky; very friable non sticky and non plastic; many fine roots; rapid permeability; abrupt smooth boundary; pH 6.8
Bt_{21}	9 - 60	Yellowish red (5 YR 4/8 m); sandy clay loam; medium moderate subangular blocky; hard firm sticky and slightly plastic; thin patchy clay films; moderately rapid permeability; quartz pieces (5-10%) present; many very fine roots; clear smooth boundary; pH 6.8
Bt_{22}	60 - 95	Yellowish red (5 YR 4/8 m); gravelly sandy clay loam; medium moderate subangular blocky; slightly hard friable sticky and slightly plastic; thin patchy clay films; quartz gravels (6- 10%) present ; moderately rapid permeability; few very fine roots; clear smooth boundary; pH 6.6
B_3	95-138$^+$	Yellowish red (5 YR 4/8 m); gravelly clay; strong medium to coarse subangular blocky; hard friable sticky and plastic; iron concretions present; quartz gravels present; moderately rapid permeability; pH 6.9

VADAVALAM SERIES



Vdv

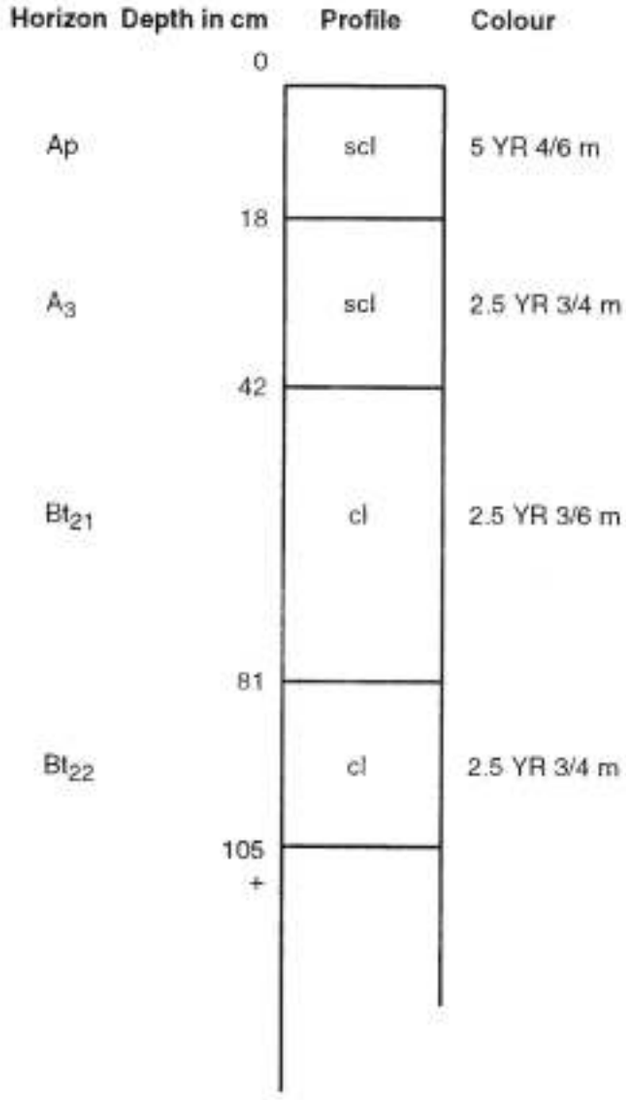
VISALUR SOIL SERIES

Brief description	:	This is very deep, yellowish red to dark red, medium textured soil derived from laterite parent material.
Physiography	:	Tamilnadu east coast plain-laterite land form.
Drainage	:	Well drained soils
Taxonomy	:	Fine loamy, kaolinitic, acidic, hyperthermic, very deep Udic Haplustalf.
Typifying pedon	:	Visalur-sandy clay loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 18	Yellowish red (5 YR 4/6 m); sandy clay loam; medium moderate subangular blocky; slightly hard friable slightly sticky and non plastic; many fine to medium roots; many medium discontinuous tubular random pores; moderately rapid permeability; abrupt smooth boundary; pH 6.3
A_3	18 - 42	Dark reddish brown (2.5 YR 3/4 m); sandy clay loam; medium moderate subangular blocky; slightly hard firm slightly sticky and plastic; few fine roots; many fine discontinuous random tubular pores; moderate permeability; clear smooth boundary; pH 6.4
Bt_{21}	42 - 81	Dark red (2.5 YR 3/6 m); clay loam; medium, moderate subangular blocky; hard firm sticky and slightly plastic; thin patchy clay films; few fine discontinuous random tubular pores; few small hard irregular ferro-manganese concretions; moderately slow permeability; clear smooth boundary; pH 6.7
Bt_{22}	81 - 105^{+}	Dark reddish brown (2.5 YR 3/4 m); clay loam; coarse strong angular blocky; hard firm sticky and plastic; thin patchy clay films; few fine discontinuous tubular pores; many small hard irregular ferro manganese concretions; moderately slow permeability; pH 6.5

VISALUR SERIES



Vsl

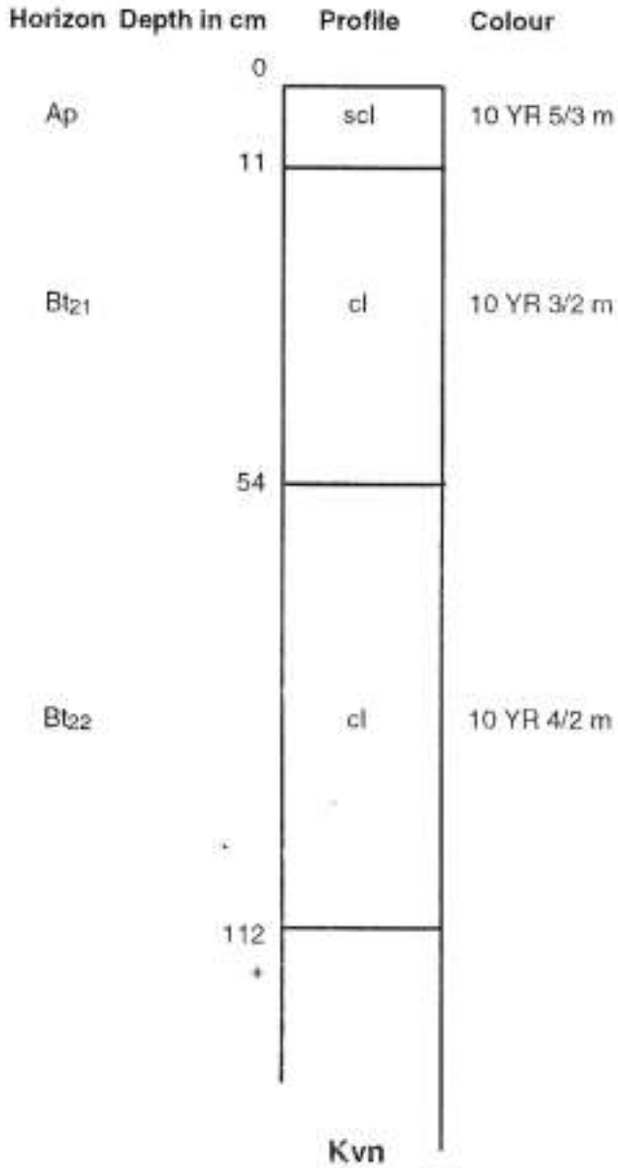
KAVINAD SOIL SERIES

Brief description	:	This consists of very deep, brown to dark brown, calcareous, moderately alkaline, in situ soils derived from laterite over gneiss.
Physiography	:	Tamilnadu east coast plain-laterite land form-low land-tank irrigated.
Drainage	:	Moderate to poorly drained.
Taxonomy	:	Fine loamy, mixed, calcareous, hyperthermic, very deep, Vertic Haplustalfs.
Typifying pedon	:	Kavinad sandy clay loam-cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 11	Brown (10 YR 5/3 m); sandy clay loam; medium moderate subangular blocky; slightly hard firm slightly sticky and slightly plastic; many fine discontinuous random tubular pores; slight effervescence; many fine roots; moderate permeability; clear smooth boundary; pH 8.0
Bt_{21}	11 - 54	Very dark greyish brown (10 YR 3/2 m); clay loam; coarse strong subangular blocky; hard firm sticky and plastic; few fine discontinuous random tubular pores; few very fine roots; effervescence; thin patchy clay films; small few conca; slow permeability; diffused smooth boundary; pH 8.1
Bt_{22}	54 - 112	Dark greyish brown (10 YR 4/2 m); clay loam; coarse strong subangular blocky; hard firm sticky and plastic; few fine discontinuous random tubular pores; few small conca; thick patchy clay films; strong effervescence; slow permeability; pH 8.4

KAVINAD SERIES

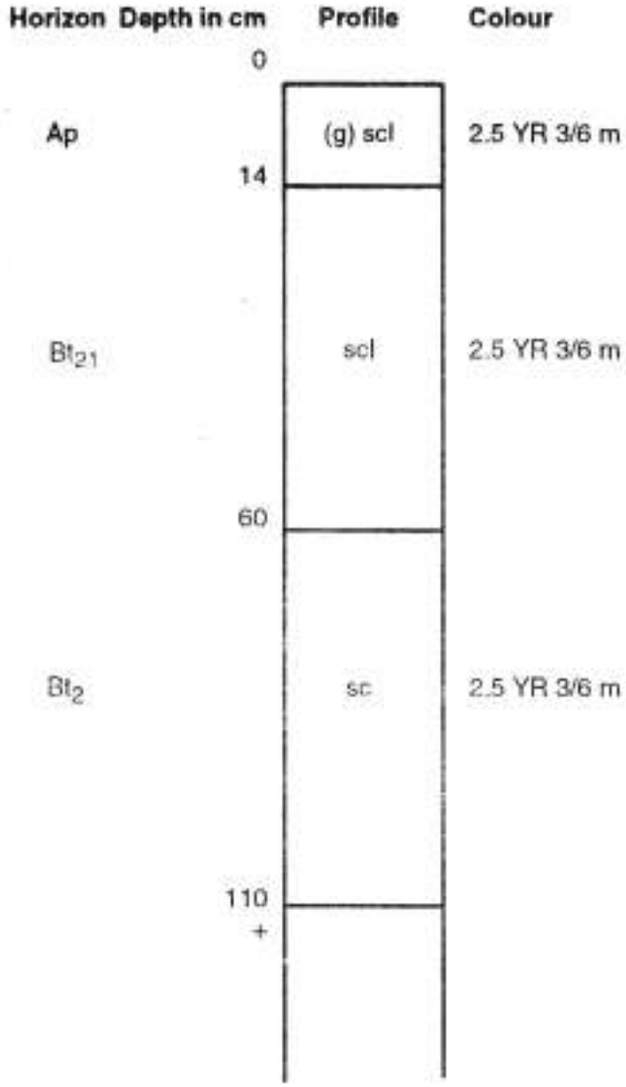


BUDALUR SOIL SERIES

Brief description	:	These are very deep, medium textured, dark red, acidic in situ soils occurring on gently sloping lands derived from weathered gneissic rock.
Physiography	:	Tamilnadu east coast plain-gneissic inland plain.
Drainage	:	Well drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep, Udic Rhodustalfs.
Typifying pedon	:	Budalur-gravelly sandy clay loam - cultivated.

Horizon	Depth(cm)	Description
Ap	0 - 14	Dark red (2.5 YR 3/6 m); gravelly sandy clay loam; medium weak subangular blocky; slightly hard friable non sticky non plastic; many fine to medium discontinuous random tubular pores; many fine roots; moderately rapid permeability; clear smooth boundary; pH 5.6
B_1	14 - 60	Dark red (2.5 YR 3/6 m); sandy clay loam; medium moderate subangular blocky; slightly hard friable slightly sticky and non plastic; many medium discontinuous random tubular pores; few fine roots; many small irregular quartz gravels; moderately slow permeability; clear smooth boundary; pH 5.7
Bt_2	60 - 110^+	Dark red (2.5 YR 3/6m); sandy clay; medium moderate subangular blocky; slightly hard firm slightly sticky and slightly plastic; many medium discontinuous random tubular pores; thin patchy clay films; many small to large irregular quartz gravels; slow permeability. pH 6.0.

BUDALUR SERIES



Bdl

PORAM SOIL SERIES

Brief description	:	Poram series comprises very deep, dark brown, medium textured soils, developed from gneiss occurring on nearly level to very gently sloping land.
Physiography	:	Tamilnadu east coast plain - gneissic inland plain.
Drainage	:	Well drained soils.
Taxonomy	:	Fine loamy, mixed, hyperthermic, very deep, Udic Haplustalfs.
Typifying pedon	:	Poram - clay loam - cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 14	Dark brown (10 YR 4/3 m); clay loam; medium moderate subangular blocky; very hard firm sticky and slightly plastic; moderate permeability; many fine to medium roots; few fine pores; clear smooth boundary; pH 7.2
A_1	14 - 32	Dark yellowish brown (10 YR 4/4 m); sandy loam; medium weak subangular blocky; slightly hard very friable slightly sticky and non plastic; rapid permeability; few fine roots; common fine pores; clear smooth boundary; pH 7.1
Bt_{21}	32- 69	Yellowish brown (10 YR 5/6 m); sandy clay loam; coarse strong subangular blocky; very hard firm sticky and slightly plastic; moderate permeability; very few fine roots; few fine pores; thin patchy clay films; clear smooth boundary; pH 7.4
Bt_{22}	69 - 88	Yellowish brown (10 YR 5/8 m); sandy clay; coarse strong subangular blocky; very hard firm sticky and slightly plastic; moderate permeability; many soft iron concretions; very few fine roots; few fine pores; thin patchy clay films; gradual smooth boundary; pH 7.4
B_3	88 - 115^+	Yellowish brown (10 YR 5/8 m); clay; massive; very hard very firm sticky and plastic; slow permeability; common soft iron concretions; common medium distinct white (10 YR 8/2) kaolin; fine distinct yellowish red (5 YR 5/8) mottlings; pH 7.9.

PORAM SERIES

Horizon	Depth in cm	Profile	Colour
	0		
Ap		cl	10 YR 4/3 m
	14		
A_1		sl	10 YR 4/4 m
	32		
Bt_{21}		scl	10 YR 5/6 m
	69		
Bt_{22}		sc	10 YR 5/8 m
	88		
B_3		C	10 YR 5/8 m
	115 +		

Prm

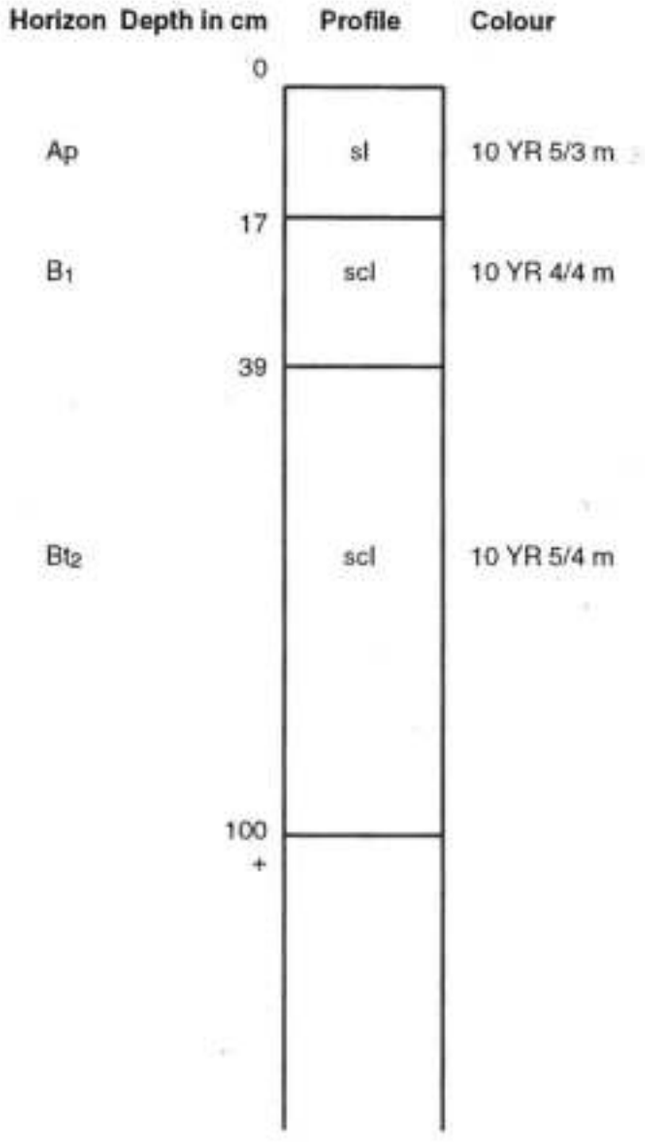
ALATHUR SOIL SERIES

Brief description	:	These are brown to greyish brown, medium to heavy textured laterite soils occurring at the bottom of the catenary sequence.
Physiography	:	Tamilnadu east coast plain - laterite land form - depression of gently sloping land.
Drainage	:	Poorly drained.
Taxonomy	:	Fine loamy, mixed, hyperthermic, calcareous, very deep. Vertic Haplustalfs.
Typifying pedon	:	Alathur sandy loam - cultivated.

Profile description :

Horizon	Depth (cm)	Description
Ap	0 - 17	Brown (10 YR 5/3 m); sandy loam; fine weak subangular blocky; friable non sticky non plastic; many fine roots; moderately rapid permeability; clear smooth boundary; pH 8.1
B_1	17 - 39	Dark yellowish brown (10 YR 4/4 m); sandy clay loam; medium moderate subangular blocky; slightly hard firm slightly sticky and slightly plastic; many fine small conca; slight effervescence; few fine roots; common fine pores; moderately slow permeability; diffused smooth boundary; pH 8.3
Bt_2	39 - 100^+	Yellowish brown (10 YR 5/4 m); sandy clay loam; coarse strong subangular blocky; very hard very firm sticky and slightly plastic; few fine to medium discontinuous tubular pores; thin patchy clay films; many small to large conca; strong effervescence; slow permeability; pH 8.6.

ALATHUR SERIES



Alt

LAND CAPABILITY CLASSIFICATION

PUDUKKOTTAI DISTRICT

Land Capability classification shows the suitability of soils for agricultural uses. The groupings are made according to the soil limitations and the risks of damage when they are used. This classification system evaluates the soils based on the inherent soil characteristics (soil depth, texture, structure, concretions rections and permeability), external land features (slope, erosion, stoniness etc.,) that limits the use of land and environmental factors (rainfall and temperature).

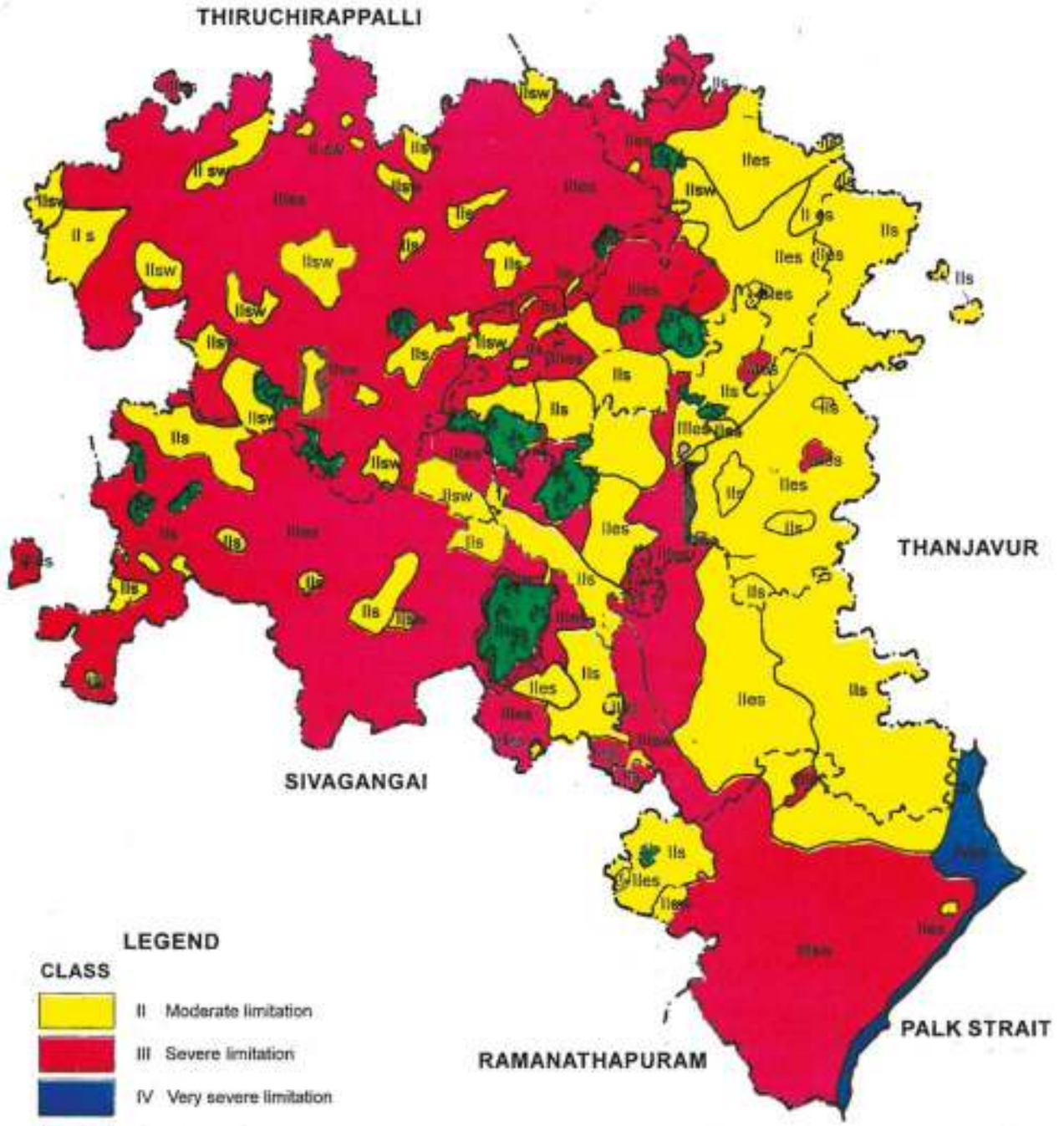
The grouping of soils into capability classes is primarily done on the basis of their capability to produce common cultivated crops and pastures without deterioration over a long period of time.

The capability classes designed by Roman numerals I to VIII. In addition the limitations like topography (t), soils (s), wetness (w), climate (c) and erosion (e) are shown by affixing small letters to the land capability classes. The numerals indicate progressively greater limitations and narrows choices for a practical use.

LAND CAPABILITY CLASSIFICATION FOR PUDUKKOTTAI DISTRICT

Sl. No.	Land Capability Class (LCC)	Soil series
1.	II - Lands that have moderate limitations for sustained use under agriculture	
	IIs - soil limitations.	Madukkur, Poram, Perungalur, Mullur, Vadavalam and Visalur
	IIes - erosion and soil limitations.	Mudukulam, Pattukkottai and Budalur
	IIsw - Soil and wetness associated limitations.	Alathur, Iluppur and Kavinad
2.	III - Lands that have severe limitations for sustained use under agriculture.	
	IIIes - erosion and soil limitations.	Mangalathupatti, vayalogam and Vallam.
	IIIsw - Soil wetness associated limitations.	Avudaiyarkoil.
3.	IV - Lands that have very severe limitations for agriculture and require careful management.	
	IVes - erosion and soil limitations.	Valuthalagudi.

LAND CAPABILITY
PUDUKKOTTAI DISTRICT



LAND IRRIGABILITY CLASSIFICATION

PUDUKKOTTAI DISTRICT

It is concerned with predicting the behaviour of the soils under the greatly altered water regime brought about by the introduction of irrigation. Land features like topography, slope, water - table and drainage and soil factors such as depth, texture, permeability, water holding capacity, salinity alkalinity and erosion status are the main factors considered for working out the irrigability classes. The land irrigability classes are denoted by the numbers from 1 to 6, the limitations progressively increasing with the increase in number.

Land irrigability classes 1, 2, 3, 4, 5 and 6.

Classes 1 to 4 - Irrigable land with limitations increasing progressively for sustained use under irrigation.

Class 5 - Unsuitable temporarily for irrigation.

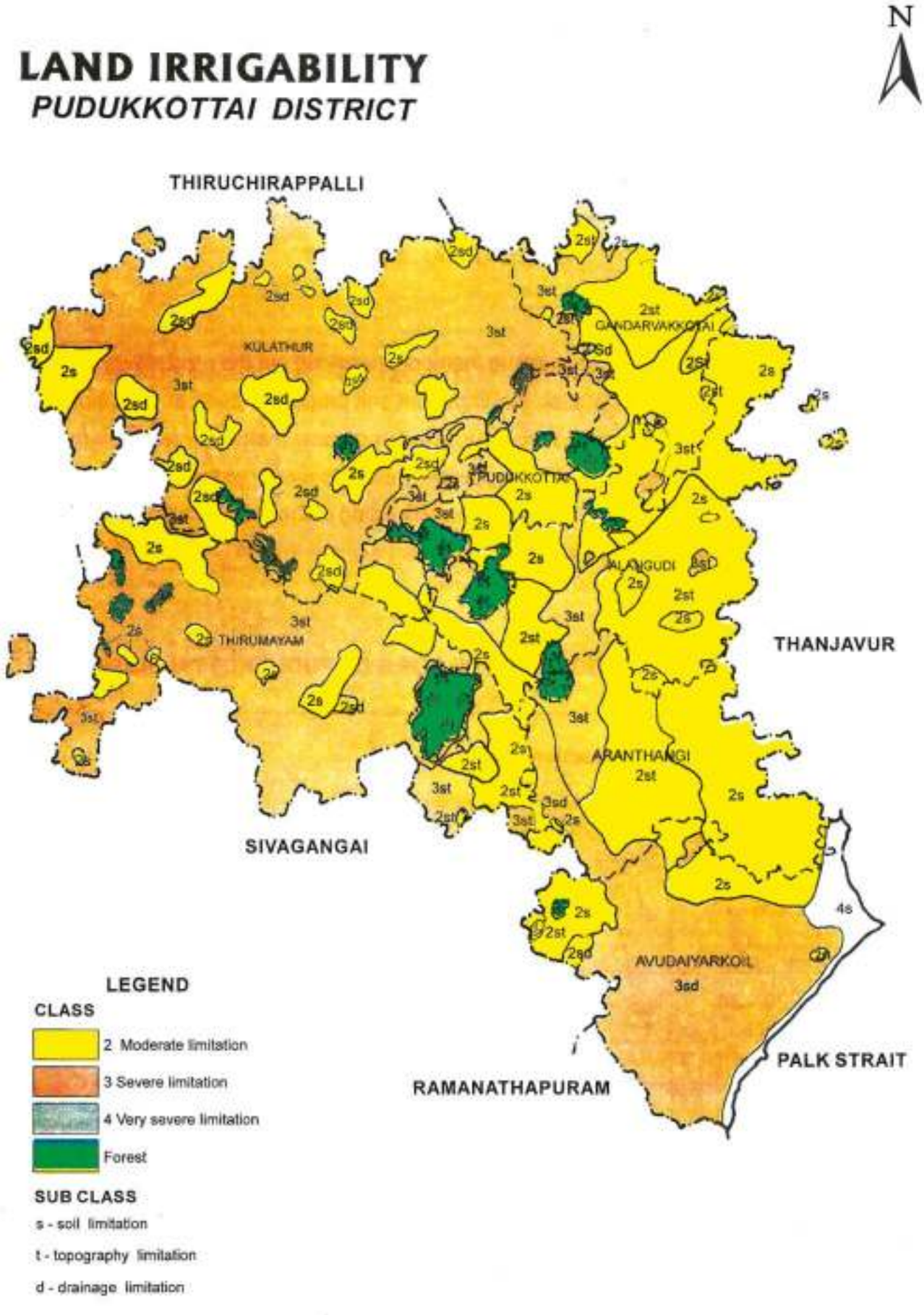
Class 6 - Not suitable for irrigation.

The numbers are affixed with small letter showing the limitations like topography (t), soil (s) and drainage (d).

LAND IRRIGABILITY CLASSIFICATION FOR PUDUKKOTTAI DISTRICT

Sl.No.	Land Irrigability Class (LIC)	Soil Series
1.	2 - Lands that have moderate soil limitations for sustained use under irrigations.	
	2s - soil limitations.	Madukkur, Mullur, Perungalur, Vadavalam, Visalur and Poram.
	2sd - soil and drainage limitations.	Alathur, Iluppur and Kavinad.
	2st - soil and drainage limitations.	Mudukulam, Pattukottai and Budalur.
2.	3 - Lands that have severe soil limitations for sustained use under irrigation.	
	3 st - soil and topographical limitations.	Vayalogam, Vallam and Mangalathupatti.
	3 sd - soil and drainage limitation.	Avudaiyarkoil.
3.	4 - Lands that have very severe limitations for sustained use under irrigation.	
	4s - soil limitations.	Valuthalagudi.

LAND IRRIGABILITY
PUDUKKOTTAI DISTRICT



SOIL PRODUCTIVITY

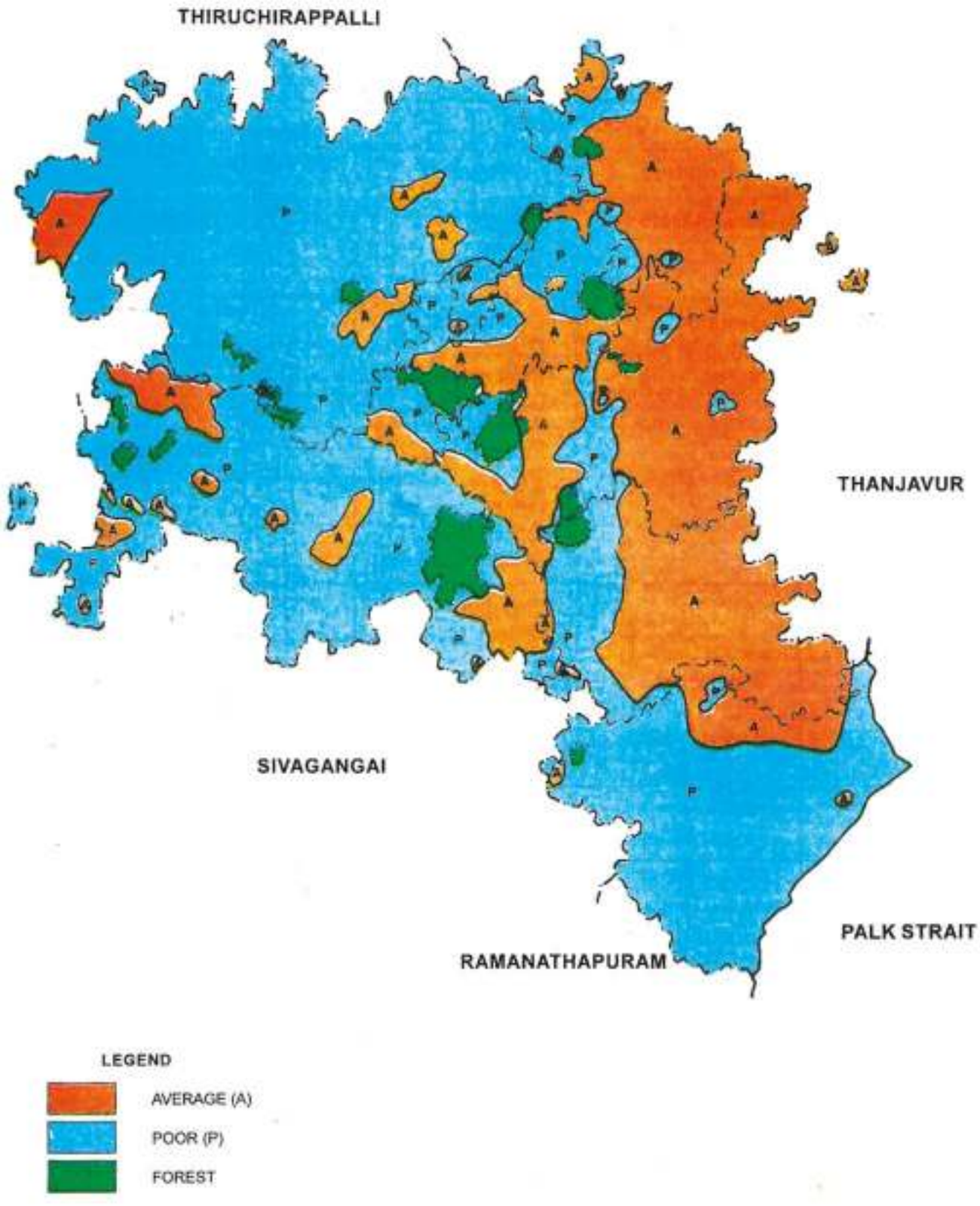
PUDUKKOTTAI DISTRICT

Riquier et al. (1970) proposed the method for working out the productivity rating of the soils taking into consideration the important soil properties such as the depth, the base saturation, the texture and the structure, the organic matter content, the mineral reserve and the soil moisture. Five productivity classes were recognized by him. This method was adopted to workout the productivity rating of the soils of the district and the measures required to increase the productivity.

PRODUCTIVITY RATINGS FOR THE SOILS OF PUDUKKOTTAI DISTRICT

Sl. No.	Ratings	Productivity Ratings	Soil Series
1.	0 - 7	Extremely Poor (EP)	—
2.	8 - 19	Poor (P)	Valuthalagudi, Mangalathupatti, Avudaiyarkoil, Vallam, Alathur, Vayalogam and Ilupur.
3.	20 - 34	Average (A)	Mudukulam, Pattukkottai, Madukkur, Poram, Perungalur, Kavinad, Budalur, Mullur, Vadavalam and Visalur.
4	35-64	Good (G)	—
5.	65 - 100	Excellent (E)	—

SOIL PRODUCTIVITY
PUDUKKOTTAI DISTRICT

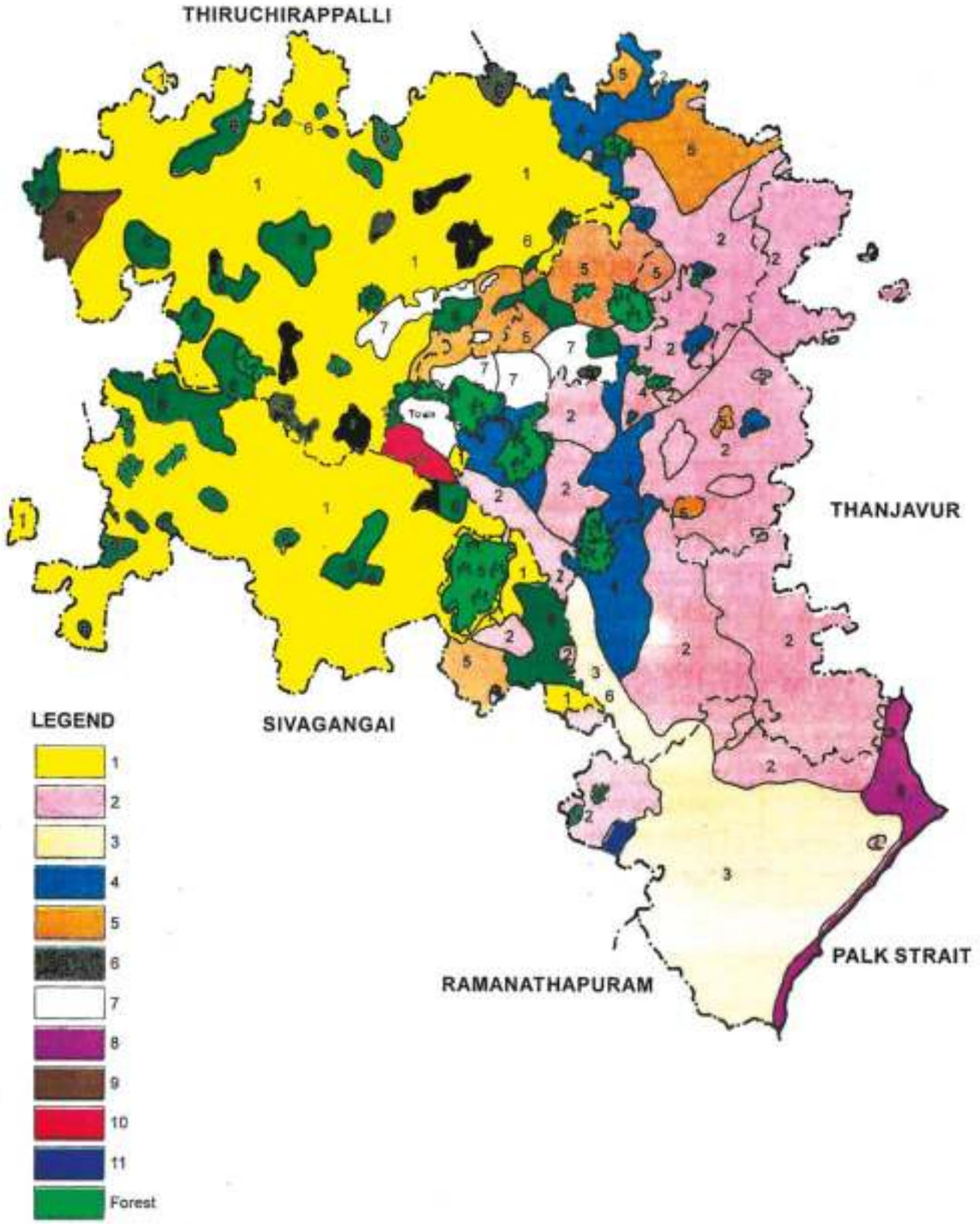


CROPS GROWN

PUDUKKOTTAI DISTRICT

Sl.No.	Crops Grown		Map symbol	Soil series
	Irrigated	Rainfed		
1.	Rice, Millets	Pulses, Millets Fruit trees	1	Vayalogam
2.	Groundnut, Gingelly, Rice Millets	Groundnut, Coconut, Fruit trees, Finger Millet	2	Pattukkottai, Madukkur
3.	Rice Finger Millets	Finger Millet, Varagu, Cotton, Gingelly, Groundnut, Millets, Cashew	3	Avudaiyarkoil
4.	—	Groundnut, Millets, Cashew	4	Vallam
5.	Groundnut, Rice Finger Millets	Groundnut, Millets, Fruit trees, Red gram	5	Mangalathupatti, Mudukulam, Budalur
6.	Rice Finger Millets	Pulses, Millets	6	Iluppur, Perungulam
7.	Finger Millet, Peare Millet, Groundnut, Maize	Groundnut, Red gram, Millets	7	Mullur, Vadavalam
8.	Rice	Coconut	8	Valuthalagudi
9.	Rice Millets	Rice Millets	9	Visalur
10.	Rice Millets, Sugarcane	Rice Millets	10	Kavinad
11.	Rice Millets	—	11	Porum, Alathur

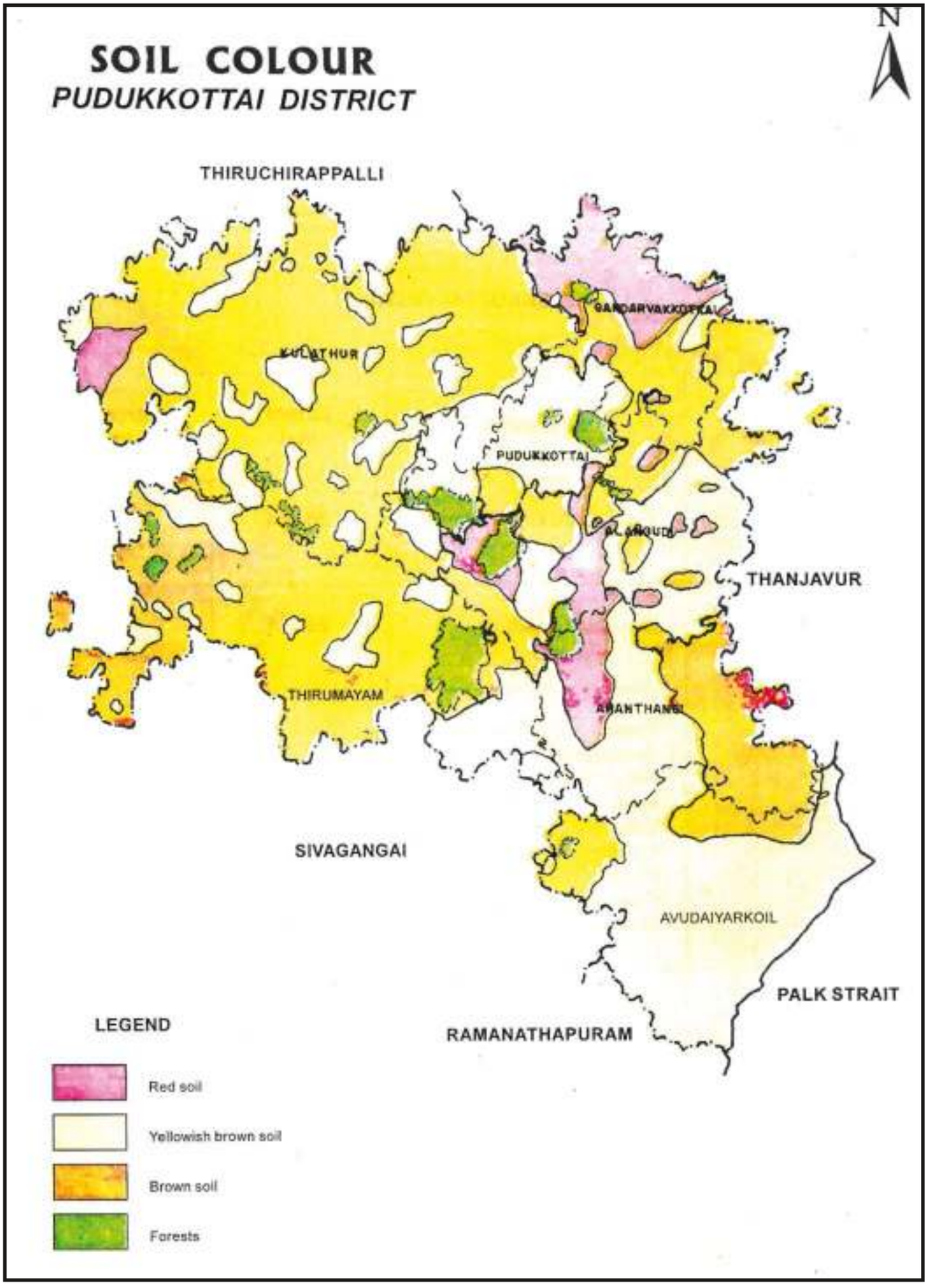
CROPS GROWN
PUDUKKOTTAI DISTRICT



SOIL COLOUR

PUDUKKOTTAI DISTRICT

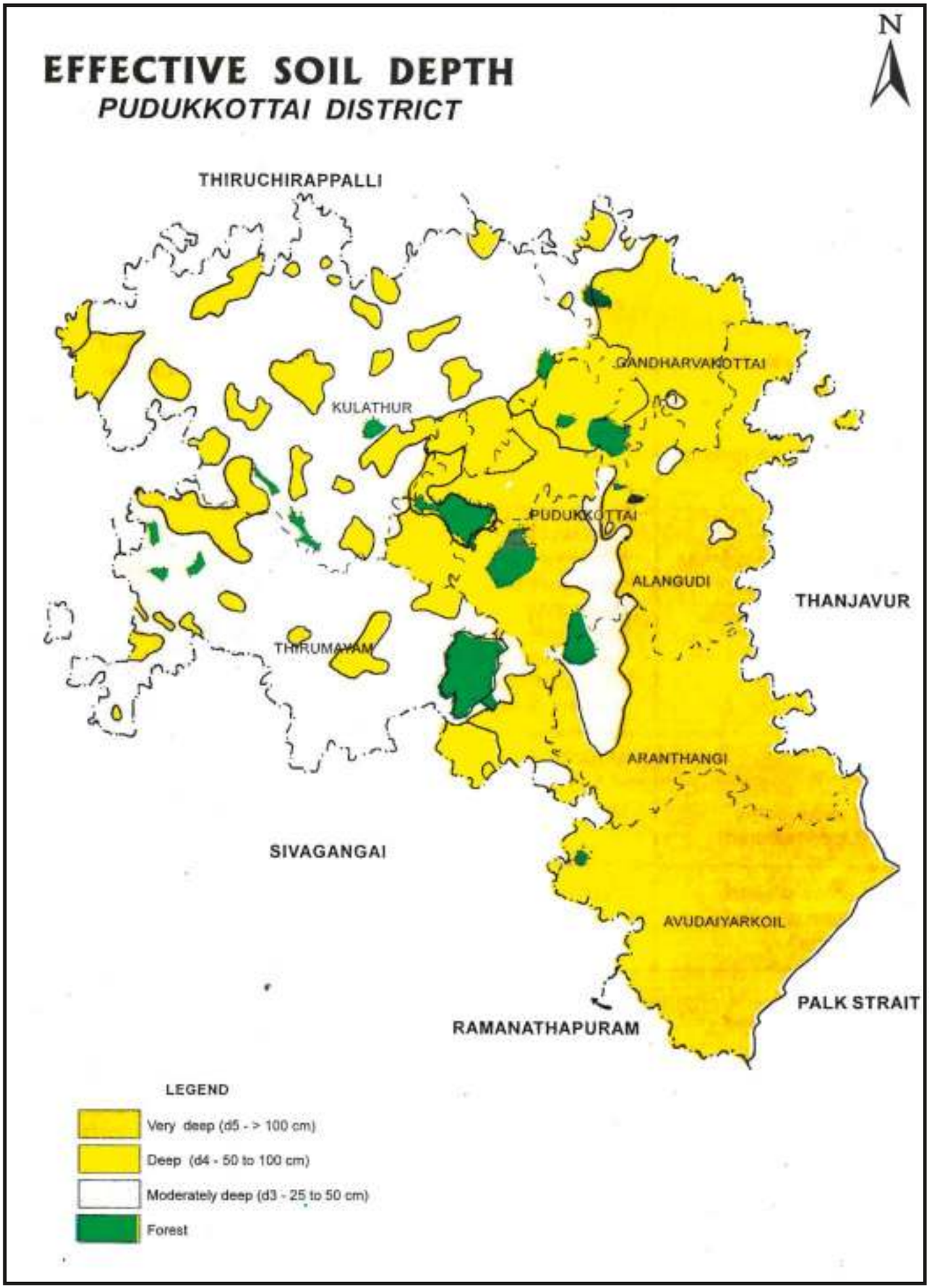
Soil Colour	Soil series	Extent (ha)	Percent to total
Red	Vallam, Mudukulam, Visalur and Budalur	41,410	9.10
Yellowish brown	Pudukkottai, Avudaiyarkoil, Mangalathupatti, Iluppur, Perungalur, Mullur and Valuthalagudi	1,79,441	39.30
Brown	Vayalogam, Madukkur, Vadavalam, Kavinad, Poram and Alathur	2,35,598	51.60
	Total	4,56,449	100.00


SOIL COLOUR
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
GANDARVAKKOTTAI
KULATHUR
PUDUKKOTTAI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
Red soil
Yellowish brown soil
Brown soil
Forests

EFFECTIVE SOIL DEPTH

PUDUKKOTTAI DISTRICT

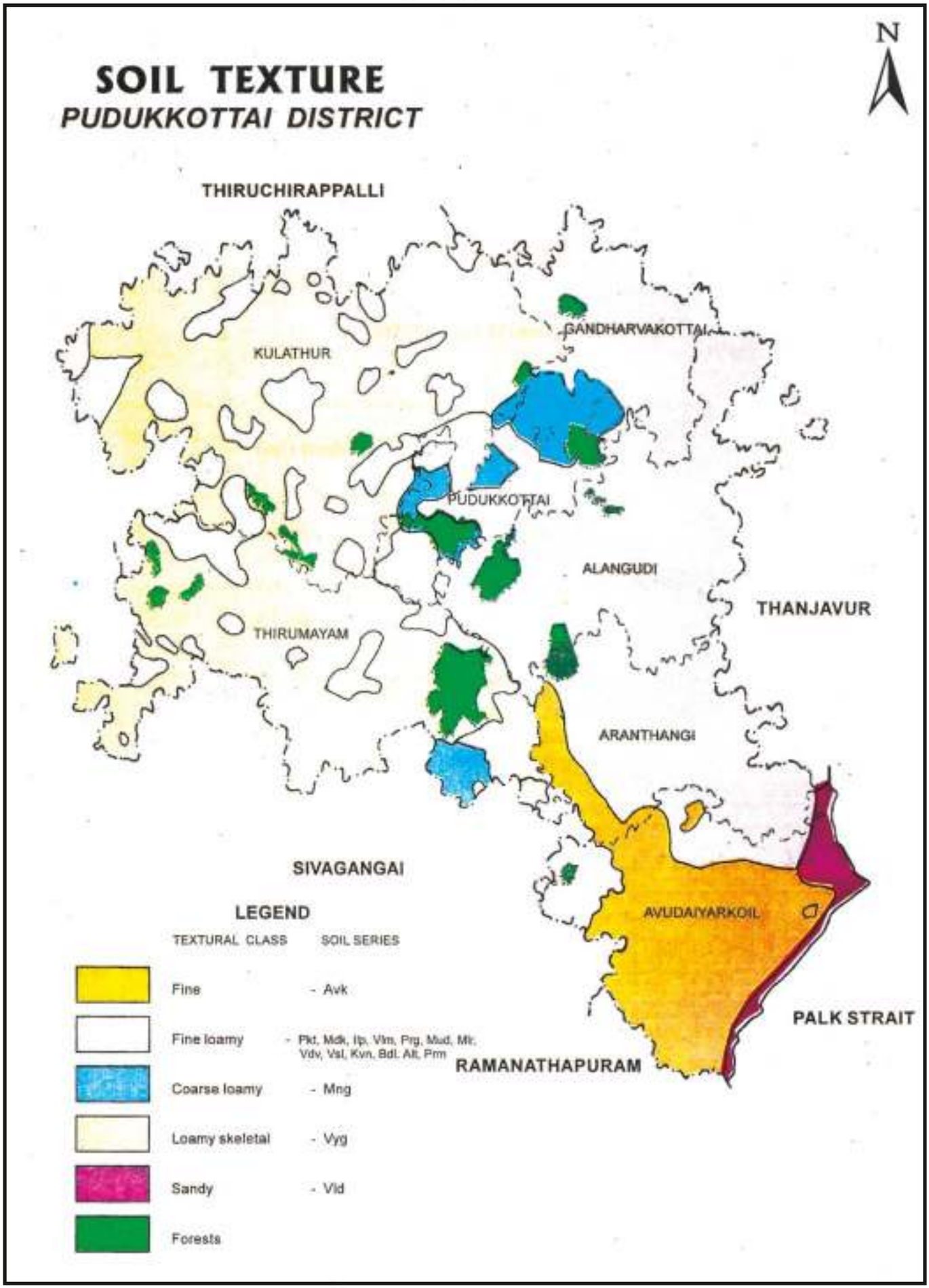
Effective soil depth	Soil series	Extent (ha)	Percent to total
Moderately deep (d3 - 25 to 50 cm)	Vayalogam and Vallam	1,96,094	42.96
Deep (d4 - 50 to 100 cm)	Mangalathupatti	25,551	5.60
Very deep (d5 > 100 cm)	Pattukkottai, Madukkur Avudaiyarkoil, Illuppur, Perungalur, Mudukulam, Mullur, Valuthalagudi, Vadavalam, Visalur, Kavinad, Budalur, Porum, Alathur, Perungalur - Iluppur association	2,34,804	51.44
	Total	4,56,449	100.00


EFFECTIVE SOIL DEPTH
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
GANDHARVAKOTTAI
KULATHUR
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
Very deep (d5 - > 100 cm)
Deep (d4 - 50 to 100 cm)
Moderately deep (d3 - 25 to 50 cm)
Forest

SOIL TEXTURE

PUDUKKOTTAI DISTRICT

Textural class	Soil series	Extent (ha)	Percent to total
Fine (Soils with high clay content)	Avudaiyar koil	49,728	10.89
Fine loamy (Soils with moderate clay content)	Pattukkottai, Madukkur, Iluppur, Vallam, Perungalur, Mudukulam, Mullur, Vadavalam, Visalur, Kavinad, Poram, Budalur, Alathur, Perungalur, Iluppur association	2,06,496	45.24
Coarse loamy (Open textured)	Mangalathupatti	25,551	5.60
Loamy skeletal (Open textured - skeletal)	Vayalogam	1,69,055	37.04
Sandy (Open textured - skeletal)	Valuthalagudi	5,619	1.23
	Total	4,56,449	100.00

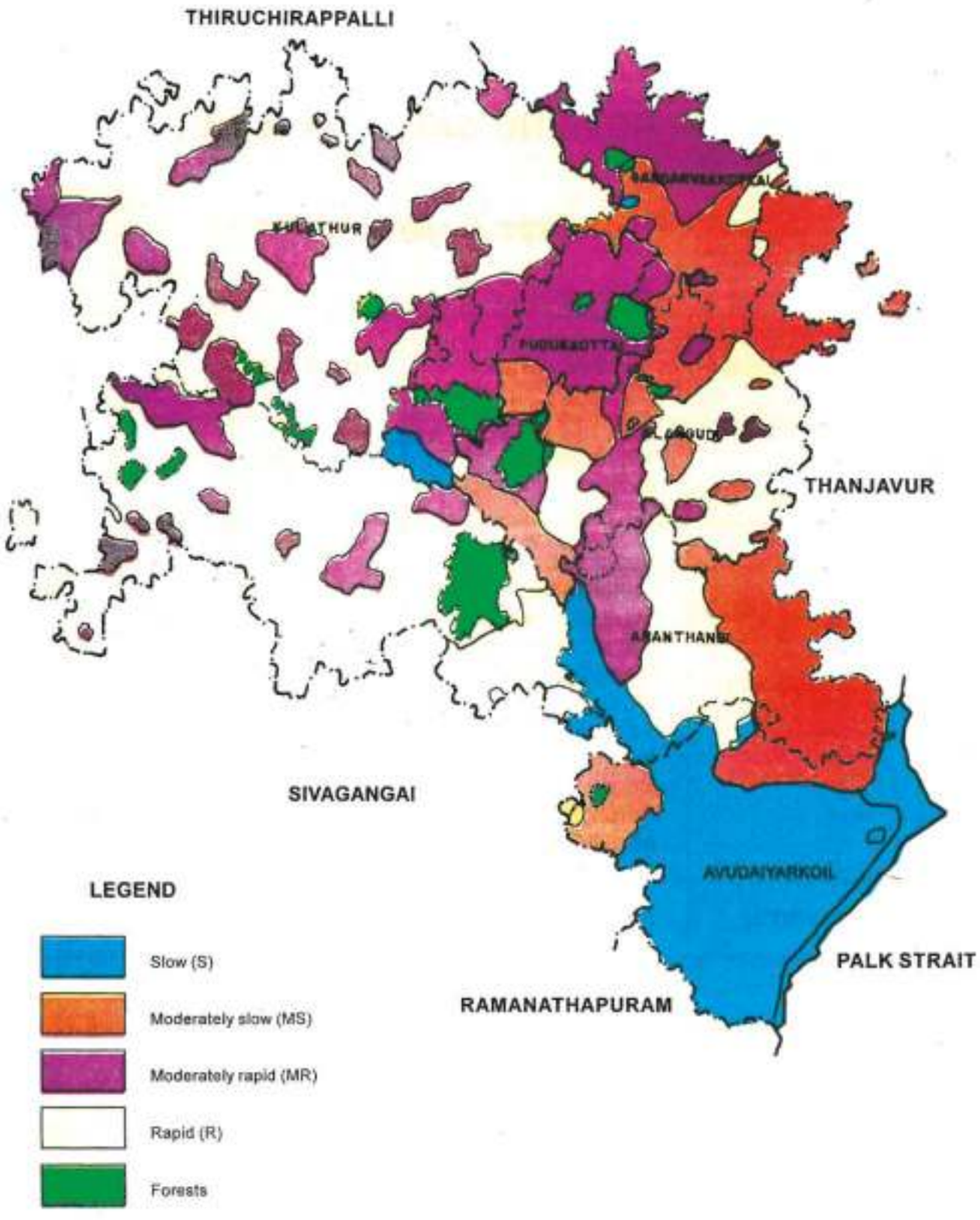

SOIL TEXTURE
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
KULATHUR
GANDHARVAKOTTAI
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
TEXTURAL CLASS
SOIL SERIES
Fine - Avk
Fine loamy - Pkt, Mdk, Ilp, Vlm, Prg, Mud, Mlr, Vdv, Vsl, Kvn, Bdl, Alt, Prm
Coarse loamy - Mng
Loamy skeletal - Vyg
Sandy - Vld
Forests

PERMEABILITY

PUDUKKOTTAI DISTRICT

Class	Soil series	Extent (ha)	Percent to total
Slow (S)	Avudaiyarkoil Kavinad and Alathur	52,042	11.40
Moderately slow (MS)	Madukkur Poram	60,715	13.30
Moderately Rapid (MR)	Vallam, Iluppur, Perungalur, Mangalathupatti, Visalur, Budalur, Mudukulam, Mullur and Perungalur - Iluppur association	1,10.954	24.30
Rapid (R)	Vayalogam, Pattukkottai, Valuthalagudi and Vadavalam	2,32,738	51.00
	Total	4,56,449	100.00

PERMEABLITY
PUDUKKOTTAI DISTRICT



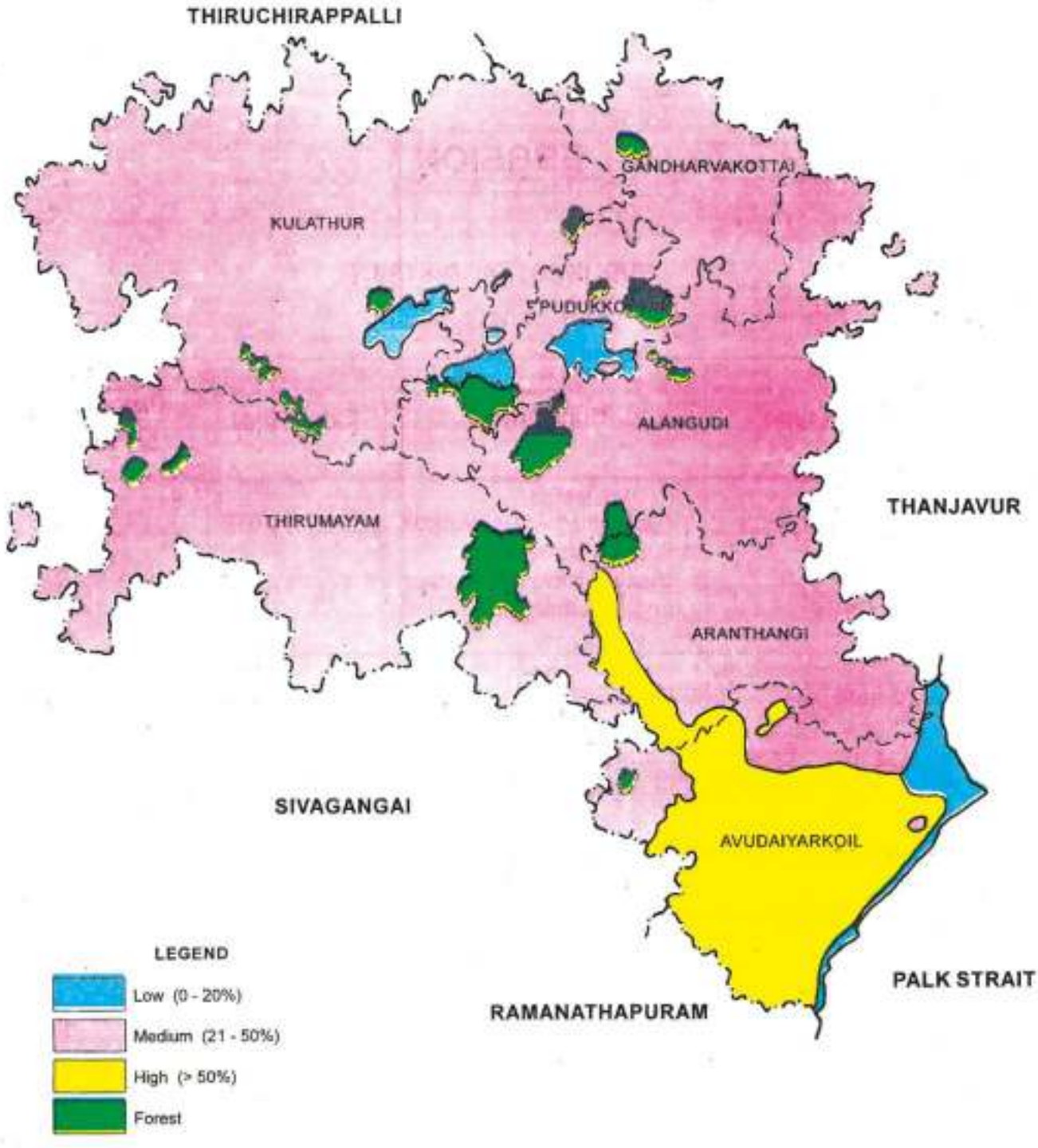
WATER HOLDING CAPACITY (WHC)

PUDUKKOTTAI DISTRICT

WHC Category	Soil series	Extent (ha)	Percent to total
Low (0 - 20%)	Valuthalagudi Mullur	11,525	2.52
Medium (21 - 50%)	Vayalogam, Pattukkottai, Madukkur, Vallam, Iluppur, Perungalur, Mangalathupatti, Mudukulam, Vadavalam, Visalur, Kavinad, Budalur, Poram, Alathur and Perungalur - Iluppur association.	3,95,196	86.59
High (> 50%)	Avudaiyarkoil	49,728	10.89
	Total	4,56,449	100.00

WATER HOLDING CAPACITY

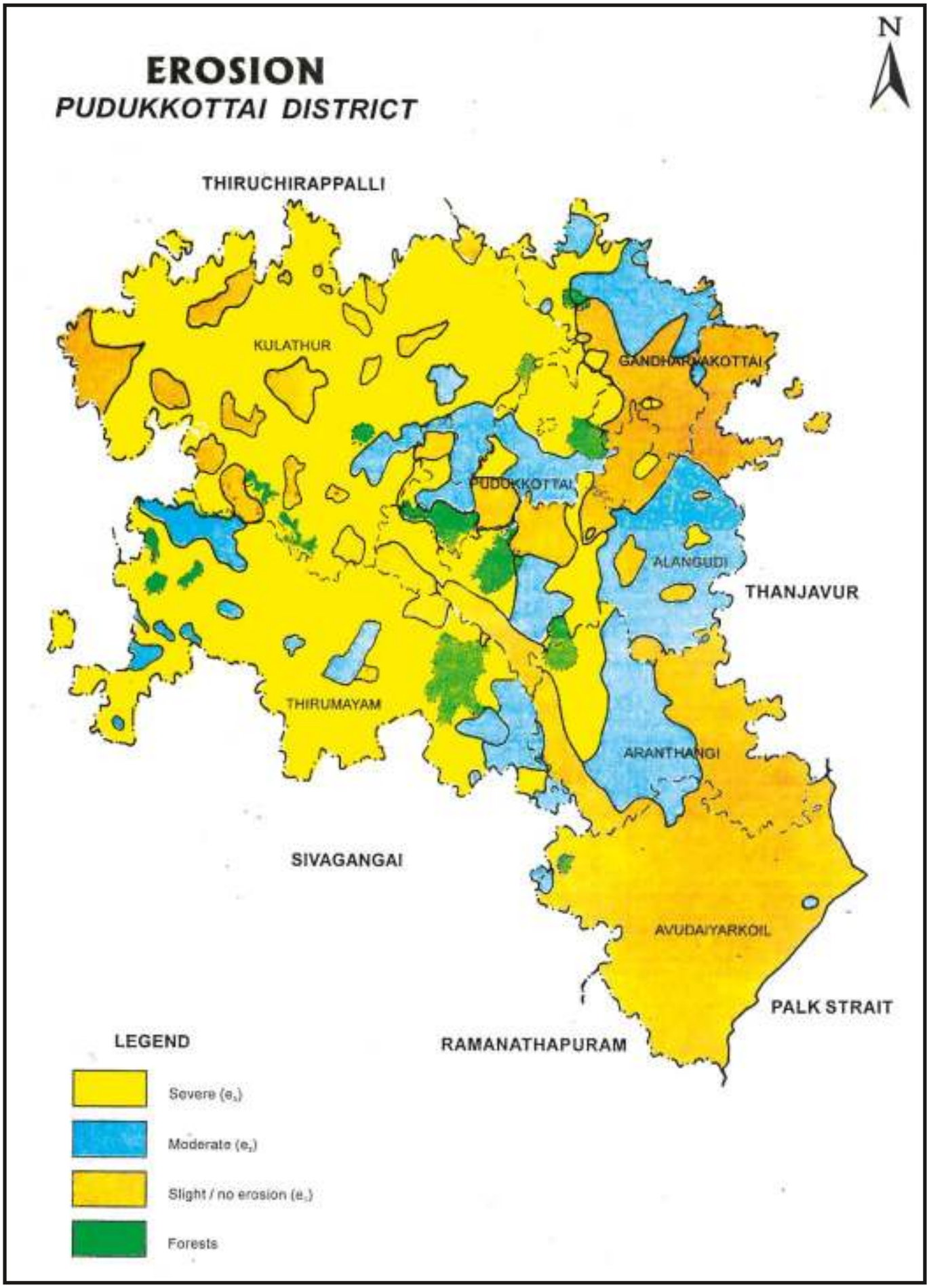
PUDUKKOTTAI DISTRICT



EROSION

PUDUKKOTTAI DISTRICT

Erosion type	Soil series	Extent (ha)	Percent to total
Slight / no erosion (e_1)	Madukkur, Avudaiyarkoil, Iluppur, Vadavalam, Visalur, Kavinad, Alathur and Valuthalagudi	1,44,512	31.60
Moderate (e_2)	Pattukkottai, Perungalur, Mudukulam, Mullur, Poram and Budalur	90,322	19.80
Severe (e_3)	Vayalogam, Vallam and Mangalathupatti	2,21,615	48.60
	Total	4,56,449	100.00

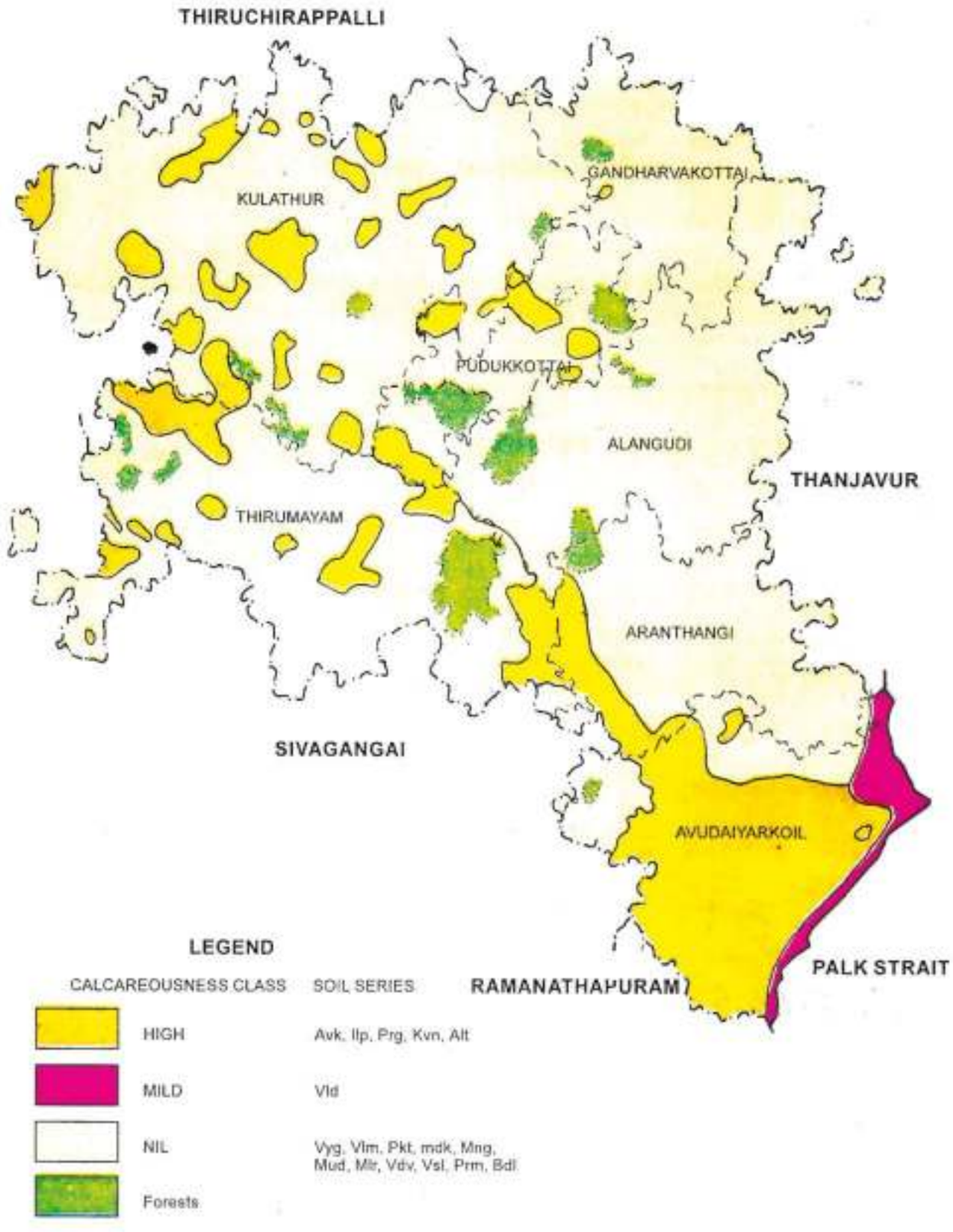

EROSION
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
KULATHUR
GANDHARVAKOTTAI
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
Severe (e3)
Moderate (e2)
Slight / no erosion (e1)
Forests

CALCAREOUSNESS

PUDUKKOTTAI DISTRICT

Calcareousness class	Soil series	Extent (ha)	Percent to total
Non - Calcareous	Vayalogam, Pattukkottai, Madukkur, Vallam, Mangalathupatti, Mudukulam, Mullur, Vadavalam, Visalur, Budalur and Poram	3,60,701	79.02
Mild	Valuthalagudi	5,619	1.24
Staing	Avudaiyarkoil, Ilupur, Perungalur, Kavinad, Alathur, Perungalur - Ilupur associasion	90,129	19.74
	Totai	4.56,449	100.00

CALCAREOUSNESS
PUDUKKOTTAI DISTRICT

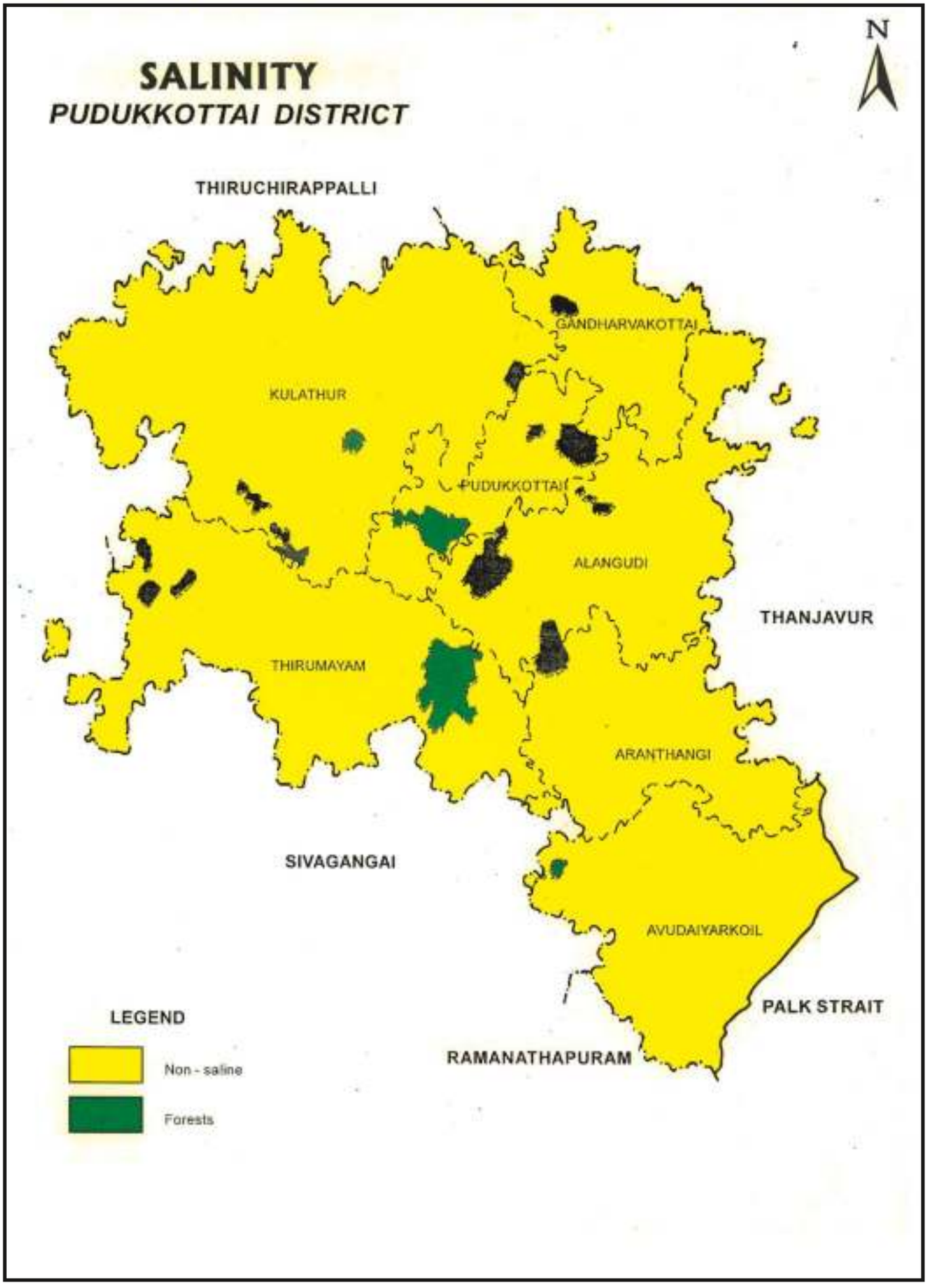


SALINITY

PUDUKKOTTAI DISTRICT

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

Category	Soil series	Extent (ha)	Percent to total
Saline	—	—	—
Non - Saline	Vayalogam, Pattukkottai, Madukkur, Avudaiyarkoil, Vallam, Mangalathupatti, Iluppur, Perungalur, Mudukulam, Muilur, Valuthalagudi, Vadavalam, Visalur, Kavinad, Budalur, Poram, Alathur, Perungalur, Iluppur association	4,56,449	100
	Total	4,56,449	100

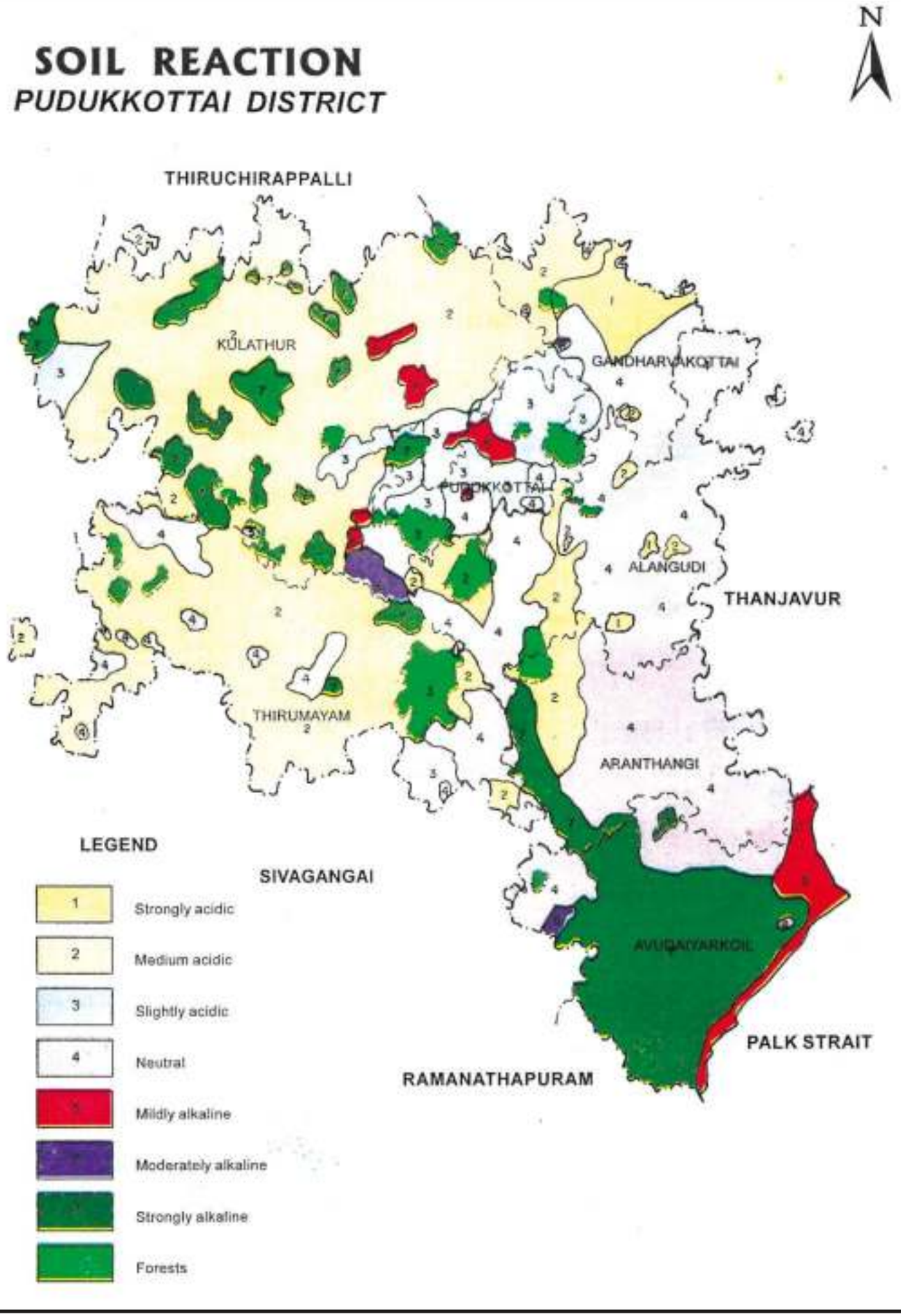

SALINITY
PUDUKKOTTAI DISTRICT
N
THIRUCHIRAPPALLI
GANDHARVAKOTTAI
KULATHUR
PUDUKKOTTAI
ALANGUDI
THANJAVUR
THIRUMAYAM
ARANTHANGI
SIVAGANGAI
AVUDAIYARKOIL
PALK STRAIT
RAMANATHAPURAM
LEGEND
Non - saline
Forests

SOIL REACTION (pH)

PUDUKKOTTAI DISTRICT

Category	Soil series	Extent (ha)	Percent to total
Strongly acidic (5.1 - 5.5)	Mudukulam	9,549	2.09
Medium acidic (5.6 - 6.0)	Vayalogam, Vallam, Budalur	1,97,498	43.27
Slightly acidic (6.1 - 6.5)	Mangalathupatti, Mullur and Visalur	34,875	7.64
Neutral (6.6 - 7.5)	Pattukkottai, Madukkur, Perungalur and Vadavalam	1,36,868	29.99
Mildly alkaline (7.6 - 8.0)	Valuthalagudi, Poram and Perungalur - Iluppur association	6,195	1.35
Moderately alkaline (8.1 - 8.5)	Alathur and Kavinad	2,314	0.51
Stongly alkaline (8.6 - 9.0)	Avudaiyarkoil and Iluppur	69,150	15.15
	Total	4,56,449	100.00

SOIL REACTION
PUDUKKOTTAI DISTRICT



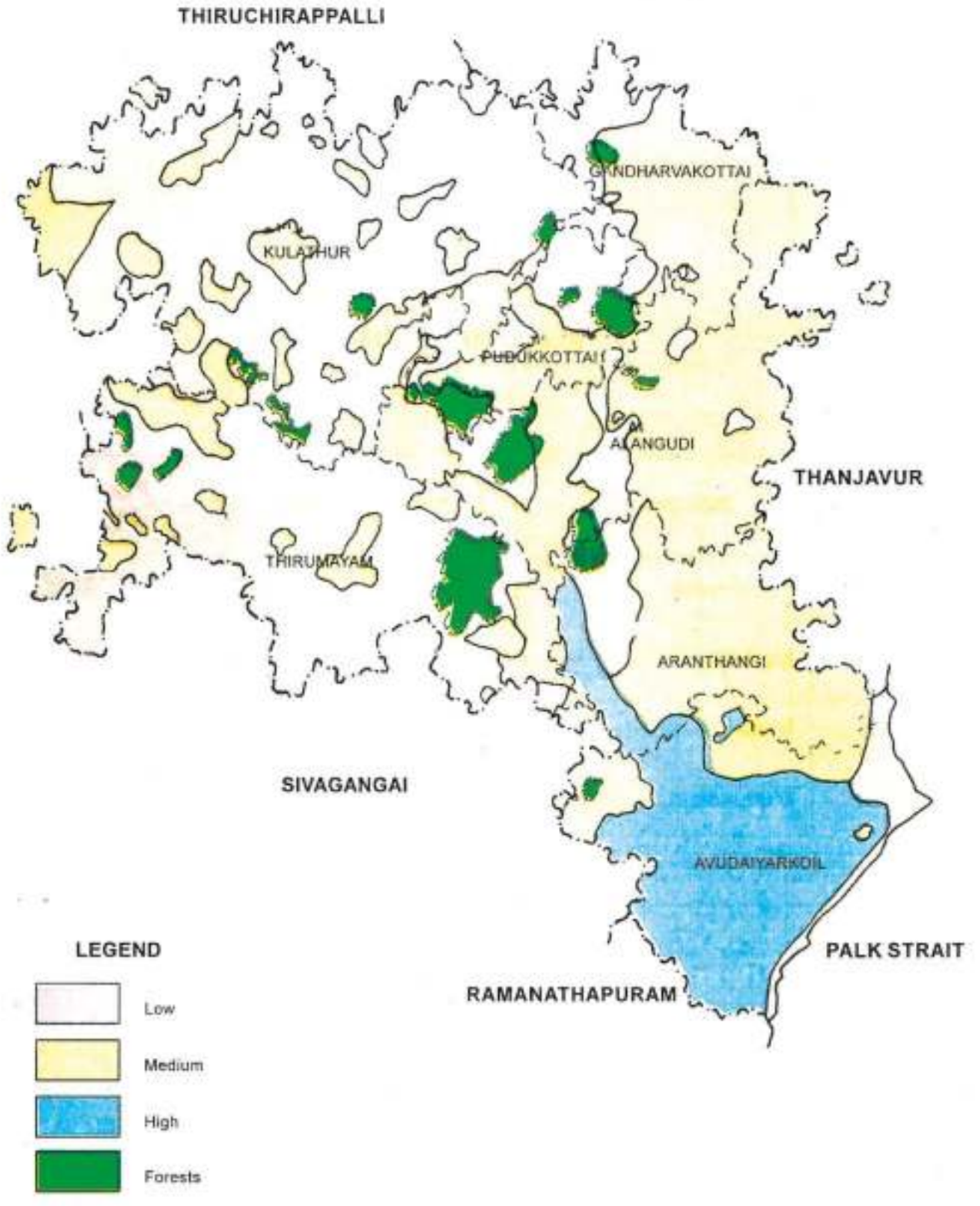
CATION EXCHANGE CAPACITY (CEC)

PUDUKKOTTAI DISTRICT

CEC Category	Soil series	Extent (ha)	Percent to total
Low (0 - 10 m.eq / 100g)	Vayalogam, Vallam, Budalur, Valuthalagudi, and Mangalathupatti	2,28,668	50.1[illegible]
Medium (10 - 25 m.eq / 100g)	Pattukkottai, Madukkur, Perungalur, Iluppur, Mullur, Vadavalam, Visalur, Kavinad, Mudukulam, Poram Perungalur and Iluppur	1,77,915	38.98
High (> 25 m.eq / 100g)	Alathur, Avudaiyarkoil	49,866	10.92
	Total	4,56,449	100.00

CATION EXCHANGE CAPACITY

PUDUKKOTTAI DISTRICT

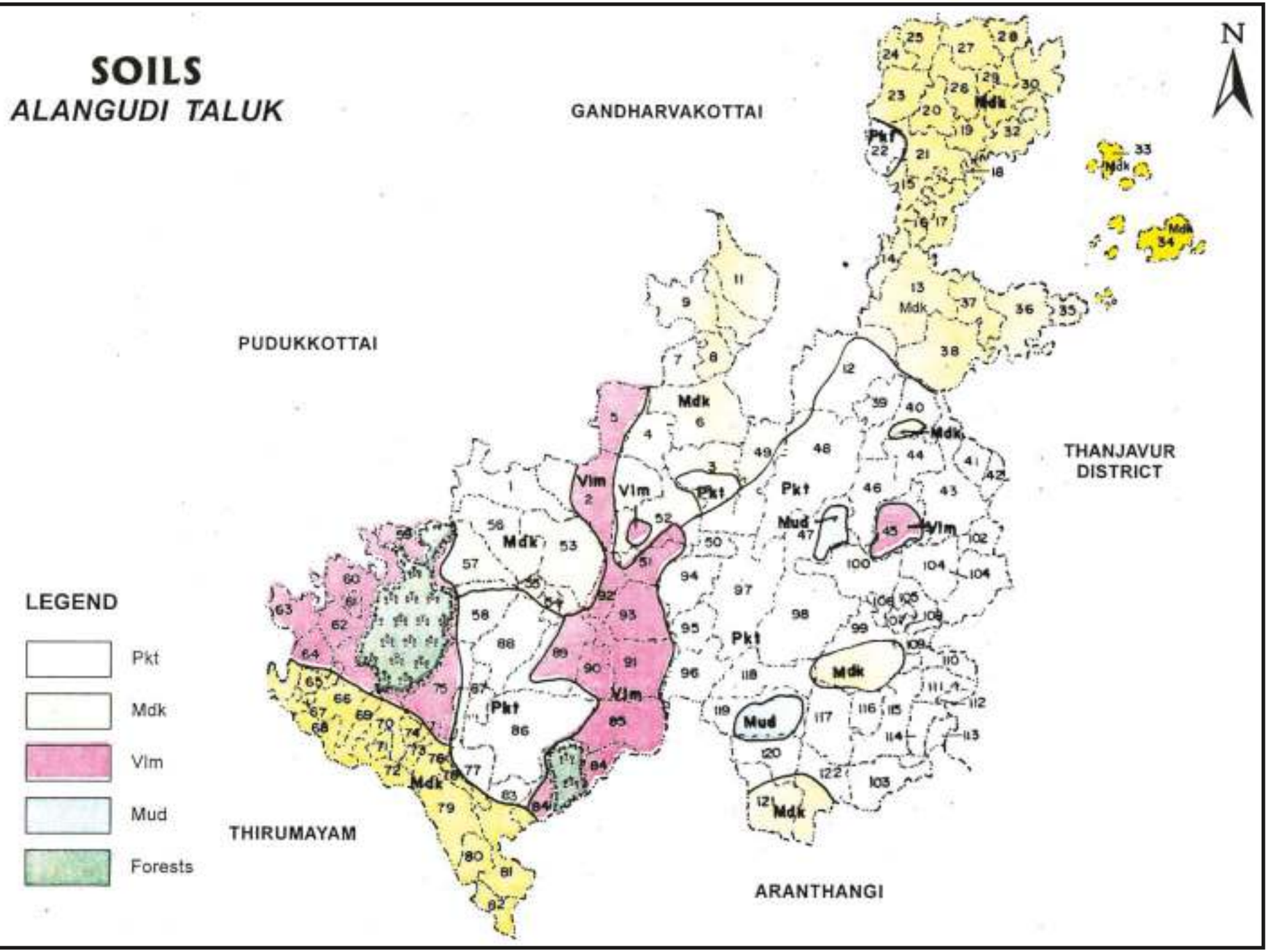


SOILS

ALANGUDI TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Pattukkottai	Pkt	30,991.00	48.7
2.	Madukkur	Mdk	20,699.00	32.5
3.	Vallam	Vlm	11,009.00	17.3
4.	Mudukulam	Mud	901.00	1.5
		Total	63,600.00	100.00

SOILS
ALANGUDI TALUK



REVENUE VILLAGE WISE SOIL DISTRIBUTION

ALANGUDI TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	7	Adiranviduthi	Mdk 100
2.	96	Alangadu	Pkt 100
3.	92	Alangudi	Vlm 80, Mdk 20
4.	14	Ambukovil	Mdk 100
5.	106	Annavayal - I	Pkt 100
6.	108	Annavayal - II	Pkt 100
7.	105	Andavarayapuram	Pkt 100
8.	85	Arayapatti	Vlm 100
9.	10	Ayipatti	Mdk 100
10.	54	Ayipatti	Mdk 100
11.	22	Bhanduvakkottai	Pkt 100
12.	18	Chinnankoneviduthi	Mdk 100
13.	75	Dakshinapuram	Vlm 75, Pkt 20, Mdk 5
14.	42	Echanviduthi	Pkt 100
15.	39	Elakkaduviduthi	Pkt 100
16.	72	Gudalur	Mdk 100
17.	61	Immanampatti	Vlm 100
18.	82	Isugapatti	Mdk 100
19.	64	Kaikurichi	Vlm 95, Mdk 5
20.	1	Kalapam	Mdk 100
21.	33	Kalyaranviduthi	Mdk 100
22.	29	Kallumadai	Mdk 100
23.	71	Kalangudi	Mdk 100
24.	93	Kallalangudi	Vlm 95, Pkt 5
25.	49	Kanakkankadu	Mdk 100
26.	74	Kanayapatti	Mdk 95, Vlm 5

(1)	(2)	(3)	(4)
27.	111	Karambakkadu	Pkt 100
28.	112	Karambakkadu	Pkt 100
29.	38	Karamakkudi	Mdk 100
30.	17	Karmabaviduthi	Mdk 100
31.	11	Karupattipatti	Mdk 100
32.	41	Kurmbivayal	Pkt 100
33.	76	Kathakkurichi	Mdk 55, Pkt 40, Vlm 5
34.	34	Kattathi	Mdk 100
35.	59	Kayampatti	Vlm 100
36.	115	Keeramangalam North	Pkt 100
37.	103	Keeramangalam South	Pkt 100
38.	43	Kilatheru	Pkt 100
39.	27	Kilangudi	Mdk 100
40.	84	Kilaiyur	Mdk 50, Vlm 50
41.	50	Kilappattirasimangalam	Mdk 100
42.	97	Kilathur	Mdk 100
43.	25	Kirathur	Mdk 100
44.	118	Kottamangalam North	Pkt 100
45.	119	Kottamangalam South	Pkt 45, Mud 55,
46.	81	Kothamangalam	Mdk 100
47.	58	Kothakkottai	Pkt 80, Mdk 10, Vlm 10
48.	33	Kovilur	Pkt 100
49.	55	Kovilurdevasthanam	Mdk 100
50.	56	Kualandaivinayagarkottai	Mdk 100
51.	120	Kulamangalam North	Pkt 85, Mud 10, Mdk 5
52.	121	Kulamangalam South	Mdk 100
53.	36	Kulanthiranpatti	Mdk 100
54.	77	Kulavaipatti	Pkt 70, Mdk 30
55.	53	Kuppakudi	Vlm70, Pkt 30
56.	109	Lakshminarasimapuram	Pkt 100
57.	16	Mailangonepatti	Mdk 100

(1)	(2)	(3)	(4)
58.	6	Malaiyur	Mdk 100
59.	80	Malakudi	Mdk 100
60.	99	Mangadu	Mdk 75, Mdk 25
61.	2	Mangottai	Vlm 45, Pkt 55
62.	68	Maniambalam	Mdk 100
63.	57	Manjanviduthi	Mdk 90, Vlm 10
64.	15	Maruthangoneviduthi	Mdk 100
65.	51	Melapatti	Vlm 100
66.	94	Melathur	Pkt 100
67.	28	Mudalipatti	Mdk 100
68.	102	Mudukkuvayal	Pkt 100
69.	48	Mullangurichi	Pkt 95, Mdk 5
70.	78	Muthupattinam	Mdk 95, Pkt 5
71.	116	Nagaram	Pkt 100
72.	73	Nambukuli	Mdk 85, Vlm 15
73.	104	Neduvasal Kilpadi	Pkt 100
74.	101	Neduvasal Melpadi	Pkt 100
75.	32	Odappaviduthi	Mdk 100
76.	52	Pachuikkottai	Mdk 70, Vlm 30
77.	79	Palaiyur	Mdk 100
78.	91	Pallathividuthi	Vlm 100
79.	12	Pallavarampathai	Mdk 50, Pkt 50
80.	122	Panangulam	Pkt 50, Mdk 50
81.	26	Pappapatti	Mdk 100
82.	90	Pathampatti	Vlm 90, Pkt 10
83.	44	Pattathikkudi	Pkt 100
84.	19	Payadipatti	Mdk 100
85.	13	Pilaviduthi	Mdk 100
86.	53	Ponnamviduthi	Mdk 50, Pkt 50
87.	3	Pudukkotaividuthi	Mdk 100

(1)	(2)	(3)	(4)
88.	20	Puduviduthi	Mdk 100
89.	110	Pulichangadu	Pkt 100
90.	100	Pullanviduthi	Pkt 100
91.	66	Puvarasagudi	Mdk 70, Vlm 30
92.	35	Rangiyamviduthi	Mdk 100
93.	23	Regunathapuram	Mdk 100
94.	83	Sendakkudi	Mdk 60, Pkt 40
95.	117	Sendangudi	Pkt 100
96.	30	Sengamedu	Mdk 100
97.	113	Seriyalur	Pkt 100
98.	114	Seriyalur	Pkt 100
99.	67	Settivayal	Mdk 100
100.	107	Settiyendal	Pkt 100
101.	95	Suranviduthi	Pkt 95, Mdk 5
102.	24	Thattamanaipatti	Mdk 100
103.	5	Therkutheru	Vlm95, Mdk 5
104.	45	Therkutheru	Vlm 80, Pkt 20
105.	63	Thirukattalai	Vlm 100
106.	40	Thirumanajeri	Pkt 85, Mdk 15
107.	31	Thiruppakovil	Mdk 100
108.	62	Thiruvarankulam	Vlm 100
109.	4	Tittanipatti	Mdk 100
110.	37	Tittanviduthi	Mdk 100
111.	98	Vadakadu	Pkt 100
112.	46	Vadatheru	Pkt 100
113.	9	Valankondanviduthi	Mdk 100
114.	70	Vallathirakottai	Mdk 100
115.	21	Vandanviduthi	Mdk 100
116.	47	Vanakkankadu	Mdk 50, Pkt 50
117.	69	Vandakkottai	Mdk 90, Vlm 10
118.	8	Vellalaviduthi	Mdk 100
119.	87	Venkattagulam	Pkt 100
120.	86	Vennavalkudi	Pkt 95, Vlm 5
121.	60	Veppangudi	Vlm 100
122.	65	Vijaaregunathapuram	Mdk 80, Vlm 20

LAND CAPABILITY CLASSIFICATION

ALANGUDI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Madukkur	**II s**	20,699	32.5	Light texture and Surface hardening	Conservation irrigation methods and addition of organics
2.	Pattukkottai and Mudukulam	**II es**	31,892	50.2	Surface hardening and erosion	Soil conservation and addition of organics
3.	Vallam	**III es**	11,009	17.3	Shallow depth, gravellines and erosion	Soil conservation methods and selection of crops
		Total	63,600	100.00		

Class

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

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

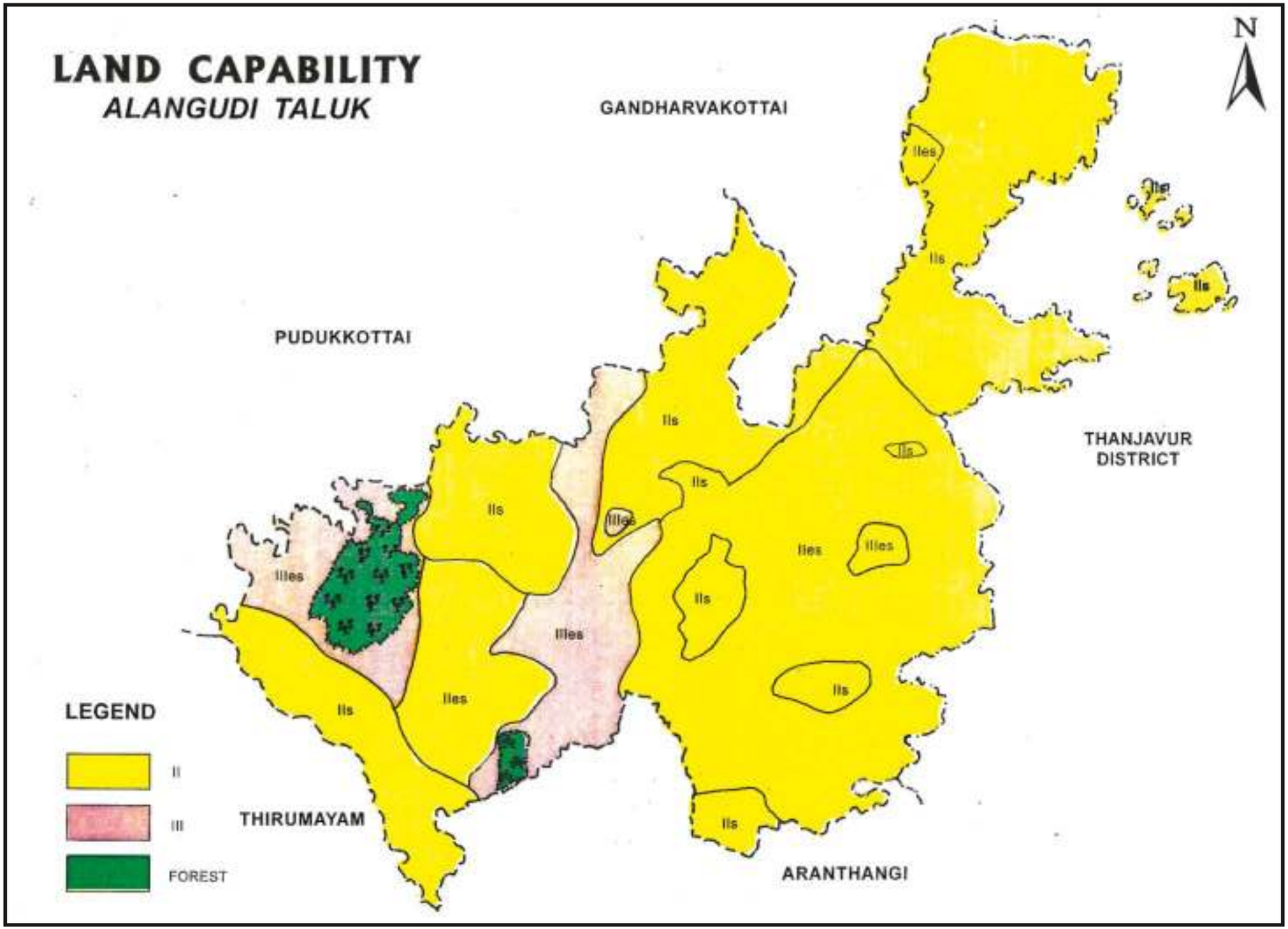
IV *Lands that have very severe limitations for sustained use under agriculture.*

Sub class

s *Root zone limitations*

e *Erosion and run-off*

w *Excess water*


LAND CAPABILITY
ALANGUDI TALUK
N
GANDHARVAKOTTAI
PUDUKKOTTAI
THANJAVUR DISTRICT
THIRUMAYAM
ARANTHANGI
IIes
IIs
IIIes
LEGEND
II
III
FOREST

LAND IRRIGABILITY CLASSIFICATION

ALANGUDI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Madukkur	**2s**	20,699	32.5	Texture and Permeability
2.	Pattukkottai and Mudukulam	**2st**	31,892	50.2	Texture topography
3.	Vallam	**3st**	11,009	17.3	Shallow solum, gravelliness and topography
		Total	63,600	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

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

Sub class

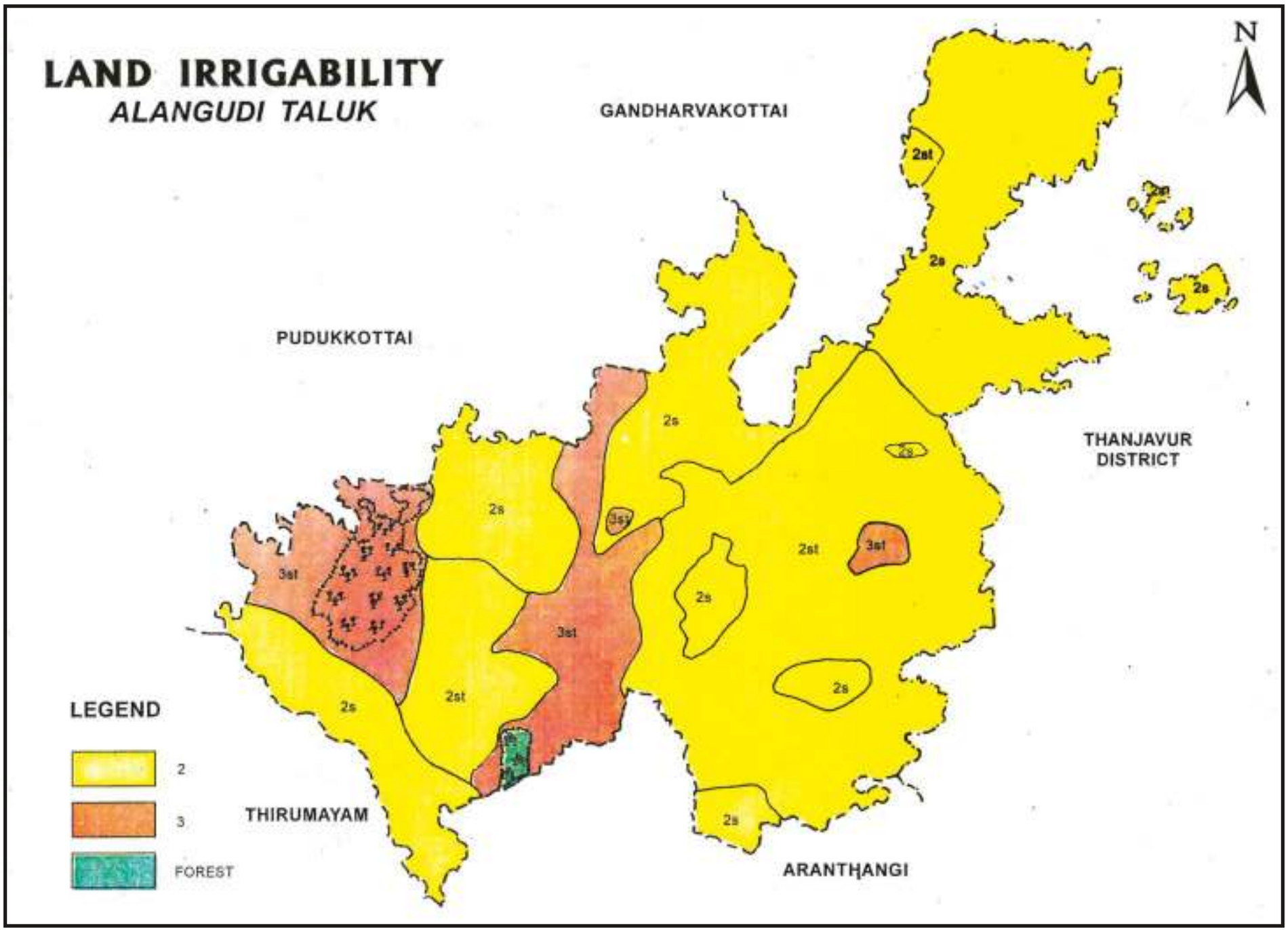
s *Soil limitations*

t *Topography*

d *Drainage*

LAND IRRIGABILITY

ALANGUDI TALUK



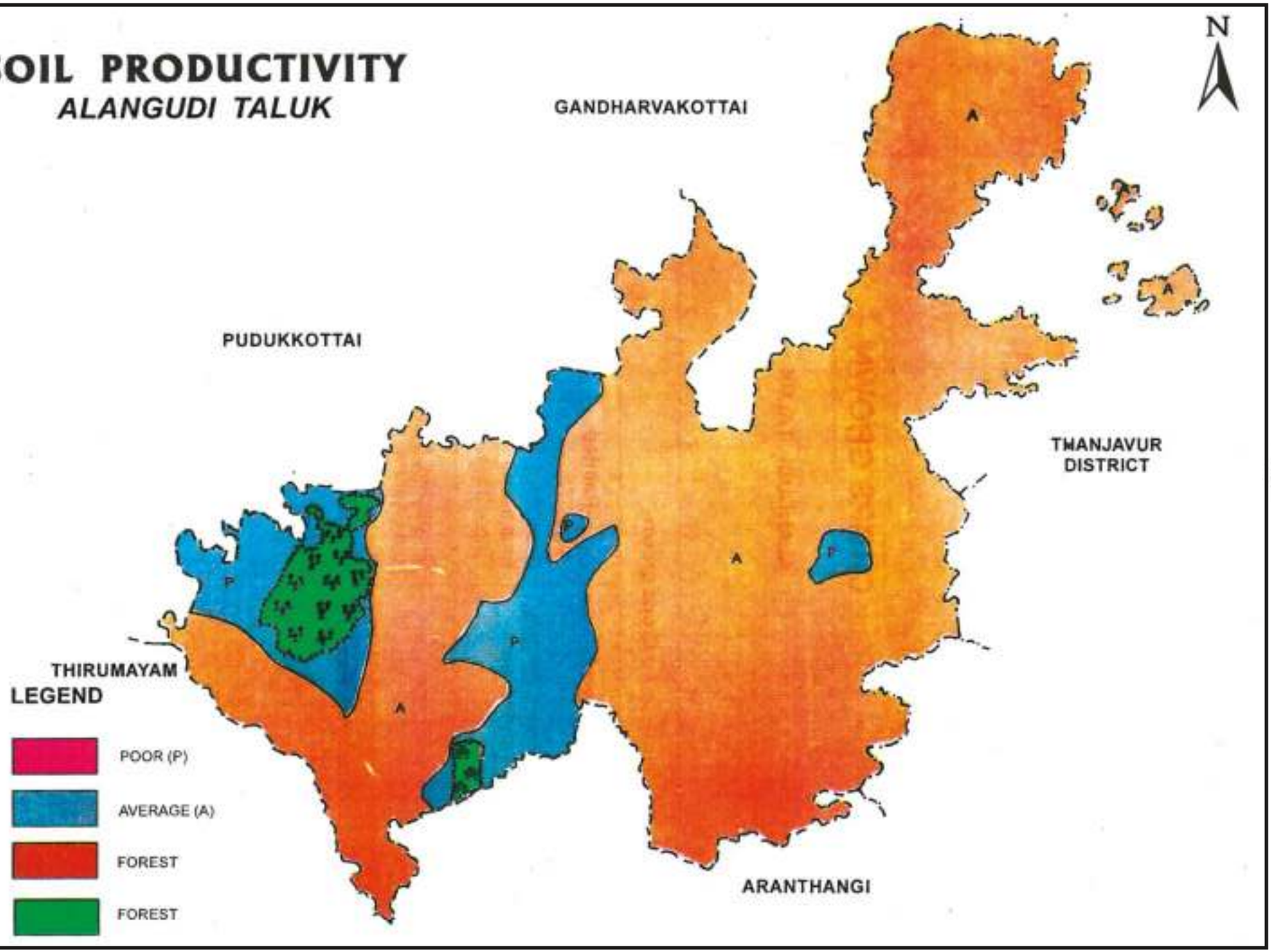
SOIL PRODUCTIVITY

ALANGUDI TALUK

Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1.	8 - 19	Poor (P)	Vallam	11,009	17.3
2.	20 - 34	Average (A)	Pattukkottai Madukkur and Mudukulam	52,591	82.7
			Total	63,600	100.00

SOIL PRODUCTIVITY

ALANGUDI TALUK



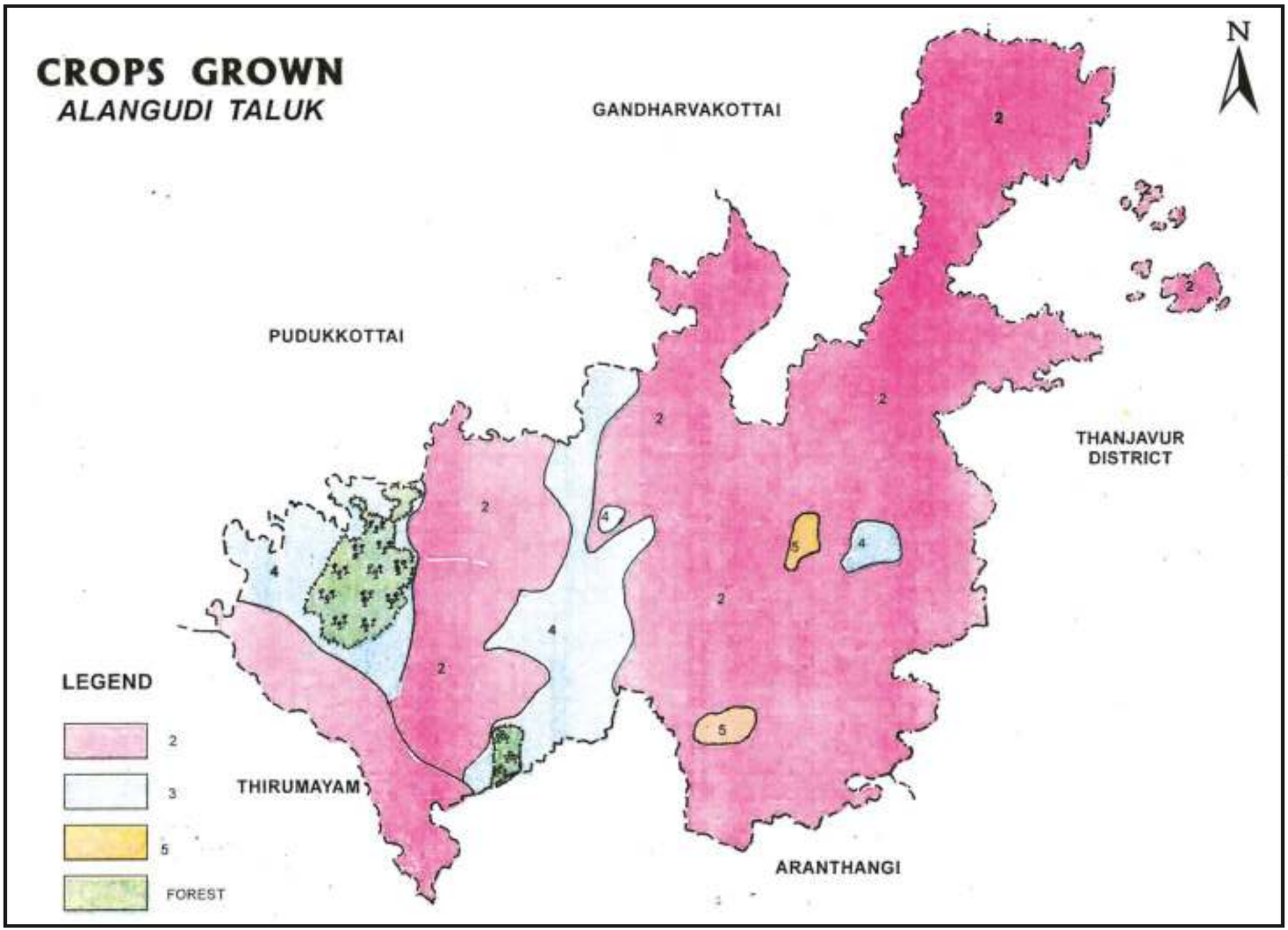
CROPS GROWN

ALANGUDI TALUK

Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Groundnut, Gingelly, Rice and Millets	Groundnut, Coconut Fruit trees, Fingermillet	2	Pattukkottai and Madukkur
2.	—	Groundnut, Millets and Cashew	4	Vallam
3.	Groundnut, Rice and Finger Millets	Groundnut, Millets Fruit trees, Redgram	5	Mudukulam

CROPS GROWN

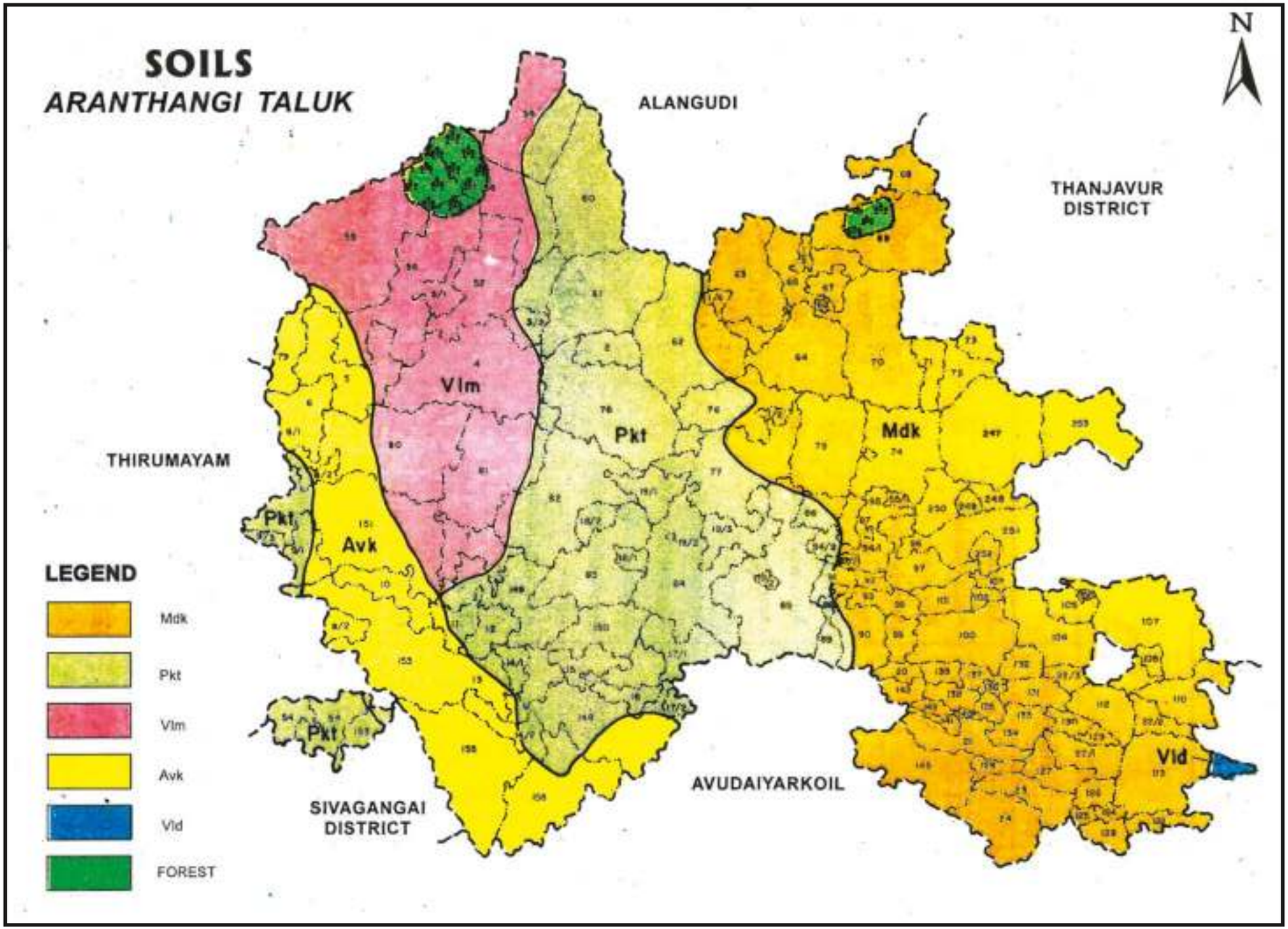
ALANGUDI TALUK



SOILS

ARANTHANGI TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Madukkur	Mdk	20,400.00	42.0
2.	Pattukkottai	Pkt	14,429.00	29.7
3.	Vallam	Vlm	7,089.00	14.6
4.	Avudaiyarkoil	Avk	6,502.00	13.4
5.	Valuthalagudi	Vld	128.00	0.3
		Total	48,548.00	100.00


SOILS
ARANTHANGI TALUK
N
ALANGUDI
THANJAVUR DISTRICT
THIRUMAYAM
SIVAGANGAI DISTRICT
AVUDAIYARKOIL
Vlm
Pkt
Mdk
Avk
Vld
LEGEND
Mdk
Pkt
Vlm
Avk
Vld
FOREST

REVENUE VILLAGE WISE SOIL DISTRIBUTION

ARANTHANGI TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	11	Alangudi	Pkt 60 Avk 40
2.	151	Alappirandam	Vlm 15 Avk 70 Pkt 15
3.	80	Aliyanilai	Vlm 70 Avk 30
4.	150	Allvimelvayal	Pkt 100
5.	20	Amanjakk	Mdk 100
6.	14	Amanji	Avk 20 Pkt 80
7.	253	Amarasimhendrapuram	Mdk 100
8.	248	Ambalpuram	Mdk 100
9.	7	Aranthangi	Pkt 100
10.	74	Arasarkulam East	Mdk 100
11.	75	Arasarkulam West	Mdk 100
12.	89	Ariyamaraikkadu	Pkt 100
13.	92	Arunachalapuram	Mdk 100
14.	107	Athani	Mdk 100
15.	61	Avanathankottai	Pkt 100
16.	70	Ayankudi	Mdk 100
17.	73	Balakrishnapuram	Mdk 100
18.	23	Brahmanavayal	Mdk 100
19.	138	Brahmanavayal	Mdk 100
20.	57	Chettikadu	Vlm 70 Pkt 30
21.	87	Chidambarapuram	Mdk 100
22.	56	Chidambaraviduthi	Vlm 100
23.	95	Chittakkanni	Mdk 100
24.	125	Dharmarajan vayal	Mdk 100
25.	154	Dharmarajanvayal	Pkt 100
26.	100	Eginivayal	Mdk 100
27.	104	Ekapperymalur	Mdk 100
28.	77	Ettiyathali	Pkt 100
29.	2	Erukkalakkottai	Pkt 100
30.	127	Gopalapuram	Mdk 100

(1)	(2)	(3)	(4)
31	139	Idaiyathur	Mdk 100
32.	10	Idaiyur	Avk 100
33.	110	Kalakkamangalam	Mdk 100
34.	112	Kambarkoil	Mdk 100
35.	54	Kammankadu	Avk 100
36.	132	Kandichangadu	Mdk 100
37.	106	Karaikkadu	Mdk 100
38.	90	Karai kudikkadai	Mdk 70 Pkt 30
39.	113	Karakkottai	Mdk 100
40	98	Karavayal	Avk 100
41.	249	Kilavijayapuram	Mdk 100
42.	16	Kilcheri	Pkt 85 Avk 15
43.	99	Kilkudi	Mdk 100
44.	137	Kodaiyidattur	Mdk 100
45.	251	Kodivayal	Mdk 100
46.	136	Kokkumuttai	Mdk 100
47.	8	Kongudi	Avk 90 Pkt 10
48.	84	Kovilvayal	Pkt 100
49.	97	Kukanur	Mdk 100
50.	9	Kulattur	Pkt 20 Avk 80
51.	18	Kummakkadu	Pkt 100
52.	133	Kumpallam	Mdk 100
53.	15	Kundagavayal	Pkt 100
54.	88	Kurinjankottai	Mdk 90 Pkt 5
55.	55	Kurumbur	Vlm Avk
56.	128	Kuttanur	Mdk 100
57.	143	Maivayal	Mdk 100
58.	94	Manakkudi	Mdk 85 Pkt 15
59.	144	Manavanallur	Mdk 100
60.	247	Mangalanadu	Mdk 100
61.		Mangudi	Pkt 65 Mdk 35

(1)	(2)	(3)	(4)
62.	252	Manivilanvayal	Mdk 100
63.	59	Maramadakki	Vlm 55 Pkt 45
64.	1	Marudangudi	Pkt 20 Mdk 80
65.	71	Mathur	Mdk 100
66.	129	Mavalinganandal	Mdk 100
67.	69	Mel Panaikkadu	Mdk 100
68.	83	Melpattu	Pkt 100
69.	85	Memangalam	Pkt 100
70.	81	Mukkudi	Vlm 95 Pkt 5
71.	135	Munnuttanvayal	Mdk 100
72.	93	Nakkudi	Mdk 100
73.	5	Nerpovalakkudi	Avk 75 Vlm 25
74.	65	Neivettalai	Mdk 100
75.	66	Neivelinathapuram	Mdk 100
76.	111	Nemmelikkadu	Mdk 100
77.	21	Nirvilangulam	Mdk 100
78.	24	Nilayur	Mdk 100
79.	109	Omakkavayal	Mdk 100
80.	149	Pallattivayal	Pkt 100
81.	134	Pangayattangudi	Mdk 100
82.	13	Panjatti	Avk 80 Pkt 20
83.	58	Paravakkottai	Vlm 85 Pkt 20
84.	63	Perialur	Mdk 100
85.	156	Perungavalur	Avk 80 Pkt 20
86.	123	Pettivayal	Mdk 100
87.	86	Pidarikkadu	Mdk 85 Pkt 15
88.	152	Puduvakkottai	Avk 100
89.	102	Punayankundu	Avk 100
90.	62	Puvattakudi	Pkt 70 Mdk 30
91.	78	Rajendrapuram	Pkt 95 Vlm 5
92.	72	Ramaswamipuram	Mdk 100
93.	82	Ratnakottai	Pkt 100
94.	103	Rayanvayal	Mdk 100
95.	140	Renderiukkadai	Mdk 100

(1)	(2)	(3)	(4)
96.	67	Settanendal	Mdk 100
97.	6	Sengamari	Avk 100
98.	142	Silattani	Mdk 100
99.	4	Silattur	Vlm 95 Pkt 5
100.	91	Sinamangalam	Pkt 100
101.	126	Singavanam	Mdk 100
102.	79	Sirunathanvayal	Avk 100
103.	148	Sivandankadu	Avk 40 Pkt 60
104.	141	Solani	Mdk 100
105.	96	Subramaniapuram	Mdk 100
106.	105	Sudalaikkalabhairavapuram	Mdk 100
107.	124	Talikkottai	Mdk 100
108.	3	Tantani	Vlm 100
109.	101	Tedakki	Mdk 100
110.	22	Tinaiyakkudi	Mdk 100
111.	130	Tirunallivayal	Mdk 100
112.	60	Tirunalur	Pkt 100
113.	108	Tiruvappadi	Mdk 100
114.	19	Tuttakudi	Pkt 100
115.	153	Ulagalandanvayal	Pkt 100
116.	12	Urvani	Pkt 95 Avk 5
117.	64	Vallavari	Mdk 100
118.	131	Vellattumangalam	Mdk 100
119.	68	Vembangudi	Mdk 100
120.	17	Vengur	Pkt 100
121.	145	Vettanur	Mdk 100
122.	250	Vijayapuram	—
123.	122	Vinaitiratogopalapuram	Mdk 90 Coastal sand 10
124.	155	Viramangalam	Avk 100

LAND CAPABILITY CLASSIFICATION

ARANTHANGI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Madukkur	II s	20,400	42.0	Light texture and Surface hardening	Conservation irrigation methods and addition of organics
2.	Pattukkottai	II es	14,429	29.7	Surface hardening and erosion	Soil conservation and addition of organics
3.	Vallam	III es	7,089	14.6	Shallow depth, gravellines and erosion	Soil conservation methods and selection of crops
4.	Avudaiyarkoil	III sw	6,502	13.4	Heavy texture and poor drainage	Drainage improvement and addition of organics
5.	Valuthalagudi	IV es	128	0.3	Sandy texture and wind erosion	Soil conservation methods and addition of organics
		Total	48,548	100.00		

Class

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

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

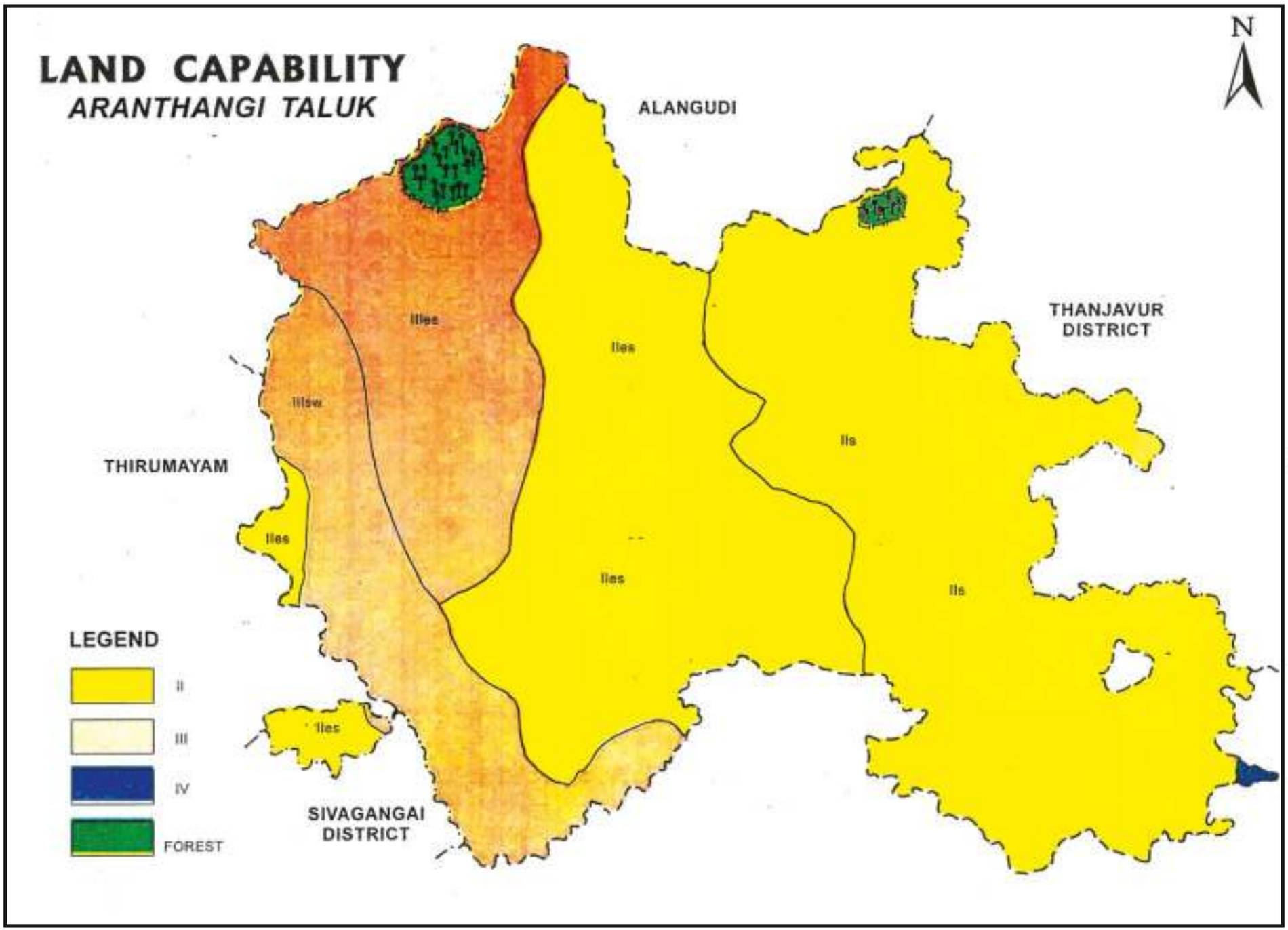
IV *Lands that have very severe limitations for sustained use under agriculture.*

Sub class

s *Root zone limitations*

e *Erosion and run-off*

w *Excess water*


LAND CAPABILITY
ARANTHANGI TALUK
N
ALANGUDI
THANJAVUR DISTRICT
THIRUMAYAM
SIVAGANGAI DISTRICT
IIIes
IIIsw
IIes
IIes
IIes
IIes
IIs
IIs
LEGEND
II
III
IV
FOREST

LAND IRRIGABILITY CLASSIFICATION

ARANTHANGI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Madukkur	**2s**	20,400	42.0	Texture and Permeability
2.	Pattukkottai	**2st**	14,429	29.7	Texture topography
3.	Vallam	**3st**	7,089	14.6	Shallow solum, gravelliness and topography
4.	Avudaiyarkoil	**3sd**	6,502	13.4	Heavy texture, poor drainage and alkalinity
5.	Valuthalagudi	**4s**	128	0.3	Rapid permeability and salinity
		Total	48,548	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

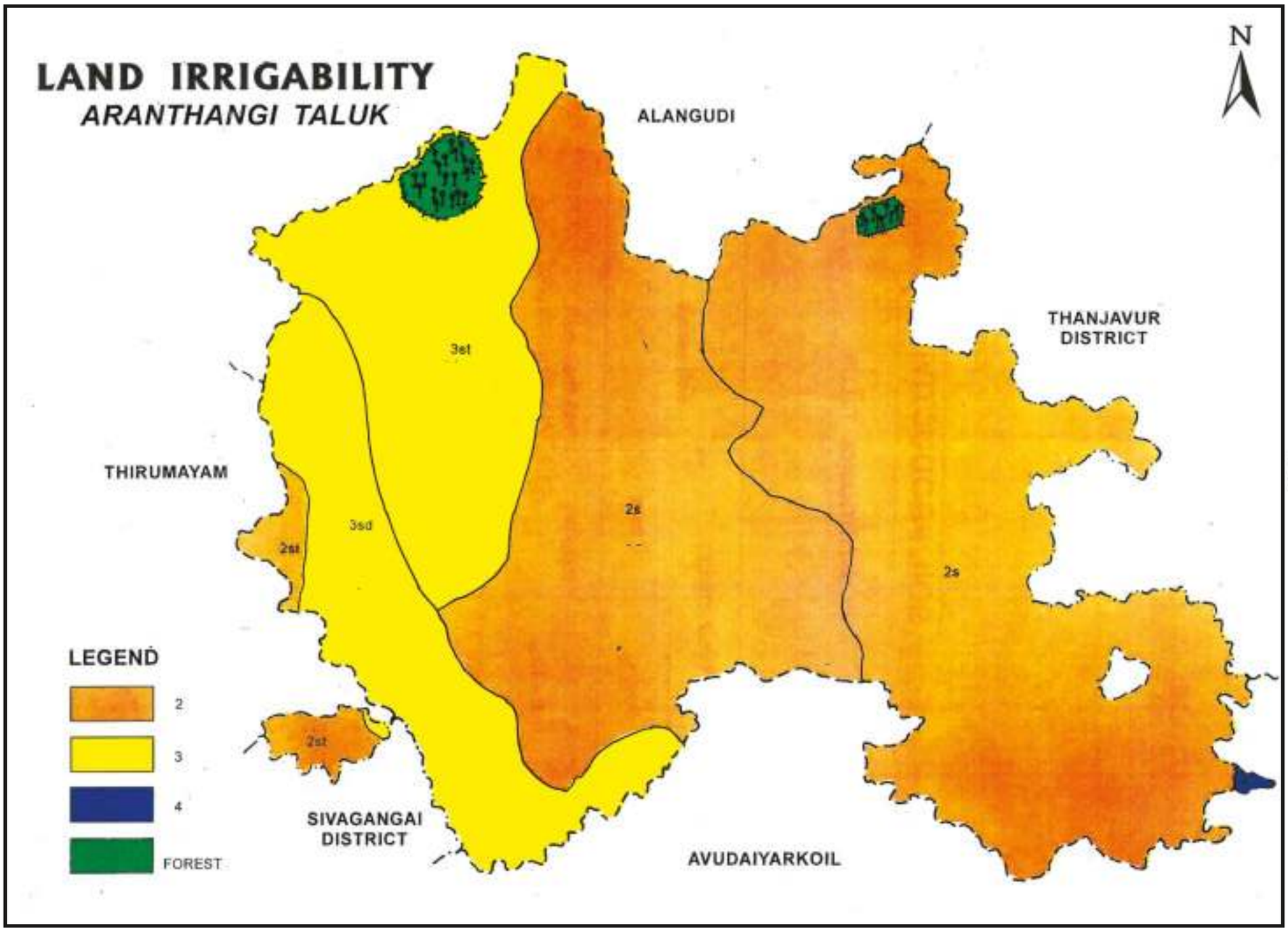
4 *Lands that have very severe soil limitations for sustained use under irrigation*

Sub class

s *Soil limitations*

t *Topography*

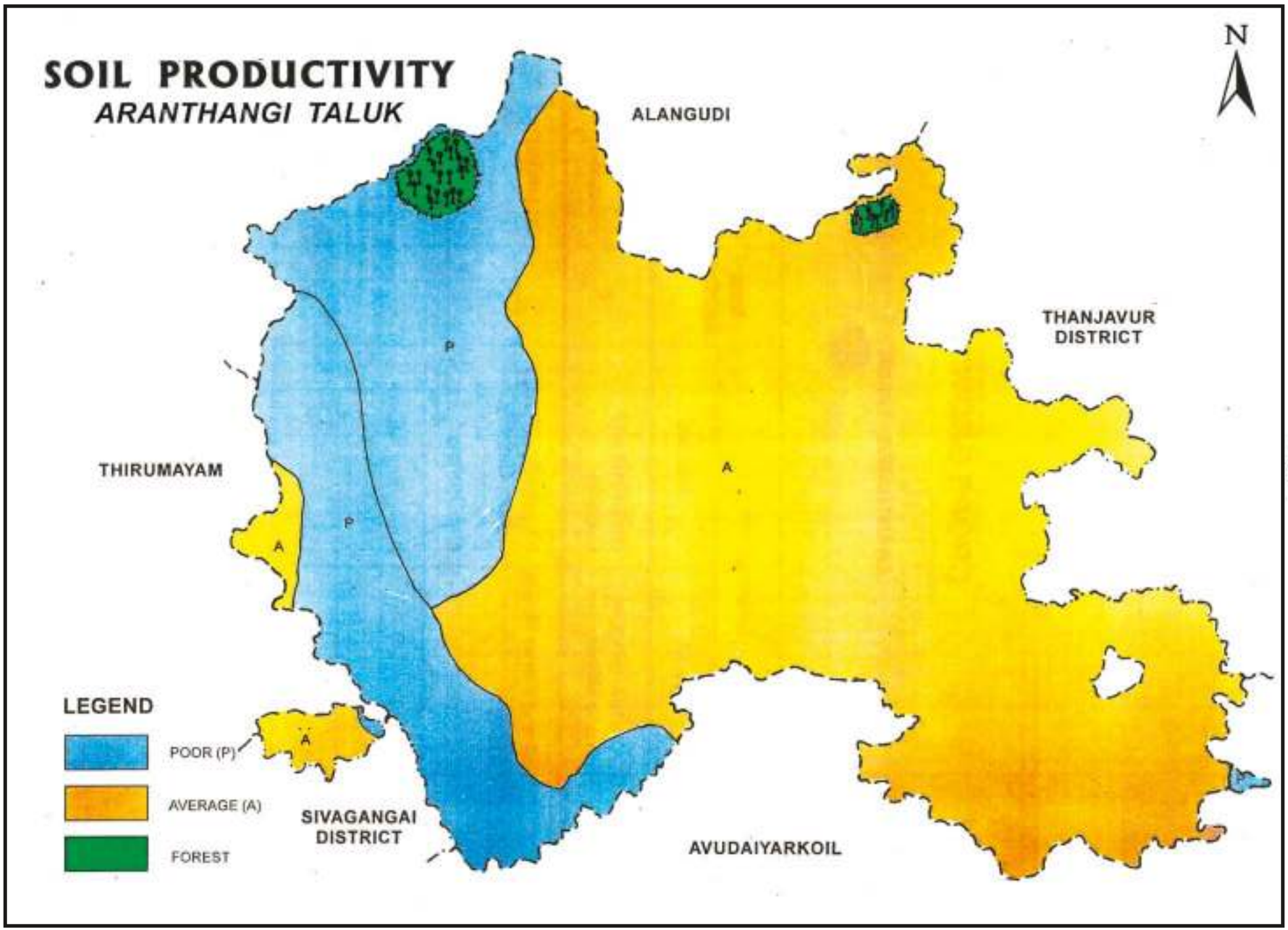
d *Drainage*


LAND IRRIGABILITY
ARANTHANGI TALUK
N
ALANGUDI
THANJAVUR DISTRICT
THIRUMAYAM
SIVAGANGAI DISTRICT
AVUDAIYARKOIL
3sl
3sd
2sl
2s
2s
2sl
LEGEND
2
3
4
FOREST

SOIL PRODUCTIVITY

ARANTHANGI TALUK

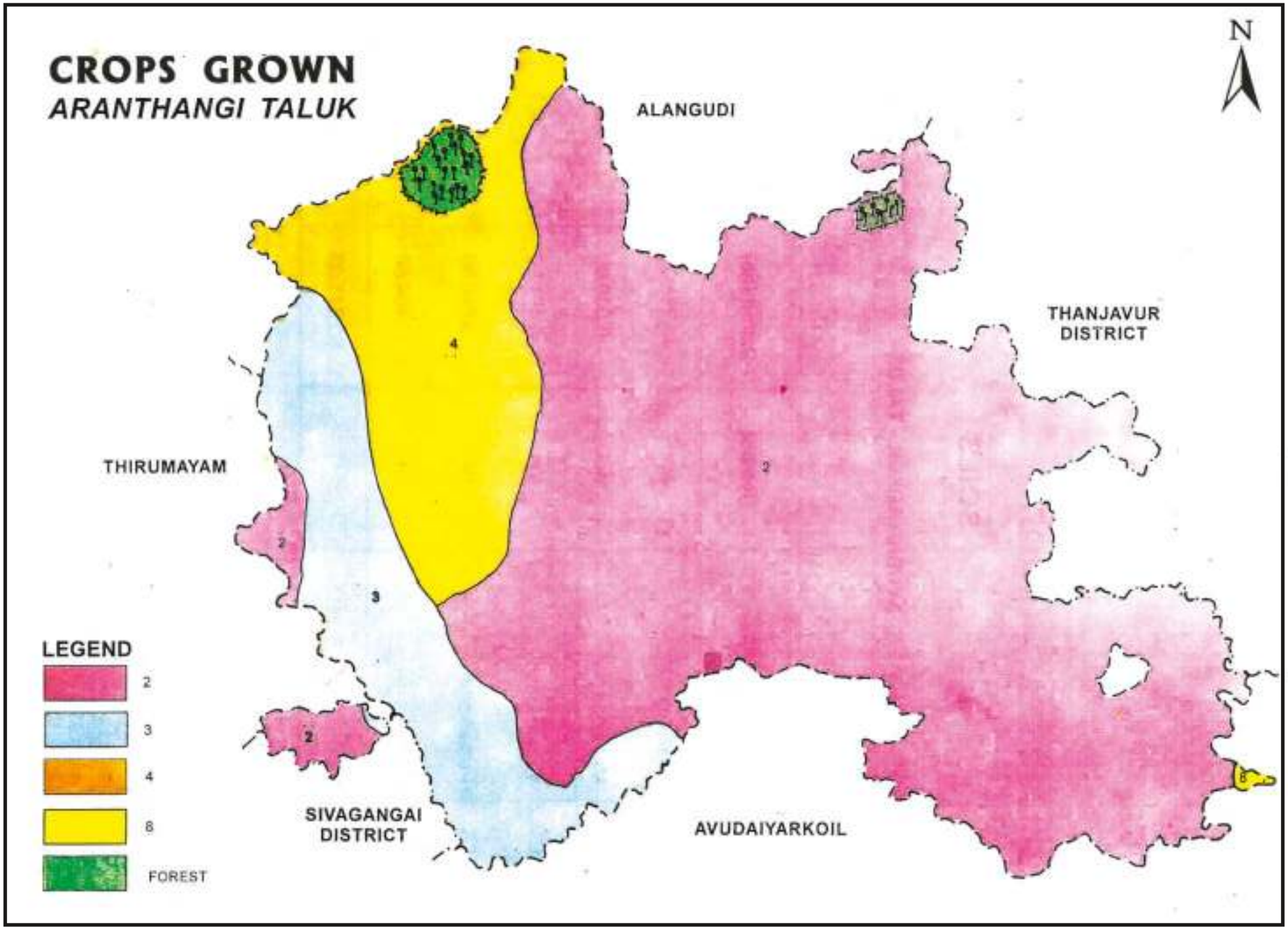
Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1.	8 - 19	Poor (P)	Valuthalagudi, Avudaiyarkoil and Vallam	13,719	28.3
2.	20 - 34	Average (A)	Pattukkottai Madukkur	34,829	71.7
			Total	48,548	100.00


SOIL PRODUCTIVITY
ARANTHANGI TALUK
N
ALANGUDI
THANJAVUR DISTRICT
THIRUMAYAM
P
A
P
A
A
LEGEND
POOR (P)
AVERAGE (A)
FOREST
SIVAGANGAI DISTRICT
AVUDAIYARKOIL

CROPS GROWN

ARANTHANGI TALUK

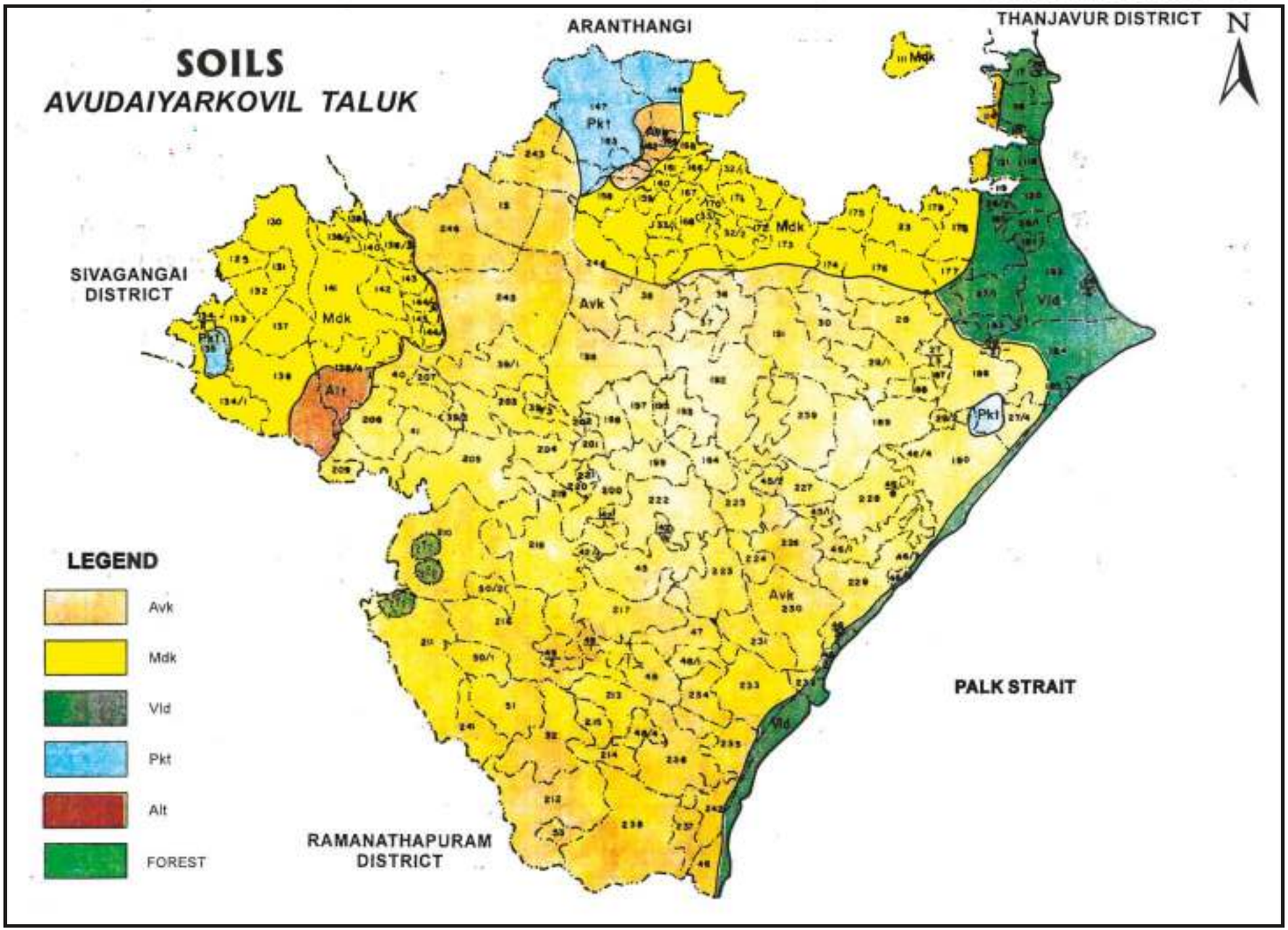
Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Groundnut, Gingelly, Rice and Millets	Groundnut and Coconut	2	Pattukkottai Madukkur
2.	Rice and Finger Millets	Fingermillet, Varagu, Cotton, Gingelly, Groundnut, Millets, and Cashew	3	Avudaiyarkoil
3.	—	Groundnut, Millets and Cashew	4	Vallam
4.	—	Coconut	8	Valuthalagudi


CROPS GROWN
ARANTHANGI TALUK
N
ALANGUDI
THANJAVUR DISTRICT
THIRUMAYAM
SIVAGANGAI DISTRICT
AVUDAIYARKOIL
LEGEND
2
3
4
6
FOREST

SOILS

AVUDAIYARKOIL TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Percent to total
1.	Avudaiyarkoil	Avk	43,226.00	71.3
2.	Madukkur	Mdk	8,000.00	13.2
3.	Valuthalagudi	Vld	5,491.00	9.1
4.	Pattukkottai	Pkt	3,820.00	6.3
5.	Alathur	Alt	104.00	0.1
	Total		60,641.00	100.00


SOILS
AVUDAIYARKOVIL TALUK
ARANTHANGI
THANJAVUR DISTRICT
N
SIVAGANGAI DISTRICT
RAMANATHAPURAM DISTRICT
PALK STRAIT
Avk
Mdk
Vld
Pkt
Alt
LEGEND
Avk
Mdk
Vld
Pkt
Alt
FOREST

REVENUE VILLAGE WISE SOIL DISTRIBUTION

AVUDAIYARKOIL TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	117	Alaganvayal	Coastal 100
2.	206	Alattivayal	Avk 100
3.	233	Alattur	Avk 100
4.	198	Amaradakki	Avk 100
5.	144	Arasur	Avk 100
6.	185	Avudaiyarpattinam	Coastal sand 100
7.	157	Avudayarkoil	Avk 100
8.	159	Chellarendal	Mdk 100
9.	174	Chellappankottai	Avk 50 Mdk 50
10.	208	Chittakur	Avk 100
11.	245	Elurithimangalam	Avk 100
12.	136	Embal	Alt 40 Mdk 60
13.	116	Enadi	Coastal sand 95 Mdk 5
14.	137	Enangam	Mdk 100
15.	243	Esamangalam	Avk 85, Pkt 15
16.	221	Ichangudi	Avk 100
17.	134	Ichikottai	Mdk 100
18.	178	Idaiyathimangalam	Mdk 45 Coastal sand 55
19.	141	Irumbanadu	Mdk 100
20.	49	Kathiramangalam	Avk 100
21.	181	Kandinivayal	Coastal sand 100
22.	189	Karakattikottai	Avk 100
23.	191	Karkamalam	Avk 100
24.	199	Kanur	Avk 100
25.	194	Kannakkur	Avk 100
26.	210	Karuvur	Avk 100
27.	211	Kalabam	Avk 100
28.	225	Kanadu	Avk 100
29.	240	Kavanur	Avk 100
30.	236	Kadavakottai	Avk 100
31.	172	Kallakottai	Mdk 100
32.	177	Kallakurichi	Mdk 80 Coastal sand 20
33.	166	Kasavayal	Avk 100
34.	161	Kandaiyankottai	Mdk 80 Avk 20
35.	53	Kannamangalam	Avk 100

(1)	(2)	(3)	(4)
36.	42	Kavadukudi	Avk 100
37.	46	Kilmanjakkudi	Avk 100
38.	147	Kidanguvayal	Pkt 100
39.	168	Kilkudi	Mdk 100
40.	187	Kilpappanur	Avk 100
41.	226	Kilarvayal	Avk 100
42.	119	Kolluthidal	Coasatal sand 100
43.	190	Kodikkulam	Avk 100
44.	192	Kopalangulam	Avk 100
45.	193	Kolandiram	Avk 100
46.	219	Koneriyandal	Avk 100
47.	241	Kovinikkidangu	Mdk 100
48.	215	Kulattur	Avk 100
49.	180	Kuttangudi	Coastal sand 100
50.	158	Kudikkadu	Mdk 85, Avk 15
51.	205	Kumulur	Avk 100
52.	130	Kurungalur	Mdk 100
53.	132	Madagam	Mdk 100
54.	30	Manllur	Avk 100
55.	160	Makaliyendal	Avk 85, Mdk 45, Pkt 10
56.	183	Mandangudi	Coastal Sand 100
57.	185	Manamelgudi	Coastal Sand 70 Avk 30
58.	228	Manjakkottai	Avk 100
59.	139	Maruthangudi	Mdk 100
60.	145	Mathagam Arasur	Mdk 100
61.	26	Melstanam	Coastal Sand 100
62.	188	Melpoppanur	Avk 100
63.	232	Minisal	Coastal Sand 100
64.	36	Minnamoli	Avk 100
65.	162	Muduvalarkudi	Avk 80, Mdk 10, Pkt 10
66.	182	Munpalai	Coastal Sand 100
67.	227	Nuvanur ukkadai Regunathapuram	Avk 100
68.	204	Narasingapuram	Avk 100
69.	231	Nariyanendal	Avk 100
70.	48	Nattanipurasakkudi	Avk 100

(1)	(2)	(3)	(4)
71.	29	Nalveli	Avk 100
72.	111	Nemmelikkadu	Mdk 100
73.	121	Nemmelivayal	Mdk 25, Coastal Sand 75
74.	37	Neykuppai	Avk 100
75.	25	Ollanur	Mdk 100
76.	40	Okkur	Avk 100
77.	224	Palaiya Vettivayal	Avk 100
78.	235	Palangulam	Avk 95, Coastal sand 5
79.	203	Pallivayal	Avk 100
80.	176	Panavayal	Mdk 60, Avk 40
81.	114	Pallakkudi Pichanendal	Mdk 50, Coastal Sand 50
82.	34	Palavarasam	Avk 25, Mdk 75
83.	171	Pattamudaiyan	Mdk 100
84.	212	Paraiyattur	Avk 100
85.	229	Periamaddaipaychal	Avk 95, Coastal sand5
86.	217	Peranur	Avk 100
87.	207	Peruntamarai	Avk 100
88.	31	Perumarudur	Mdk 75, Avk 25
89.	223	Pilluvalasai	Avk 100
90.	244	Priantani	Avk 80, Mdk 20
91.	179	Pillangudi	Mdk 100
92.	120	Pillaiyartidal	Coastal sand 100
93.	43	Ponpathi	Avk 100
94.	38	Punvalur	Avk 100
95.	146	Puduvakkadu	Mdk 100
96.	169	Puvalurukkadai	Avk 50, Mdk 50
97.	170	Puduvayal Ukkadai	Mdk 100
98.	202	Puduvettivayal	Avk 100
99.	246	Punniyavayal	Avk 100
100.	214	Ramachandrapuram	Avk 100
101.	115	Ravuthanvayal	Costal sand 100
102.	239	Rettaiyalam	Avk 100
103.	209	Sanarendal	Avk 100
104.	32	Sattakkudi	Mdk 100
105.	44	Settiyadi	Avk 100

(1)	(2)	(3)	(4)
106.	59	Sattiyakudi	Avk 100
107.	143	Sathirapatti	Mdk 100
108.	216	Sathiyadi	Avk 100
109.	230	Seyyanam	Avk 100
110.	129	Seppavayal	Mdk 100
111.	51	Senganam	Avk 100
112.	35	Sirumarudur	Mdk 100
113.	163	Sivagnanapuram	Avk 20, Pkt 80
114.	220	Siruveli	Avk 100
115.	242	Sirukadaivakkattaji	Avk 100
116.	175	Sudalaivayal	Mdk 100
117.	118	Subramaniapuram	Coastal sand 100
118.	195	Takkadivayal	Avk 100
119.	27	Tandaki	Coastal sand 100
120.	222	Talanur	Avk 100
121.	135	Tanikadu	Pkt 50, Md 50
122.	218	Tanikkondan	Avk 100
123.	52	Tennamari	Avk 100
124.	131	Thilavayal	Mdk 100
125.	138	Thonnakudi	Alt 60, Mdk 40
126.	133	Tirappidingi	Mdk 100
127.	238	Tiruppunavasal	Avk 100
128.	140	Tiruvakkudi	Mdk 100
129.	213	Tiyattur	Avk 100
130.	50	Tiyyar	Avk 100
131.	41	Tunjanur	Avk 100
132.	164	Valayanvayal	Avk 100
133.	201	Valuvur	Avk 100
134.	33	Vattathur	Mdk 100
135.	237	Vekmar	Avk 100
136.	196	Velimangalam	Avk 100
137.	167	Velivayal	Avk 100
138.	234	Velivayal	Avk 100
139.	142	Vellalavayal	Mdk 100
140.	197	Veliyathur	Avk 100
141.	173	Vellur Siruvarai	Mdk 60, Avk 40
142.	47	Velvarai	Avk 100
143.	28	Vellur	Avk 100
144.	45	Vettivayal	Avk 100
145.	200	Vettivayal (alias) Sundaranayakipuram	Avk 100
146.	165	Vettinivayal	Mdk 60, Avk 40
147.	186	Vichehur	Avk 80, Pkt 10 Coastal sand 10

LAND CAPABILITY CLASSIFICATION

AVUDAIYARKOIL TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Percent to total	Soil Limitations	Special needs
1.	Madukkur	II s	8,000	13.2	Light texture and Surface hardening	Conservation irrigation methods and addition of organics
2.	Pattukkottai	II es	3,820	6.3	Surface hardening and erosion	Soil conservation and addition of organics
3.	Alathur	II sw	104	0.1	Heavy texture, poor drainage and alkalinity	Drainage improvement, addition of organics and amendments
4.	Avudaiyarkoil	III sw	43,226	71.3	Heavy texture and poor drainage	Drainage improvements, addition of organics
5.	Valuthalagudi	IV es	5,491	9.1	Sandy texture and wind erosion	Soil conservation methods and addition of organics
		Total	60,641	100.00		

Class

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

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

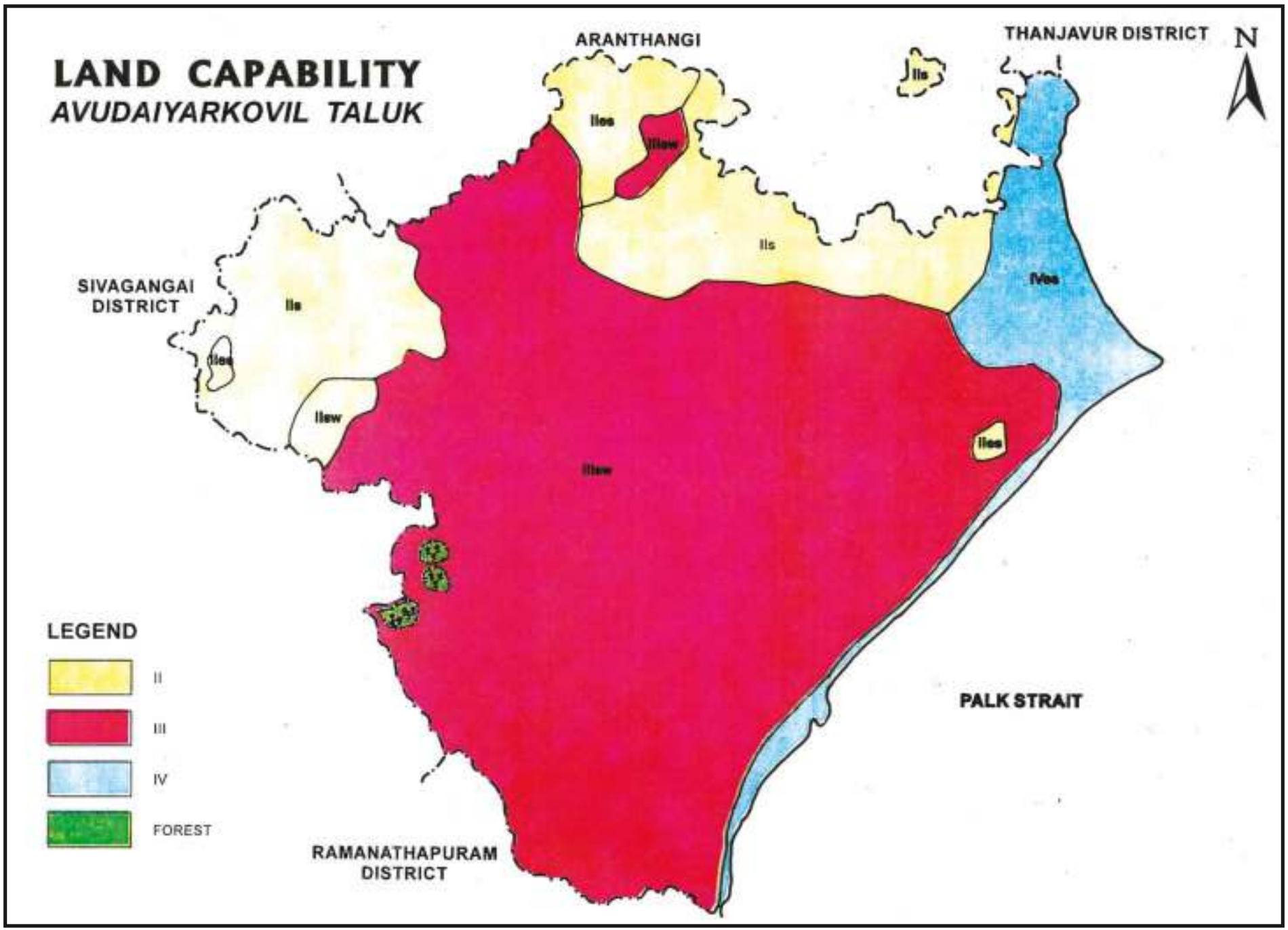
IV *Lands that have very severe limitations for sustained use under agriculture*

Sub class

s *Root zone limitations*

e *Erosion and run-off*

w *Excess water*


LAND CAPABILITY
AVUDAIYARKOVIL TALUK
ARANTHANGI
THANJAVUR DISTRICT
N
SIVAGANGAI DISTRICT
IIs
IIes
IIesw
IIsw
IIIes
IVes
PALK STRAIT
RAMANATHAPURAM DISTRICT
LEGEND
II
III
IV
FOREST

LAND IRRIGABILITY CLASSIFICATION

AVUDAIYARKOIL TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Percent to total	Soil Limitations
1.	Madukkur	**2s**	8,000	13.2	Texture and Permeability
2.	Pattukkottai	**2st**	3,820	6.3	Texture, topography
3.	Alathur	**2sd**	104	0.1	Texture, poor drainage and alkalinity
4.	Avudaiyarkoil	**3 sd**	43,226	71.3	Texture and poor drainage
5.	Valuthalagudi	**4 s**	5,491	9.1	Texture, rapid permeability salinity
		Total	60,641	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

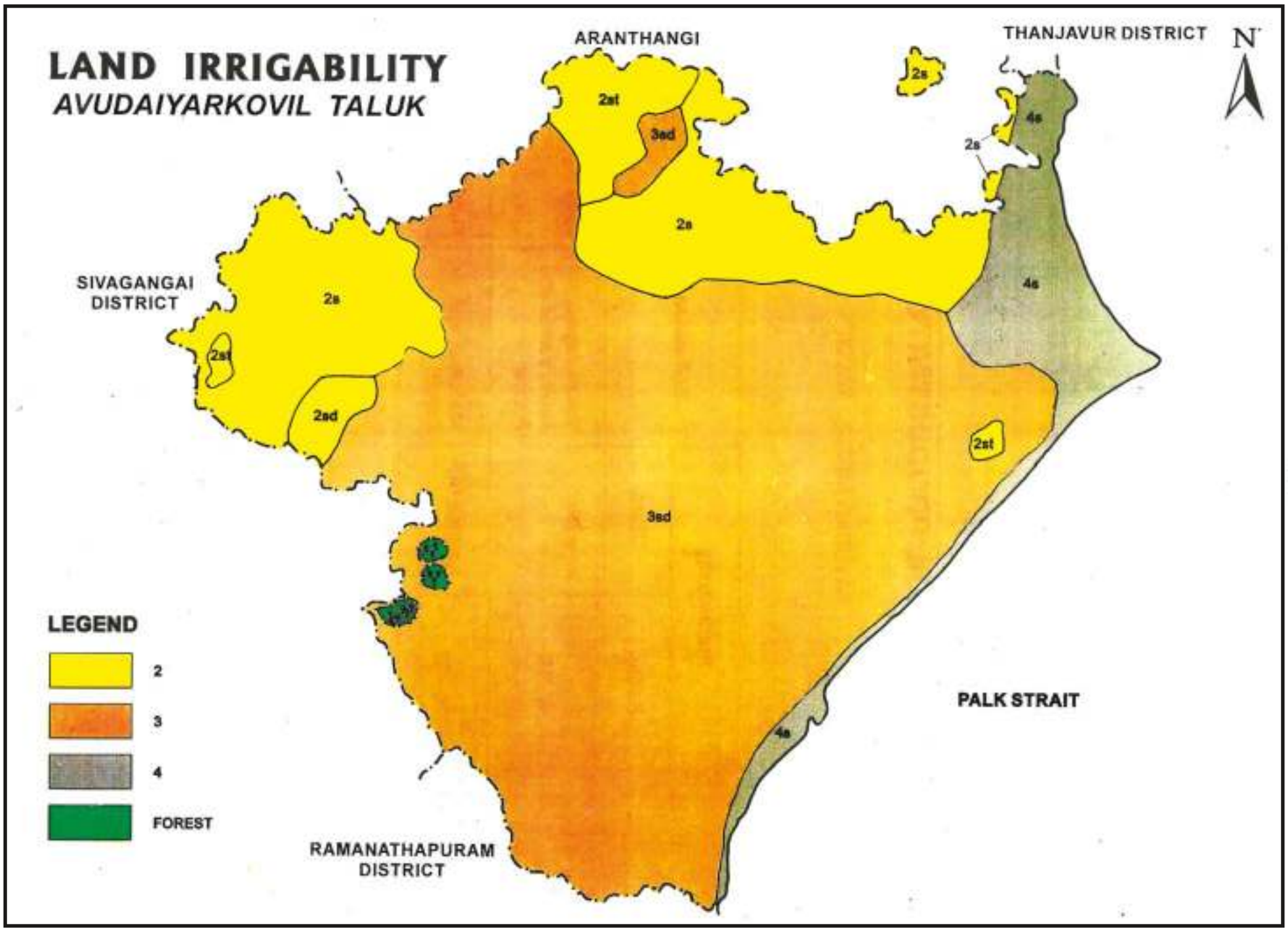
4 *Lands that have very severe soil limitations for sustained use under irrigation*

Sub class

s *Soil limitations*

t *Topography*

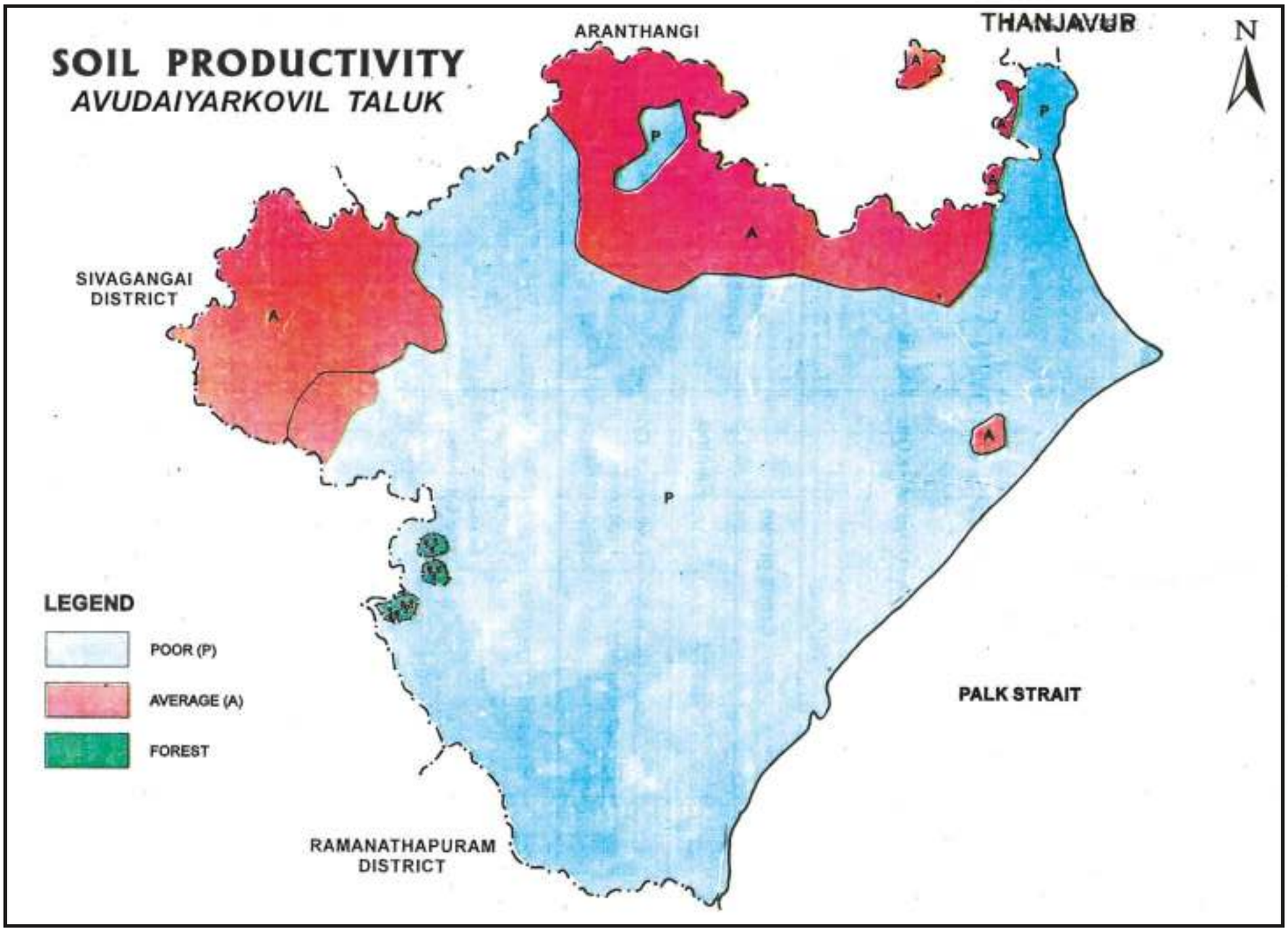
d *Drainage*


LAND IRRIGABILITY
AVUDAIYARKOVIL TALUK
ARANTHANGI
THANJAVUR DISTRICT
N
SIVAGANGAI DISTRICT
RAMANATHAPURAM DISTRICT
PALK STRAIT
2s
2st
3sd
4s
2sd
LEGEND
2
3
4
FOREST

SOIL PRODUCTIVITY

AVUDAIYARKOIL TALUK

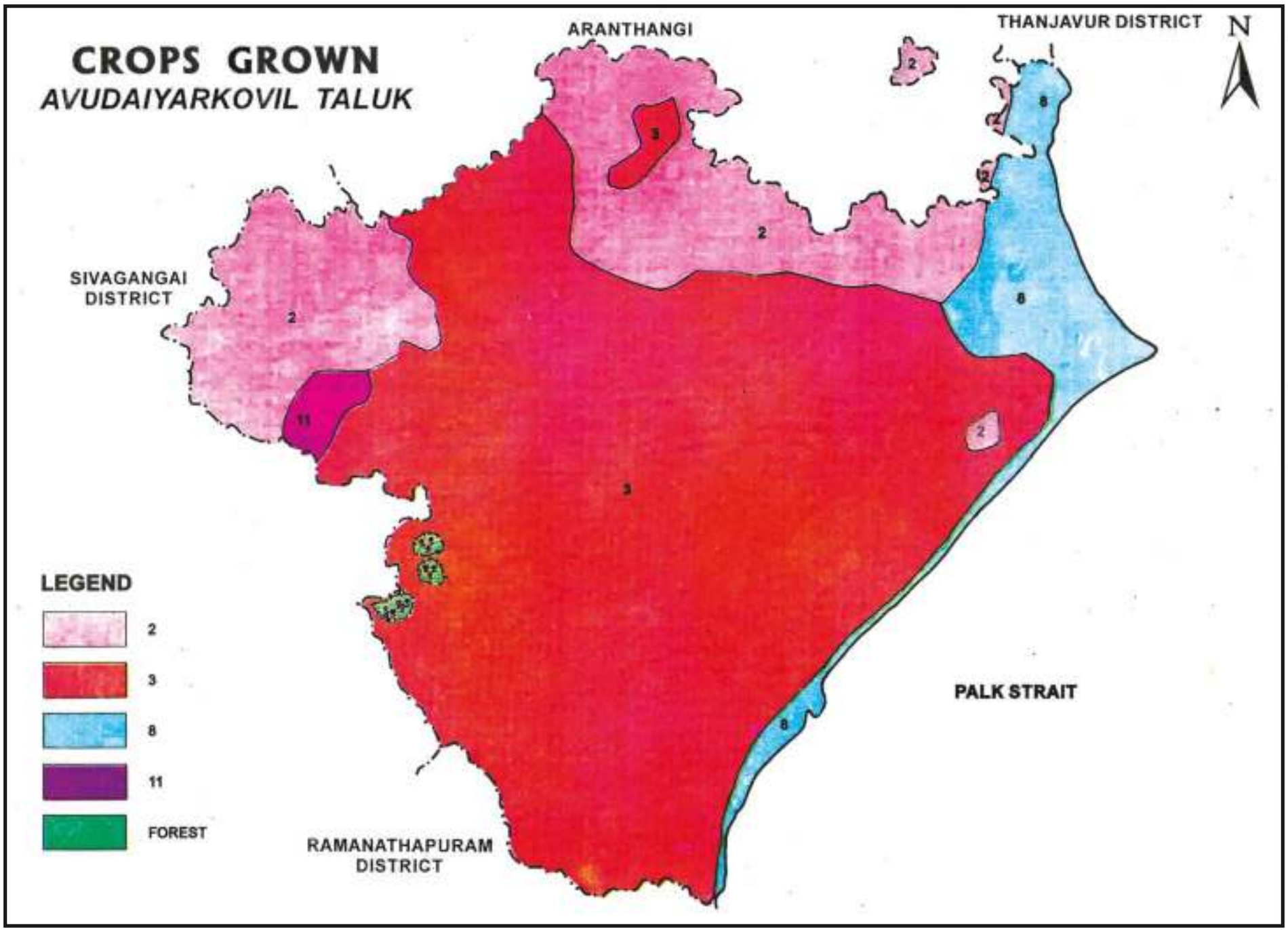
Sl. No.	Productivity		Soil series	Extent (ha)	Percent to total
	Rating	Class			
1.	8 - 19	Poor (P)	Valuthalagudi, Avudaiyarkoil and Alathur	48,821	80.5
2.	20 - 34	Average (A)	Madukkur and Pattukkottai	11,820	19.5
			Total	60,641	100.00


SOIL PRODUCTIVITY
AVUDAIYARKOVIL TALUK
ARANTHANGI
THANJAVUR
N
SIVAGANGAI DISTRICT
RAMANATHAPURAM DISTRICT
PALK STRAIT
LEGEND
POOR (P)
AVERAGE (A)
FOREST

CROPS GROWN

AVUDAIYARKOIL TALUK

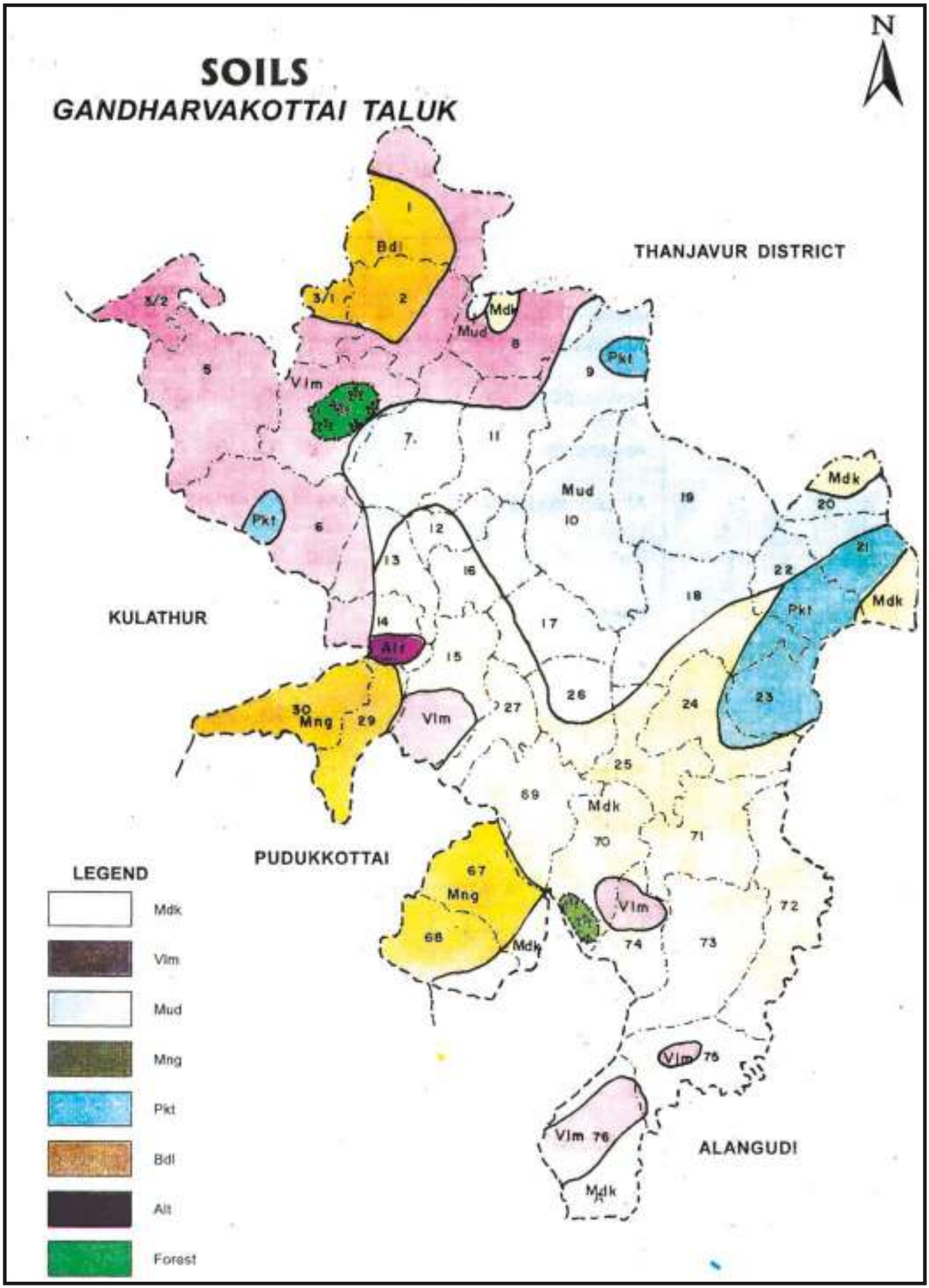
Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Groundnut, Gingelly, Rice and Millets	Groundnut, Coconut Fruit trees, Fingermillet	2	Madukkur Pattukkottai
2.	Rice and Fingermillet	Fingermillet, Varagu, Cotton, Gingelly, Groundnut, Millets, and Cashew.	3	Avudaiyarkoil
3.	—	Coconut	8	Valuthalagudi
4.	Rice Millets	—	11	Alathur


CROPS GROWN
AVUDAIYARKOVIL TALUK
ARANTHANGI
THANJAVUR DISTRICT
N
SIVAGANGAI DISTRICT
RAMANATHAPURAM DISTRICT
PALK STRAIT
LEGEND
2
3
8
11
FOREST

SOILS

GANDHARVAKOTTAI TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Madukkur	Mdk	11,398.00	30.0
2.	Vallam	Vlm	8,911.00	23.5
3.	Mudukulam	Mud	8,521.00	22.4
4.	Mangalathupatti	Mng	5,818.00	15.3
5.	Pattukkottai	Pkt	1,876.00	4.9
6.	Budalur	Bdl	1,434.00	3.8
7.	Alathur	Alt	34.00	0.1
		Total	37,992.00	100.00


SOILS
GANDHARVAKOTTAI TALUK
N
THANJAVUR DISTRICT
KULATHUR
PUDUKKOTTAI
ALANGUDI
LEGEND
Mdk
Vlm
Mud
Mng
Pkt
Bdl
Alt
Forest

REVENUE VILLAGE WISE SOIL DISTRIBUTION

GANDHARVAKOTTAI TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	34	Andanur	Mdk 60 Vlm 40
2.	14	Aravampatti	Vlm 40 Mdk 30 Alt 30
3.	11	Ariyanipatti	Mud 70 Vlm 30
4.	38	Athangaraividuthi	Mdk 90 Vlm 10
5.	31	Ganapathipuram	Mng 85 Mdk 15
6.	37	Kallakottai	Mdk 100
7.	27	Kattunaval	Mdk 100
8.	7	Komapuram	Mud 70 Pkt 10 Vlm 30
9.	15	Kovilur	Mdk 55 Vlm 45
10	21	Kulathur	Pkt 35 Mud 35 Mdk 30
11.	1	Kurumpundi	Bdl 60 Vlm 40
12.	3	Malaiyapatti	Vlm 80 Bdl 20
13.	6	Manganur	Vlm 85 Pkt 15
14.	8	Manjapettai	Vlm 85 Mdk 10 Mud 5
15.	26	Mattangal	Mud Mdk
16.	22	Meikadipatti	Mdk 55 Mud 45
17.	23	Mudukulam	Mud 100

(1)	(2)	(3)	(4)
18.	22	Nadupatti	Pkt 55 Mud 45
19.	23	Namburanpatti	Pkt 95 Mdk 5
20.	33	Neppugai	Mdk 90 Vlm 10
21.	5	Nodiyur	Vlm 100
22.	16	Palayagandarvakottai	Mdk 50 Mud 50
23.	24	Periyakottai	Mdk 90 Pkt 10
24.	17	Pisanathur	Mud 80 Mdk 20
25.	9	Ponakulam	Mud 80 Pkt 20
26.	10	Pudunagar	Mud 100
27.	25	Pudupatti	Mdk 100
28.	35	Sangamviduthi	Mdk 100
29.	20	Seviarkudikadu	Mdk 50 Mud 50
30.	29	Sothupalai	Mng 100
31.	32	Sundampatii	Mdk 100
32.	2	Thanchenkurichi	Bdl 60 Vlm 40
33.	39	Thuvar	Vlm 55 Mdk 45
34.	30	Tondaman Urani	Mng 80 Mdk 20
35.	13	Vadugapatti	Vlm 40 Mdk 40 Mud 20
36.	28	Vadavampatti	Mng 100
37.	18	Veeradipatti	Mud 80 Mdk 20
38.	36	Vellalaviduthi	Mdk 100
39.	4	Viralipatti	Vlm 95 Pkt 5

LAND CAPABILITY CLASSIFICATION

GANDHARVAKOTTAI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Madukkur	IIe	11,398	30.0	Light texture Surface hardening	Conservation irrigation methods and addition of organics
2.	Mudukulam Pattukkottai Budalur	IIes	11,831	31.1	Surface hardening erosion	Soil conservation and addition of organics
3.	Alathur	IIsw	34	0.1	Heavy texture poor drainage alkalinity	Drainage improvement addition of organics and amendments
4.	Vallam Mangalathupatti	IIIes	14,729	38.8	Light texture gravelliness shallow solum erosion	Conservation irrigation methods and selection of crops
		Total	37,992	100.00		

Class

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

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

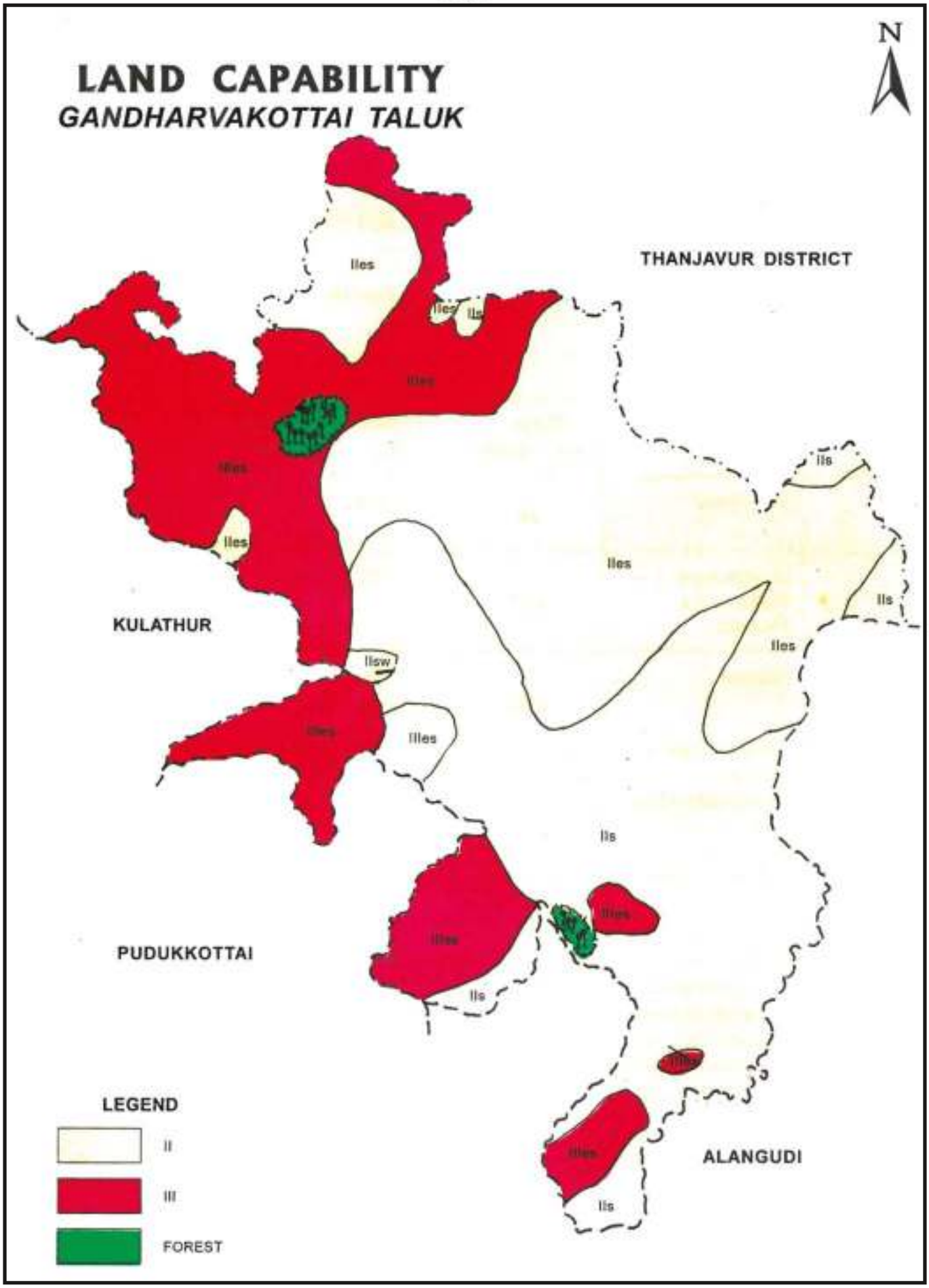
IV — *Lands that have very severe limitations for sustained use under agriculture.*

Sub class

s — *Root zone limitations*

e — *Erosion and run-off*

w — *Excess water*


LAND CAPABILITY
GANDHARVAKOTTAI TALUK
N
THANJAVUR DISTRICT
KULATHUR
PUDUKKOTTAI
ALANGUDI
IIes
IIs
IIsw
LEGEND
II
III
FOREST

LAND IRRIGABILITY CLASSIFICATION

GANDHARVAKOTTI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Madukkur	**2s**	11,398	30.0	Texture and permeability
2.	Mudukulam Pattukkottai Budalur	**2st**	11,831	31.1	Texture and topography
3.	Alathur	**2sd**	34	0.1	Texture poor drainage and alkalinity
4.	Vallam Mangalathupatti	**3st**	14,729	38.8	Gravelliness and topography
		Total	37,992	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

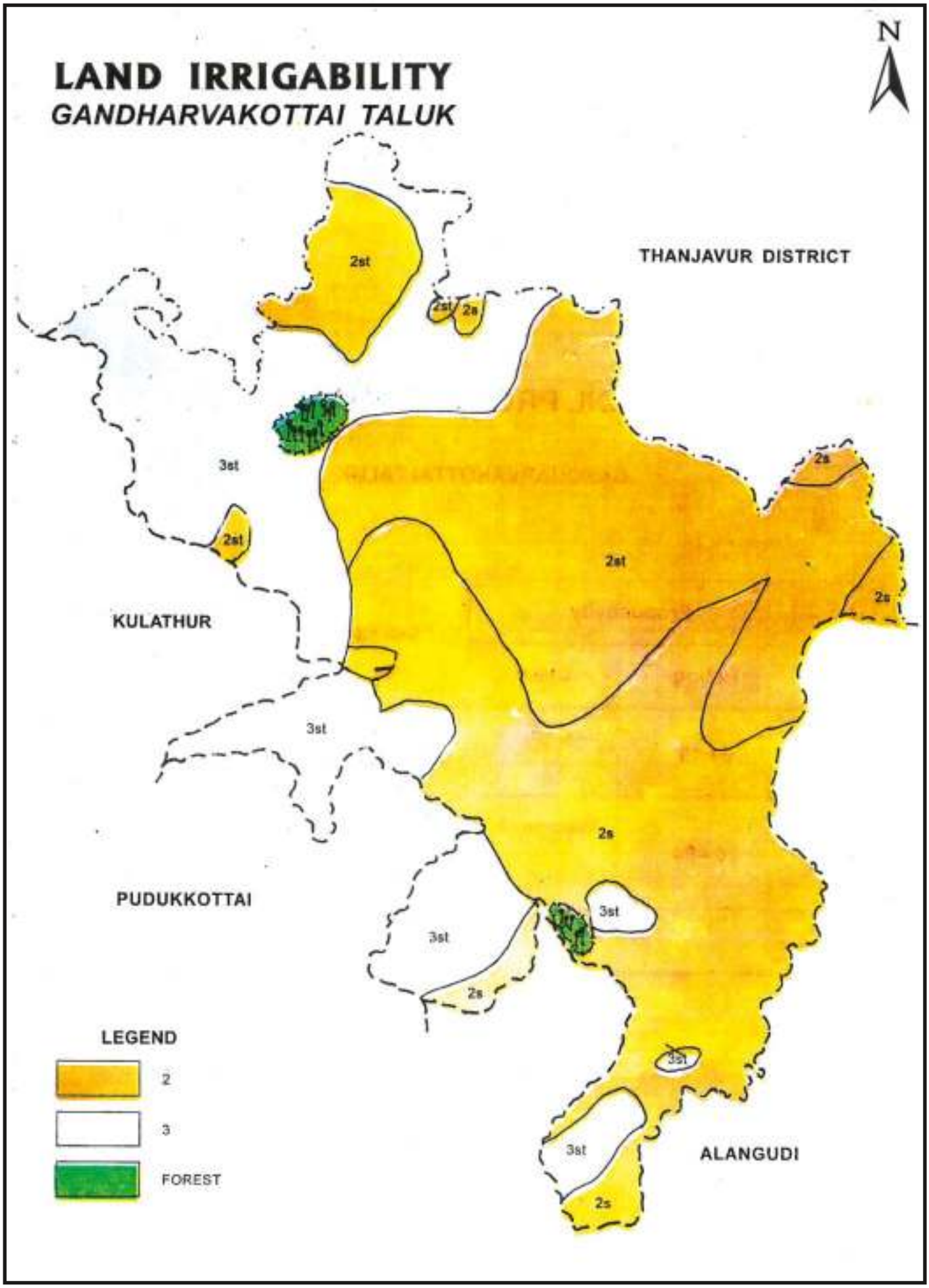
4 *Lands that have very severe soil limitations for sustained use under irrigation*

Sub class

s *Soil limitations*

t *Topography*

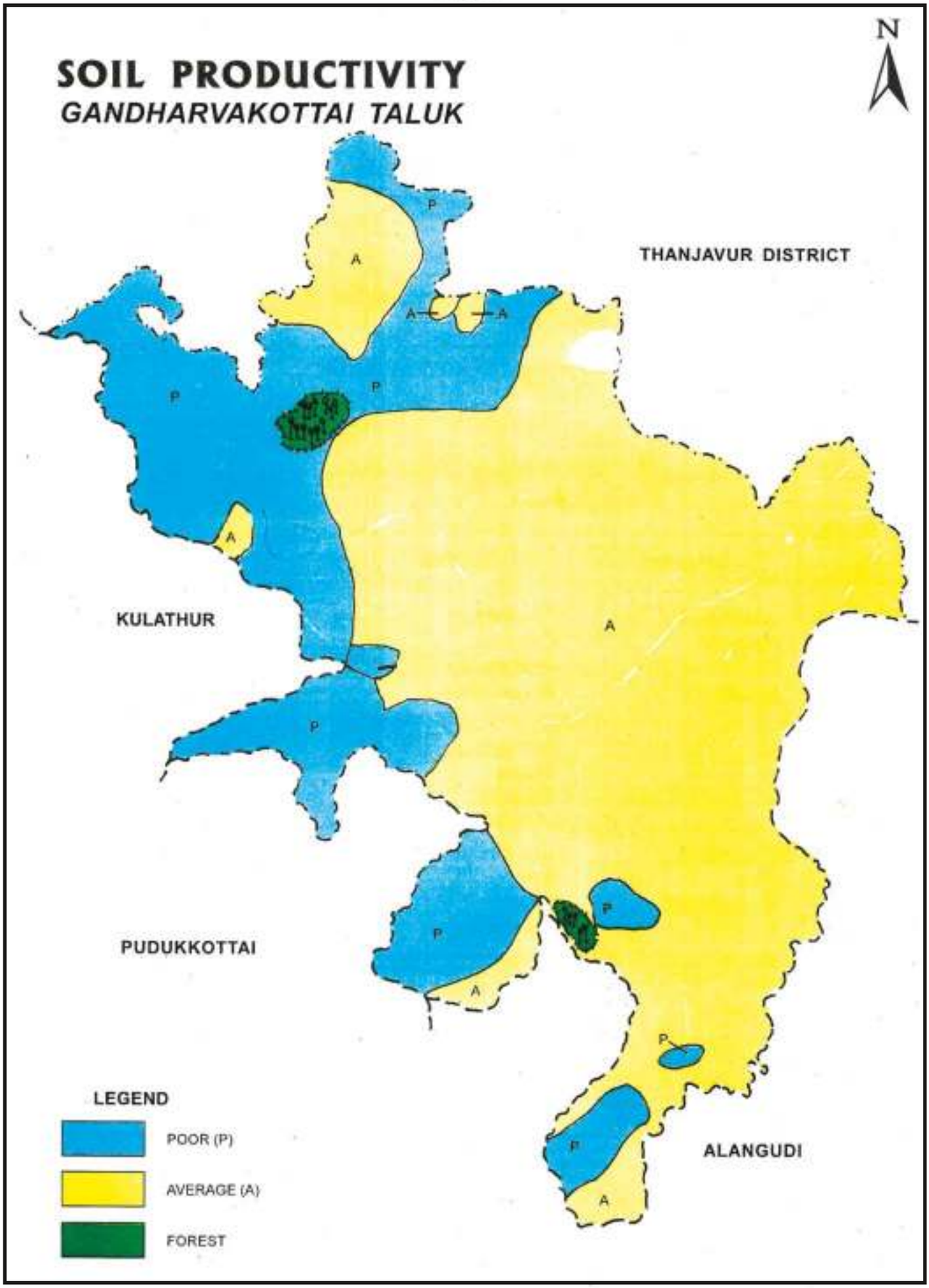
d *Drainage*


LAND IRRIGABILITY
GANDHARVAKOTTAI TALUK
N
THANJAVUR DISTRICT
KULATHUR
PUDUKKOTTAI
ALANGUDI
2st
2s
3st
LEGEND
2
3
FOREST

SOIL PRODUCTIVITY

GANDHARVAKOTTAI TALUK

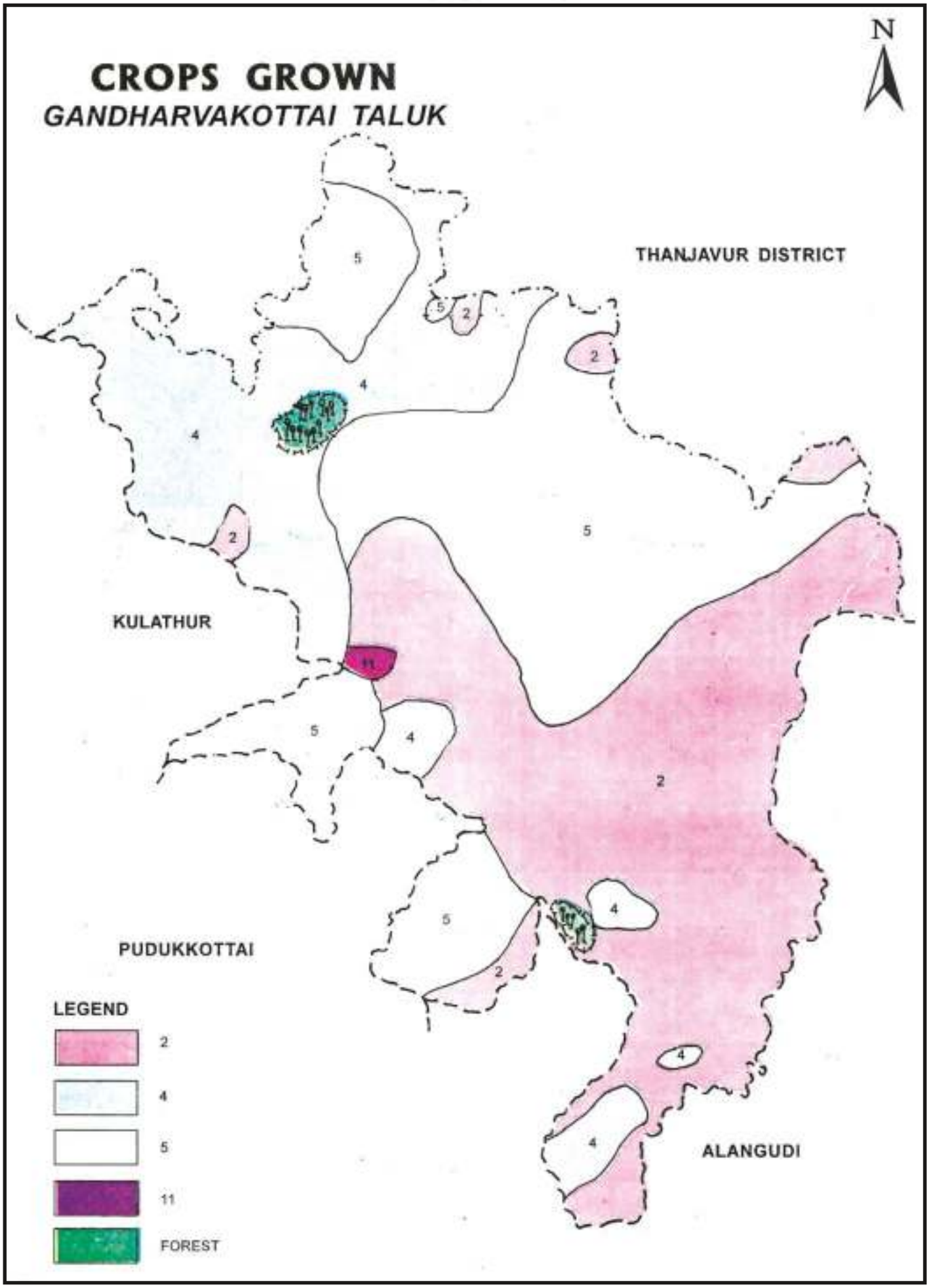
Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1.	**8 - 19**	Poor (P)	Mangalathupatti Vallam and Alathur	14,763	38.9
2.	**20 - 34**	Average (A)	Madukkur Mudukulam and Pattukkottai	23,229	61.1
			Total	37,992	100.00


SOIL PRODUCTIVITY
GANDHARVAKOTTAI TALUK
N
THANJAVUR DISTRICT
KULATHUR
PUDUKKOTTAI
ALANGUDI
P
A
LEGEND
POOR (P)
AVERAGE (A)
FOREST

CROPS GROWN

GANDHARVAKOTTAI TALUK

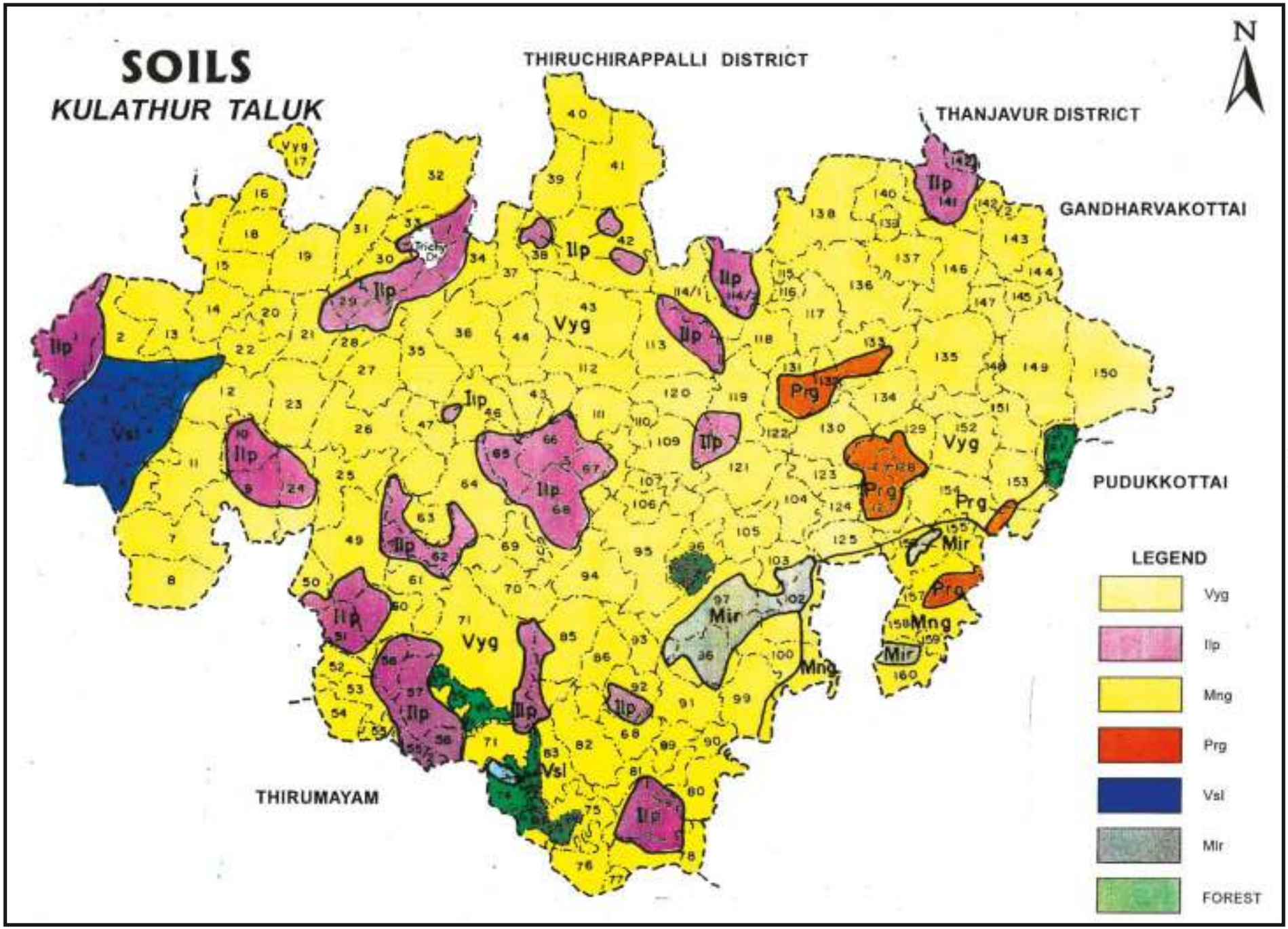
Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Groundnut Gingelly Rice Millets	Groundnut Coconut Fruit trees Finger Millet	2	Madukkur and Pattukkottai
2.	—	Groundnut Millets Cashew	4	Vallam
3.	Groundnut Rice Fingermillet	Groundnut Millets Fruit trees Redgram	5	Mangalathupatti Mudukulam and Budalur
4.	Rice Millets	—	11	Alathur


CROPS GROWN
GANDHARVAKOTTAI TALUK
N
THANJAVUR DISTRICT
KULATHUR
PUDUKKOTTAI
ALANGUDI
LEGEND
2
4
5
11
FOREST

SOILS

KULATHUR TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Vayalogam	Vyg	1,03,796.00	78.3
2.	Iluppur	Ilp	15,957.00	12.0
3.	Mangalathupatti	Mng	4,694.00	3.5
4.	Perungalur	Prg	4,457.00	3.4
5.	Visalur	Vsl	3,418.00	2.6
6.	Mullur	Mlr	298.00	0.2
		Total	1,32,620.00	100.00


SOILS
KULATHUR TALUK
THIRUCHIRAPPALLI DISTRICT
THANJAVUR DISTRICT
GANDHARVAKOTTAI
PUDUKKOTTAI
THIRUMAYAM
N
LEGEND
Vyg
Ilp
Mng
Prg
Vsl
Mir
FOREST

REVENUE VILLAGE WISE SOIL DISTRIBUTION

KULATHUR TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	7	Agarappatti	Vyg 100
2.	29	Akkalanayakkanpatti	Vyg 100
3.	44	Alangudi	Vyg 100
4.	60	Alathur	IIp 50 Vyg 50
5.	37	Anburapatti	IIp 5 Vyg 95
6.	105	Ammachathiram	Vyg 100
7.	154	Andakkulam	Vyg 90 Prg 10
8.	85	Annavasal	Vyg 80 IIp 20
9.	88	Ariyur	Vyg 100
10.	80	Ayingudi	Vyg 100
11.	122	Brahadambalpuram	Vyg 100
12.	19	Buthakudi	Vyg 100
13.	138	Chettipatti	Vyg 100
14.	49	Ennai	IIp 20 Vyg 80
15.	52	Gudalur	Vyg 100
16.	61	Idaiyapatti	Vyg 100
17.	62	Iluppur	IIp 95 Vyg 80
18.	93	Irumbali	Vyg 100
19.	64	Irundirappatii	Vyg 90 IIp 10
20.	25	Iswarankovil	Vyg 100
21.	59	Kadambarayanpatti	Vyg 100
22.	128	Kadambavayal	Vyg 100
23.	51	Kadavampatti	IIp 80 Vyg 20

(1)	(2)	(3)	(4)
24.	113	Kalamavur	Vyg 100
25.	18	Kalkudi	Vyg 100
26.	140	Kanangudi	Vyg 100
27.	8	Kasavanur	Vyg 100
28.	26	kattangudi	Vyg 100
29.	30	Kattalur	Vyg 50 Ilp 50
30.	142	Kattukottaipatti	Vyg 60 Ilp 40
31.	119	Keeranur	Ilp 20 Vyg 80
32.	146	Kilaiyur	Vyg 100
33.	94	Kilakkurichi	Vyg 100
34.	53	Kilikudi	Vyg 100
35.	152	Killanur	Vyg 100
36.	143	Killukkottai	Vyg 100
37.	145	Killukulavoipatti	Vyg 100
38.	11	Kodumbalur	Vyg 100
39.	17	Komangalam	Vyg 100
40.	47	kongudipatti	Vyg 100
41.	78	Kothandaramapuram	Vyg 60 Ilp 40
42	24	Kottirappatti	Vyg 50
43.	73	Kudumiamalai	Vyg 95 Ilp 5
44.	121	Kulathur	Ilp 20 Vyg 80
45.	40	Kumaramangalam	Vyg 100
46.	33	Kumarapatti	Vyg 60 Ilp 40
47	148	Kunnandarkovil	Vyg 100
48.	32	Kunnathur	Vyg 85 Ilp 15
49.	77	Kurukkappatti	Vyg 100
50	114	Lachchumanappatti	Ilp 50 Vyg 50
51.	108	Leekkanapatti	Vyg 100

(1)	(2)	(3)	(4)					
52.	34	Madayanaipatti	Ilp	40	Vyg	60		
53.	92	Madiyanallur	Vyg	50	Ilp	50		
54.	58	Mambatti	Vyg	100				
55.	42	Manddiyur	Vyg	80	Ilp	20		
56.	130	Mangathevanpatti	Vyg	95	Prg	5		
57.	82	Margudi	Vyg	100				
58.	82	Marayappatti	Vyg	90	Ilp	10		
59.	45	Marudampatti	Vyg	100				
60.	132	Marudur	Vyg	50	Prg	50		
61.	41	Mathur	Vyg	100				
62.	120	Melappuduvayal	Vyg	90	Ilp	10		
63.	31	Melapachakudi	Vyg	100				
64.	98	Melur	Vyg	30	Ilp	70		
65.	14	Meppudakkudi	Vyg	100				
66.	115	Mettupatti	Vyg	100				
67.	8	Minaveli	Vyg	100				
68.	150	Mianattur	Vyg	100				
69.	28	Mullaiyur	Vyg	100				
70.	102	Muthukkadu	Ilp	80	Mng	20		
71.	156	Muttanpatti	Vyg	100				
72.	2	Nammanpatty	Vyg	45	Vsr	45	Ilp	10
73.	66	Nanguppatti	Vyg	10	Ilp	90		
74.	131	Nanjur	Prg	50	Vyg	50		
75.	126	Naragiyanpatti	Vyg	100				
76.	96	Narthamalai	Vyg	100				
77.	43	Nirpalani	Vyg	100				
78.	109	Odukkur	Vyg	100				
79.	134	Oduvampatti	Vyg	100				

(1)	(2)	(3)	(4)
80.	67	Padippatti	Vyg 100
81.	65	Paiyur	Ilp 90 Vyg 10
82.	46	Pakkudi	Vyg 90 Ilp 10
83.	118	Palandanpatti	Vyg 100
84.	91	Panampatti	Vyg 100
85.	87	Panangudi	Vyg 95 Ilp 5
86.	57	Parambur	Ilp 80 Vyg 20
87.	36	Perambur	Vyg 100
88.	79	Perunanur	Vyg 100
89.	107	perungudippatti	Vyg 100
90.	89	Perunjinai	Vyg 90 Ilp 10
91.	54	Peyal	Vyg 100
92.	56	Pinnangudi	Vyg 100
93.	153	Pirambur	Vyg 80 Mng 20
94.	100	Poongudi	Mng 50 Vyg 50
95.	15	Poruvai	Vyg 100
96.	5	Poyyamani	Vsl 100
97.	72	Pudur	Vyg 100
98.	136	Puliyur	Vyg 100
99.	75	Pulvayal	Vyg 100
100.	63	Punginippatti	Vyg 90 Ilp 10
101.	23	Rajagiri	Vyg 100
102.	147	Rakkadanpatti	Vyg 100
103.	68	Rappusal	Ilp 85 Vyg 15
104.	1	Rasalippatti	Ilp 100
105.	97	Sathyamanagalam	Ilp 100
106.	155	Sattinippatti	Mng 100

(1)	(2)	(3)	(4)
107.	124	Seemanur	Vyg 95 Prg 5
108.	159	Seeranganpatti	Val 100
109.	38	Sengalarakkudi	Vyg 100
110.	141	Sangalur	Ilp 100
111.	127	Senaiyakkudi	Prg 70 Vyg 30
112.	39	Singathakurichi	Vyg 100
113.	86	Sittannavasal	Vyg 100
114.	116	Sivagamipuram	Vyg 100
115.	76	Sundarappatti	Vyg 100
116.	35	Suriyur	Vyg 100
117.	84	Tachampatti	Vyg 100 Ilp 35
118.	106	Tayinippatti	Vyg 100
119.	4	Tengatinnipatty	Vsl 100
120.	10	Tennambadi	Ilp 90 Vyg 10
121.	48	Tenmangudi	Vyg 95 Ilp 5
122.	158	Tennangudi	Mng 100
123.	117	Tennaitirayanpatti	Vsl 100
124.	50	Thalinji	Vyg 65 Ilp 35
125.	149	Themmavur	Vyg 100
126.	9	Theranur	Vyg 65 Ilp 35
127.	27	Thirunallur	Vyg 100
128.	90	Tiruvengavasal	Vyg 100
129.	103	Tadaiyur	Vyg 100
130.	160	Uchohani	Mlr 40 Mng 60
131.	135	udayalippatti	Vyg 100
132.	144	Ulagangattanpatti	Vyg 100
133.	104	Uppiliyakkudi	Vyg 100

(1)	(2)	(3)	(4)
134.	20	Vadugappatti	Vyg 100
135.	110	Vadugappatti	Vyg 100
136.	157	Vaithur	Prg 25 Mng 75
137.	123	Valamangalam	Vyg 95 Prg 5
138.	133	Valiyampatti	Vyg 70 Prg 30
139.	13	Vanaidirayanpatti	Vsl 100
140.	55	Vannarappatti	Vyg 100
141.	151	Vattankkottai	Vyg 100
142.	125	Vattankurichi	Vyg 75 Mng 25
143.	83	Vayalogam	Vyg 100
144.	70	Vellanjar	Vyg 100
145.	99	Vellanur	Vyg 100
146.	21	Velur	Ilp 20 Vyg 80
147.	139	Vellapillaiyarpatti	Vyg 100
148.	112	Vemmani	Vyg 100
149.	101	Vengavayal	Vyg 100
150.	160	Vettukkadu	Vyg 100
151.	111	Vilappatti	Vyg 90 Ilp 10
152.	95	Vilattuppatti	Vyg 100
153.	74	Visalur	Vsl 10 Vyg 90
154.	137	Visalur	Vyg 100
155.	22	Viralimalai	Vyg 100
156.	12	Viralur	Vyg 85 Vsl 15
157.	129	Virakkudi	Prg 55 Vyg 45
158.	71	Virappatti	Vyg 100
159.	3	Virudapatty	Vsl 100
160.	16	Vittamapatti	Vyg 100

LAND CAPABILITY CLASSIFICATION

KULATHUR TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Visalur Perungalur Mullur	**II s**	8,173	6.2	Medium texture Surface hardening	Conservation irrigation methods application of organics
2.	Iluppur	**II sw**	15,957	12.0	Heavy texture, poor drainage alkalinity	Improvement of drainage application of organics
3.	Vayalogam Mangalathupatti	**IIII es**	1,08,490	81.8	Light texture, gravelliness erosion	Conservation irrigation methods
		Total	1,32,620	100.00		

Class

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

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

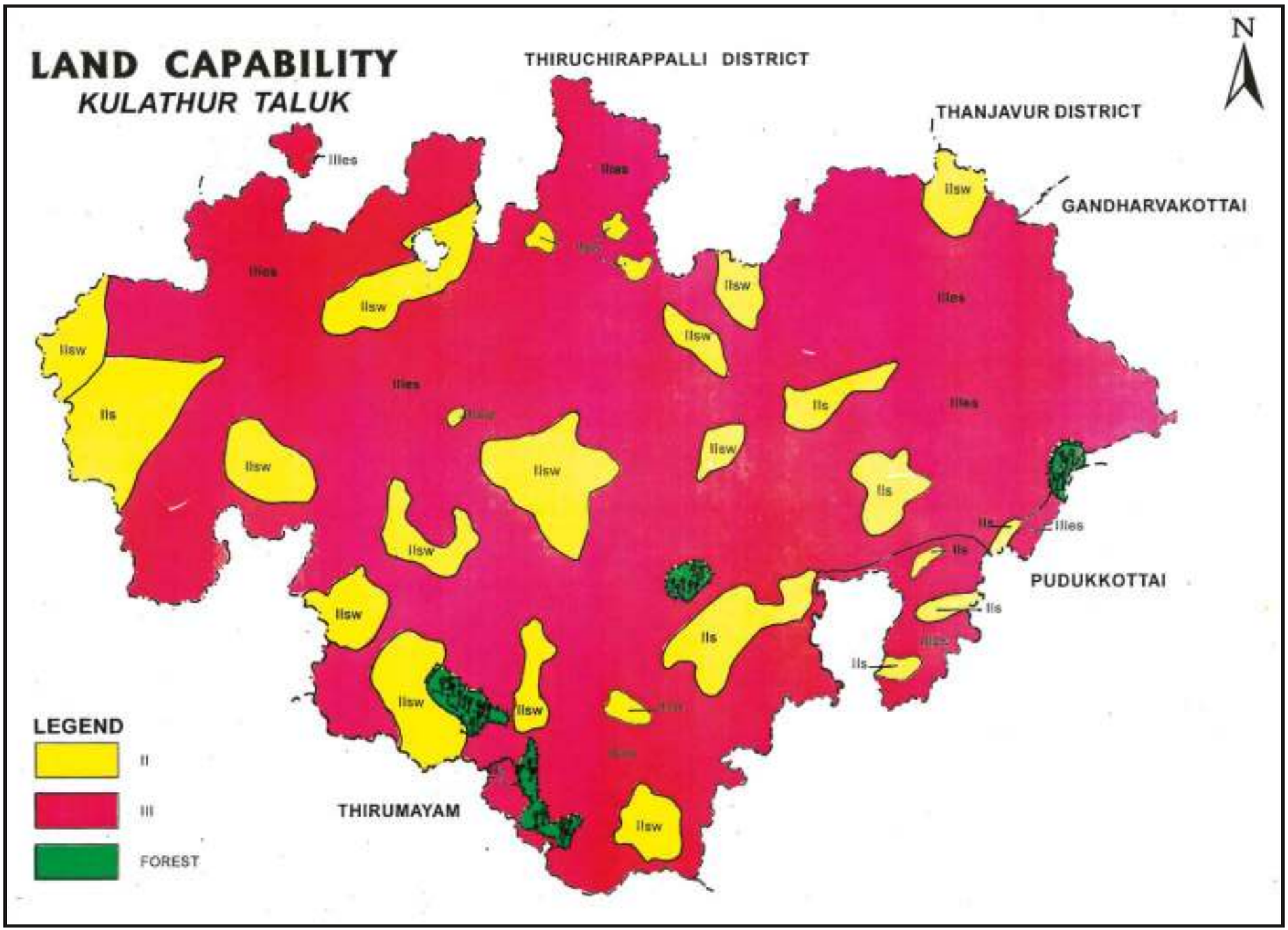
IV *Lands that have very severe limitations for sustained use under agriculture.*

Sub class

s *Root zone limitations*

e *Erosion and run-off*

w *Excess water*


LAND CAPABILITY
KULATHUR TALUK
THIRUCHIRAPPALLI DISTRICT
THANJAVUR DISTRICT
GANDHARVAKOTTAI
PUDUKKOTTAI
THIRUMAYAM
N
IIIes
IIes
IIsw
IIs
LEGEND
II
III
FOREST

LAND IRRIGABILITY CLASSIFICATION

KULATHUR TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Visalur Perungalur Mullur	**2s**	8,173	6.2	Texture
2.	Iluppur	**2sd**	15,957	12.0	Texture, drainage and alkalinity
3.	Vayalogam Mangalathupatti	**3st**	1.08,490	81.8	Texture, gravelliness and topography
		Total	37,992	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

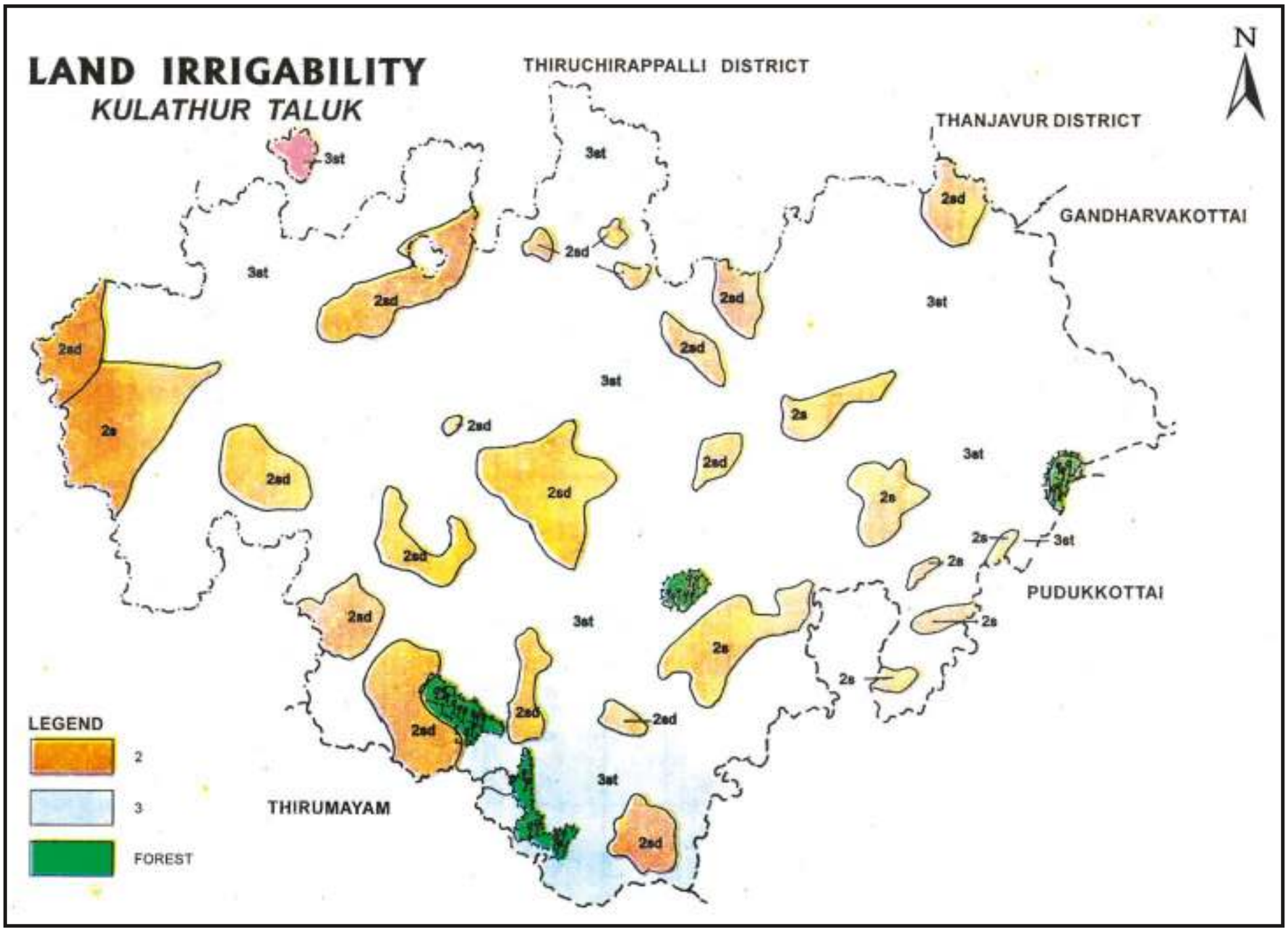
4 *Lands that have very severe soil limitations for sustained use under irrigation*

Sub class

s *Soil limitations*

t *Topography*

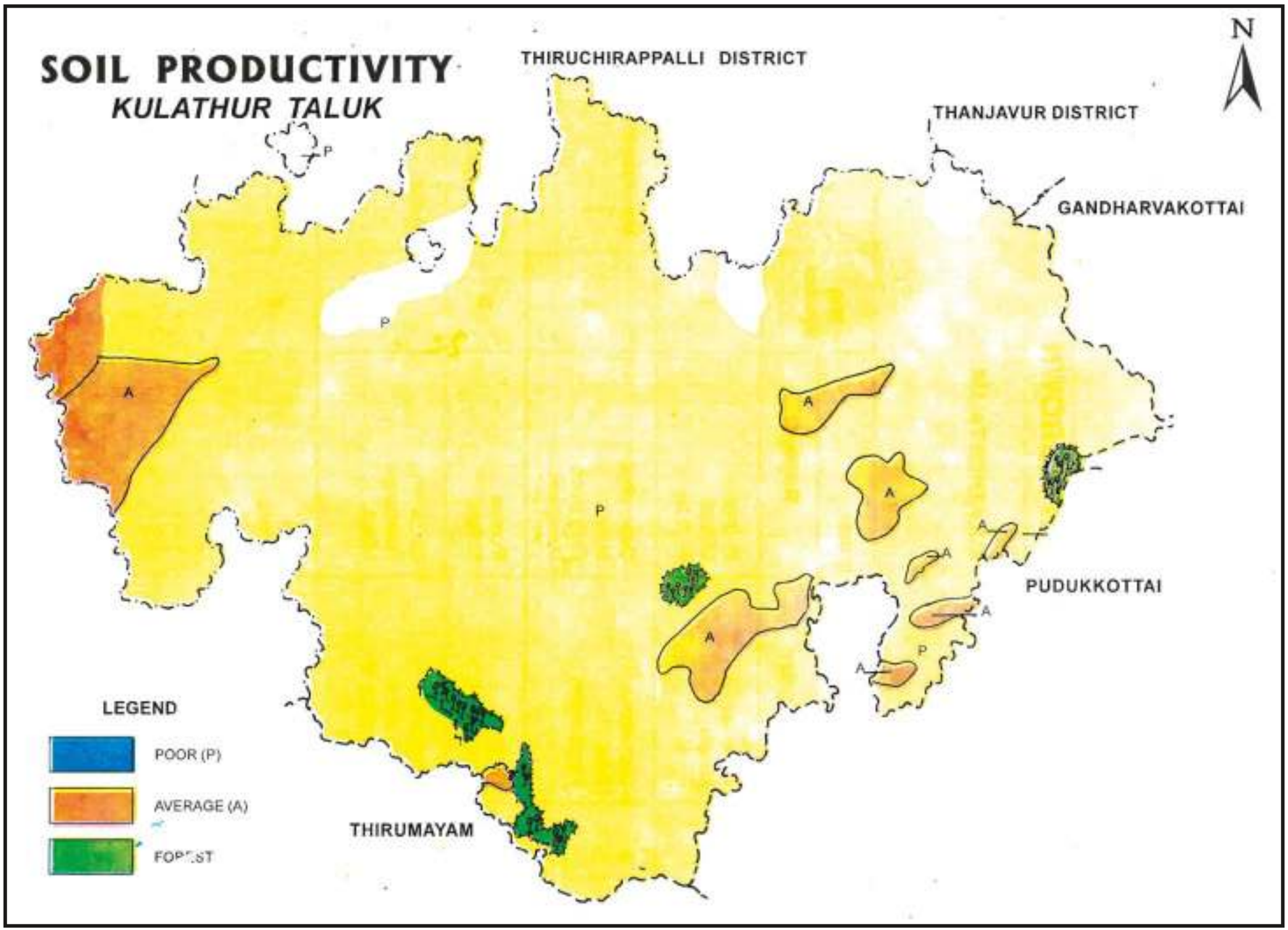
d *Drainage*


LAND IRRIGABILITY
KULATHUR TALUK
THIRUCHIRAPPALLI DISTRICT
THANJAVUR DISTRICT
GANDHARVAKOTTAI
PUDUKKOTTAI
THIRUMAYAM
N
3st
2sd
2s
LEGEND
2
3
FOREST

SOIL PRODUCTIVITY

KULATHUR TALUK

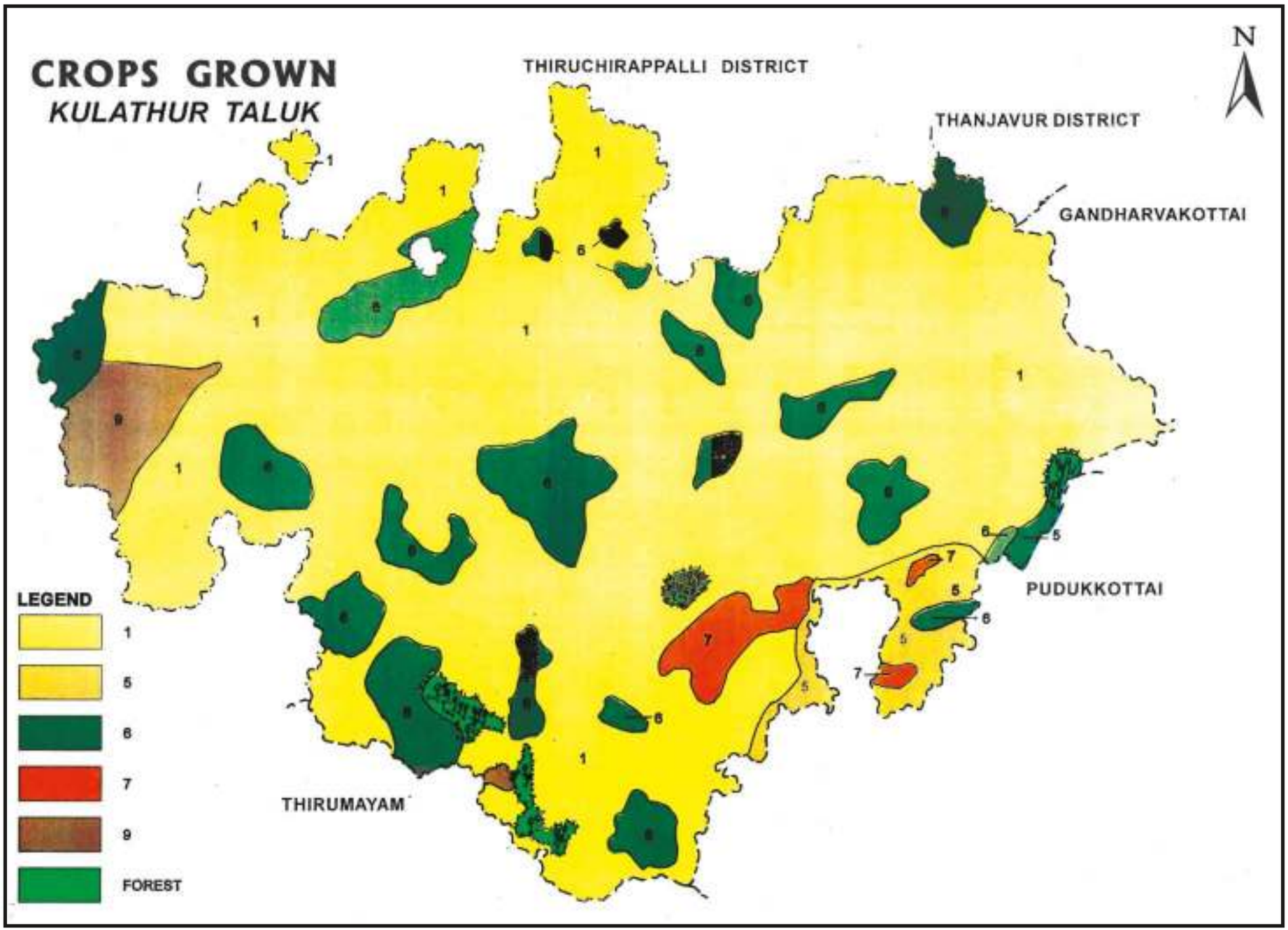
Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1.	8 - 19	Poor (P)	Mangalathupatti Vayalogam Iluppur	8,173	6.2
2.	20 - 34	Average (A)	Visalur Perungalur Mullur	1,24,447	93.8
			Total	1,32,620	100.00


SOIL PRODUCTIVITY
KULATHUR TALUK
THIRUCHIRAPPALLI DISTRICT
THANJAVUR DISTRICT
GANDHARVAKOTTAI
PUDUKKOTTAI
THIRUMAYAM
N
P
A
LEGEND
POOR (P)
AVERAGE (A)
FOREST

CROPS GROWN

KULATHUR TALUK

Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Rice Millets	Pulses Millets Fruit trees	1	Vayalogam
2.	Groundnut Rice Fingermillet	Groundnut Millets Fruit trees Redgram	5	Managalathupatti
3.	Rice Fingermillet	Pulses Millets	6	Iluppur and Perungalur
4.	Fingermillet Pearl millet Groundnut Maize	Groundnut Raedgram Millets	7	Mullur
5.	Rice Millets	Rice Millets	9	Visalur


CROPS GROWN
KULATHUR TALUK
THIRUCHIRAPPALLI DISTRICT
THANJAVUR DISTRICT
GANDHARVAKOTTAI
PUDUKKOTTAI
THIRUMAYAM
N
LEGEND
1
5
6
7
9
FOREST

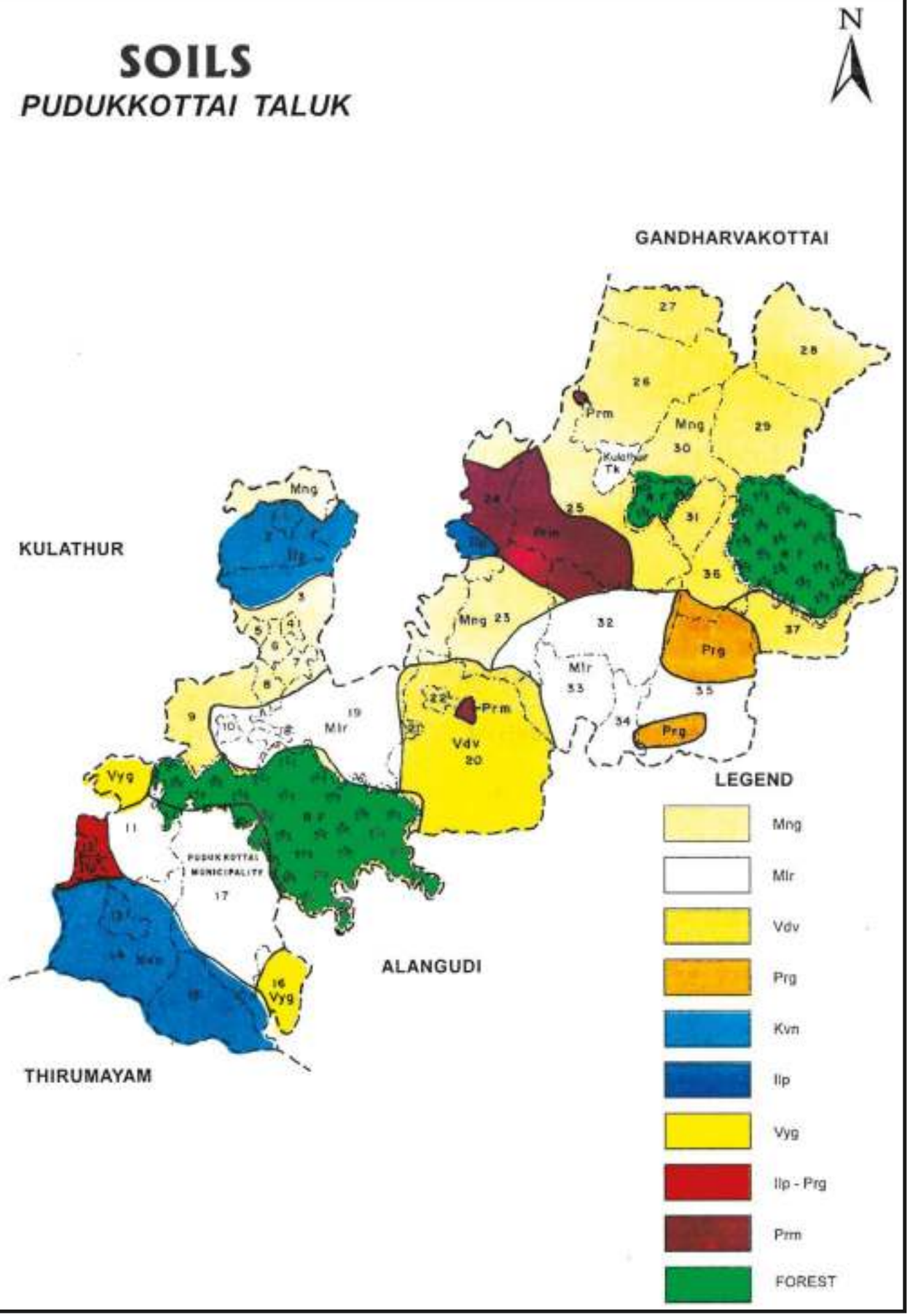
SOILS

PUDUKKOTTAI TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Mangalathupatti	Mng	8,692.00	33.7
2.	Mullur	Mlr	5,608.00	21.8
3.	Vadavalam	Vdv	3,514.00	13.6
4.	Perungalur	Prg	2,969.00	11.5
5.	Kavinad	Kvn	2,176.00	8.4
6.	Iluppur	Ilp	1,640.00	6.4
7.	Vayalogam	Vyg	583.00	2.3
8.	Iluppur - Perungalur Association	Ilp - Prg	358.00	1.4
9.	Porum	Prm	218.00	0.9
	Total		25,758.00	100.00

SOILS

PUDUKKOTTAI TALUK



REVENUE VILLAGE WISE SOIL DISTRIBUTION

PUDUKKOTTAI TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	26	Adhanakootai	Mng 100
2.	18	Ayyavayal	Mlr 100
3.	1	Egavayal	Ilp 100
4.	21	Ichiyadi II Bit	Vdv 100
5.	22	Ichiyadi I Bit	Vdv 100
6.	28	Kallukaranpatti	Mng 95 Vlm 5
7.	14	Kavinadu West	Kvn 100
8.	15	kavinadu East	Kvn 100
9.	6	Kedayapatti	Mng 100
10.	4	Kurichipatti	Mng 100
11.	33	Kulavoipatti	Mlr 90 Vdv 10
12.	30	Kuppayampatti	Mng 100
13.	32	Manaviduthi	Mlr 90 Prg 10
14.	24	Mangalathupatti	Mlr 20 Prg 50 Mng 30
15.	34	Mukkanpatti	Mlr 100
16.	19	Mullur	Mlr 100
17.	11	Nathampannai	Prg - Ilp 100

(1)	(2)	(3)	(4)
18.	31	Nammelipatti	Mng 100
19.	23	Perungadanviduthi	Mng 65 Mlr 25 Vdv 10
20.	25	Perungalur	Prg 40 Mng 60
21.	17	Pudukkottai	Vyg 100
22.	37	Pulavankadu	Mlr 95 Prg 5
23.	13	Purakarainathampannai	Kvn 100
24.	3	Puthambur	Ilp 65 Mng 35
25.	35	Sammattividuthi	Prg 60 Mlr 40
26.	5	Sanivayal	Mng 100
27.	12	Sellukudi	Prg - Ilp 100
28.	2	Sembattur	Ilp 100
29.	10	Siruvayal	Mlr 100
30.	27	Sokkanathapatti	Mng 100
31.	7	Tattampatti	Mng 100
32.	8	Thennathiraiyanpatti	Mng 90 Mlr 10
33.	16	Thirumalarayasamudram	Vyg 100
34.	20	Vadavalam	Vdv 100
35.	9	Vagavayal	Mlr 100
36.	29	Vannarapatti	Mng 100
37.	36	Varappur	Mng 100

LAND CAPABILITY CLASSIFICATION

PUDUKKOTTAI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Vadavalam Mullur Perungalur Porum	**II s**	12,309	47.8	Light / medium texture Surface hardenting	Conservation irrigation methods addition of organics
2.	Iluppur Kavinad	**II sw**	3,816	14.8	Heavy texture poor drainage	Improvement of drainage addition of organics
3.	Vayalogam Mangalathupatti	**III es**	9,275	36.0	Light texture gravelliness erosion	Conservation irrigation methods
4.	Iluppur - Perungalur association	**II sw**	358	1.4	Texture poor drainage	Improvement of drainage
		Total	25,758	100.00		

Class

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

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

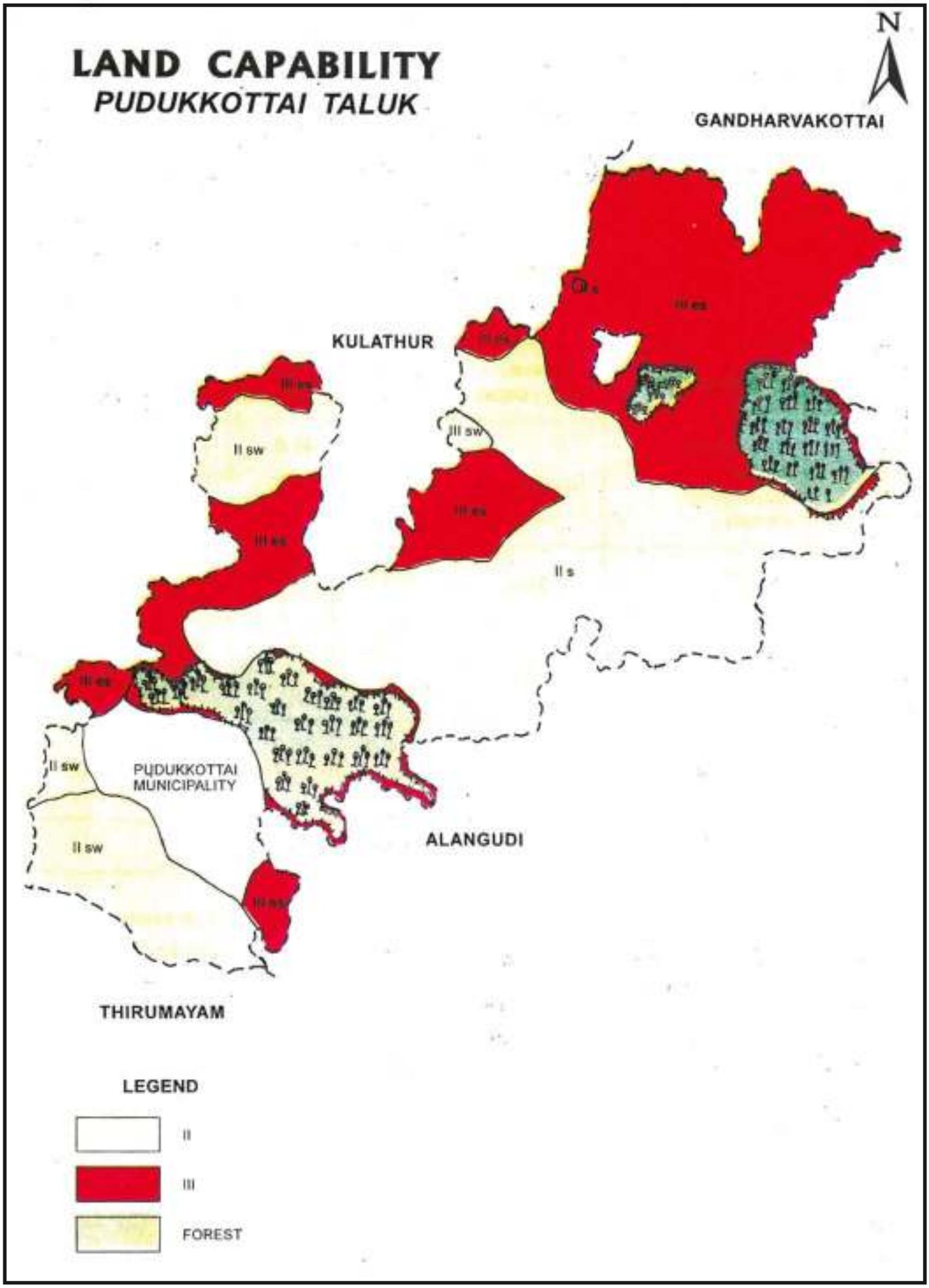
IV — *Lands that have very severe limitations for sustained use under agriculture.*

Sub class

s — *Root zone limitations*

e — *Erosion and run-off*

w — *Excess water*


LAND CAPABILITY
PUDUKKOTTAI TALUK
N
GANDHARVAKOTTAI
KULATHUR
II sw
III sw
III es
II s
PUDUKKOTTAI
MUNICIPALITY
ALANGUDI
THIRUMAYAM
LEGEND
II
III
FOREST

LAND IRRIGABILITY CLASSIFICATION

PUDUKKOTTAI TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Vadavalam Mullur Perungalur Porum	**2s**	12,309	47.8	Texture
2.	Iluppur Kavinad	**2sd**	3,816	14.8	Heavy texture poor drainage
3.	Iluppur - Perungalur association	**2sd**	358	1.4	Heavy texture poor drainage
4.	Vayalogam Mangalathupatti	**3st**	9,275	36.0	Texture gravelliness topography
		Total	25,758	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

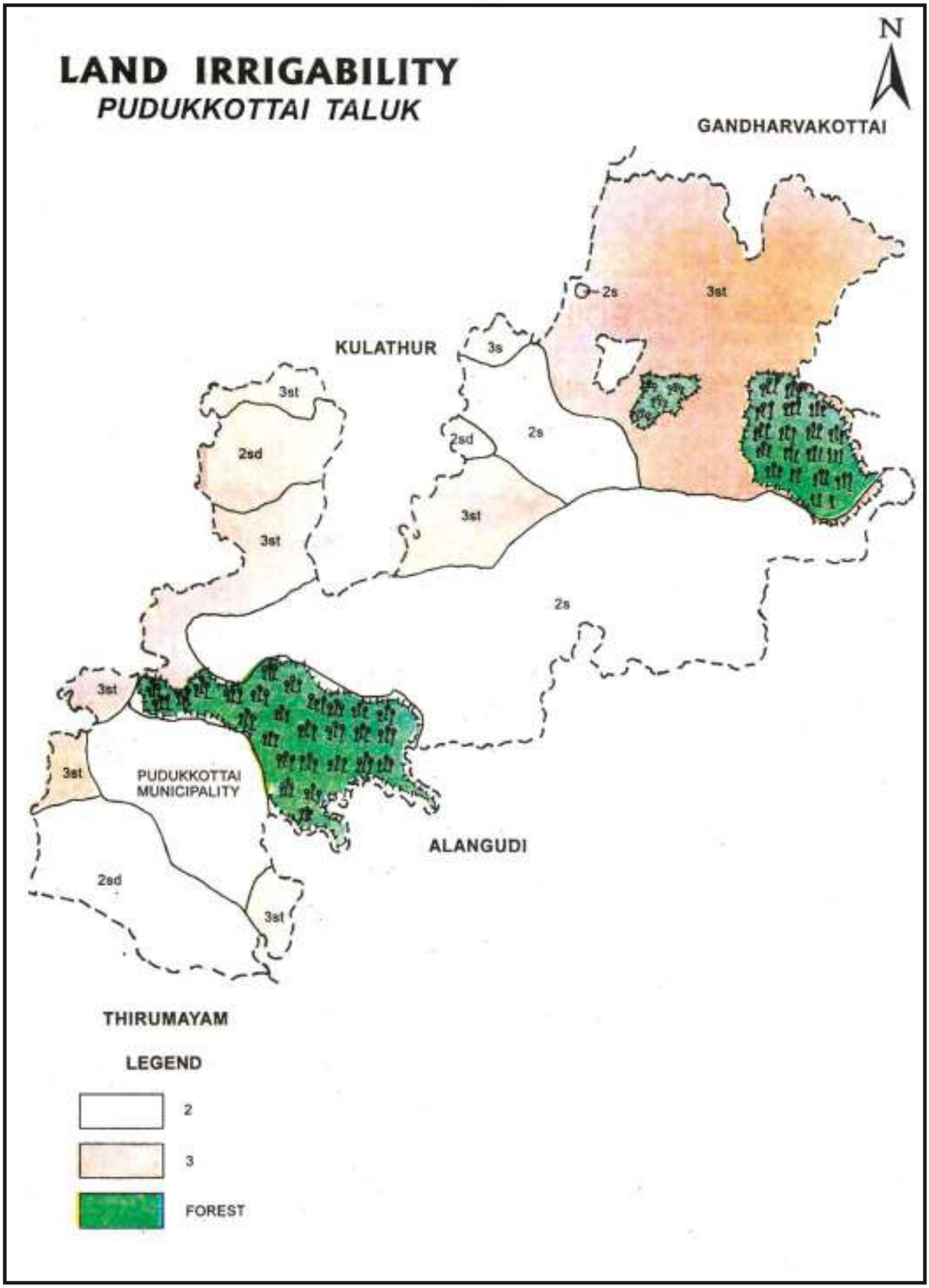
4 *Lands that have very severe soil limitations for sustained use under irrigation*

Sub class

s *Soil limitations*

t *Topography*

d *Drainage*


LAND IRRIGABILITY
PUDUKKOTTAI TALUK
N
GANDHARVAKOTTAI
KULATHUR
ALANGUDI
THIRUMAYAM
PUDUKKOTTAI MUNICIPALITY
2s
3st
3s
2sd
LEGEND
2
3
FOREST

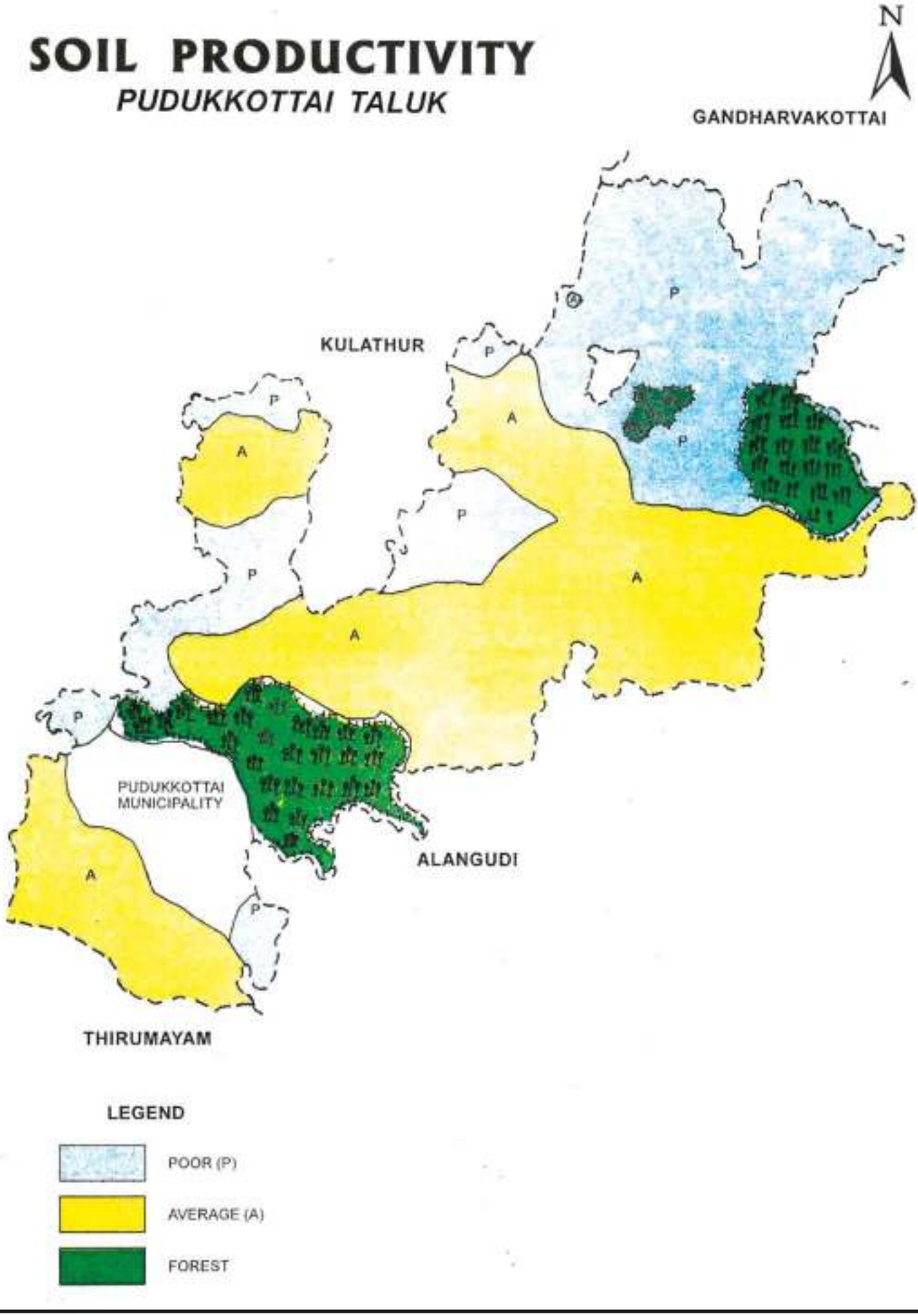
SOIL PRODUCTIVITY

PUDUKKOTTAI TALUK

Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1	8 - 19	Poor (P	Mangalathupatti Vayalogam Iluppur	10,915	42.4
2.	20 - 34	Average (A)	Mullur Vadavalam Perungalur Kavinad Illuppur - Perungalur association Porum	14,843	57.6
			Total	25,758	100.00

SOIL PRODUCTIVITY

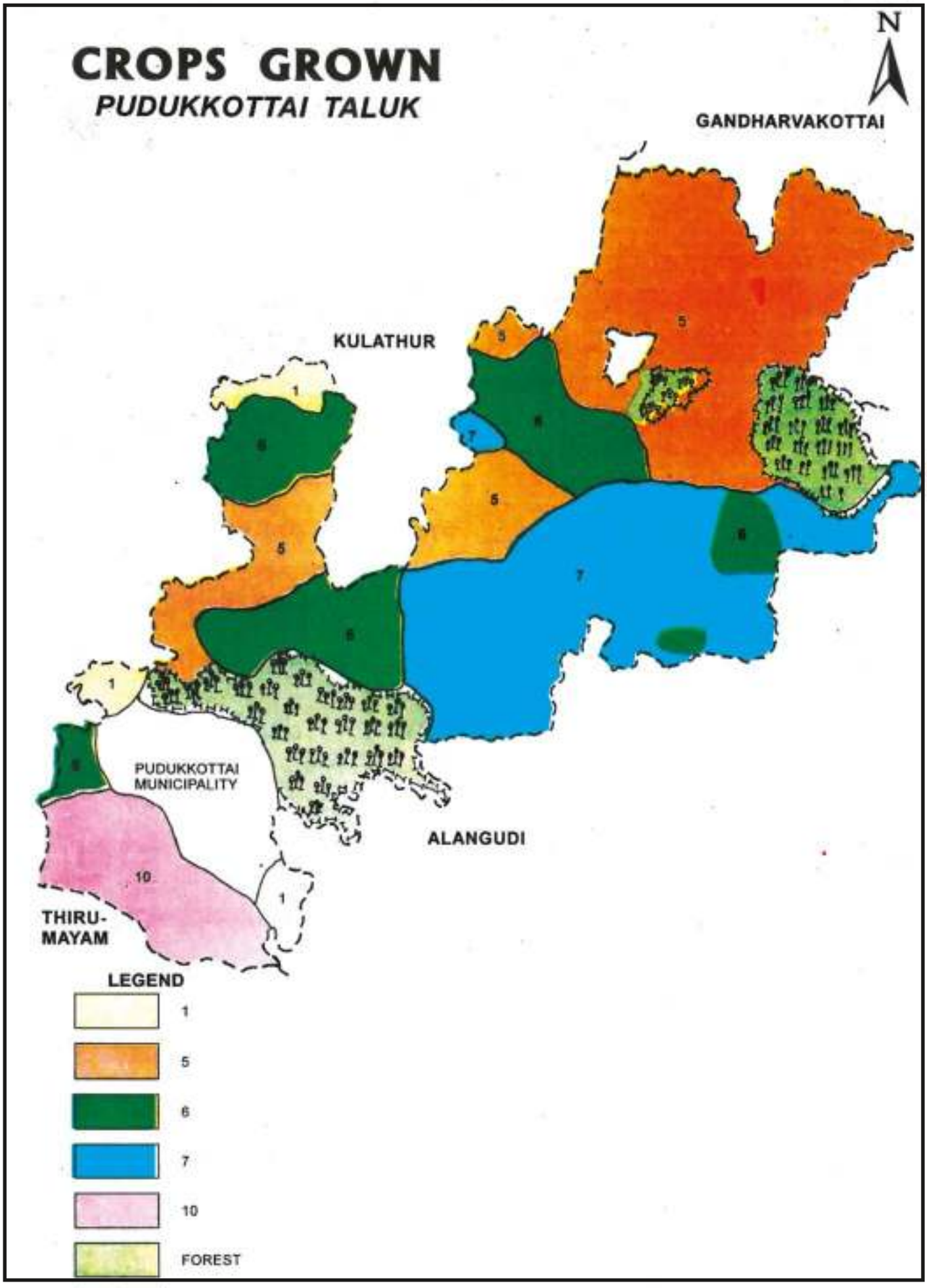
PUDUKKOTTAI TALUK



CROPS GROWN

PUDUKKOTTAI TALUK

Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Rice & Millets	Pulses Millets Fruit trees	1	Vayalogam
2.	Groundnut Rice Fingermillet	Groundnut Millets Fruit tree Redgram	5	Mangalathupatti
3.	Rice Fingermillet	Pulses Millets	6	Perungalur Iluppur
4.	Fingermillet Pearlmillet Groundnut Maize	Groundnut Redgram, Millets	7	Mullur Vadavalam
5.	Rice Millets Sugarcane	Rice & Millets	10	Kavinad
6.	Rice Millets	—	11	Porum

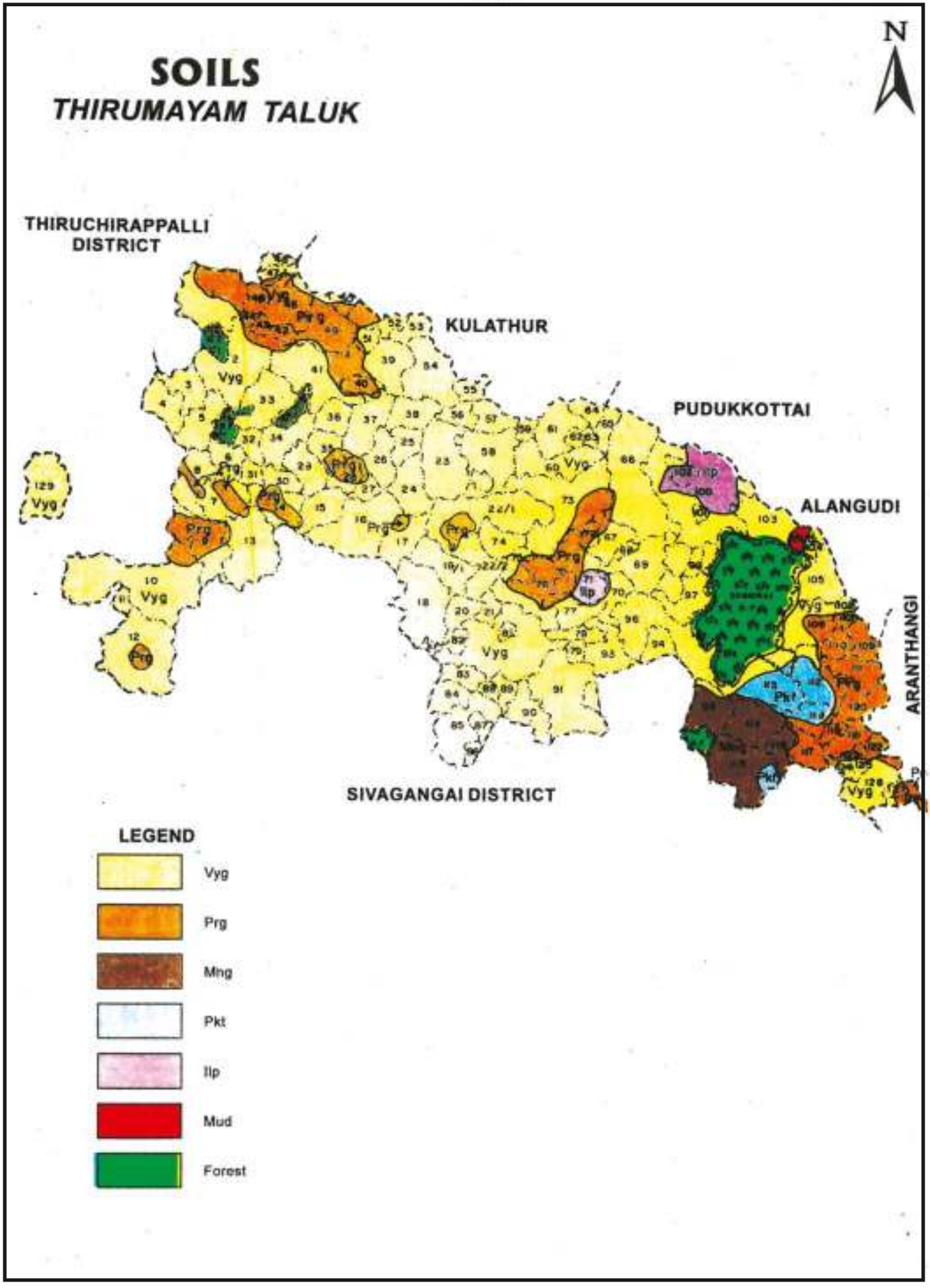

CROPS GROWN
PUDUKKOTTAI TALUK
N
GANDHARVAKOTTAI
KULATHUR
PUDUKKOTTAI MUNICIPALITY
ALANGUDI
THIRU-MAYAM
LEGEND
1
5
6
7
10
FOREST

SOILS

THIRUMAYAM TALUK

Sl. No.	Soil series	Symbol	Extent (ha)	Per cent to total
1.	Vayalogam	Vyg	64,676.00	74.1
2.	Perungalur	Prg	10,881.00	12.5
3.	Mangalathupatti	Mng	6,347.00	7.3
4.	Pattukkottai	Pkt	3,434.00	3.9
5.	Iluppur	Ilp	1,825.00	2.0
6.	Mudukulam	Mud	127.00	0.2
	Total		87,290.00	100.00

SOILS
THIRUMAYAM TALUK



REVENUE VILLAGE WISE SOIL DISTRIBUTION

THIRUMAYAM TALUK

S.No.	Village No.	Village name	Soil distribution in Percentage
1.	91	Adanur	Vyg 100
2.	82	Adugapatti	Vyg 100
3.	109	Agavayal	Prg 100
4.	121	Agavayal	Prg 100
5.	6	Alavayal	Vyg 100
6.	77	Alavayal	Vyg 100
7.	123	Allanvayal	Vyg 100
8.	5	Ammankurichi	Vyg 100
9.	124	Anikkini	Vyg 80 Phy 20
10.	92	Aramanpatti	Prg 100
11.	37	Arasamalai	Prg 5 Vyg 95
12.	65	Arasandampatti	Vyg 100
13.	105	Arimalam	Vyg 100
14.	17	Athur	Vyg 90 Prg 10
15.	43	Avampatti	Prg 10
16.	125	Chittampatti	Vyg 100
17.	55	Chithur	Vyg 100
18.	20	Dhurvasapuram	Vyg 100
19.	127	Edayanvayal	Prg 80 Vyg 20
20.	70	Elanjavur	Vyg 100
21.	72	Enappatti	Vyg 100
22.	56	Gudaiur	Vyg 100
23.	33	Idaiyattur	Vyg 100
24.	63	Kadambavayal	Vyg 100
25.	118	Kaikkulamvayal	Prg 100
26.	50	Kalaniyapatti	Prg 35 Vyg 65
27.	4	Kallampatti	Vyg 100
28.	8	Kandiyanatham	Vyg 85 Prg 15
29.	19	Kannanur I bit	Vyg 100
30.	21	Kannanur II bit	Vyg 100

(1)	(2)	(3)	(4)
31.	94	Kannakarakudi	Vyg 100
32.	41	Karaiyur	Vyg 100
33.	120	Karamangalam	Prg 100
34.	51	Karanappatti	Vyg 90 Prg 10
35.	49	Keelathaniyam	Prg 100
36.	106	Keelapanaiyur	Prg 100
37.	30	Konnaiyur	Vyg 100
38.	26	Kovanur	Vyg 100
39.	90	Konapattu	Vyg 100
40.	79	Kolathupatti	Vyg 100
41.	69	Kottaiyur	Vyg 100
42.	60	Kottur	Vyg 100
43.	58	Kulamangalam	Vyg 100
44.	24	Kulipirai	Vyg 100
45.	59	Kummangudi	Vyg 100
46.	112	Kummangudi	Ply 40 Prg 50 Vyg 10
47.	81	Kunnathupatti	Vyg 100
48.	128	Kurichi	Vyg 100
49.	73	Lebalakkudi	Vyg 100
50.	61	Mallangudi	Vyg 100
51.	86	Manjinipatti	Vyg 100
52.	2	Maraya madurai	Vyg 85 Prg 15
53.	35	Mathiyani	Prg 100
54.	15	Melamelanilai	Vyg 100
55.	23	Melapanaiyur	Vyg 100
56.	113	Melanilaivayal	Pkt 70 Mng 15 Vyg 15
57.	46	Melathariyam	Prg 90 Vyg 10
58.	108	Melivayal	Prg 100
59.	76	Melur	Prg 50 Vyg 50
60.	27	Mekkinipatti	Vyg 95 Prg 5
61.	103	Mirattunilai	Vyg 95 Prg 5
62.	83	Meyyapuram	Vyg 100
63.	14	Moolangudi	Prg 40 Vyg 60

(1)	(2)	(3)	(4)
64.	42	Mullipatti	Prg 100
65.	3	Nagarapatti	Vyg 100
66.	116	Nallambalsamudram	Mng 95 Prg 5
67.	54	Nallur	Vyg 100
68.	31	Nathupatti	Vyg 100
69.	95	Nedungudi	Mng 100
70.	74	Neikonam	Vyg 100
71.	85	Neivasal	Vyg 100
72	38	Neiveli	Vyg 100
73.	39	Nerinjikudi	Vyg 100
74.	1	Oliyamangalam	Prg 45 Vyg 55
75.	129	Palakurichi	Vyg 100
76.	88	Pallivasal	Vyg 100
77.	96	Panangudi	Vyg 100
78.	64	Peraiyur	Vyg 100
79.	75	Perundurai	Vyg 100
80.	100	Perungudi	Ilp 35 Vyg 65
81.	62	Pilakkudipatti	Vyg 100
82.	67	Pilivalam	Vyg 85 Prg 15
83.	117	Piliyavayal	Prg 100
84.	84	Pillamangalam	Vyg 100
85.	13	Ponnamaravathy East	Vyg 95 Prg 5
86.	9	Ponnamaravathy West	Vyg 30 Prg 70
87.	101	Poovampatti	Vyg 100
88.	114	Pudunilaivayal	Mng 100
89.	18	Rangiyam	Vyg 100
90.	57	Ratnapuram	Vyg 100
91.	115	Rayapuram	Mng 85 Pkt 15
92.	99	Rayaregunatha samudram	Vyg 100
93.	98	Rayavaram	Vyg 100
94.	107	Sammandanvayal	Vyg 100
95.	110	Samudram	Prg 100
96.	36	Sathanur	Vyg 100
97.	29	Sembuthi	Vyg 100
98.	32	Semmelapatti	Vyg 100

(1)	(2)	(3)	(4)
99.	97	Sengirai	Mng 100
100.	53	Seranur	Vyg 100
101.	47	Surapatty	Vyg 90 Prg 10
102.	16	Sevalur	Vyg 95 Prg 5
103.	87	Sirathakkudi	Vyg 100
104.	104	Sirayampatti	Vyg 100
105.	68	Sokkanathapatti	Vyg 100
106.	28	Sundaram	Vyg 100
107.	119	Thalayathivayal	Pkt 50 Prg 50
108.	66	Thekkattur	Vyg 100
109.	34	Thenur	Vyg 100
110.	12	Thirukkalampur	Vyg 90 Prg 10
111.	71	Thirumayam	Ilp 20 Vyg 30 Prg 50
112.	80	Thulaiyanur	Vyg 100
113.	111	Thuraiyur	Prg 100
114.	7	Thuthur	Vyg 70 Prg 30
115.	93	Unaiyur	Vyg 100
116.	45	Usilampatti	Prg 100
117.	48	Vadakkupatti	Vyg 100
118.	25	Valakkurichi	Vyg 100
119.	126	Valaramanickam	Vyg 100
120.	102	Valayampatti	Ilp 100
121.	78	Vanniyulandanvayal	Vyg 100
122.	10	Varapattu	Vyg 100
123.	122	Velavayal	Vyg 100
124.	44	Vellaiyagoundanpatti	Prg 100
125.	52	Vellugudi	Prg 5 Vyg 95
126.	40	Vellukudi	Prg 80 Vyg 20
127.	89	Vengalur	Vyg 100
128.	22	Virachilai	Vyg 100

LAND CAPABILITY CLASSIFICATION

THIRUMAYAM TALUK

Sl. No.	Soil series	Class sub - class	Extent (ha)	Per cent to total	Soil Limitations	Special needs
1.	Perungalur	**II s**	10,881	12.5	Texture and Surface hardening	Conservation irrigation methods addition of organics
2.	Mudukulam Pattukkottai	**II es**	3,561	4.1	Light texture and erosion	Soil and Water conservation measures
3.	Iluppur	**II sw**	1,825	2.0	Heavy texture poor drainage alkalinity	Improvement of drainage and application of organics and amendments
4.	Mangalathupatti Vayalogam	**III es**	71,023	81.4	Light texture gravelliness and erosion	Soil and Water conservation measures
		Total	87,290	100.00		

Class

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

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

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

Sub class

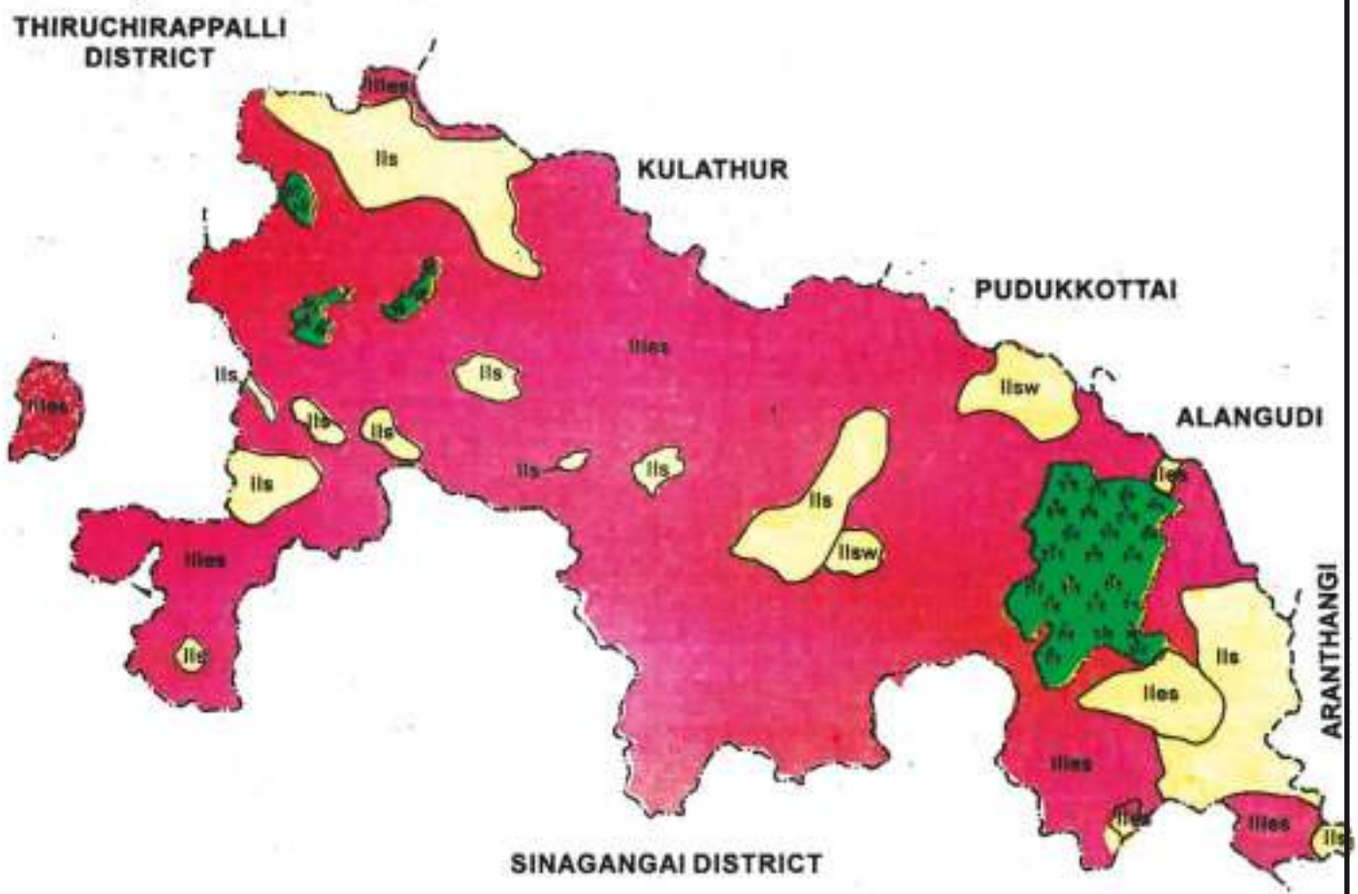
s — *Root zone limitations*

e — *Erosion and run-off*

w — *Excess water*

LAND CAPABILITY

THIRUMAYAM TALUK



LAND IRRIGABILITY CLASSIFICATION

THIRUMAYAM TALUK

Sl. No.	Soil series	Class , sub - class	Extent (ha)	Per cent to total	Soil Limitations
1.	Perungalur	**2s**	10,881	12.5	Texture
2.	Mudukulam Pattukkottai	**2st**	3,561	4.1	Texture topography
3.	Iluppur	**2sd**	1,825	2.0	Texture drainage alkalinity
4.	Mangalathupatti Vayalogam	**3st**	71,023	81.4	Texture gravelliness topography
		Total	87,290	100.00	

Class

2 *Lands that have moderate soil limitations for sustained use under irrigation*

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

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

Sub class

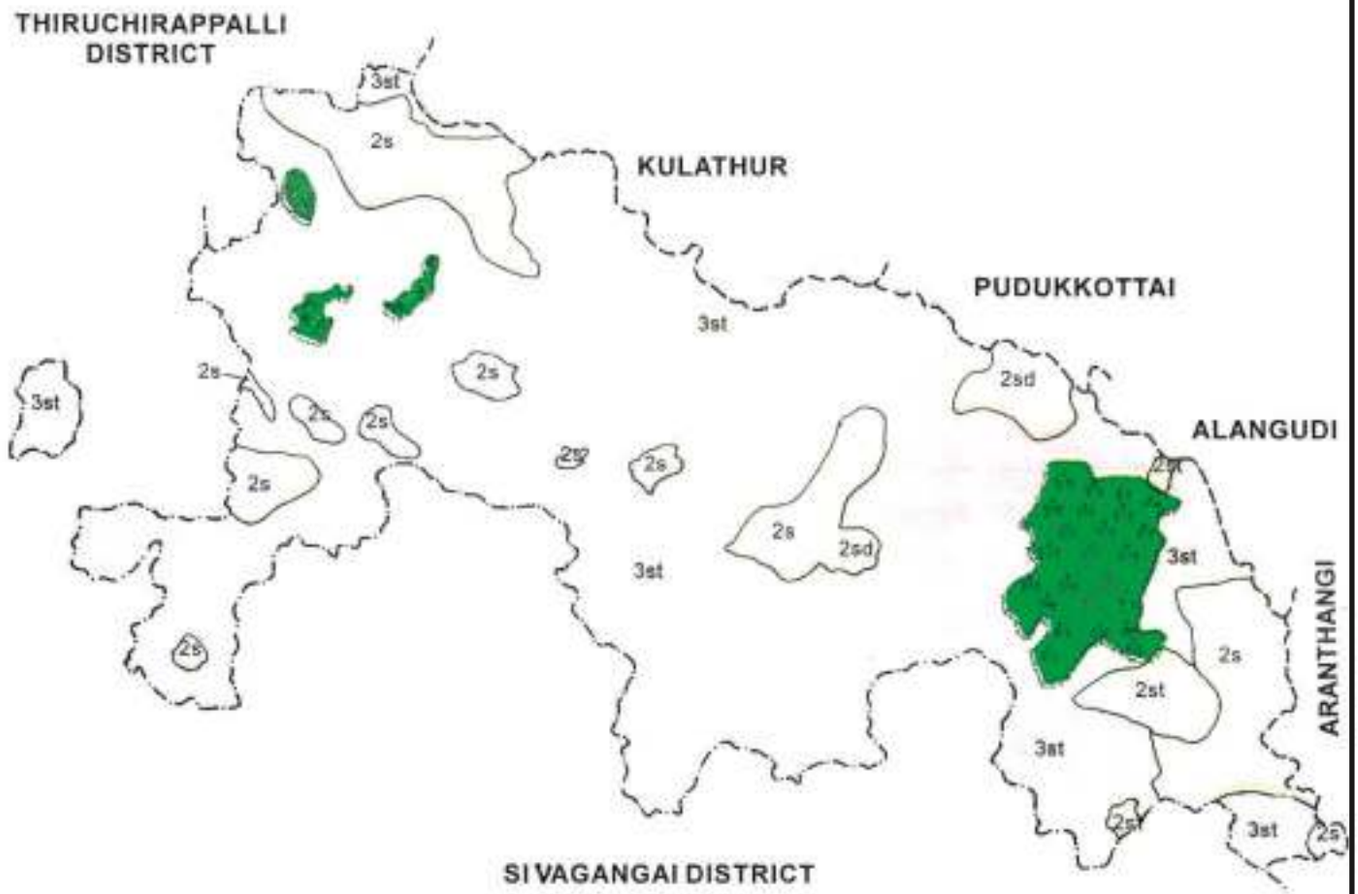
s *Soil limitations*

t *Topography*

d *Drainage*

LAND IRRIGABILITY

THIRUMAYAM TALUK



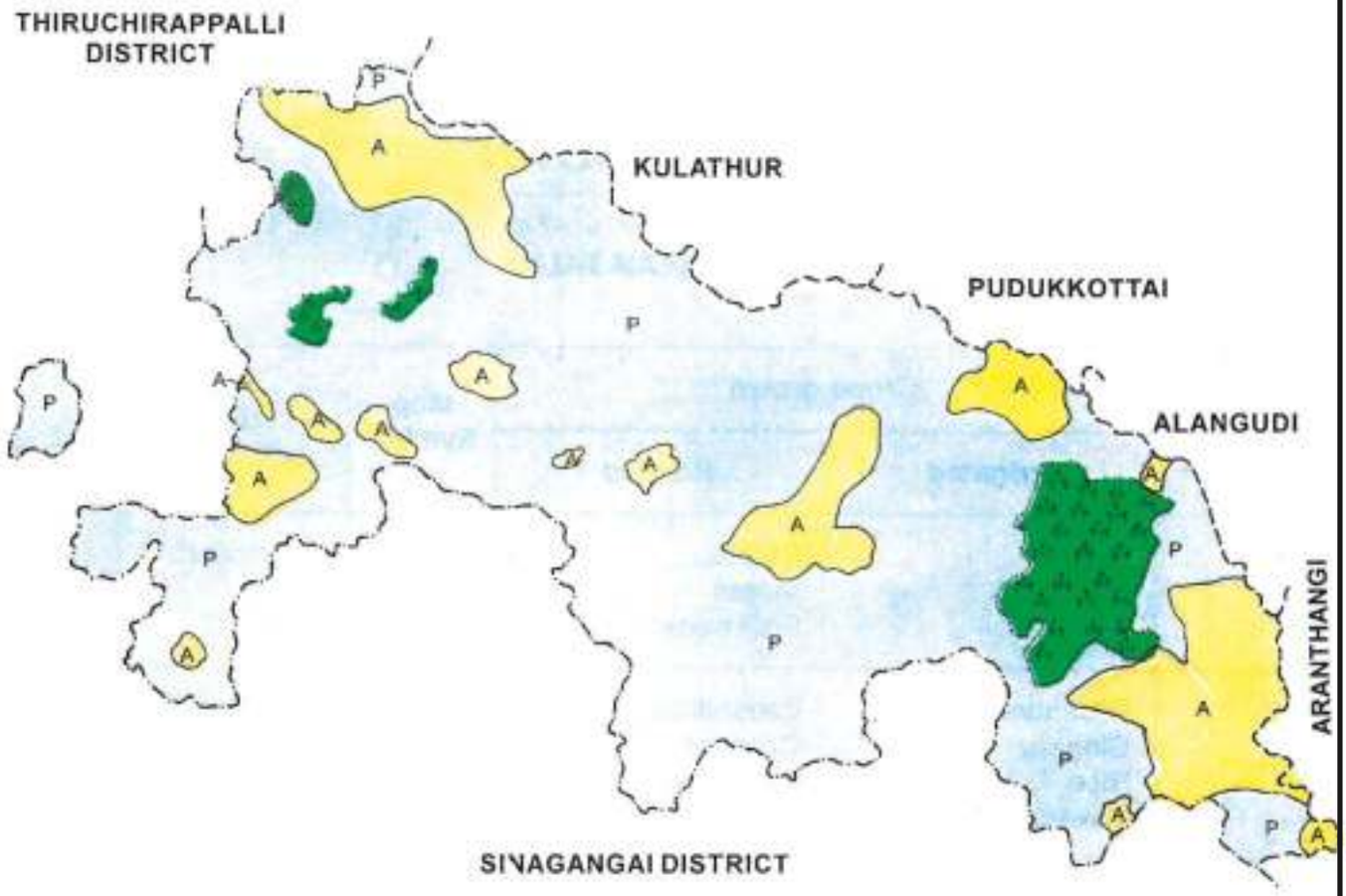
SOIL PRODUCTIVITY

THIRUMAYAM TALUK

Sl. No.	Productivity		Soil series	Extent (ha)	Per cent to total
	Rating	Class			
1.	**8 - 19**	Poor (P)	Mangalathupatti Vayalogam Iluppur	72,848	83.4
2.	**20 - 34**	Average (A)	Perungalur Pattukkottai Mudukulam	14,442	16.6
			Total	87,290	100.00

SOIL PRODUCTIVITY

THIRUMAYAM TALUK

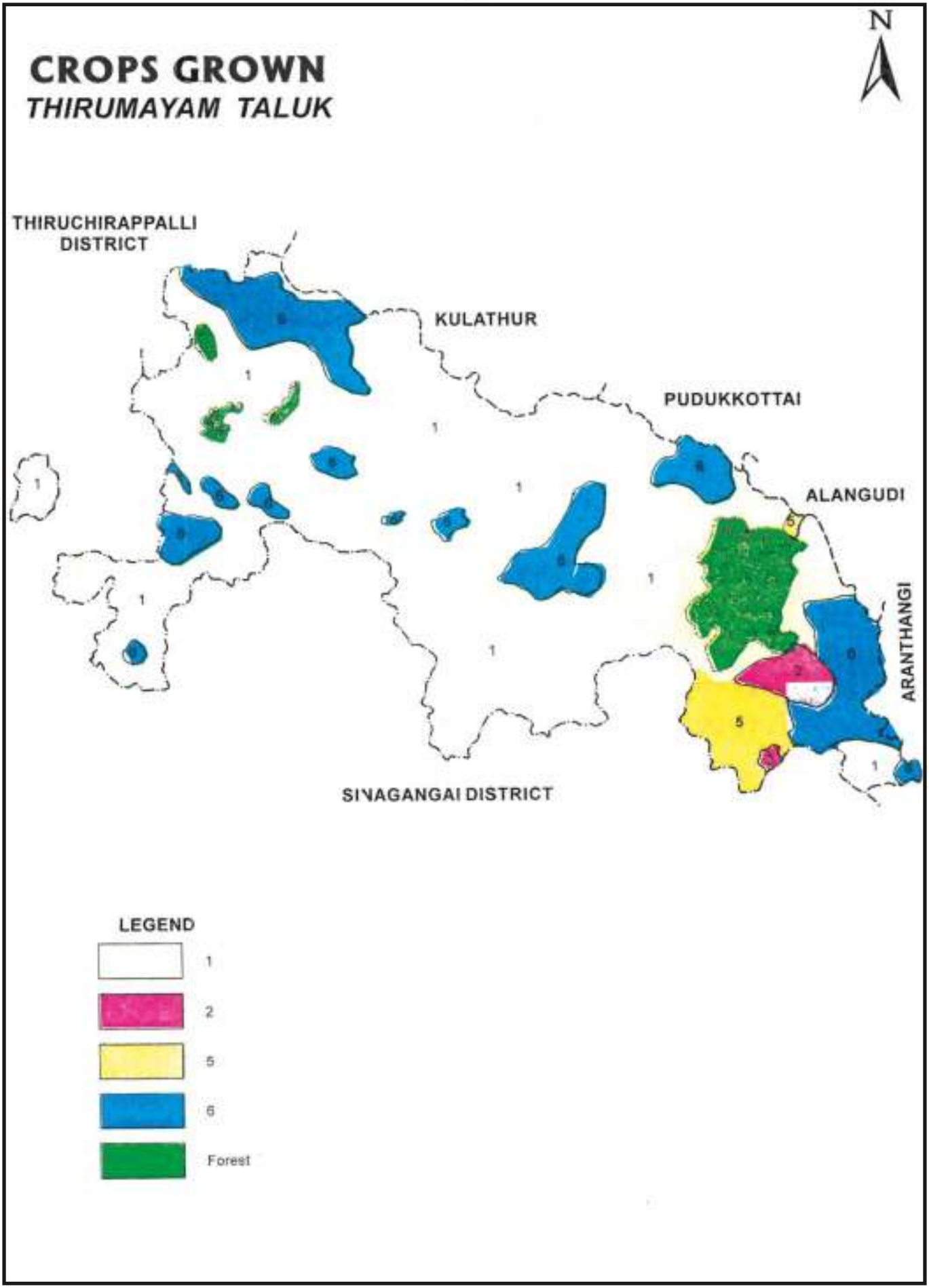


CROPS GROWN

THIRUMAYAM TALUK

Sl. No.	Crops grown		Map Symbol	Soil series
	Irrigated	Rainfed		
1.	Rice Millets	Pulses Millets Fruit trees	1	Vayalogam
2.	Groundnut Gingelly Rice Millets	Groundnut Coconut Fruit trees Finger millet	2	Pattukkottai
3.	Groundnut Rice Finger millet	Groundnut Millets Fruit trees Red gram	5	Mangalathupatti Mudukulam
4.	Rice Finger millet	Pulses Millets	6	Perungalur Iluppur

CROPS GROWN
THIRUMAYAM TALUK



CONTRIBUTORS

1.	*Concept*	:	**Dr. K. Arulmozhi** Director of Agriculture **Syed Nazeer Peeran** Addl. Director of Agriculture (Res) Chennai **S. Lakshminarayanan** Addl. Director of Agriculture (Res) (Retd)
2.	*Source*	:	*i)* ***Soils Resources of Pudukkottai district*** Report No. 79 Published by SSLUO Thanjavur *ii)* ***Soil series of Pudukkottai district*** Report No. 75 Published by SSLUO Thanjavur *iii)* ***Soil Brochure Pudukkottai district*** Published by Soil Testing Laboratory Kudumianmalai
3.	*Script & Maps Compilation*	:	**T. Ganapathi** Assistant Agricultural Chemist **S. Kanagasabai** Agricultural Officer **T. Alagunagendran** Agricultural Officer **J. Mohan** Agricultural Officer
4.	*Cartography*	:	**S. Mariyappan** Senior Draughting Officer **C. Paulraj** Assistant Draughtsman **L. Soundarrajan** Assistant Dranghtsman
5.	*Editing*	:	**S. Altaf Ahamed** Agricultural Chemist **M. Basheer Ahamed** Agricultural Chemist **T. Lashminarayanan** Assistant Agricultural
6.	*Approval*	:	**Syed Nazeer Peeran** Addl. Director of Agriculture (Res) Chennai **P.R. Ramachandran,** Joint Director of Agriculture (Res) Soil Survey and Land Use Organisation Coimbatore

BHARATHI PATHIPPAGAM & TRADERS, SALEM - 636 015 PH : 260917