



# **SOIL ATLAS**

# **VILLUPURAM**

# **DISTRICT**



**SOIL SURVEY & LAND USE ORGANISATION**

**(Department of Agriculture, Tamil Nadu)**

**Coimbatore - 641 013**

**2004**





# **SOIL ATLAS VILLUPURAM DISTRICT**

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

**2004**



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CONTRIBUTORS

## ABOUT THE DISTRICT SOIL ATLAS

Agriculture plays a vital role in the Indian economy and provides occupation to about 70% 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 productivity on a sustained basis have to be maintained for sound production systems. 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 forms the basic tool for agricultural development programmes and provides information on characteristics and location of the different kinds of soils and their management potentials as well as their limitations for different purposes. Keeping this in view a data base on soils of the district have been developed through reconnaissance soil survey and this could be found useful for planning at regional level.

In this 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 given separately at taluk level also. Further, dominant types 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 survey at higher intensity is necessary for micro level development programmes.

***“The wealth of a nation lies in her soils and their intelligent use and management”.***

- Richard Gordon Moores (1970)

## LOCATION

- ❖ Villupuram district was formed on 30<sup>th</sup> September 1993 by bifurcating the erstwhile South Arcot district.
- ❖ It is located in between 11<sup>o</sup> to 12<sup>o</sup>35' north latitude and 78<sup>o</sup>38' and 80<sup>o</sup>00' east longitude. Villupuram is the district head quarters and the district occupies an area of 7222.03 sq km.
- ❖ The district is bounded by the Union Territory of Pondicherry and Bay of Bengal in the east, Cuddalore district in the south, Dharmapuri and Salem districts in the west and Kancheepuram and Tiruvannamalai districts in the north.

**Agro climatic zone** - Falls in the north eastern zone of Tamil Nadu.

### **Agro ecological region**

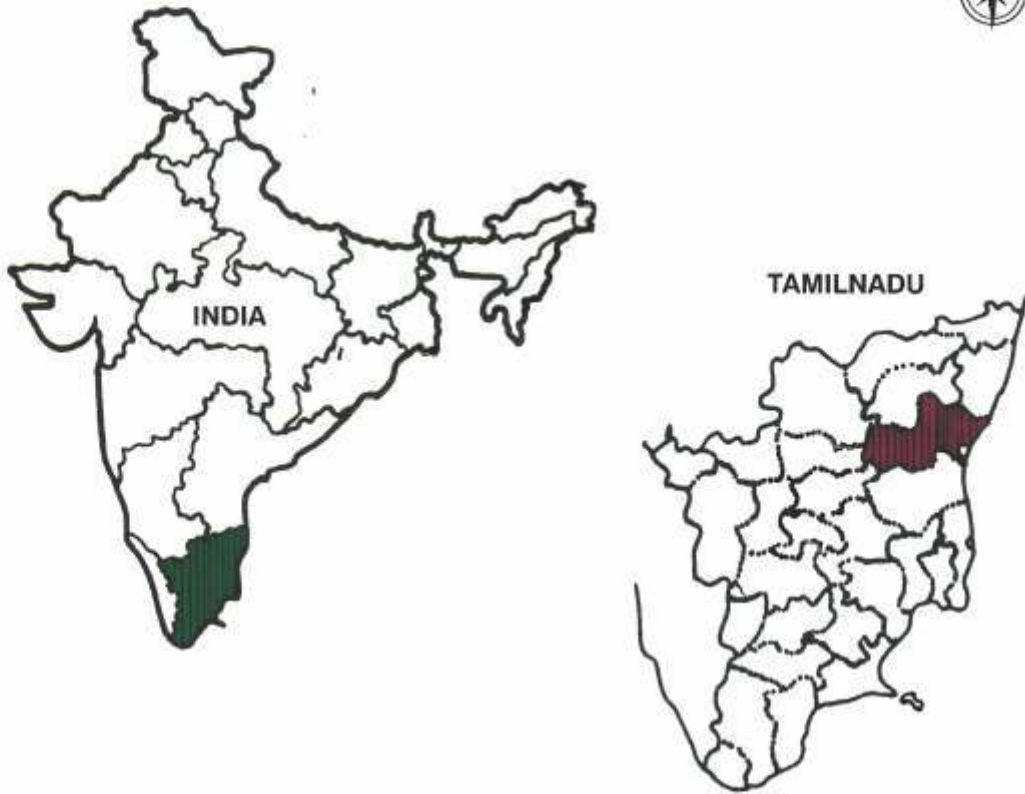
▫ *Eastern part of the district*

Eastern coastal plains, hot sub humid eco-region with alluvium derived soils and growing period 150-210 days.

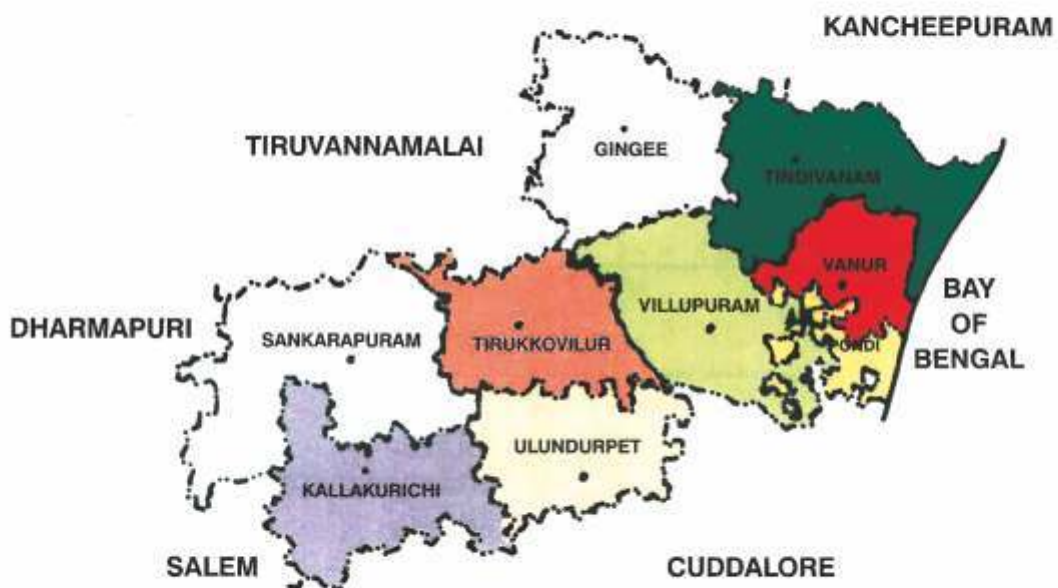
▫ *Western part of the district*

Eastern ghats (TN uplands) and Deccan plateau, hot semi arid ecoregion with red loamy soils and growing period 90-150 days.

# VILLUPURAM DISTRICT LOCATION



## VILLUPURAM DISTRICT

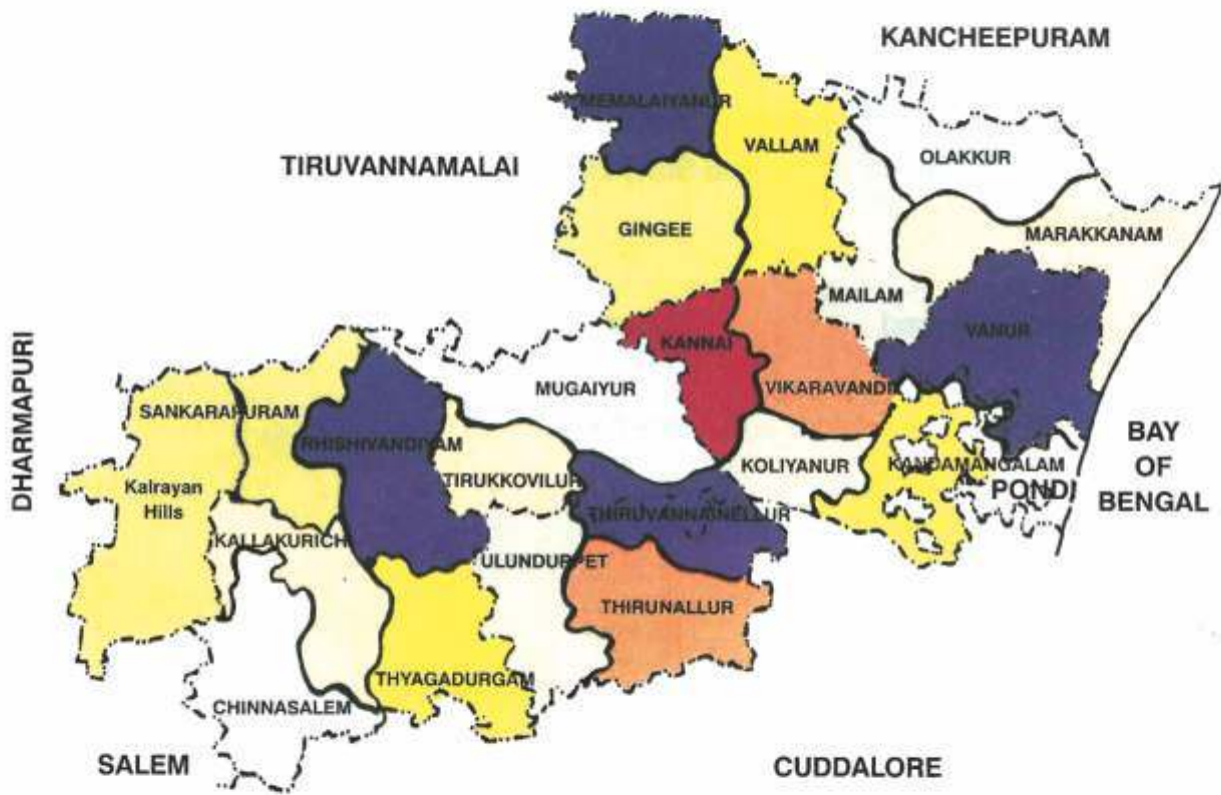


## TALUKS AND PANCHAYAT UNIONS

The district comprises of 8 taluks and 21 panchayat unions as indicated below.

| <b>Taluk</b>    | <b>Panchayat Union</b>   |
|-----------------|--|
| 1) GINGEE       | 1) Gingee<br>2) Melmalaiyanur<br>3) Vallam                         |
| 2) KALLAKURICHI | 4) Chinnasalem<br>5) Kallakurichi<br>6) Thyagadurgam               |
| 3) SANKARAPURAM | 7) Sankarapuram<br>8) Rhishivandiyam                               |
| 4) TINDIVANAM   | 9) Mailam<br>10) Marakkanam<br>11) Olakkur                         |
| 5) TIRUKKOVILUR | 12) Mugaiyur<br>13) Tirukkovilur<br>14) Thiruvannainallur          |
| 6) ULUNDURPET   | 15) Thirunallur<br>16) Ulundurpet                                  |
| 7) VANUR        | 17) Vanur  |
| 8) VILLUPURAM   | 18) Kannai<br>19) Kandamangalam<br>20) Koliyanur<br>21) Vikravandi |

# TALUKS & PANCHAYAT UNIONS VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- — — COASTAL BOUNDARY

## LEGEND

- · — TALUK BOUNDARY
- — — PANCHAYAT UNION BOUNDARY

## ROADS & RAILWAYS

All the towns and villages in the district are connected by roads. National Highways cover about 71 km and State Highways 64 km. Other road details are given below.

|                      |    |         |
|----------------------|----|---------|
| Municipality road    | .. | 23 km   |
| Panchayat union road | .. | 5340 km |
| Town panchayat road  | .. | 168 km  |
| Forest road          | .. | 55 km   |

The district is well connected by rail and the length of railway lines in the district is about 180 km. Out of the 8 taluks, excepting Gingee, Sankarapuram and Vanur taluks, the remaining 5 taluks are connected by rail.



## GEOLOGY

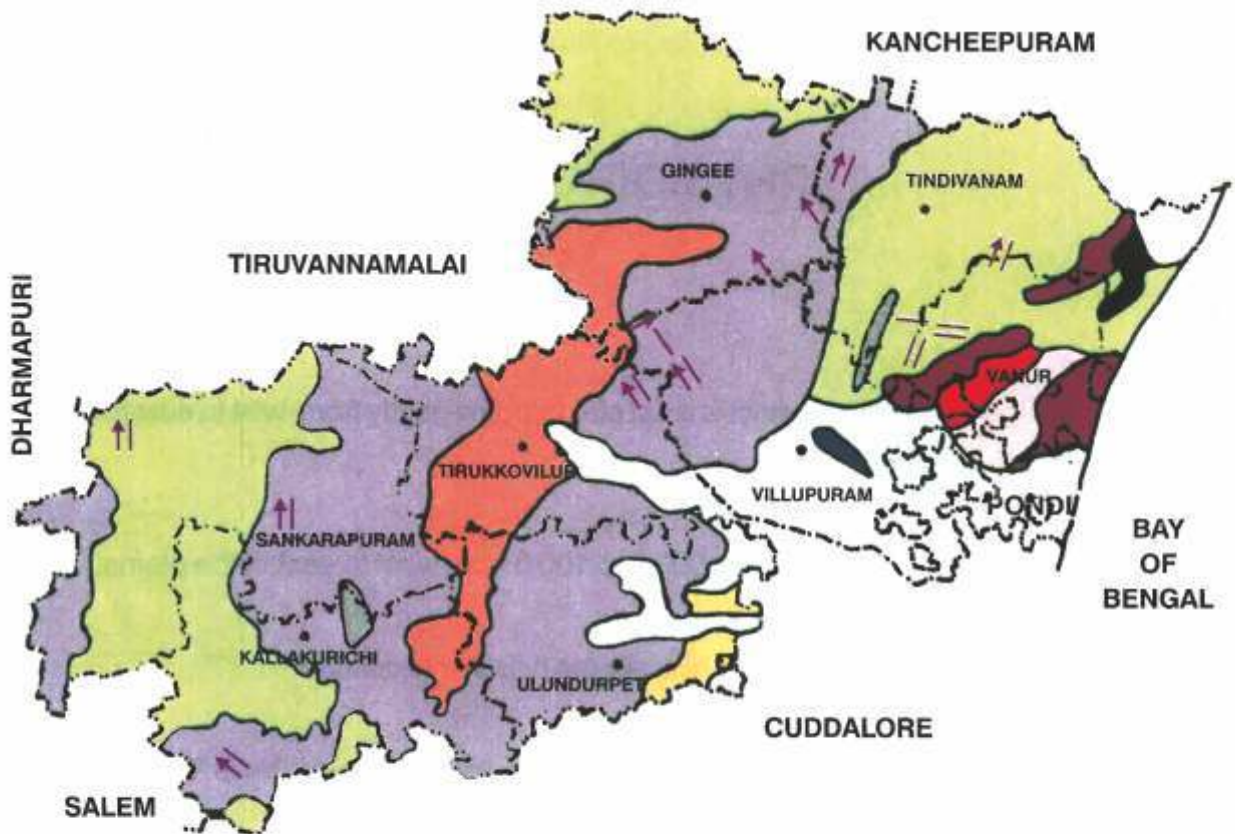
The greater part of the district is covered with metamorphic crystalline rocks of Archaean age belonging to the charnockite – khondalite group.

The basic and ultrabasic intrusive and extrusive rocks are present. Dark looking dolerite dykes form the youngest basic intrusives.

Overlying the Archaean are the fossiliferous upper cretaceous formations mainly occur. Overlying the cretaceous rocks are the cuddalore formations of mio-pliocene age. These comprise sand stone, often ferruginous, pebble bed, sand and clay with lignite. White to grey silica sand of sub recent age occur as long leaner bands along the north - eastern coast of the district around Marakkanam.

During sub-recent to recent times there has been the deposition of alluvium, coastal sands and soils including lateritic soil.

# GEOLOGY VILLUPURAM DISTRICT



- REFERENCE**
- · · · — STATE BOUNDARY
  - · · — DISTRICT BOUNDARY
  - · — TALUK BOUNDARY
  - COASTAL BOUNDARY

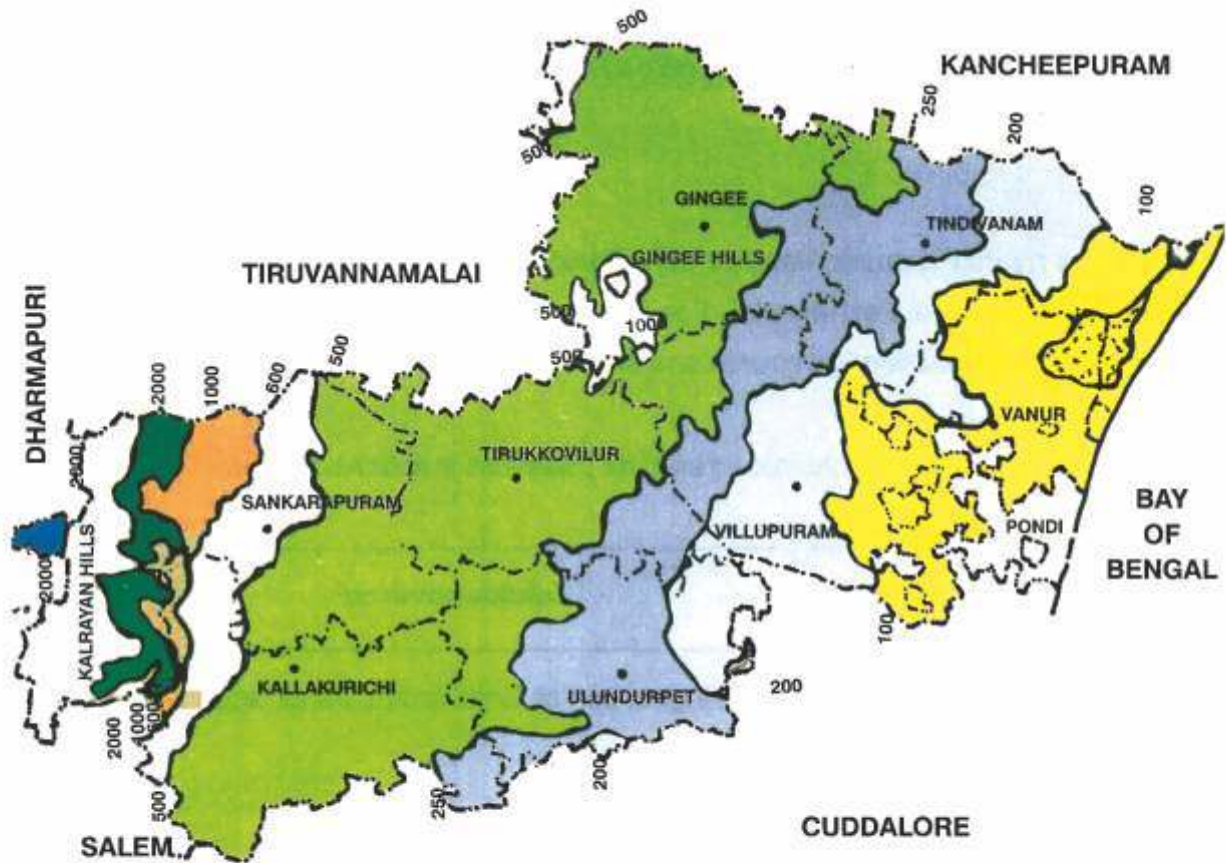
**LEGEND**

- ALLUVIUM
- LATERITE
- CUDDALORE SANDSTONES
- THENIYUR AND ARIYALUR FORMATIONS
- TRICHINOPOLY FORMATIONS
- UPPER GONOWANA GROUP
- CHARNOCKITE
- UNCLASSIFIED GNEISS
- GRANITES AND SYENITES
- DOLARITIES

## PHYSIOGRAPHY

- Greater part of the district is a flat plain sloping gently from west to east towards the sea.
- The altitude ranges from 1000 ft to 100 ft from west to east in the plains.
- Kalrayan hills and Gingee hills are the hills in this district.
- Western part of Sankarapuram and Kallakurichi is coming under Tamilnadu up lands.
- Eastern part of Tindivanam and Vanur constitute marine landform.
- Remaining part of the district is largely inland plain.

# PHYSIOGRAPHY VILLUPURAM DISTRICT



## REFERENCE

- STATE BOUNDARY
- .-.-.- DISTRICT BOUNDARY
- . - . - TALUK BOUNDARY
- COASTAL BOUNDARY

## LEGEND

- 0 - 100 ft
- 100 - 200 ft
- 200 - 250 ft
- 250 - 500 ft
- 500 - 600 ft
- 600 - 1000 ft
- 1000 - 2000 ft
- Above 2000 ft

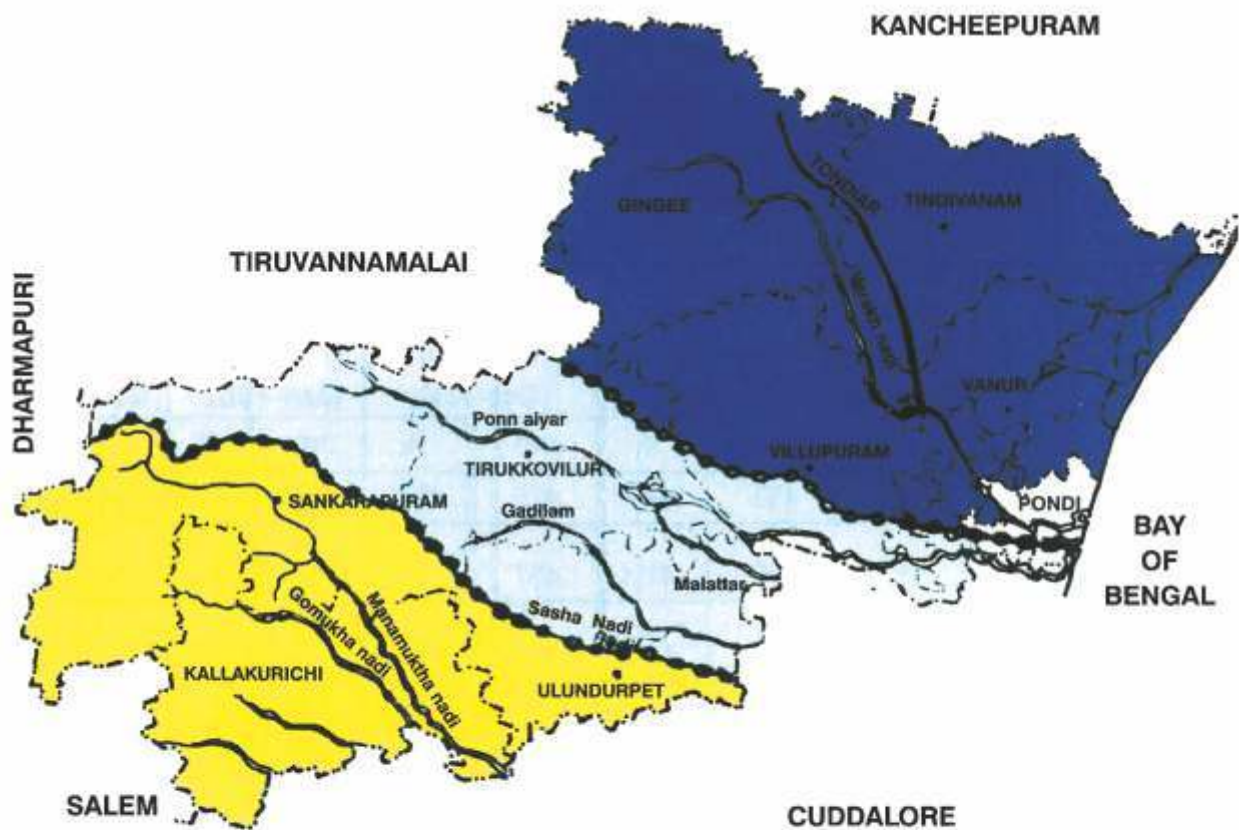
## DRAINAGE AND RIVER BASINS

The rivers Ponnaiar, Varahanadhi, Tondiar, Gadilam, Malattar, Manimukthar, Gomukanathi and Seshanadhi, flowing through this district from northwest to southeast, act as drainage course and also irrigation source.

The district is divisible into three river basins as mentioned below.

| Riverbasin     | Taluks covered   |
|----------------|--|
| 1. Tondiar     | Gingee, part of Tindivanam, Vanur and Villupuram.                            |
| 2. Ponnaiar    | Kallakurichi, Tirukkovilur, Villupuram, Ulunderpet and part of Sankarapuram. |
| 3. Manimukthar | Sankarapuram and Kallakurichi.   |

# DRAINAGE & RIVER BASINS VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY

## LEGEND

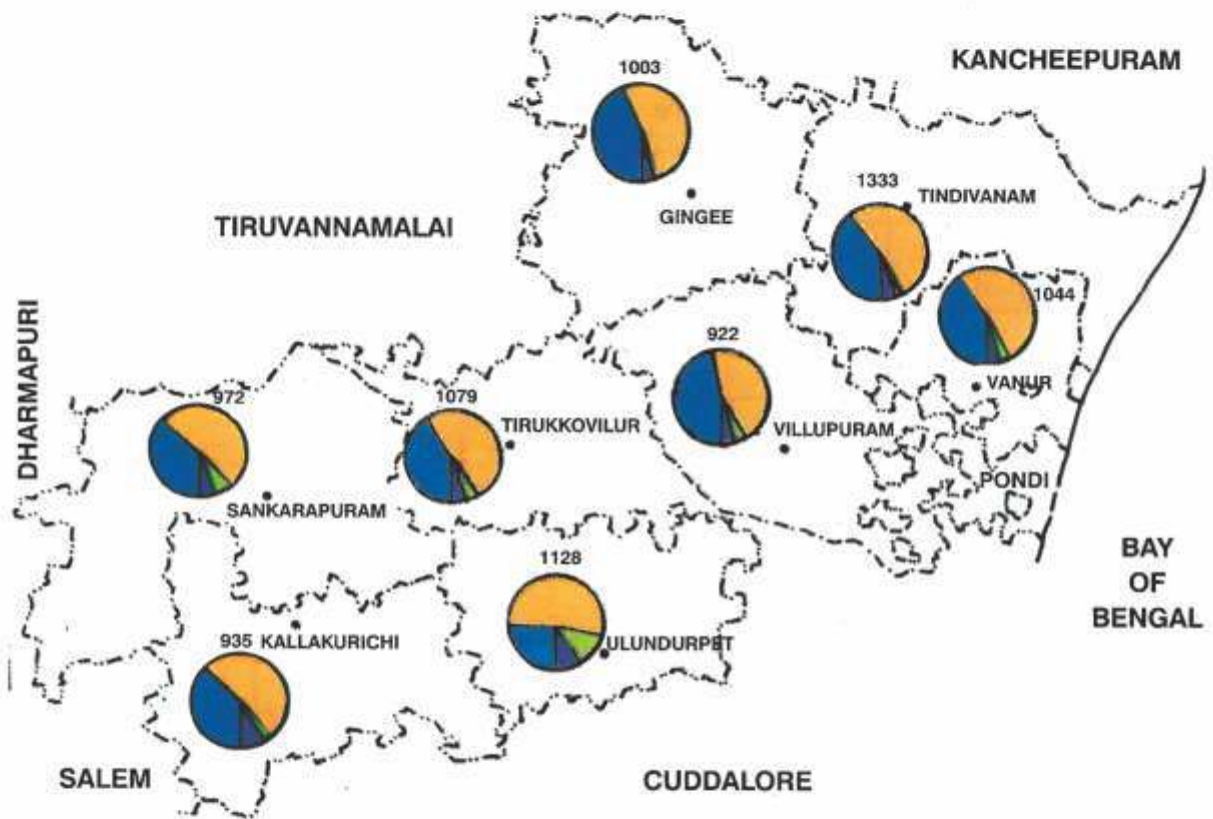
- TONDIAR RIVER BASIN
- PONNAIYAR RIVER BASIN
- MANIMUKTHAR RIVER BASIN

## RAINFALL

The district is benefitted largely by the north east monsoon (50 %) followed by south west monsoon (39 %). Among the tauks, Tindivanam records the maximum of 133 mm followed by Ulundurpet (1128 mm) and the minimum is registered by Villupuram taluk (922 mm).

| Taluk                        | Mean Annual Rainfall | South west monsoon (Jun-Sep) |             | North east monsoon (Oct-Dec) |             | Winter (Jan-Feb) |            | Summer (Mar-May) |            |
|------------------------------|----------------------|------------------------------|-------------|------------------------------|-------------|------------------|------------|------------------|------------|
|                              | mm                   | mm                           | %           | mm                           | %           | mm               | %          | mm               | %          |
| GINGEE                       | 1003                 | 453                          | 45.1        | 476                          | 47.5        | 40               | 4.0        | 34               | 3.4        |
| KALLAKURICHI                 | 935                  | 385                          | 41.1        | 457                          | 48.9        | 29               | 3.2        | 64               | 6.8        |
| SANKARAPURAM                 | 972                  | 408                          | 41.9        | 475                          | 48.9        | 49               | 5.0        | 40               | 4.2        |
| TINDIVANAM                   | 1333                 | 457                          | 34.2        | 754                          | 56.6        | 17               | 1.4        | 105              | 7.8        |
| TIRUKKOVILUR                 | 1079                 | 456                          | 42.2        | 520                          | 48.3        | 21               | 1.9        | 82               | 7.6        |
| VANUR                        | 1044                 | 398                          | 38.0        | 537                          | 51.5        | 61               | 5.9        | 48               | 4.6        |
| VILLUPURAM                   | 922                  | 435                          | 47.2        | 388                          | 42.0        | 52               | 5.7        | 47               | 5.1        |
| ULUNDURPET                   | 1128                 | 275                          | 24.3        | 585                          | 51.7        | 185              | 16.5       | 83               | 7.5        |
| <b>Mean for the District</b> | <b>1052</b>          | <b>408</b>                   | <b>39.2</b> | <b>524</b>                   | <b>49.5</b> | <b>57</b>        | <b>5.5</b> | <b>63</b>        | <b>5.8</b> |

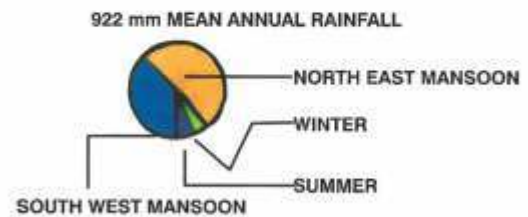
# RAINFALL VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY

## LEGEND



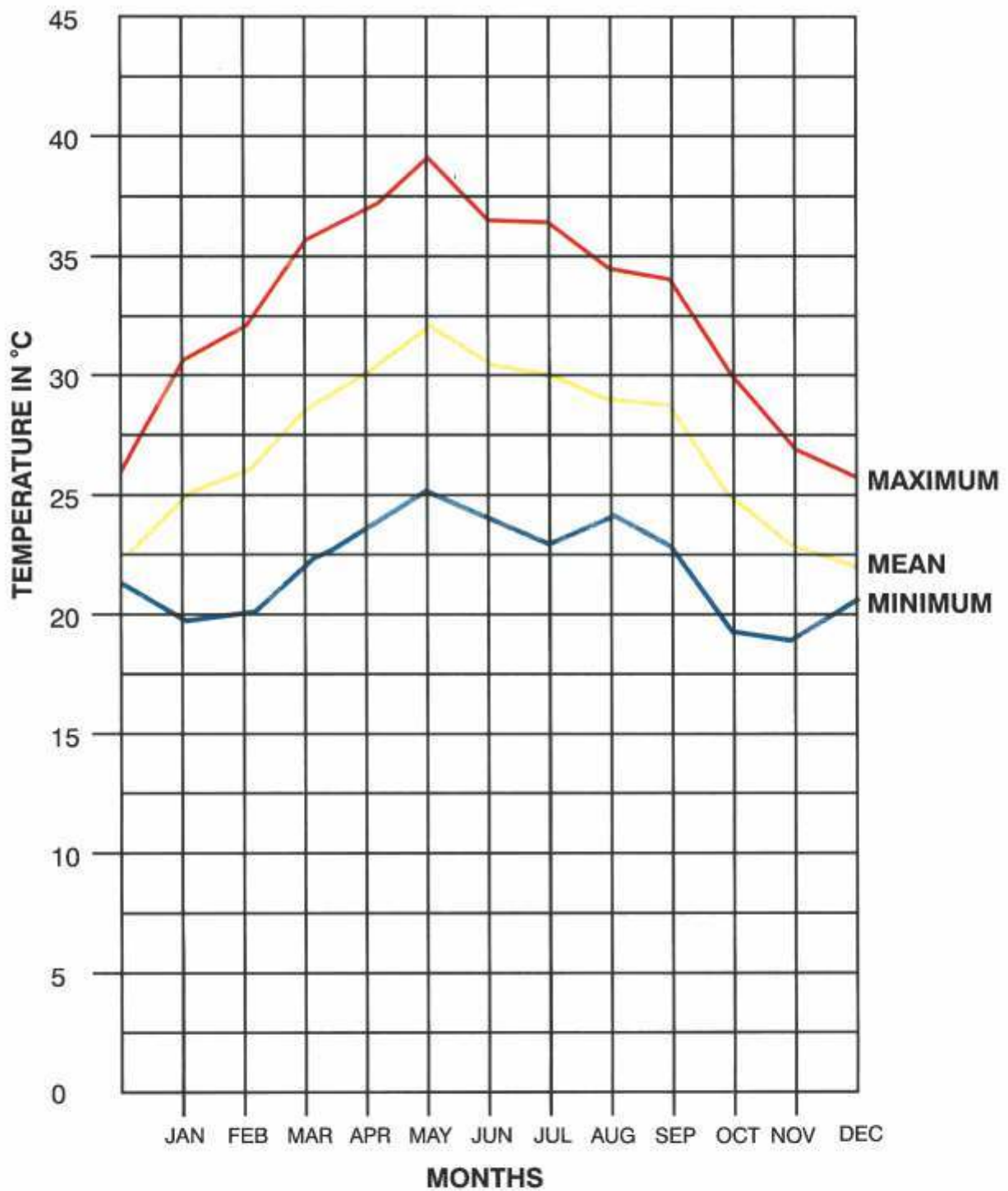
## TEMPERATURE

The mean annual temperature is 27.7°C. Maximum temperature is recorded during May and the minimum in December. Data of the atmospheric temperature (°C) is given below .

| Month       | Maximum Temperature | Minimum Temperature | Mean Temperature |
|-------------|---------------------|---------------------|------------------|
| January     | 30.7                | 19.7                | 25.2             |
| February    | 32.2                | 20.4                | 26.3             |
| March       | 35.6                | 22.1                | 28.8             |
| April       | 37.2                | 23.6                | 30.4             |
| May         | 39.1                | 25.2                | 32.1             |
| June        | 36.9                | 24.3                | 30.6             |
| July        | 36.5                | 23.6                | 30.0             |
| August      | 34.5                | 24.2                | 29.3             |
| September   | 34.1                | 23.3                | 28.7             |
| October     | 30.8                | 19.8                | 25.3             |
| November    | 27.2                | 19.1                | 23.1             |
| December    | 26.6                | 18.8                | 22.7             |
| <b>Mean</b> | <b>33.4</b>         | <b>22.0</b>         | <b>27.7</b>      |

The soil temperature is found to be hyperthermic.

# TEMPERATURE VILLUPURAM DISTRICT



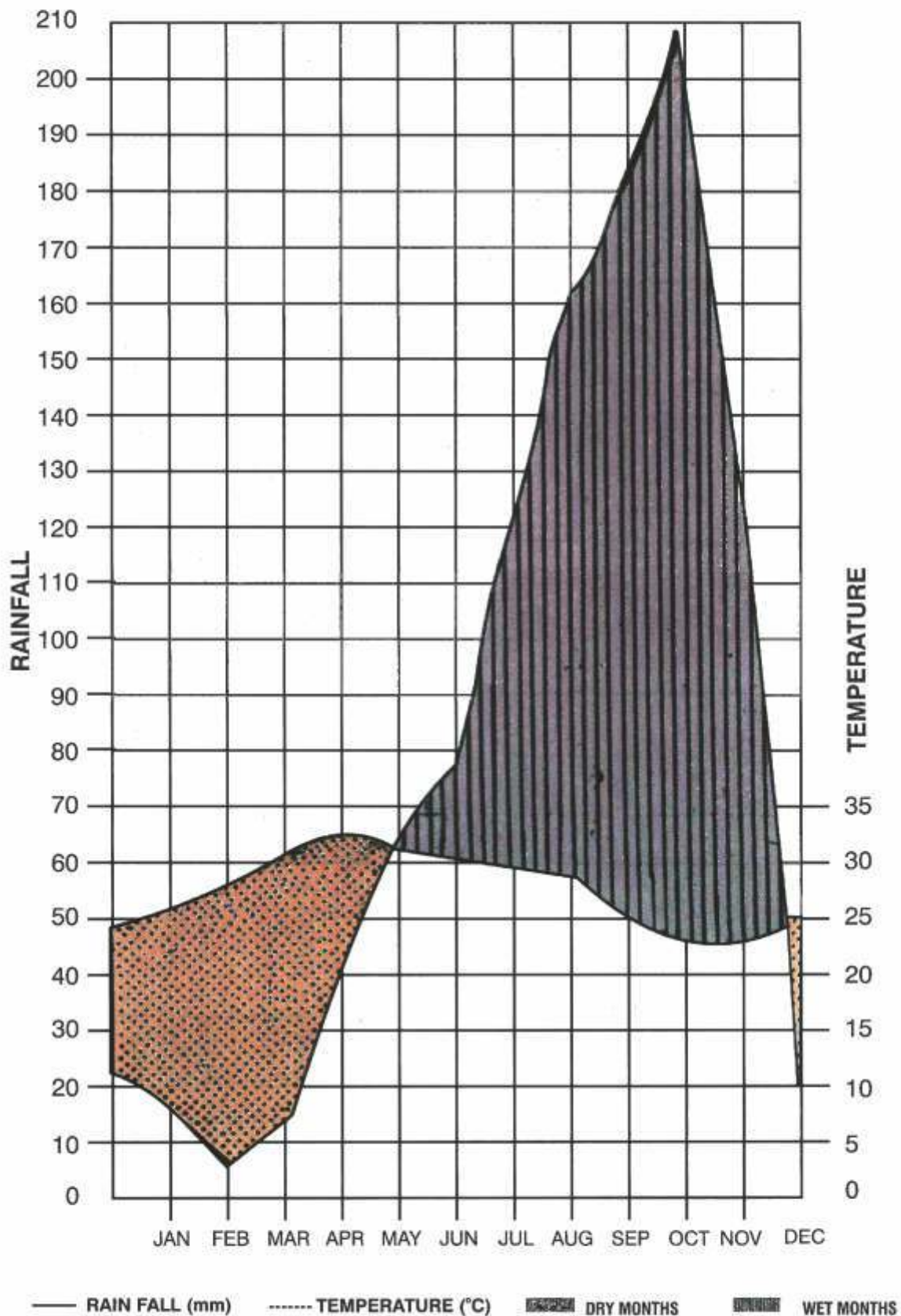
## OMBROTHERMIC DATA

| Month     | Mean Rainfall (mm)   | Mean Temperature (°C) |
|-----------|----------------------|-----------------------|
| January   | 23.3                 | 25.2                  |
| February  | 17.2                 | 26.3                  |
| March     | 7.4                  | 28.8                  |
| April     | 15.6                 | 30.4                  |
| May       | 44.8                 | 32.1                  |
| June      | 60.3                 | 30.6                  |
| July      | 79.6                 | 30.0                  |
| August    | 124.8                | 29.3                  |
| September | 161.8                | 28.7                  |
| October   | 180.0                | 25.3                  |
| November  | 208.9                | 23.1                  |
| December  | 128.3                | 22.7                  |
|           | <b>Total 1052 mm</b> | <b>Mean 27.7</b>      |

The data indicates that the soil moisture is available from June onwards for 7 months which is ideal for crop growth.

The moisture regime is found to be ustic.

# OMBROTHERMIC DIAGRAM VILLUPURAM DISTRICT

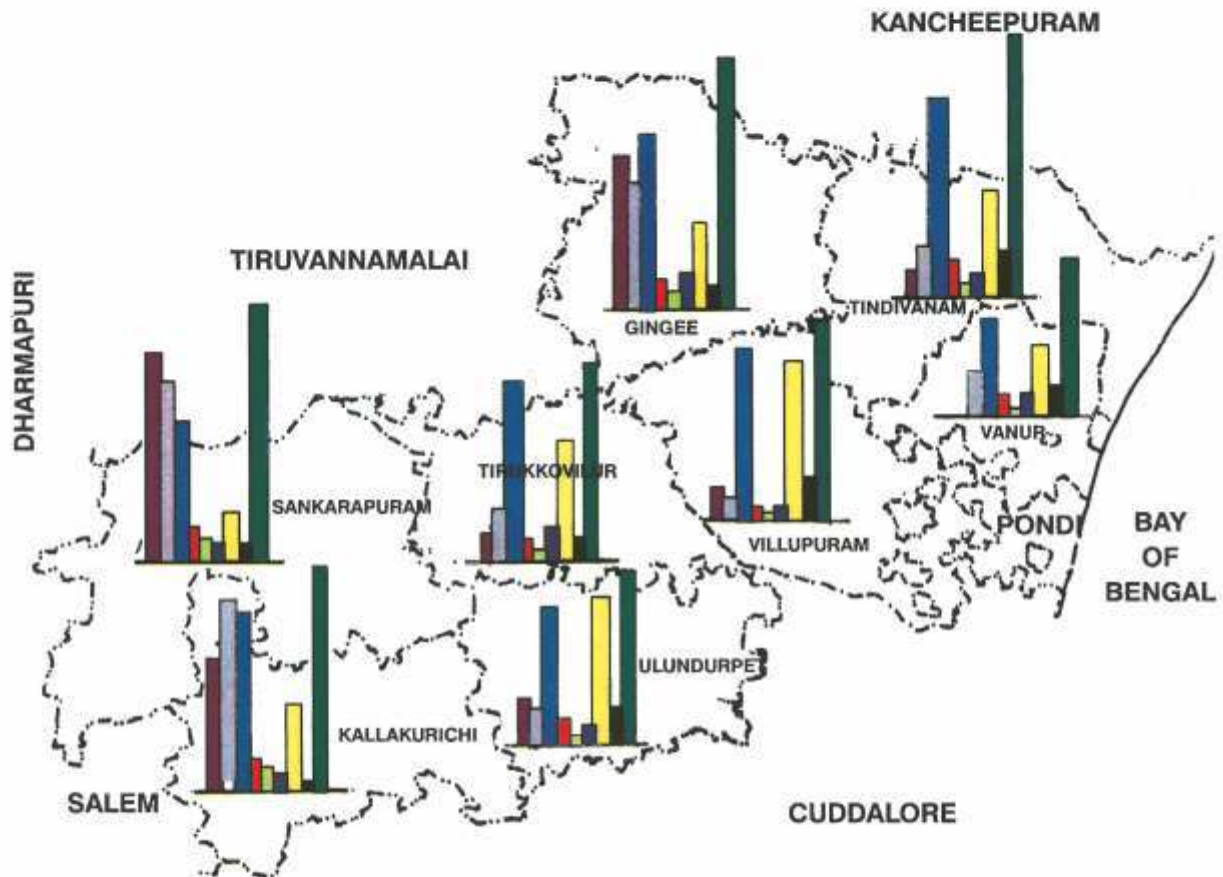


## LAND USE PATTERN

| Land Use                               | Gingee            | Kallakurichi     | Sankarapuram      | Tirukkoviur      | Tindivanam        | Vanur            | Villupuram       | Ulundurpet       | Total              |
|--|-------------------|------------------|-------------------|------------------|-------------------|------------------|------------------|------------------|--------------------|
| Total Geographical area                | 106117<br>(100.0) | 98301<br>(100.0) | 131716<br>(100.0) | 72969<br>(100.0) | 101867<br>(100.0) | 45487<br>(100.0) | 91538<br>(100.0) | 74208<br>(100.0) | 722203<br>(100.00) |
| 1) Forest                              | 11903<br>(11.22)  | 9291<br>(9.45)   | 41102<br>(31.20)  | 2401<br>(3.20)   | 1098<br>(1.08)    | -                | 2135<br>(2.33)   | 3767<br>(5.08)   | 71697<br>(9.93)    |
| 2) Barren and uncultivable land        | 9585<br>(9.03)    | 14118<br>(14.36) | 18818<br>(14.28)  | 3889<br>(5.30)   | 3889<br>(3.82)    | 3210<br>(7.06)   | 1507<br>(1.65)   | 2293             | 57309              |
| 3) Land put to non-agricultural use    | 13450<br>(12.68)  | 13710<br>(13.95) | 10569<br>(8.02)   | 13774<br>(18.86) | 29465<br>(28.93)  | 7549<br>(16.59)  | 19934<br>(21.78) | 10468<br>(14.10) | 118919<br>(16.46)  |
| 4) Cultivable waste                    | 1584<br>(1.49)    | 1853<br>(1.89)   | 1640<br>(1.25)    | 858<br>(1.18)    | 2742<br>(2.69)    | 797<br>(1.76)    | 890<br>(0.97)    | 1446<br>(1.95)   | 11810<br>(1.63)    |
| 5) Permanent pastures and grazing land | 882<br>(0.83)     | 1391<br>(1.42)   | 686<br>(0.52)     | 113<br>(0.15)    | 504<br>(0.49)     | 127<br>(0.28)    | 285<br>(0.31)    | 207<br>(0.29)    | 4195<br>(0.58)     |
| 6) Miscellaneous tree crops and groves | 2645<br>(2.49)    | 1200<br>(1.22)   | 591<br>(0.45)     | 1897<br>(2.60)   | 1410<br>(1.38)    | 620<br>(1.36)    | 417<br>(0.46)    | 431<br>(0.58)    | 9211<br>(1.27)     |
| 7) Current fallows                     | 6909<br>(6.51)    | 6501<br>(6.61)   | 3703<br>(2.81)    | 9289<br>(12.73)  | 8989<br>(8.83)    | 5172<br>(11.38)  | 13778<br>(15.05) | 11001<br>(14.82) | 65342<br>(9.06)    |
| 8) Other fallow land                   | 1808<br>(1.70)    | 181<br>(0.18)    | 644<br>(0.49)     | 1281<br>(1.76)   | 3547<br>(3.48)    | 1933<br>(4.24)   | 3263<br>(3.56)   | 2225<br>(3.00)   | 14882<br>(2.06)    |
| 9) Net area sown                       | 57351<br>(54.05)  | 50056<br>(50.92) | 53965<br>(40.98)  | 39464<br>(54.08) | 50223<br>(49.30)  | 26079<br>(57.33) | 49330<br>(53.89) | 42370<br>(57.09) | 368838<br>(51.07)  |

Forest wealth is inadequate and accounts for 10% only. The net area sown is more than 51%

# LAND USE PATTERN VILLUPURAM DISTRICT



- REFERENCE**
- · · · — STATE BOUNDARY
  - · · · — DISTRICT BOUNDARY
  - · · — TALUK BOUNDARY
  - — — COASTAL BOUNDARY

**LEGEND**

- FOREST
- BARREN AND UNCULTIVABLE LAND
- LAND PUT TO NONAGRICULTURAL USE
- CULTIVABLE WASTE
- PERMANENT PASTURES AND GRAZING LANDS
- MISCELLANEOUS TREE CROPS AND GROVES
- CURRENT FALLOWS
- OTHER FALLOW LANDS
- NET AREA SOWN

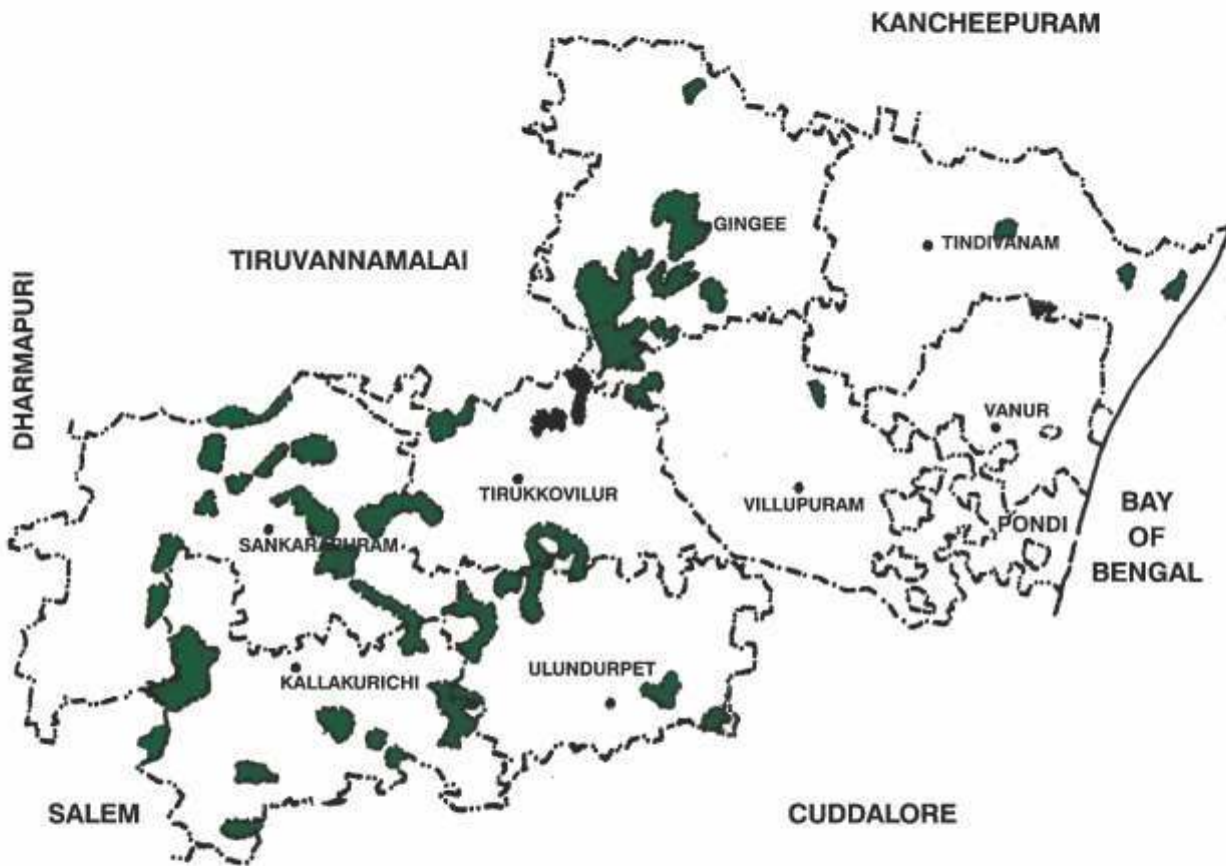
## FOREST

| TALUK            | AREA (ha)            |
|------------------|----------------------|
| 1) Gingee        | 11903 (16.60 %)      |
| 2) Kallakurichi  | 9291 (12.96 %)       |
| 3) Sankarapuram  | 41102 (57.32 %)      |
| 4) Thirukkovilur | 2401 (3.36 %)        |
| 5) Tindivanam    | 1098 (1.53 %)        |
| 6) Vanur         | ---                  |
| 7) Villupuram    | 2135 (2.98 %)        |
| 8) Ulundurpet    | 3767 (5.25 %)        |
| <b>Total</b>     | <b>71697 (100 %)</b> |

The forest wealth accounts for 10 % of the area only as against the national policy of 33 %. Sankarapuram taluk is the only taluk possessing adequate forests to the extent of 31 %.

Tropical moist deciduous type of forest is mostly encountered.

# FOREST VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
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- COASTAL BOUNDARY

## LEGEND

-  FOREST BOUNDARY

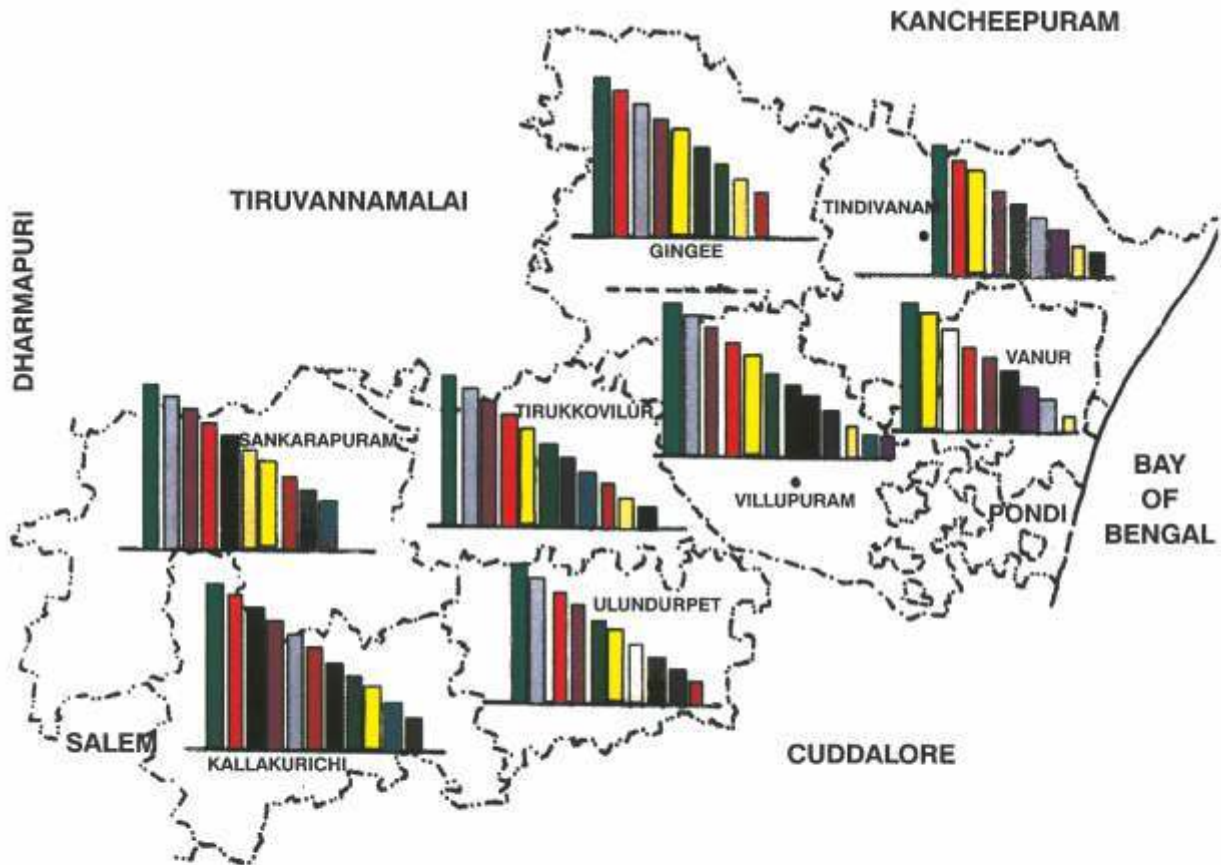
## CROP AREA

(Area in hectares)

| Crop         | Gingee       | Kalla-<br>kurichi | Sankara-<br>-puram | Tindi-<br>vanam | Tiruk-<br>kovilur | Vanur        | Villu-<br>puram | Ulunder-<br>-pet | Total         |
|--------------|--------------|-------------------|--------------------|-----------------|-------------------|--------------|-----------------|------------------|---------------|
| 1) Rice      | 31293        | 25790             | 25548              | 24322           | 18873             | 5803         | 28320           | 18212            | 178161        |
| 2) Cholam    | 154          | 2255              | 627                | 49              | 204               | 48           | 30              | 331              | 3722          |
| 3) Cumbu     | 2694         | 3968              | 14430              | 716             | 13022             | 264          | 9513            | 14787            | 57022         |
| 4) Ragi      | 227          | 28                | 1154               | 275             | 197               | 88           | 300             | 60               | 6722          |
| 5) Sugarcane | 1484         | 4058              | 5934               | 2071            | 7231              | 1402         | 7523            | 3472             | 33175         |
| 6) Pulses    | 633          | 186               | 281                | 41              | 286               | 14           | 400             | 455              | 2296          |
| 7) Cotton    | 151          | 1520              | 442                | 137             | 30                | 55           | 1198            | 186              | 3697          |
| 8) Groundnut | 29459        | 6661              | 5477               | 16219           | 5408              | 2004         | 5762            | 7033             | 78023         |
| 9) Banana    | 4            | 200               | 334                | 39              | 207               | 17           | 315             | 27               | 1143          |
| 10) Coconut  | 21           | 83                | 86                 | 659             | 91                | 446          | 281             | 40               | 1707          |
| 11) Gingelly | 230          | 1071              | 73                 | 719             | 917               | 59           | 1827            | 2452             | 7348          |
| 12) Tapioca  | 20           | 5630              | 1879               | 191             | 164               | 510          | 711             | 384              | 9489          |
| 13) Cashew   | -            | 1                 | -                  | 92              | -                 | 2372         | 57              | 689              | 3211          |
| Others       | 663          | 1016              | 662                | 10380           | 952               | 12466        | 3168            | 1316             | 30623         |
| <b>Total</b> | <b>67033</b> | <b>52467</b>      | <b>56927</b>       | <b>55910</b>    | <b>47582</b>      | <b>25548</b> | <b>59405</b>    | <b>49444</b>     | <b>416339</b> |

Rice is the dominant crop (43 %) followed by groundnut (19 %) and cumbu(14 %).





# CROP AREA VILLUPURAM DISTRICT



## REFERENCE

- STATE BOUNDARY
- - - - - DISTRICT BOUNDARY
- . - . - TALUK BOUNDARY
- COASTAL BOUNDARY

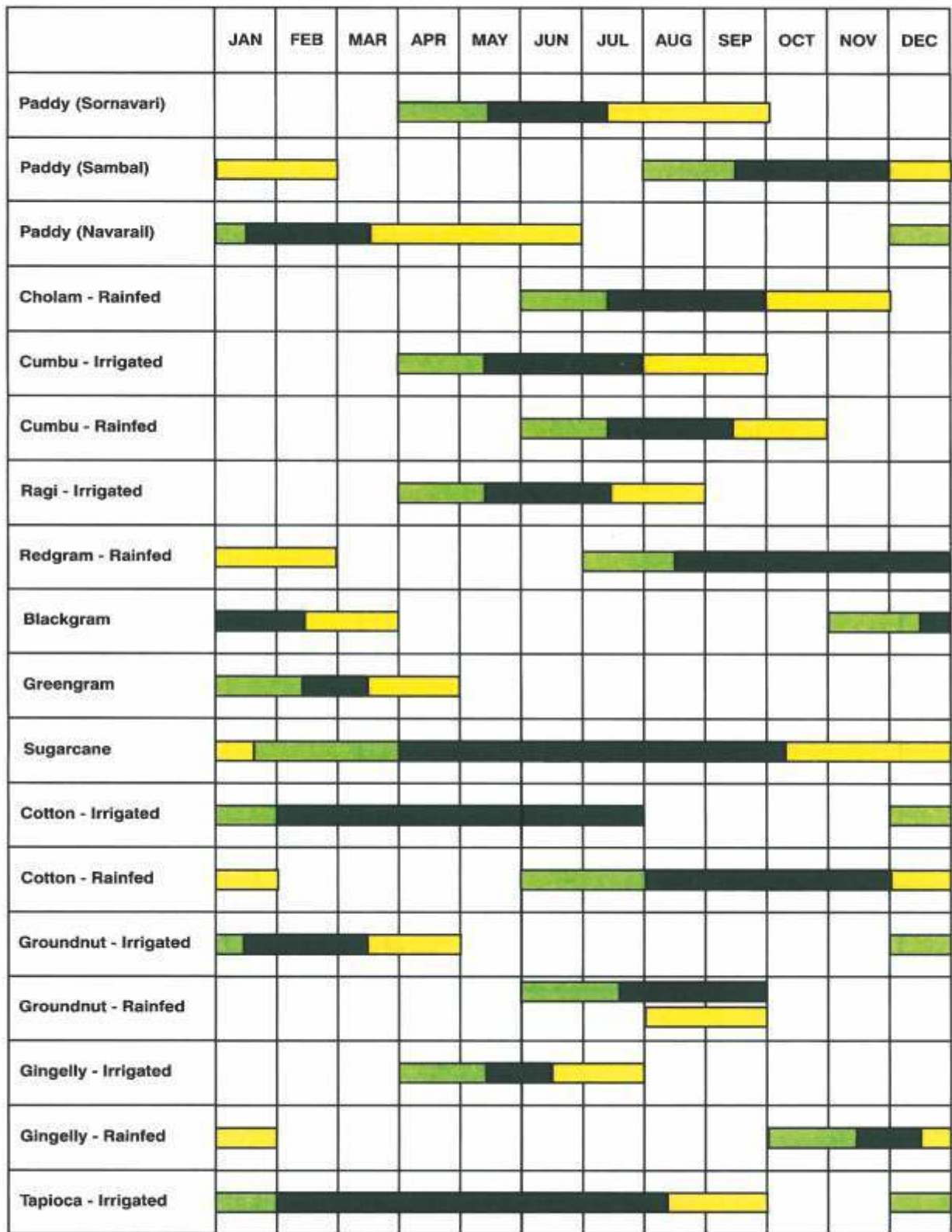
## LEGEND

|   |           |   |           |
|---|-----------|---|-----------|
|  | RICE      |  | GROUNDNUT |
|  | CHOLAM    |  | BANANA    |
|  | CUMBU     |  | COCONUT   |
|  | RAGI      |  | GINGELLY  |
|  | SUGARCANE |  | TAPIOCA   |
|  | PULSES    |  | CASHEW    |
|  | COTTON    |  | OTHERS    |

## CROPPING CALENDAR

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

# CROPPING CALENDAR VILLUPURAM DISTRICT



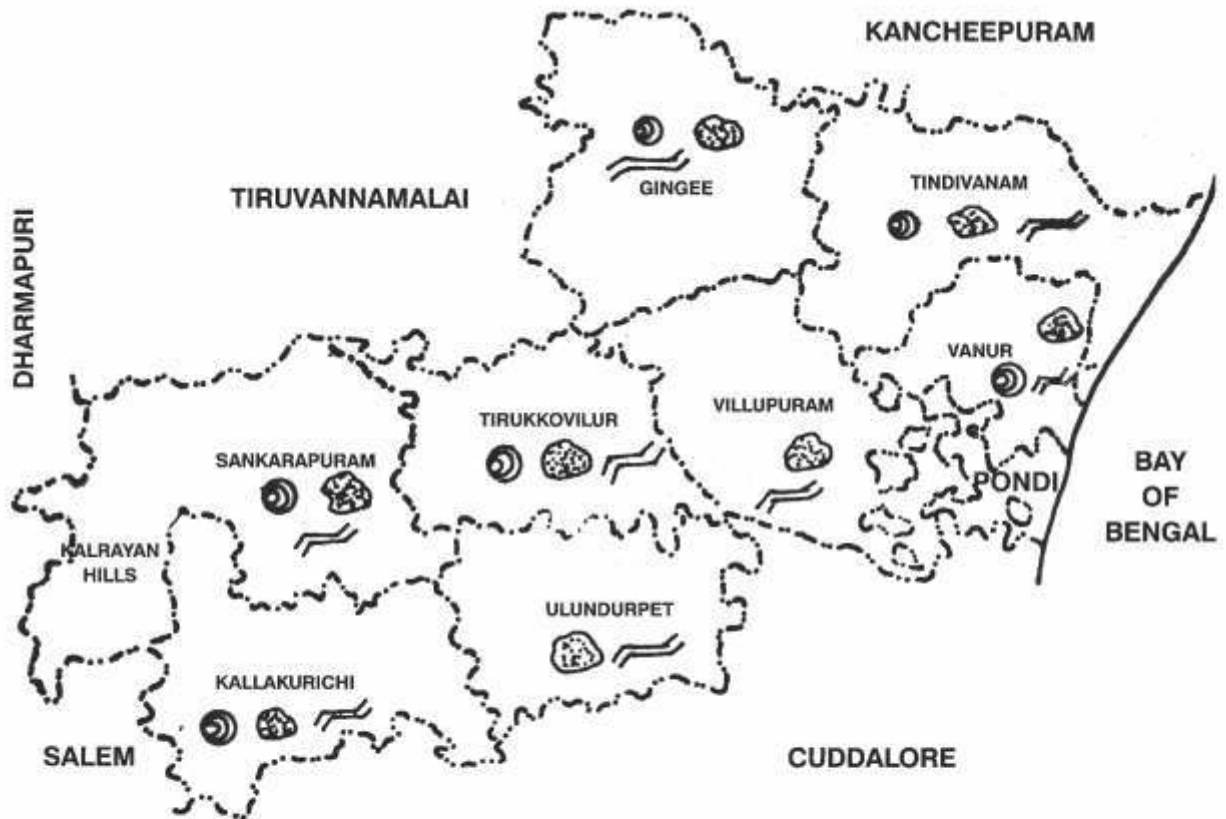
Sowing Period
  Growing Period
  Harvesting Period

## SOURCES OF IRRIGATION

| Taluk           | Canal      | Well         | Tank        | Dam      |
|-----------------|------------|--------------|-------------|----------|
| 1) Gingee       | 1          | 3230         | 94          | -        |
| 2) Kallakurichi | 15         | 923          | 427         | 1        |
| 3) Sankarapuram | 1          | 310          | 341         | -        |
| 4) Tindivanam   | 1          | 2151         | 260         | 1        |
| 5) Tirukkovilur | 61         | 3015         | 265         | -        |
| 6) Ulundurpet   | 36         | -            | 130         | -        |
| 7) Vanur        | 59         | 12694        | 373         | -        |
| 8) Villupuram   | 22         | -            | 195         | 1        |
| <b>TOTAL</b>    | <b>196</b> | <b>22323</b> | <b>2085</b> | <b>3</b> |

*Source: Joint Director of Agriculture, Villupuram*

# SOURCES OF IRRIGATION VILLUPURAM DISTRICT



## REFERENCE

- STATE BOUNDARY
- . . - - DISTRICT BOUNDARY
- . - . - TALUK BOUNDARY
- COASTAL BOUNDARY

## LEGEND

- WELL
- TANK
- CANAL

## AGRICULTURAL INSTITUTIONS

| Taluk        | State Seed Farm | Seed Processing Unit | Research Station | Agricultural Extension Center | Uzhavar Santhai | Agricultural Laboratory | PBC      | FTC      |
|--------------|-----------------|----------------------|------------------|-------------------------------|-----------------|-------------------------|----------|----------|
| Villupuram   | 1               | 1                    | -                | 7                             | 1               | 1*                      | 1        | -        |
| Ulundurpet   | -               | -                    | -                | 5                             | -               | -                       | -        | -        |
| Tirukovilur  | 1               | 1                    | -                | 6                             | -               | -                       | -        | -        |
| Kallakurichi | 1               | 1                    | -                | 6                             | 1               | -                       | 1        | -        |
| Vanur        | 1               | 1                    | -                | 3                             | -               | -                       | -        | -        |
| Gingee       | -               | -                    | -                | 6                             | -               | -                       | -        | -        |
| Tindivanam   | -               | -                    | 1                | 5                             | 1               | -                       | 1        | 1        |
| Sankarapuram | -               | -                    | -                | 4                             | -               | -                       | -        | -        |
| <b>Total</b> | <b>4</b>        | <b>4</b>             | <b>1</b>         | <b>42</b>                     | <b>3</b>        | <b>1</b>                | <b>3</b> | <b>1</b> |

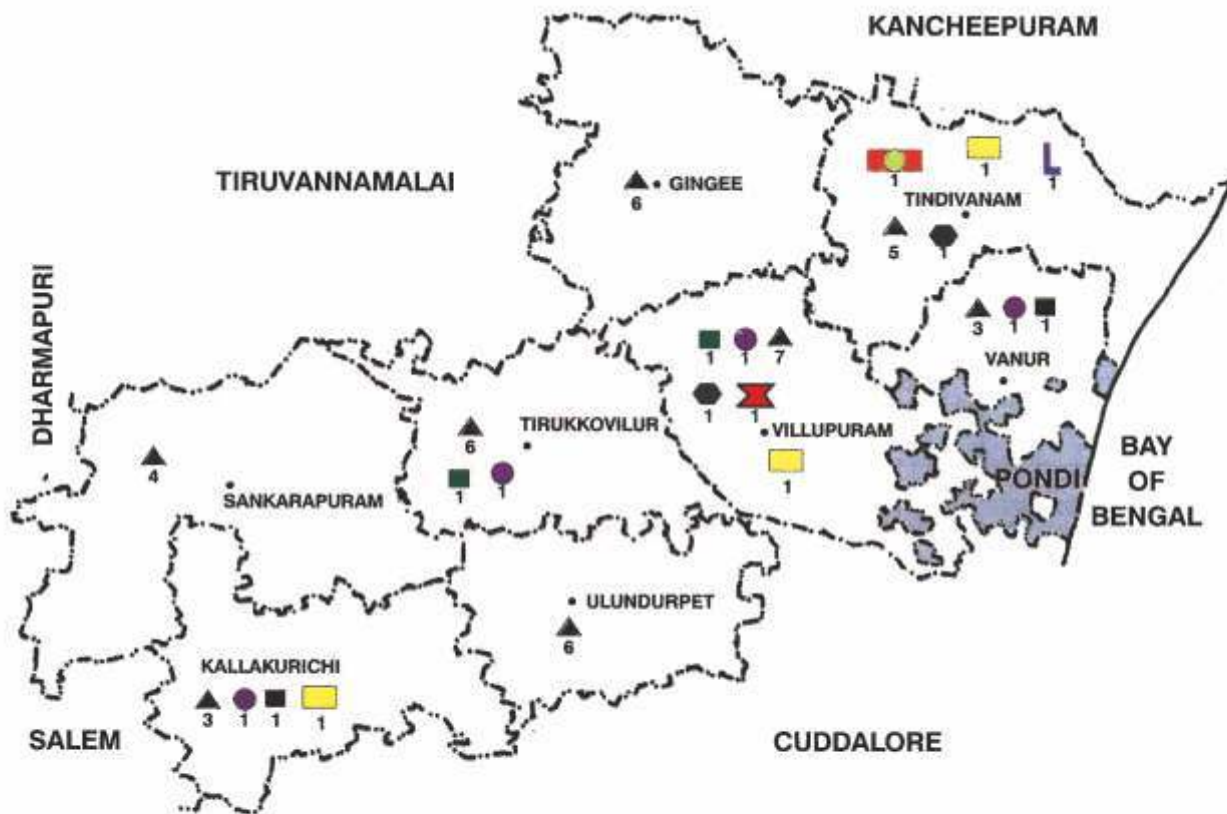
PBC-Parasite Breeding Center

FTC-Farmers Training Center

\* Fertilizers Testing Laboratory

**Source : Joint Director of Agriculture, Villupuram.**

# AGRICULTURAL INSTITUTIONS VILLUPURAM DISTRICT



### REFERENCE

- STATE BOUNDARY
- DISTRICT BOUNDARY
- - - - - TALUK BOUNDARY
- COASTAL BOUNDARY

### LEGEND

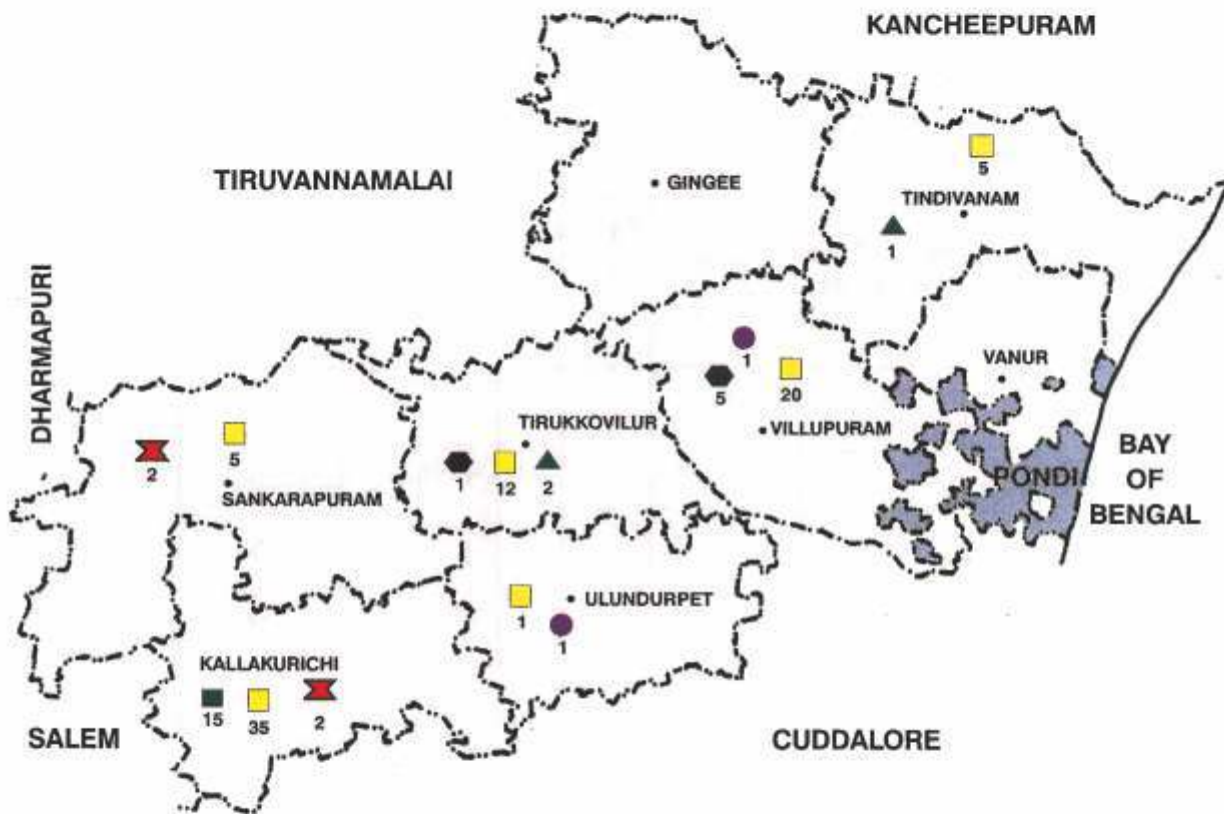
- PARASITE BREEDING CENTRE
- RESEARCH STATION
- AGRICULTURAL EXTENSION CENTRE
- STATE SEED FARM
- UZHALAVAR SANTHAI
- FERTILIZER TESTING LABORATORY
- FARMERS TRAINING CENTRE
- SEED PROCESSING UNIT

## AGRO INDUSTRIES

| Taluk        | Rice Mill | Textiles | Sago Factory | Ginning & Cotton Mill | Sugar Mill | Vanas pathi |
|--------------|-----------|----------|--------------|-----------------------|------------|-------------|
| Kallakurichi | 35        | -        | 15           | -                     | 2          | -           |
| Gingee       | -         | -        | -            | -                     | -          | -           |
| Sankarapuram | 5         | -        | -            | -                     | 2          | -           |
| Tindivanam   | 5         | 1        | -            | -                     | -          | -           |
| Tirukkovilur | 12        | 2        | -            | 1                     | -          | -           |
| Ulundurpet   | 1         | -        | -            | -                     | -          | 1           |
| Vanur        | -         | -        | -            | -                     | -          | -           |
| Villupuram   | 20        | -        | -            | 5                     | -          | 1           |
| <b>Total</b> | <b>78</b> | <b>3</b> | <b>15</b>    | <b>6</b>              | <b>4</b>   | <b>2</b>    |

*Source : Inspector of Factories, Villupuram.*

# AGRO INDUSTRIES VILLUPURAM DISTRICT



## REFERENCE

- STATE BOUNDARY
- DISTRICT BOUNDARY
- . - . - TALUK BOUNDARY
- COASTAL BOUNDARY

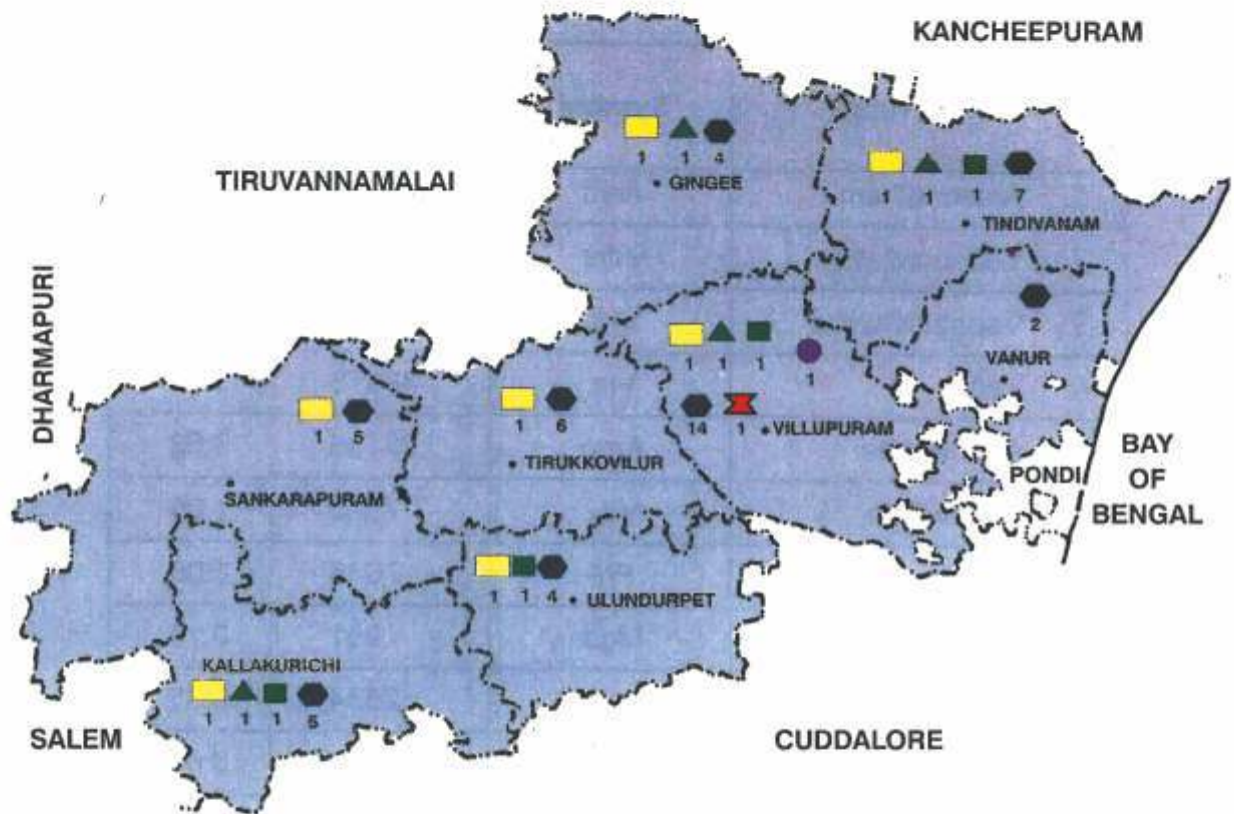
## LEGEND

- RICE MILL
- TEXTILES
- SAGO FACTORY
- GINNING & COTTON MILL
- SUGAR MILL
- VANASPATHI

## ANIMAL HUSBANDRY INSTITUTIONS

| Taluk        | Veterinary Hospital | Mobile Unit | Research Institution | Slaughter House | Artificial insemination Centre | Sheep Farm |
|--------------|---------------------|-------------|----------------------|-----------------|--------------------------------|------------|
| Gingee       | 1                   | 1           | -                    | -               | 4                              | -          |
| Kallakurichi | 1                   | 1           | -                    | 1               | 5                              | -          |
| Sankarapuram | 1                   | -           | -                    | -               | 5                              | -          |
| Tirukkoilur  | 1                   | -           | -                    | -               | 6                              | -          |
| Tindivanam   | 1                   | 1           | -                    | 1               | 7                              | -          |
| Vanur        | -                   | -           | -                    | -               | 2                              | -          |
| Villupuram   | 1                   | 1           | 1                    | 1               | 14                             | 1          |
| Ulundurpet   | 1                   | -           | -                    | 1               | 4                              | -          |
| <b>Total</b> | <b>7</b>            | <b>4</b>    | <b>1</b>             | <b>4</b>        | <b>47</b>                      | <b>1</b>   |

# ANIMAL HUSBANDRY INSTITUTIONS VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY

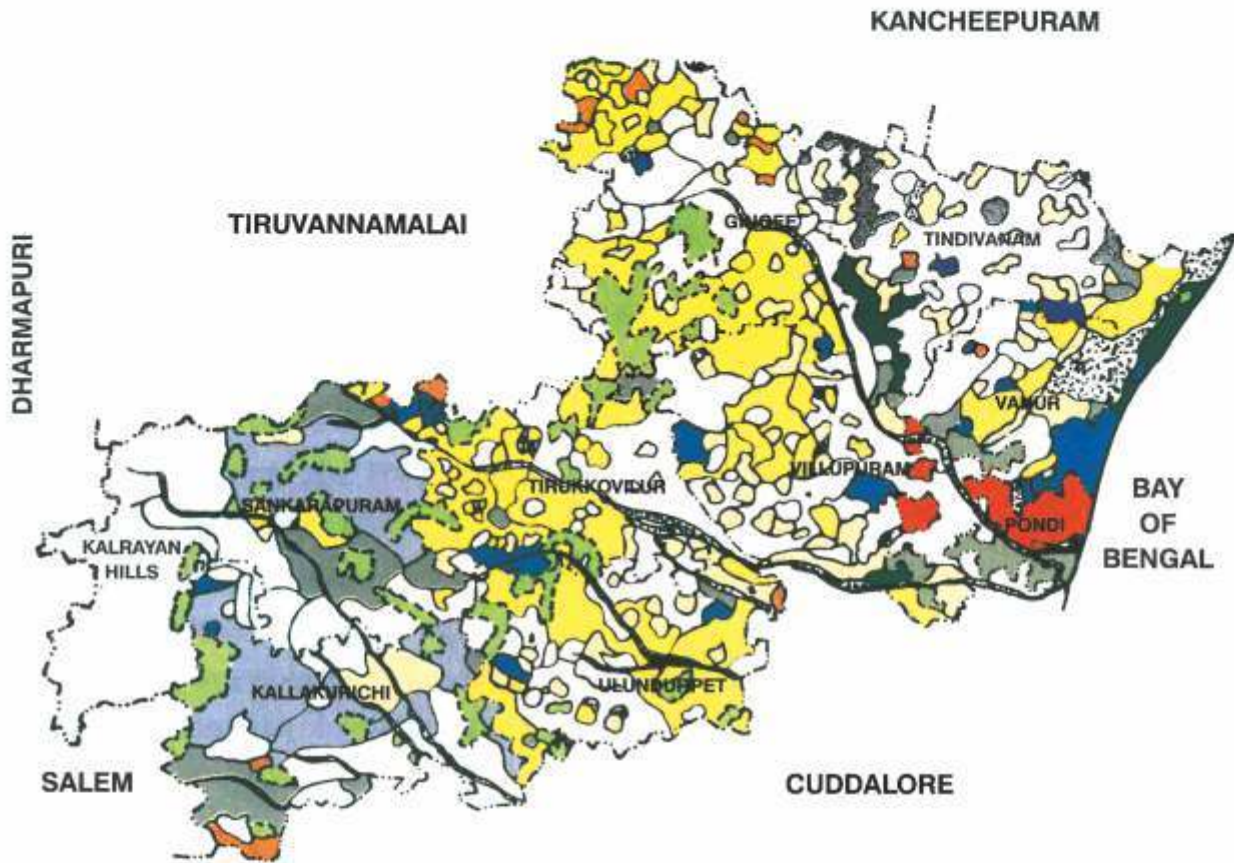
## LEGEND

- VETERINARY HOSPITAL
- MOBILE VETERINARY DISPENSARY
- SLAUGHTER HOUSE
- ARTIFICIAL INSEMIATION CENTRE
- RESEARCH INSTITUTIONS
- SHEEP FARM

## SOILS

| Soil Series             | Symbol | Extent        |              |
|-------------------------|--------|---------------|--------------|
|                         |        | ha            | %            |
| 1. Arasanatham          | Anm    | 71371         | 9.88         |
| 2. Vadamadurai          | Vdm    | 47828         | 6.62         |
| 3. Vadathesalur         | Vds    | 42654         | 5.91         |
| 4. Vanur                | Vnr    | 39573         | 5.48         |
| 5. Ammapettai           | Amp    | 26136         | 3.62         |
| 6. Vadavalam            | Vdv    | 7680          | 1.06         |
| 7. Pachol               | Phl    | 7648          | 1.06         |
| 8. Mangadu              | Mgd    | 991           | 0.14         |
| 9. Idamyanpattu         | Inp    | 2534          | 0.35         |
| 10. Lalapettai          | Llp    | 620           | 0.09         |
| 11. Vadalapakkam        | Vdl    | 563           | 0.08         |
| 12. Mahabalipuram       | Mbm    | 974           | 0.13         |
| <b>Soil association</b> |        | <b>252624</b> | <b>34.98</b> |
| <b>Forest</b>           |        | <b>71697</b>  | <b>9.93</b>  |
| <b>Others</b>           |        | <b>149310</b> | <b>20.67</b> |
| <b>Total</b>            |        | <b>722203</b> | <b>100.0</b> |

# SOILS VILLUPURAM DISTRICT



- REFERENCE**
- · · · — STATE BOUNDARY
  - · · — DISTRICT BOUNDARY
  - · — TALUK BOUNDARY
  - COASTAL BOUNDARY
  - RIVERS & GULLY
  - TANK
  - FOREST BOUNDARY

- LEGEND**
- VANUR
  - VADAMADURAI
  - VADATHESASALUR
  - AMMAPETTAI
  - VADAVARAM
  - ARASANATHAM
  - LALAPETTAI
  - PACHOL
  - MAHALIPURAM
  - MANGADU
  - VADALAPAKKAM
  - IDAMYANPATTU
  - SOIL ASSOCIATION

## ARASANATHAM SERIES [Anm]

|                 |   |                              |
|-----------------|---|------------------------------|
| Location        | : | Agrapurm, Kallakurichi taluk |
| Physiography    | : | Very gently sloping          |
| Topography      | : | Plain                        |
| Drainage        | : | Welll drained                |
| Parent material | : | Gneiss                       |

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>   |
|-----------------|--------------|--|
| Ap              | 0-22 cm      | Greyish brown (10 YR 5/2); sandy clay loam; coarse strong sub-angular blocky; hard (dry), firm (moist), slightly sticky and slightly plastic (wet); many small to large irregular concretions; slight effervescence; many fine to medium roots; many fine tubular pores; moderate permeability; clear smooth boundary; pH 7.6. |
| Bw <sub>1</sub> | 22-65 cm     | Greyish brown (10 YR 5/2); sandy clay loam; coarse strong sub-angular blocky; very hard (dry), very firm (moist), sticky and plastic (wet); many small to large irregular concretions; few fine roots; common fine tubular pores; violent effervescence; moderately slow permeability; abrult smooth boundary; pH 8.2.         |
| Bw <sub>2</sub> | 65-105 cm    | Light brownish grey (10 YR 6/2); sandy clay; medium strong sub-angular blocky; hard (dry), firm(moist), slightly sticky and slightly plastic; many small to large irregular concretions; common fine tubular pores; violent offervescence; slow permeability; pH 8.4.  |

## ARASANATHAM SERIES (Anm)

|                  |             |          |
|------------------|-------------|----------|
| 0                |             |          |
| Ap               | scl         | 10YR 5/2 |
| 22               | es      7.6 |          |
| Bw <sub>1</sub>  | scl         | 10YR 5/2 |
| 65               | ev      8.2 |          |
| Bw <sub>2</sub>  | sc          | 10YR 6/2 |
| 105 <sup>+</sup> | ev      8.4 |          |
|                  |             |          |

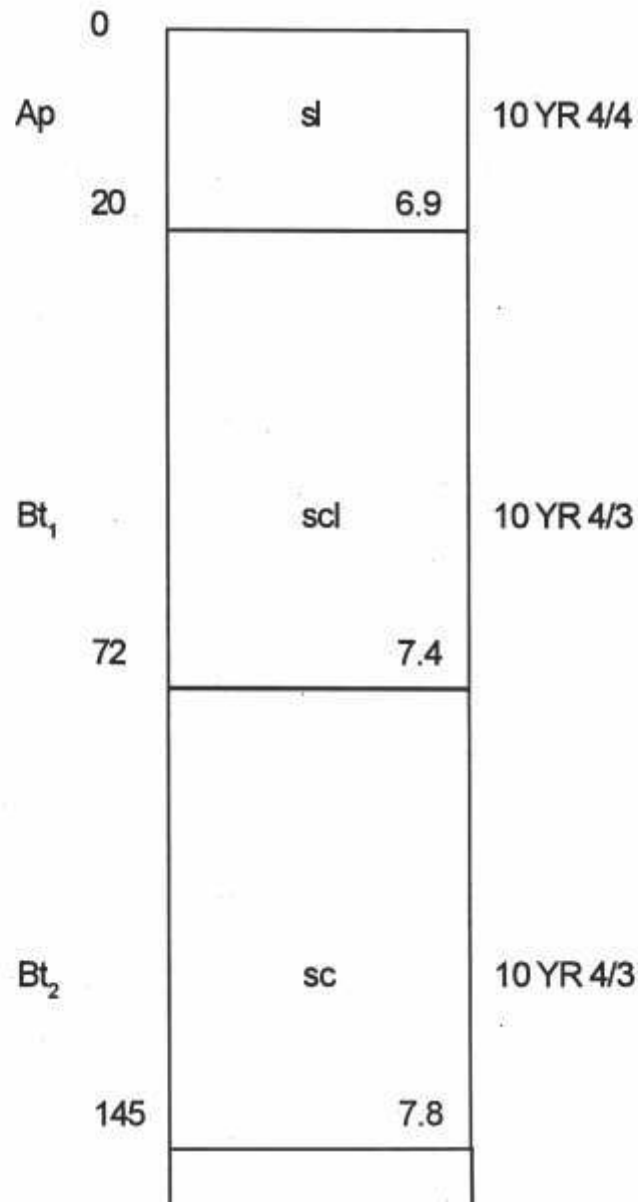
**Soil Taxonomy : Fine loamy mixed calcareous hyperthermic *Typic Ustropept***

## VADAMADURAI SERIES [Vdm]

|                 |   |                     |
|-----------------|---|---------------------|
| Location        | : | Sirupandal          |
| Physiography    | : | Very gently sloping |
| Topography      | : | Plain               |
| Drainage        | : | Well drained        |
| Parent material | : | Gneiss              |

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>  |
|-----------------|--------------|---|
| Ap              | 0-20 cm      | Dark yellowish brown (10 YR 4/4); sandy loam; fine weak crumb; loose (dry), friable (moist); many fine roots; moderately rapid permeability; clear smooth boundary; pH 6.9.   |
| Bt <sub>1</sub> | 20-72 cm     | Dark brown (10 YR 4/3); sandy clay loam; medium moderate sub-angular blocky; slightly hard (dry); firm (moist), sticky and slightly plastic (wet); few fine roots; few small soft irregular concretions; moderately slow permeability; clear smooth boundary; pH 7.4. |
| Bt <sub>2</sub> | 72-145 cm    | Dark brown (10 YR 4/3); sandy clay; coarse strong sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); many small soft irregular concretions; slow permeability; pH 7.8.   |

## VADAMADURAI SERIES (Vdm)



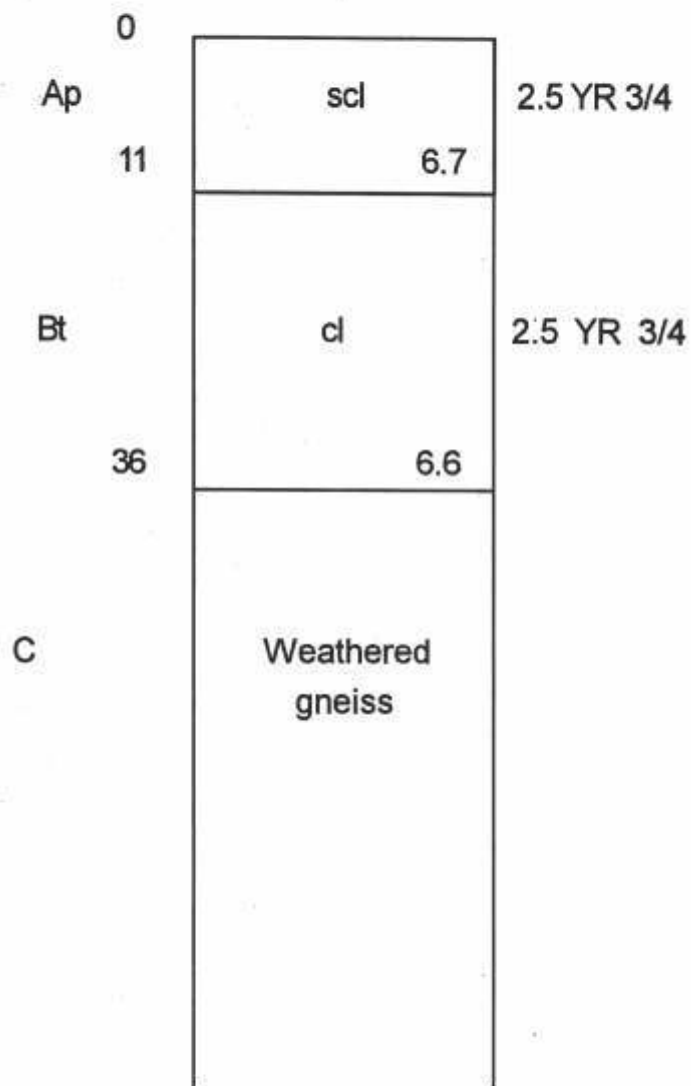
**Soil Taxonomy :** Fine loamy mixed hyperthermic **Typic Haplustalf**

## VADATHESASALUR SERIES [Vds]

|                 |   |                     |
|-----------------|---|---------------------|
| Location        | : | Vadathesasalur      |
| Physiography    | : | Very gently sloping |
| Topography      | : | Plain               |
| Drainage        | : | Well drained        |
| Parent material | : | Weathered gneiss    |

| <u>Horizon</u> | <u>Depth</u> | <u>Description</u>   |
|----------------|--------------|--|
| Ap             | 0-11 cm      | Dark reddish brown (2.5 YR 3/4) sandy clay loam; coarse strong sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); few small irregular concretions; many fine to medium roots; many fine to medium tubular pores; moderately rapid permeability; clear smooth boundary; pH 6.7. |
| Bt             | 11-36 cm     | Dark reddish brown (2.5 YR 3/4); clay loam; coarse strong sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); many irregular concretions; thin clay skins; few fine roots; many fine to medium tubular pores; moderate permeability; pH 6.6.   |
| C              | 36 cm +      | Weathered gneiss.  |

## VADATHESASALUR SERIES (Vds)



**Soil Taxonomy :** *Fine loamy mixed hyperthermic Paralithic Rhodustalf*

## VANUR SERIES [Vnr]

|                 |   |                               |
|-----------------|---|-------------------------------|
| Location        | : | Melpettai, Tindivanam Taluk   |
| Physiography    | : | Very gently sloping           |
| Topography      | : | Plain                         |
| Drainage        | : | Poor                          |
| Parent material | : | Weathered gneiss with kankar. |

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>   |
|-----------------|--------------|--|
| Ap              | 0-19 cm      | Dark greyish brown (10YR 4/2); sandy clay; moderate medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); slight effervescence; cracks with more than one cm width; common coarse roots; few fine pores; slow permeability; diffused wavy boundary; pH 8.6.       |
| Bw <sub>1</sub> | 19-48 cm     | Dark greyish brown (10 YR4/2); silty clay loam; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; few fine pores; few coarse roots; slow permeability; diffused wavy boundary; pH 8.7.  |
| Bw <sub>2</sub> | 48-76 cm     | Very dark greyish brown (10YR3/2); silty clay; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; very few medium to coarse roots; dark brown iron mottlings; few fine pores; slow permeability; diffused wavy boundary; pH 8.8. |
| Bw <sub>3</sub> | 76-98 cm     | Dark greyish brown (10 YR 3/2); clay; strong medium angular blocky; hard (dry), firm (moist), sticky and plastic (wet); violent effervescence; few fine dark brown iron mottlings; common medium pores; slow permeability; diffused wavy boundary. pH 8.8.                             |
| Ck              | 98+ cm       | Weathered gneiss with kankar.  |

## VANUR SERIES (Vnr)

|                 |    |                                    |           |
|-----------------|----|------------------------------------|-----------|
|                 | 0  |                                    |           |
| Ap              |    | sc                                 | 10 YR 4/2 |
|                 | 19 | e                                  | 8.6       |
| Bw <sub>1</sub> |    | sicl                               | 10 YR 4/2 |
|                 | 48 | ev                                 | 8.7       |
| Bw <sub>2</sub> |    | sic                                | 10 YR 3/2 |
|                 | 76 | ev                                 | 8.8       |
| Bw <sub>3</sub> |    | c                                  | 10 YR 3/2 |
|                 | 98 | ev                                 | 8.8       |
| Ck              |    | Weathered<br>gneiss<br>+<br>kankar |           |

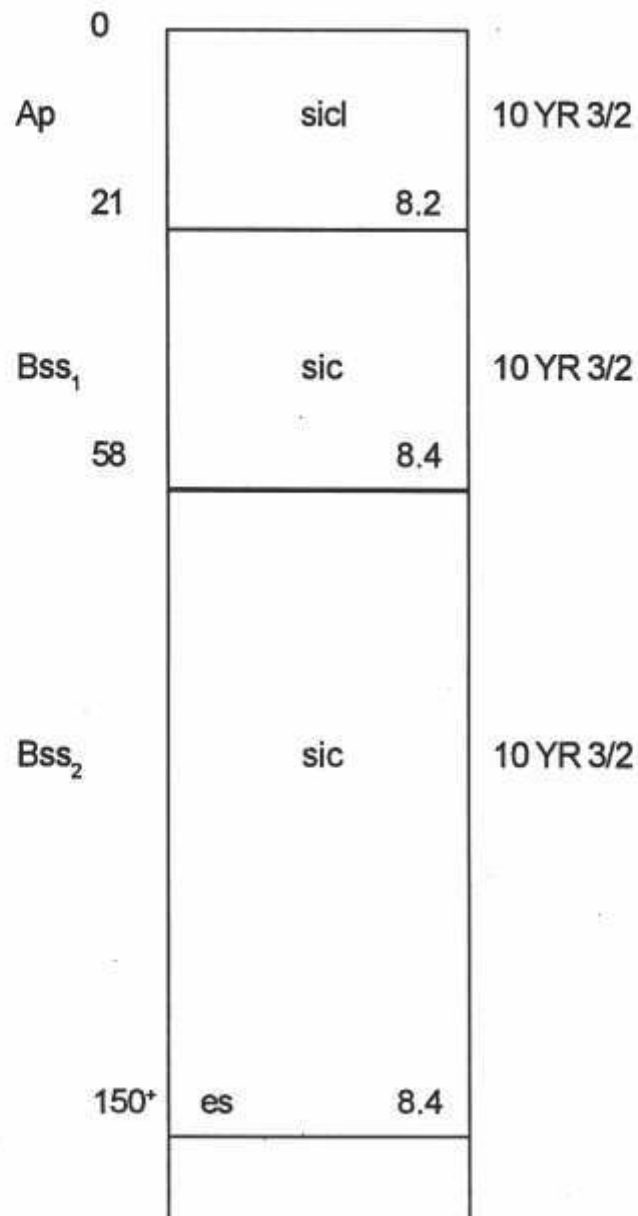
**Soil Taxonomy : Fine mixed calcareous hyperthermic *Vertic Ustropept***

## AMMAPETTAI SERIES [Amp]

|                 |   |                     |
|-----------------|---|---------------------|
| Location        | : | Ariyaperumanur      |
| Physiography    | : | Very gently sloping |
| Topography      | : | Plain               |
| Drainage        | : | Moderately drained  |
| Parent material | : | Gneiss              |

| <u>Horizon.</u>  | <u>Depth</u> | <u>Description</u>   |
|------------------|--------------|--|
| A <sub>p</sub>   | 0-21 cm      | Very dark greyish brown (10YR3/2); silty clay; coarse strong sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); moderately slow permeability; plenty fine roots; abrupt smooth boundary; pH 8.2.  |
| Bss <sub>1</sub> | 21-58 cm     | Very dark greyish brown (10YR 3/2); silty clay; coarse strong sub-angualr blocky; very hard (dry), firm (moist), sticky and plastic (wet); prominent intersecting slickensides; slow permeability; few fine roots; abrupt smooth boundary; pH 8.4.                           |
| Bss <sub>2</sub> | 58-150+ cm   | Very dark greyish brown (10 YR 3/2); silty clay; coarse strong sub-angular blocky; very hard (dry), firm (moist), sticky and plastic (wet); many small irregular hard concretions; strong effervescence; prominent intersecting slickensides very slow permeability; pH 8.4. |

## AMMAPETTAI SERIES (Amp)



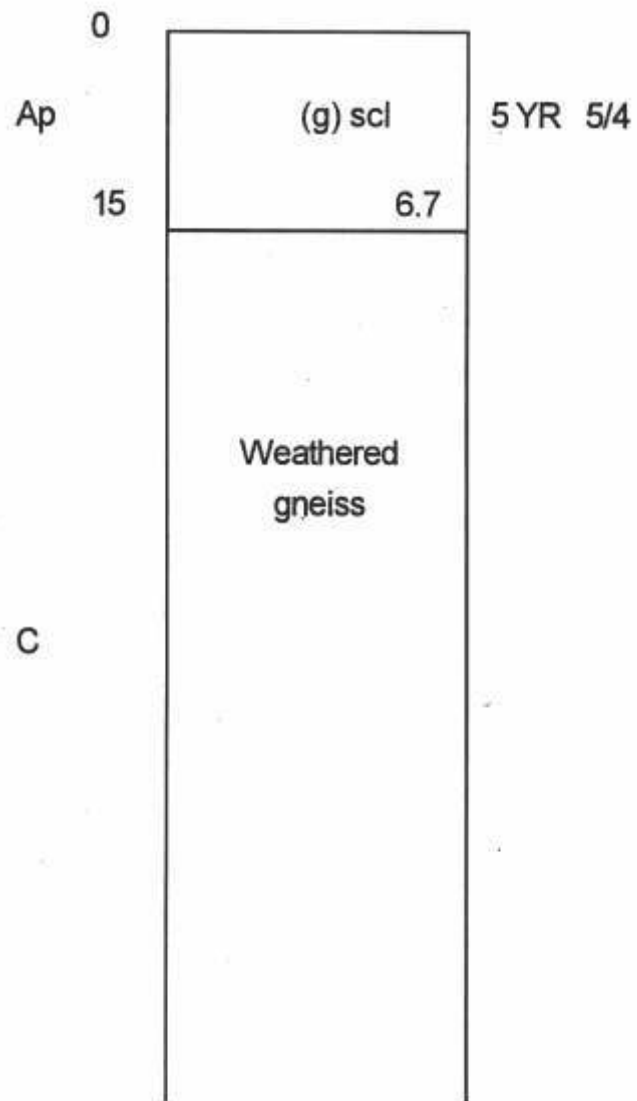
**Soil Taxonomy : Fine montmorillonitic hyperthermic *Typic Haplustert***

## PACHOL SERIES [PhI]

|                 |   |                |
|-----------------|---|----------------|
| Location        | : | Adanur         |
| Physiography    | : | Gently sloping |
| Topography      | : | Plain          |
| Drainage        | : | Well drained   |
| Parent material | : | Gneiss         |

| <u>Horizon</u> | <u>Depth</u> | <u>Description</u>   |
|----------------|--------------|--|
| Ap             | 0-15 cm      | Reddish brown (5 YR5/4); gravelly sandy clay loam; medium moderate sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); many small to large irregular concretions; many fine roots ; many fine tubular pores; moderately rapid permeability; pH 6.7. |
| C              | 15 + cm      | Weathered gneiss.  |

**PACHOL SERIES (Phl)**



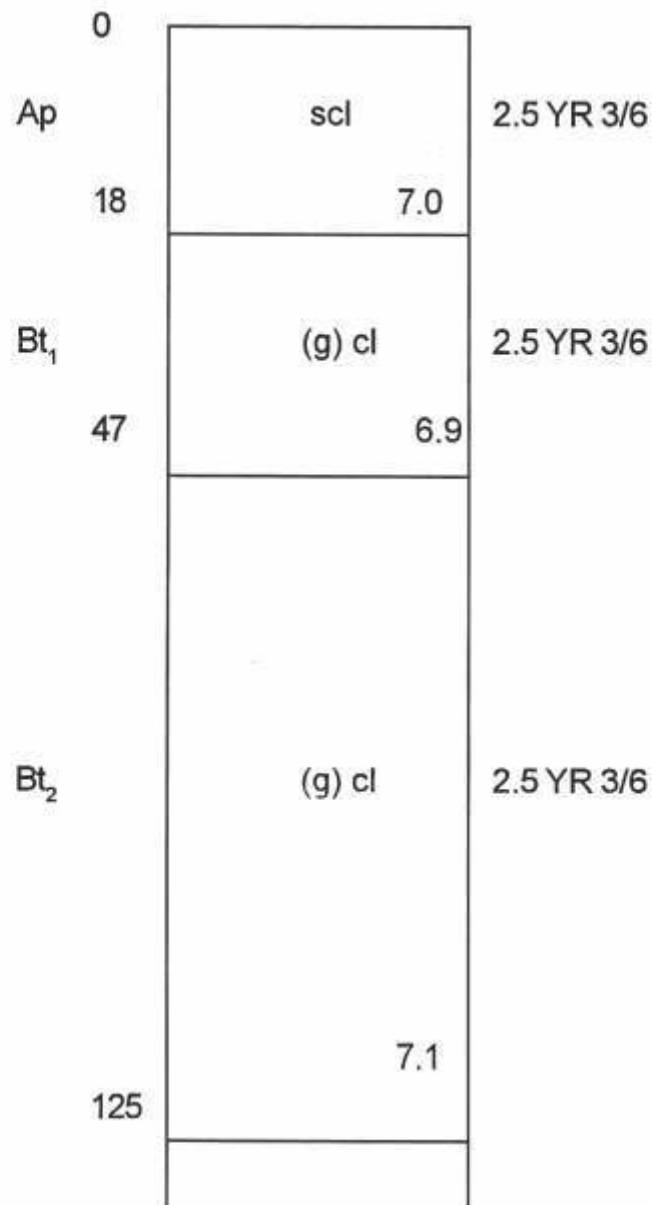
***Soil Taxonomy : Loamy skeletal mixed Paralithic Ustorthent***

## VADAVALAM SERIES [Vdv]

|                 |   |                                   |
|-----------------|---|-----------------------------------|
| Location        | : | Agarakottalam, Kallakurichi taluk |
| Physiography    | : | Gently sloping                    |
| Topography      | : | Gently sloping terrain            |
| Drainage        | : | Well drained                      |
| Parent material | : | Gneiss                            |

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>  |
|-----------------|--------------|---|
| Ap              | 0-18 cm      | Dark red (2.5 YR 3/6); sandy clay loam; medium moderate sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); plentiful fine roots ; moderate permeability; clear smooth boundary; pH 7.0. |
| Bt <sub>1</sub> | 18-47 cm     | Dark red (2.5 YR 3/6 ); gravelly clay loam; coarse strong sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); few fine roots; thin cutans; moderate permeability; clear smooth boundary; pH 6.9.                    |
| Bt <sub>2</sub> | 47-125 cm    | Dark red (2.5 YR 3/6); gravelly clay loam; coarse strong sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); thin cutans; moderately slow permeability; pH 7.1.   |

## VADAVALAM SERIES (Vdv)



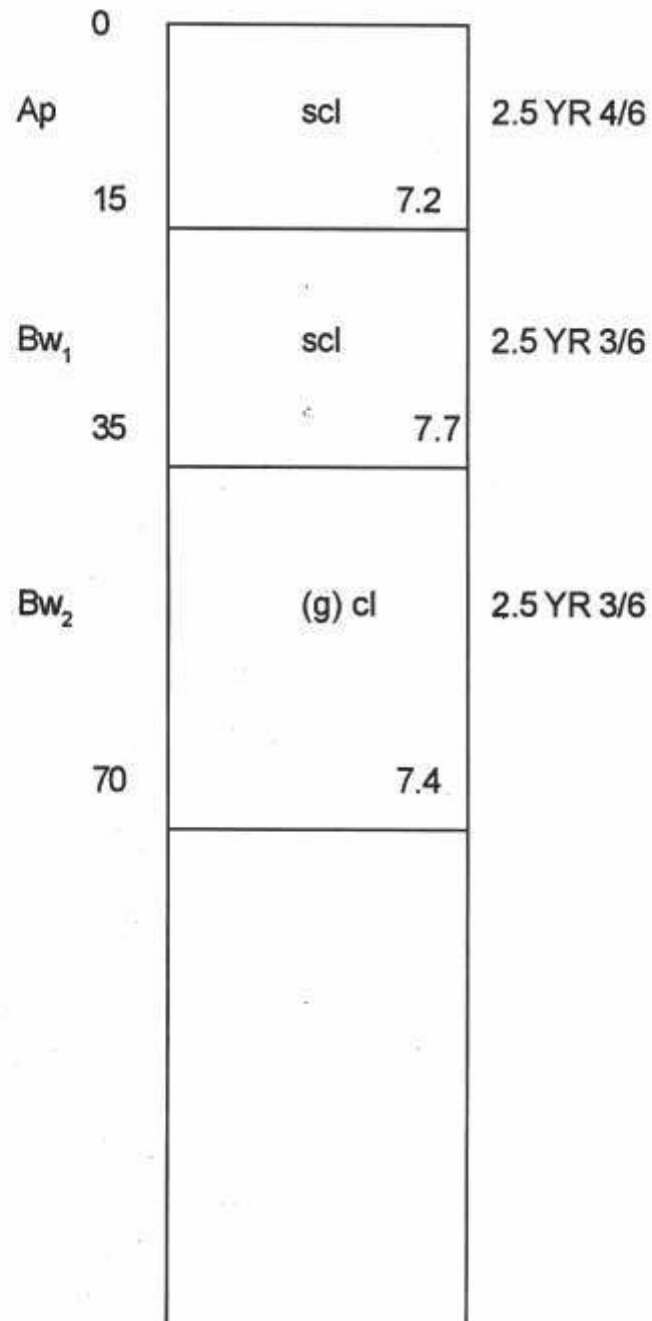
***Soil Taxonomy : Fine mixed hyperthermic Typic Rhodustalf***

## IDAMYANPATTU SERIES [Inp]

|                 |   |                     |
|-----------------|---|---------------------|
| Location        | : | Idayanpatti         |
| Physiography    | : | Very gently sloping |
| Topography      | : | Plain               |
| Drainage        | : | Well drained        |
| Parent material | : | Gneiss              |

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>  |
|-----------------|--------------|---|
| Ap              | 0-15 cm      | Red (2.5 YR 4/6); sandy clay loam; medium moderate sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); few fine roots; common fine to medium tubular pores ; moderate permeability; clear wavy boundary; pH 7.2. |
| Bw <sub>1</sub> | 15-35 cm     | Dark red (2.5 YR3/6); sandy clay loam; fine weak sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); few fine roots; fine to medium tubular pores; moderately slow permeability; clear wavy boundary; pH 7.7.    |
| Bw <sub>2</sub> | 35-70 cm     | Dark red (2.5 YR 3/6); gravelly clay loam; medium moderate sub-angular blocky; slightly hard (dry), firm (moist), slightly sticky and slightly plastic (wet); few fine roots; fine to medium tubular pores; moderately slow permeability; pH 7.4.               |

## IDAMYANPATTU SERIES [Inp]



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

## MANGADU SERIES [Mgd]

|                 |   |                             |
|-----------------|---|-----------------------------|
| Location        | : | Akshikadu, Tindivanam Taluk |
| Physiography    | : | Gently sloping              |
| Topography      | : | Plain                       |
| Drainage        | : | Moderately well             |
| Parent material | : | Alluvium                    |

| <u>Horizon</u> | <u>Depth</u> | <u>Description</u>  |
|----------------|--------------|---|
| Ap             | 0-15 cm      | Dark yellowish brown (10 YR 4/4); sandy clay loam; weak medium sub-angular blocky; hard (dry), firm (moist), slightly sticky and slightly plastic (wet); common many irregular pores; moderately rapid permeability; diffused wavy boundary; pH7.4.                               |
| Bw             | 15-27 cm     | Dark yellowish brown (10 YR 4/6); sandy clay; moderate medium sub-angular blocky; hard(dry), slightly hard (moist), slightly sticky and slightly plastic (wet); many irregular pores; moderately rapid permeability; clear smooth boundary; pH 7.2.                               |
| C <sub>1</sub> | 27-48 cm     | Dark yellowish brown (10 YR 4/4); coarse sand; granular; loose (dry), friable (moist), many irregular pores; very rapid permeability; clear smooth boundary; pH 7.0.  |
| C <sub>2</sub> | 48-76 cm     | Dark yellowish brown (10 YR 4/6); sandy clay loam; weak moderate sub-angular blocky; slightly hard (dry), friable (moist), slightly sticky and slightly plastic (wet); common many irregular pores; few fine roots; moderately rapid permeability; clear smooth boundary; pH 7.2. |
| C <sub>3</sub> | 76-104 cm    | Dark yellowish brown (10 YR 4/4); sandy loam; weak medium sub-angular blocky; firm (dry), friable (moist), many irregular pores; moderately rapid permeability; diffused wavy boundary; pH 7.2.   |

## MANGADU SERIES [Mgd]

|                  |     |     |           |
|------------------|-----|-----|-----------|
| 0                |     |     |           |
| Ap               | scl |     | 10 YR 4/4 |
| 15               |     | 7.4 |           |
| Bw               | sc  |     | 10 YR 4/6 |
| 27               |     | 7.2 |           |
| C <sub>1</sub>   | s   |     | 10 YR 4/4 |
| 48               |     | 7.0 |           |
| C <sub>2</sub>   | scl |     | 10 YR 4/6 |
| 76               |     | 7.2 |           |
| C <sub>3</sub>   | sl  |     | 10 YR 4/4 |
| 104 <sup>+</sup> |     | 7.2 |           |
|                  |     |     |           |

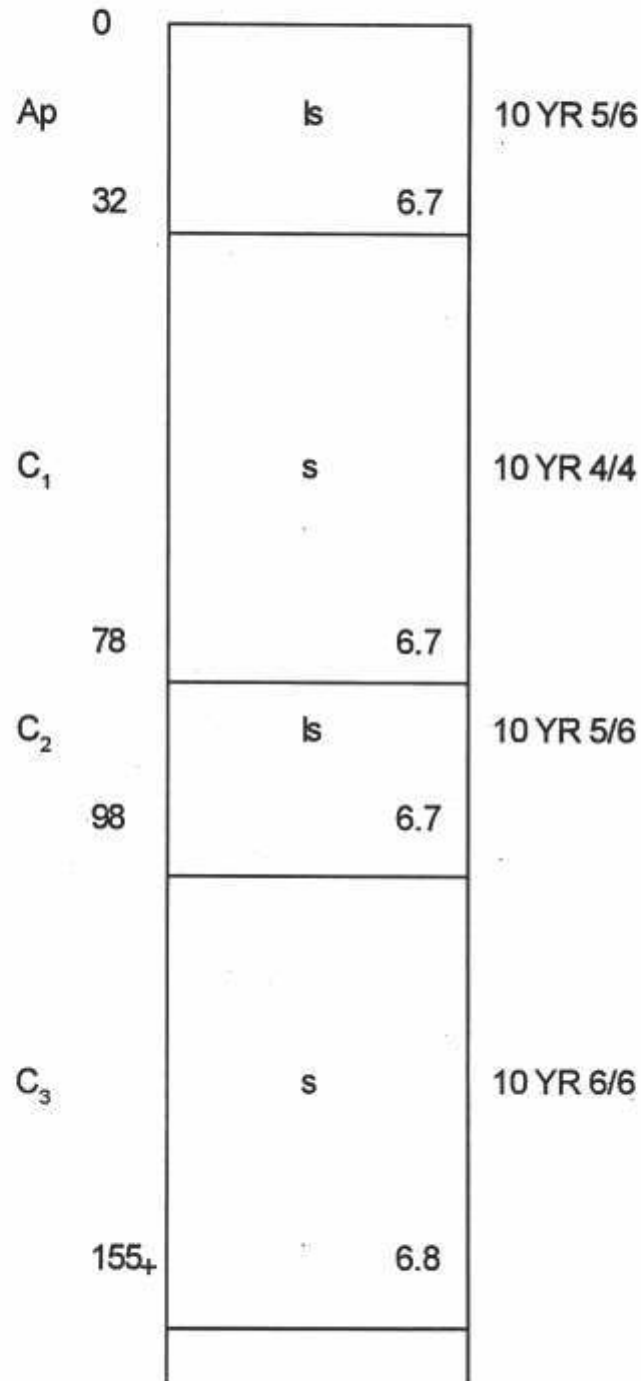
**Soil Taxonomy : Fine loamy mixed hyperthermic *Fluventic Ustropet***

## MAHABALIPURAM SERIES (Mbm)

|                 |   |                               |
|-----------------|---|-------------------------------|
| Location        | : | Vada Agaram, Tindivanam Taluk |
| Physiography    | : | Very gently sloping           |
| Topography      | : | Plain                         |
| Drainage        | : | Excessively drained           |
| Parent material | : | Alluvium                      |

| <u>Horizon</u> | <u>Depth</u> | <u>Description</u>   |
|----------------|--------------|--|
| Ap             | 0-32 cm      | Yellowish brown(10 YR 5/6); loamy sand; granular; loose (dry), friable (moist), common coarse roots; common fine pores; rapid permeability; abrupt wavy boundary; pH 6.7.        |
| C <sub>1</sub> | 32-78 cm     | Dark yellowish brown (10 YR4/4); sand; single grained; loose (dry), friable (moist), many fine roots; common medium pores; rapid permeability; diffused smooth boundary; pH 6.7. |
| C <sub>2</sub> | 78-98 cm     | Yellowish brown (10 YR 5/6); loamy sand single grained; loose (dry), friable (moist), common medium pores; rapid permeability; diffused smooth boundary; pH 6.7.                 |
| C <sub>3</sub> | 98-155+ cm   | Brownish yellow (10 YR 6/6); sand; single grained; loose (dry), friable (moist), common medium pores; rapid permeability; diffused smooth boundary; pH 6.8.                      |

## MAHABALIPURAM SERIES (Mbm)



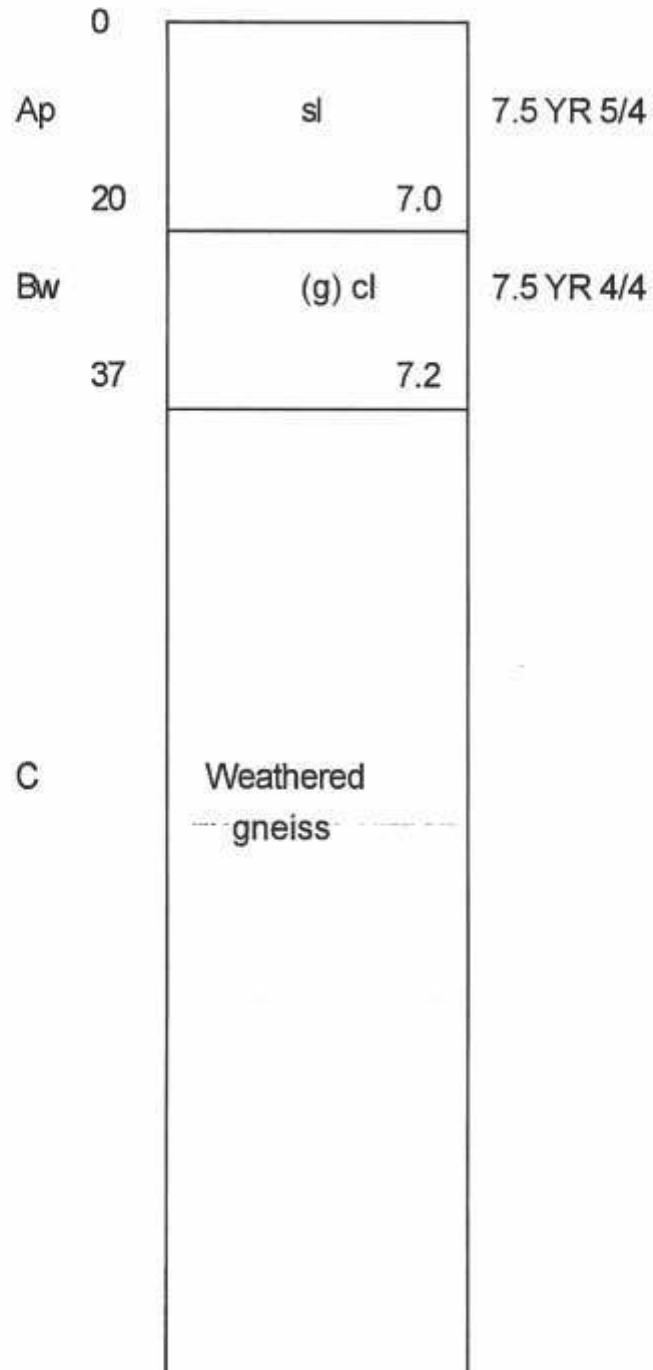
**Soil Taxonomy :** *Sandy silicious hyperthermic Typic Ustipsamment*

## LALAPETTAI SERIES [Llp]

|                 |   |                     |
|-----------------|---|---------------------|
| Location        | : | Lalapettai          |
| Physiography    | : | Very gently sloping |
| Topography      | : | Plain               |
| Drainage        | : | Well drained        |
| Parent material | : | Weathered gneiss    |

| <u>Horizon</u> | <u>Depth</u> | <u>Description</u>   |
|----------------|--------------|--|
| Ap             | 0-20 cm      | Brown (7.5 YR 5/4); sandy loam; single grained; loose (dry), friable (moist), many fine to medium roots; moderately rapid permeability; abrupt smooth boundary; pH 7.0.  |
| Bw             | 20-37 cm     | Dark brown (7.5 YR 4/4); gravelly clay loam; moderate medium; sub-angular blocky; hard (dry), firm (moist), few small hard irregular concretions; thin clay skins; few roots; few fine to medium tubular pores; moderate permeability; pH 7.2. |
| C              | 37 cm        | Weathered gneiss.  |

## LALAPETTAI SERIES [Lip]



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

## VADALAPAKKAM SERIES [Vdl]

Location : Vadalapakkam, Tindivanam Taluk  
 Physiography : Very gently sloping  
 Topography : Plain  
 Drainage : Well drained  
 Parent material : Gneiss

| <u>Horizon</u>  | <u>Depth</u> | <u>Description</u>   |
|-----------------|--------------|--|
| Ap              | 0-16 cm      | Yellowish red (5 YR 4/6); sandy clay loam; weak moderate sub-angular blocky; loose (dry), friable (moist), slightly sticky and slightly plastic (wet); common coarse roots; few fine irregular pores; moderately rapid permeability; diffused smooth boundary; pH 6.5. |
| B               | 16-29 cm     | Dark red (2.5 YR 3/6); clay loam; moderate medium sub-angular blocky; hard (dry), firm (moist), firm sticky and plastic (wet); thin patchy cutans; few fine roots; few fine irregular pores; moderately rapid permeability; diffused wavy boundary; pH 6.8.            |
| Bt <sub>1</sub> | 29-62 cm     | Dark reddish brown (2.5 YR 3/4); clay loam, moderate medium sub-angular blocky; hard (dry), firm (moist), sticky and plastic (wet); thin patchy cutans; few very fine roots; common fine pores; moderately rapid permeability; diffused wavy boundary; pH 7.0.         |
| Bt <sub>2</sub> | 62-82 cm     | Dark reddish brown (2.5 YR 3/4); gravelly clay; moderate medium sub-angular blocky; hard (dry), very firm (moist), very sticky and plastic (wet); thick cutans; fine to medium irregular pores; moderately slow permeability; diffused smooth boundary; pH 7.0.        |
| C               | 82+ cm       | Weathered gneiss.  |

## VADALAPAKKAM SERIES [Vdl]

|                 |                     |            |
|-----------------|---------------------|------------|
| 0               |                     |            |
| Ap              | scl                 | 5 YR 4/6   |
| 16              | 6.5                 |            |
| B               | cl                  | 2.5 YR 3/6 |
| 29              | 6.8                 |            |
| Bt <sub>1</sub> | cl                  | 2.5 YR 3/4 |
| 62              | 7.0                 |            |
| Bt <sub>2</sub> | (g) c               | 2.5 YR 3/4 |
| 82              | 7.0                 |            |
| C               | Weathered<br>gneiss |            |

**Soil Taxonomy :** *Fine loamy deep mixed hyperthermic Typic Rhodustalf*

## LAND CAPABILITY

Land capability assesses the suitability of land for cultivation or grazing/forest. As the class increases the limitation also increases.

| Area [ha] | Land Capability Classification | Soil series                                 | Limitation   | Needs  |
|-----------|--------------------------------|---|--|--|
| 56071     | II e                           | Vadamadurai<br>Vadalapakkam<br>Vadavalam    | Erosion  | Soil conservation  |
| 72362     | II s                           | Arasanatham<br><br>Mangadu                  | Moderate alkalinity<br>Calcareousness<br>Sandy texture | Soil reclamation<br>Textural improvement<br>Suitable Crops |
| 45808     | III se                         | Lalapettai<br>Idayanpatti<br>Vadathesasalur | Shallow depth<br>Gravels & erosion                     | Soil conservation  |
| 65709     | III sw                         | Ammapettai<br><br>Vanur                     | Heavy Texture<br>Alkalinity<br>Sub surface drainage    | Improvement of drainage<br>Selection of crops              |
| 974       | IV s                           | Mahabalipuram                               | Excessive drainage                                     | Selection of crops<br>Texture improvement                  |
| 7648      | IV se                          | Pachol                                      | Shallow depth erosion                                  | Selection of crops<br>Soil conservation                    |

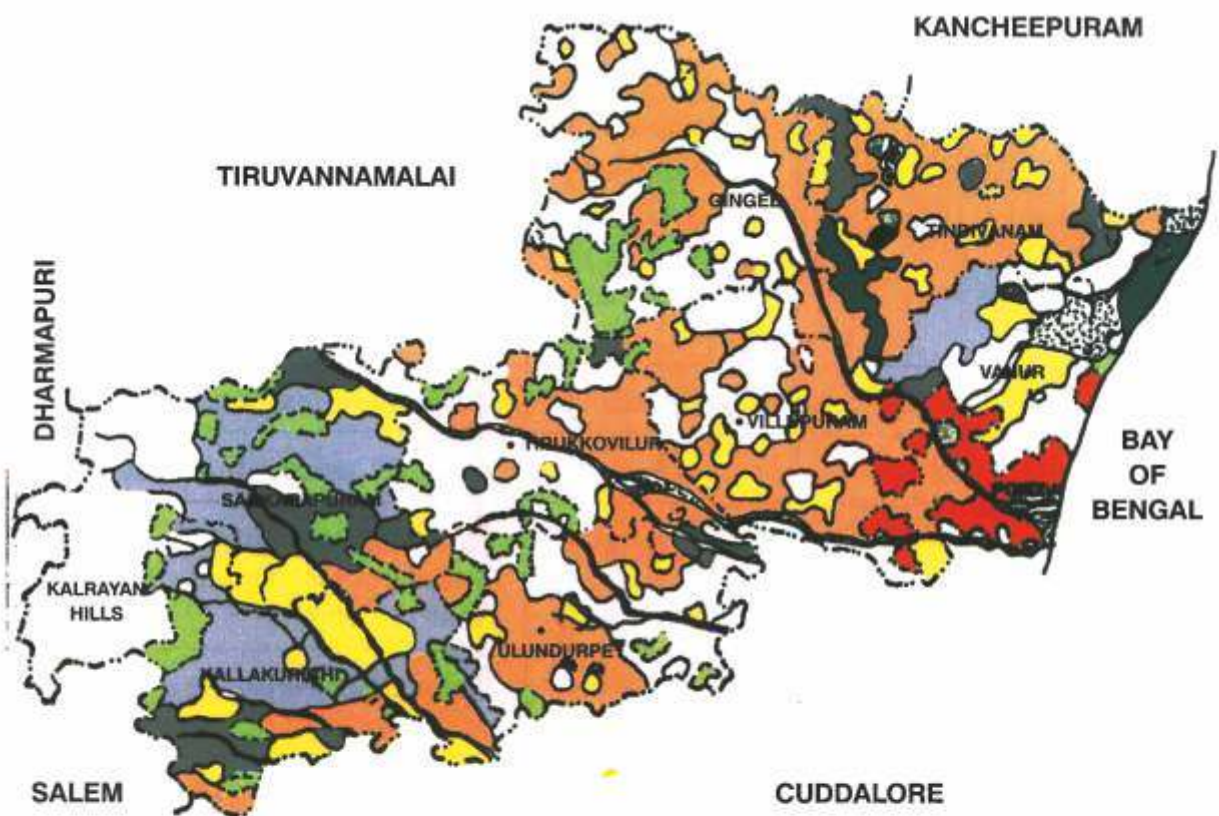
### Class

- 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 severe limitations for sustained use under agriculture.

### Sub-class

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

## LEGEND

- II e
- II s
- III se
- III sw
- IV s
- IV se

## LAND IRRIGABILITY

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

| Area [ha] | Irrigability Classification | Soil Series  | Limitation  |
|-----------|-----------------------------|--|---|
| 122296    | 2 s                         | Vadalapakkam<br>Vadamadurai<br>Idamyampattu<br>Arasanatham | Gravels in sub-soil. Low water holding capacity in surface<br><br>Coarse fragments in the sub surface<br>Moderate alkalinity in the sub surface |
| 7680      | 2 d                         | Vadavalam  | Sub surface permeability  |
| 39573     | 2 sd                        | Vanur  | Alkalinity, slow permeability   |
| 991       | 2 ds                        | Mangadu<br>Lalapettai                                      | Floods, stratification<br>Shallow depth, gravels  |
| 43274     | 3 s                         | Vadathesasalur   | Shallow depth   |
| 26136     | 3 sd                        | Ammapettai   | Moderate alkalinity, slow permeability  |
| 7648      | 4 st                        | Pachol   | Shallow soil, gravels, erosion  |
| 974       | 4 sd                        | Mahabalipuram  | Excessive drainage  |

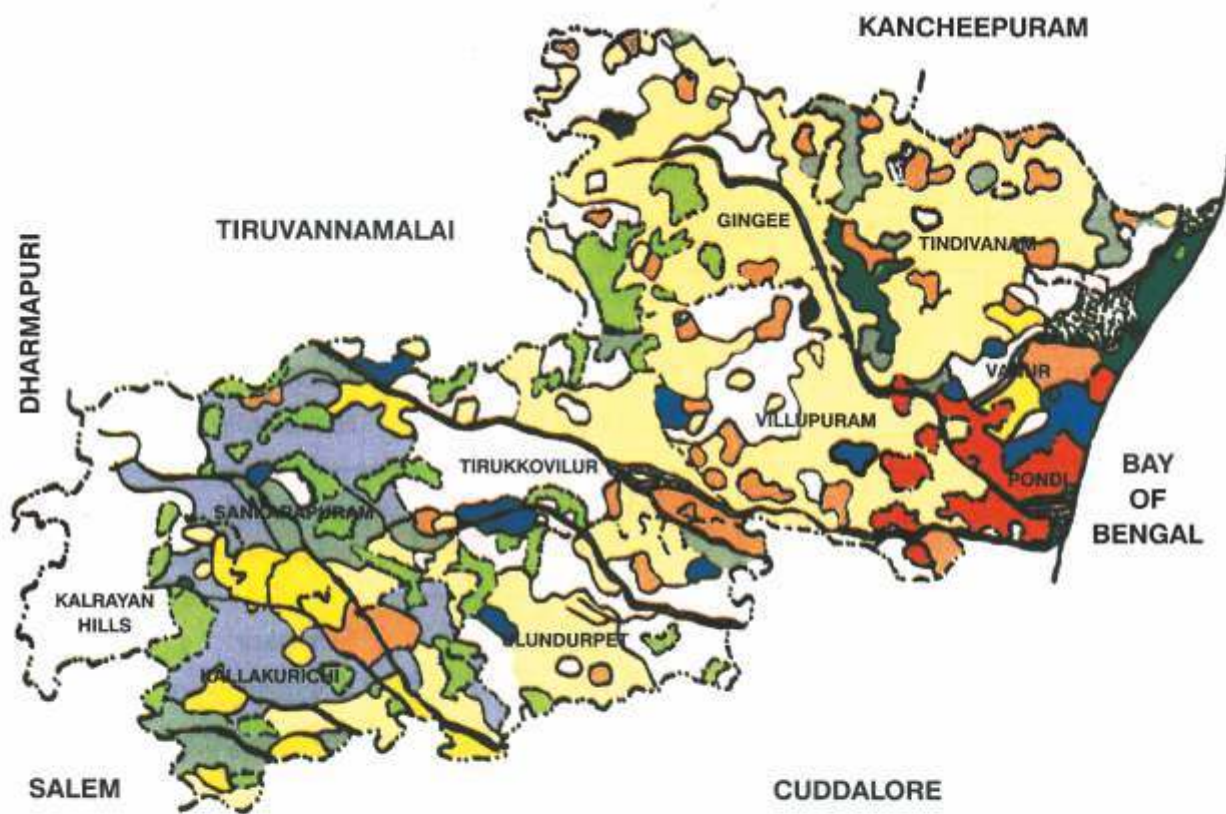
### **Class**

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

### **Sub Class**

- s - Soil limitation
- t - Topography
- d - Drainage

# LAND IRRIGABILITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

## LEGEND

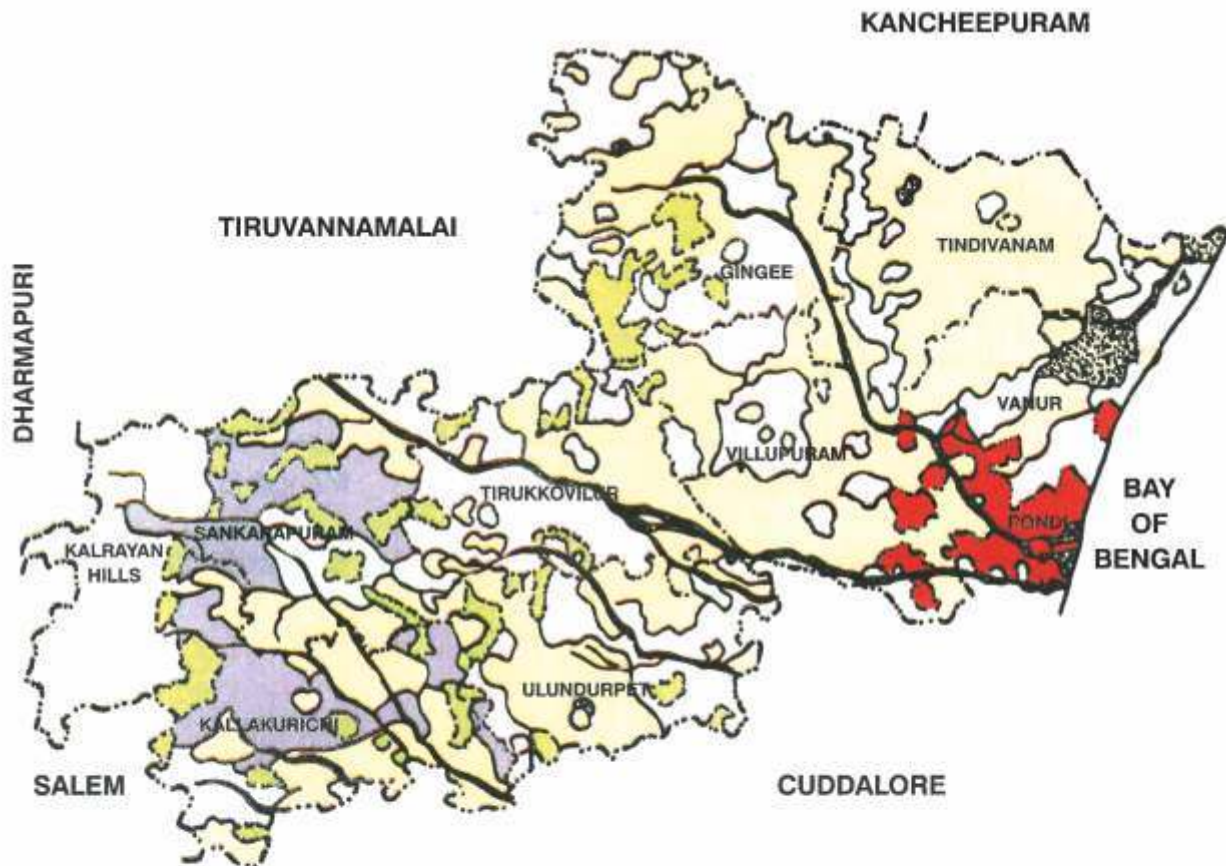
|  |      |  |      |
|--|------|--|------|
|  | 2 s  |  | 3 s  |
|  | 2 d  |  | 3 sd |
|  | 2 s  |  | 4 st |
|  | 2 sd |  | 4 sd |
|  | 2 ds |  |      |

## SOIL PRODUCTIVITY

It is the inherent capacity of the soil to produce certain amount of crop yield per unit area and is a function of soil characters under normal management system.

| Area (ha) | Productivity |                | Soil Series   |
|-----------|--------------|----------------|---|
|           | Rating       | Grouping       |   |
| 8622      | 0-7          | Extremely poor | Pachol<br>Mahabalipuram   |
| 43274     | 8-19         | Poor           | Lalapettai<br>Vadathesalur  |
| 141168    | 20-34        | Average        | Mangadu<br>Arasanatham<br>Idamyanpattu<br>Vadalapakkam<br>Ammapettai<br>Vanur |
| 55508     | 35-64        | Good           | Vadavalam<br>Vadamadurai  |

# SOIL PRODUCTIVITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- — COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

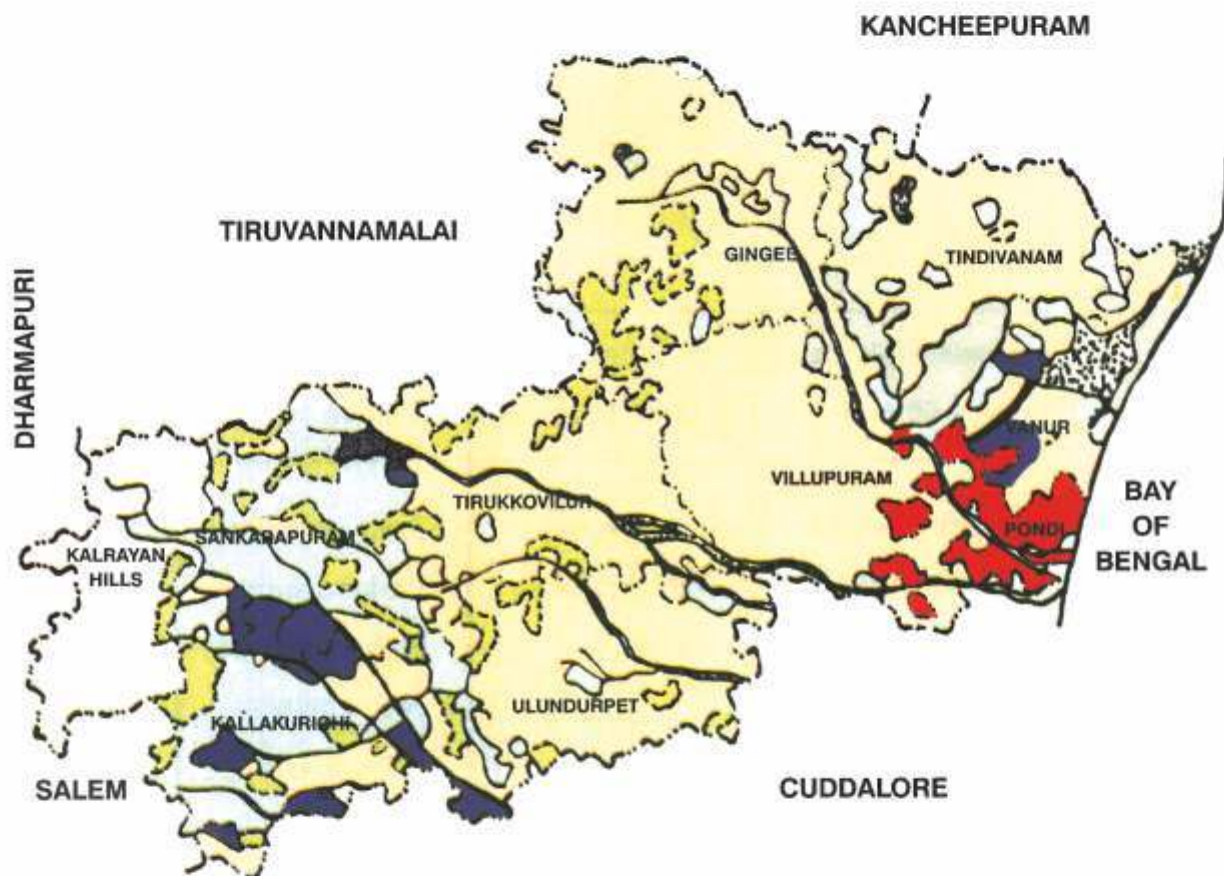
## LEGEND

- EXTREMELY POOR
- POOR
- AVERAGE
- GOOD

## SOIL COLOUR

| Red Soil   | Brown Soil   | Black Soil   | Alluvial Soil            |
|--|--|--------------|--------------------------|
| Idamyanpattu<br>Vadathesasalur<br>Pachol<br>Vadalapakkam | Vadamadurai<br>Arasanatham<br>Lalapettai<br>Vanur<br>Vadavalam | Ammapettai   | Mangadu<br>Mahabalipuram |
| <b>Area (ha) 53399</b>                                   | <b>167072</b>  | <b>26136</b> | <b>1965</b>              |

# SOIL COLOUR VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

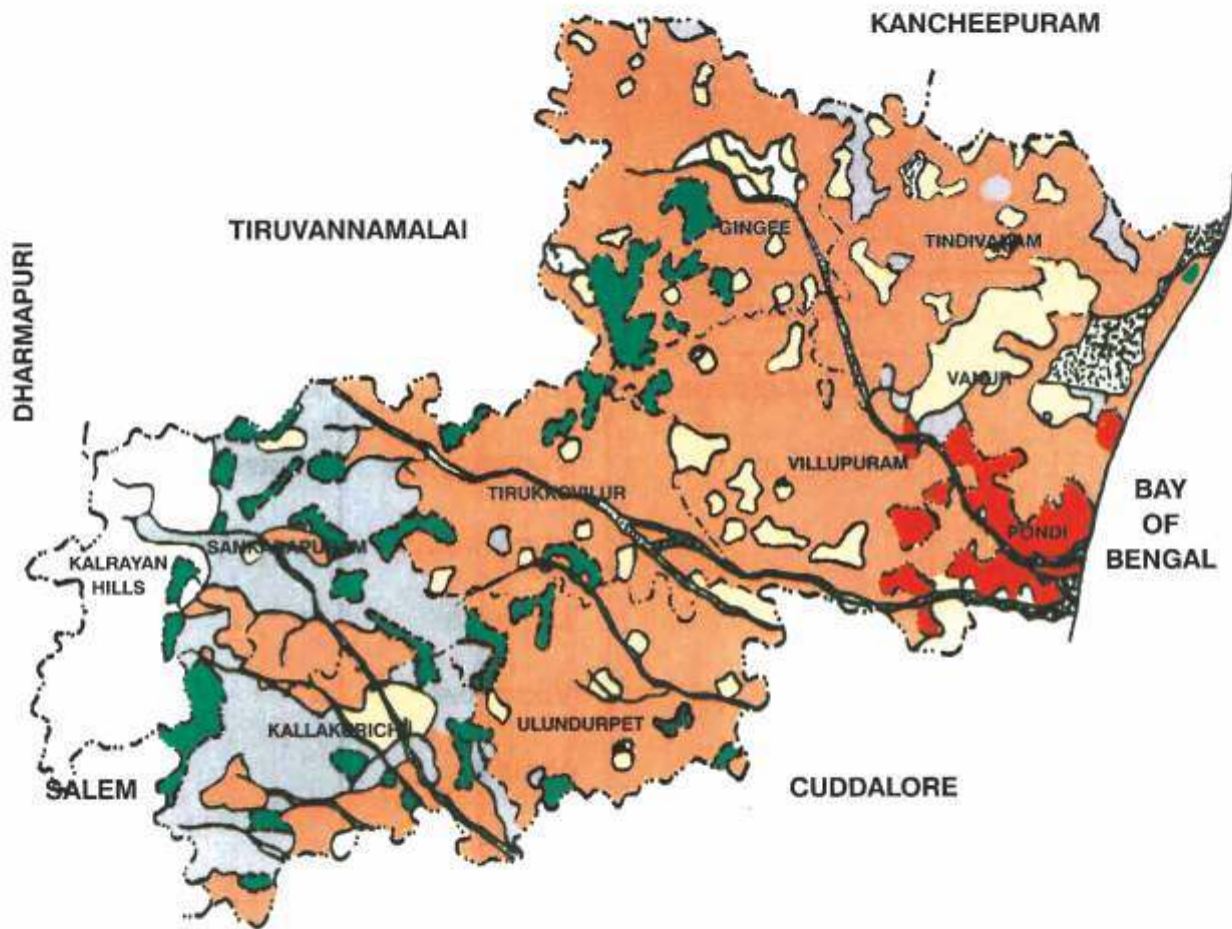
## LEGEND

- RED SOIL
- BROWN SOIL
- ALLUVIUM
- BLACK SOIL

## DEPTH

| <b>Moderately deep<br/>(26 – 50 cm)</b> | <b>Deep<br/>(51 – 100 cm)</b>         | <b>Very deep<br/>(Above 100 cm)</b>   |
|---|---------------------------------------|---|
| Vadathesasalur<br>Pachol<br>Lalapettai  | Idamyanpattu<br>Vadalapakkam<br>Vanur | Ammapettai<br>Vadamadurai<br>Mahabalipuram<br>Arasanatham<br>Mangadu<br>Vadavalam |
| <b>Area (ha) 50922</b>                  | <b>42670</b>                          | <b>154980</b>   |

# DEPTH VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- — COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

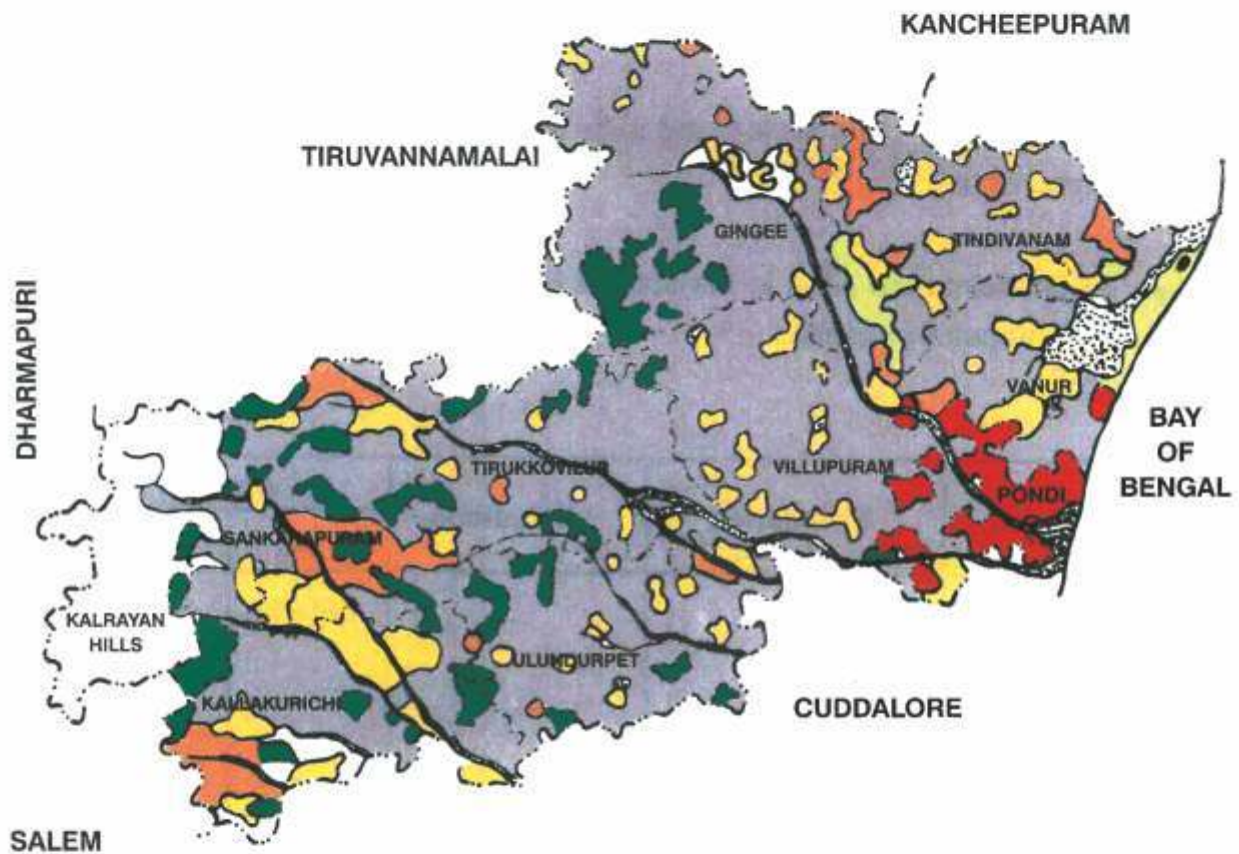
## LEGEND

- MODERATELY DEEP
- DEEP
- VERY DEEP

## TEXTURE

| Loamy skeletal        | Coarse loamy  | Fine loamy   | Fine                                |
|-----------------------|---------------|--|-------------------------------------|
| Pachol                | Mahabalipuram | Arasanatham<br>Vadamadurai<br>Idamyanpattu<br>Lalapettai<br>Vadathesasalur<br>Mangadu<br>Vadavalam | Ammapettai<br>Vanur<br>Vadalapakkam |
| <b>Area (ha) 7648</b> | <b>974</b>    | <b>173678</b>  | <b>66272</b>                        |

# SOIL TEXTURE VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · · — DISTRICT BOUNDARY
- · · — TALUK BOUNDARY
- — — COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

## LEGEND

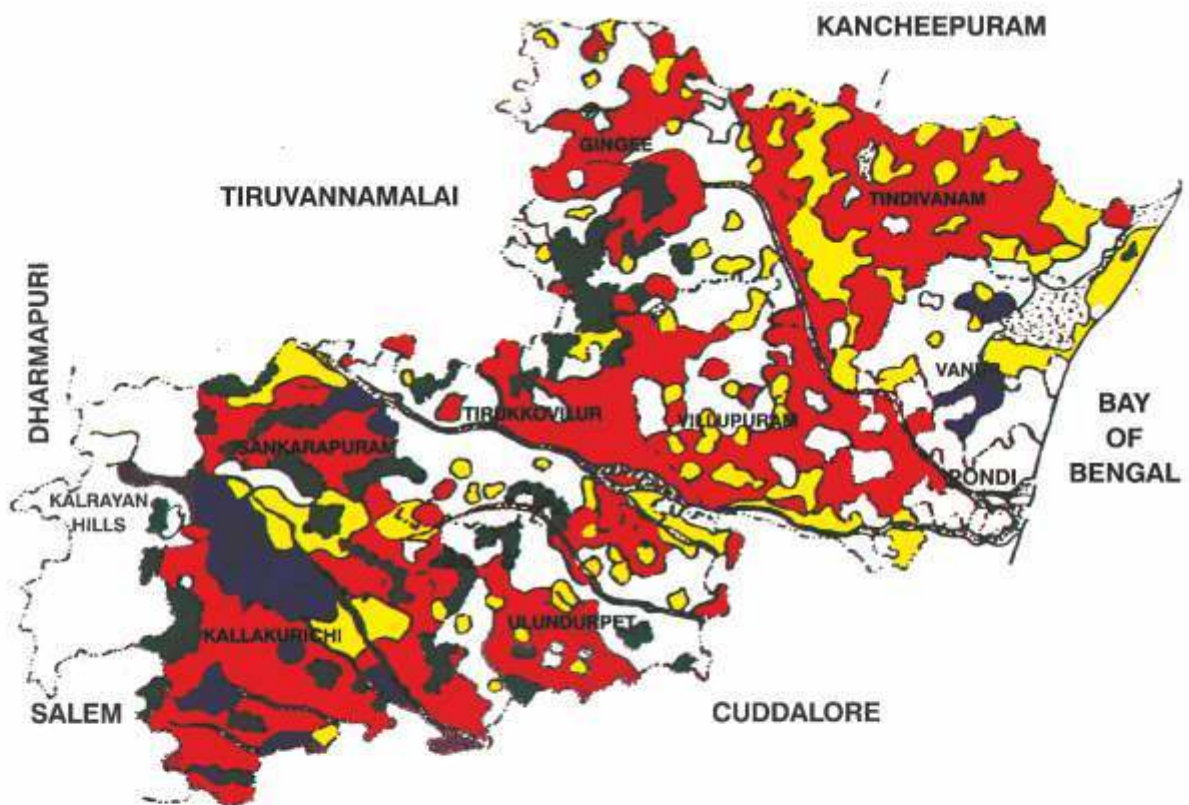
- LOAMY SKELETAL
- COARSE LOAMY
- FINE LOAMY
- FINE

## SOIL SUITABILITY FOR GROUNDNUT

- Groundnut comes up well in light to medium textured soils with a pH range of 5.4 - 8.2. However, the optimum pH for cultivation is 6.0 -7.5
- Larger area (15.9 %) is found to be moderately suitable for cultivation of groundnut.
- Constraints are seen in the soils of Mahabalipuram, Vanur, Pachol and Ammapettai soil series.

| Class               | Soil Series   | Limitations                             | Area   |      |
|---------------------|---|---|--------|------|
|                     |   |   | ha     | %    |
| Highly suitable     | Vadamadurai<br>Idamyampattu<br>Vadalapakkam<br>Mangadu<br>Vadavalam | -                                       | 59596  | 8.3  |
| Moderately suitable | Lalapettai<br>Vadathesasalur<br>Arasanatham                         | Calcareousness<br>alkalinity            | 114645 | 15.9 |
| Marginally suitable | Mahabalipuram<br>Vanur<br>Pachol                                    | Calcareousness<br>alkalinity<br>texture | 48195  | 6.7  |
| Not suitable        | Ammapettai  | Heavy texture                           | 26136  | 3.6  |

# SOIL SUITABILITY FOR GROUNDNUT VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

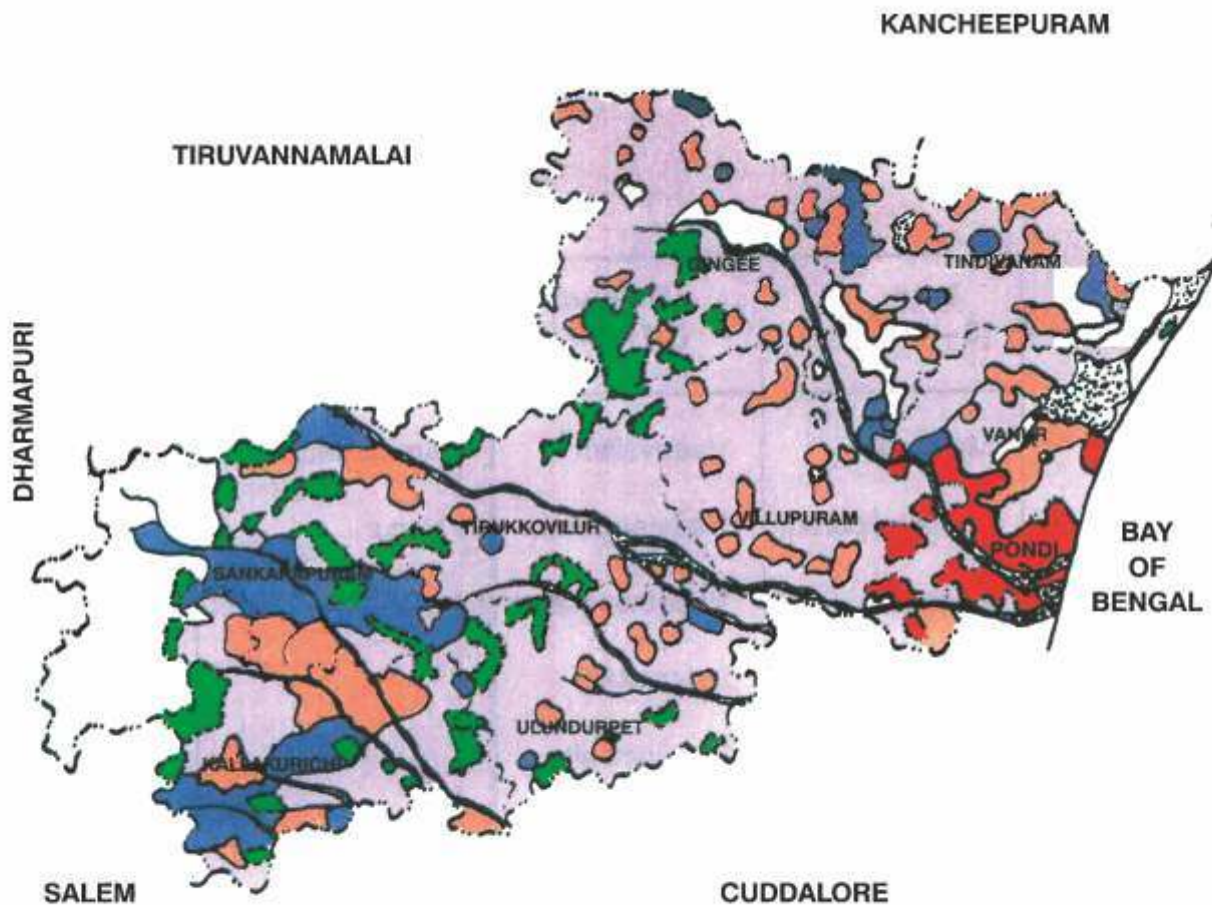
## LEGEND

- HIGHLY SUITABLE
- MODERATELY SUITABLE
- MARGINALLY SUITABLE
- NOT SUITABLE

## PERMEABILITY

| Slow                   | Moderately slow   | Moderately rapid                     | Rapid                    |
|------------------------|---|--------------------------------------|--------------------------|
| Vanur<br>Ammapettai    | Vadavalam<br>Arasanatham<br>Vadalapakkam<br>Idamyanpattu<br>Vadamadurai | Pachol<br>Vadathesalur<br>Lalapettai | Mangadu<br>Mahabalipuram |
| <b>Area (ha) 65709</b> | <b>129976</b>   | <b>50922</b>                         | <b>1965</b>              |

# PERMEABILITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

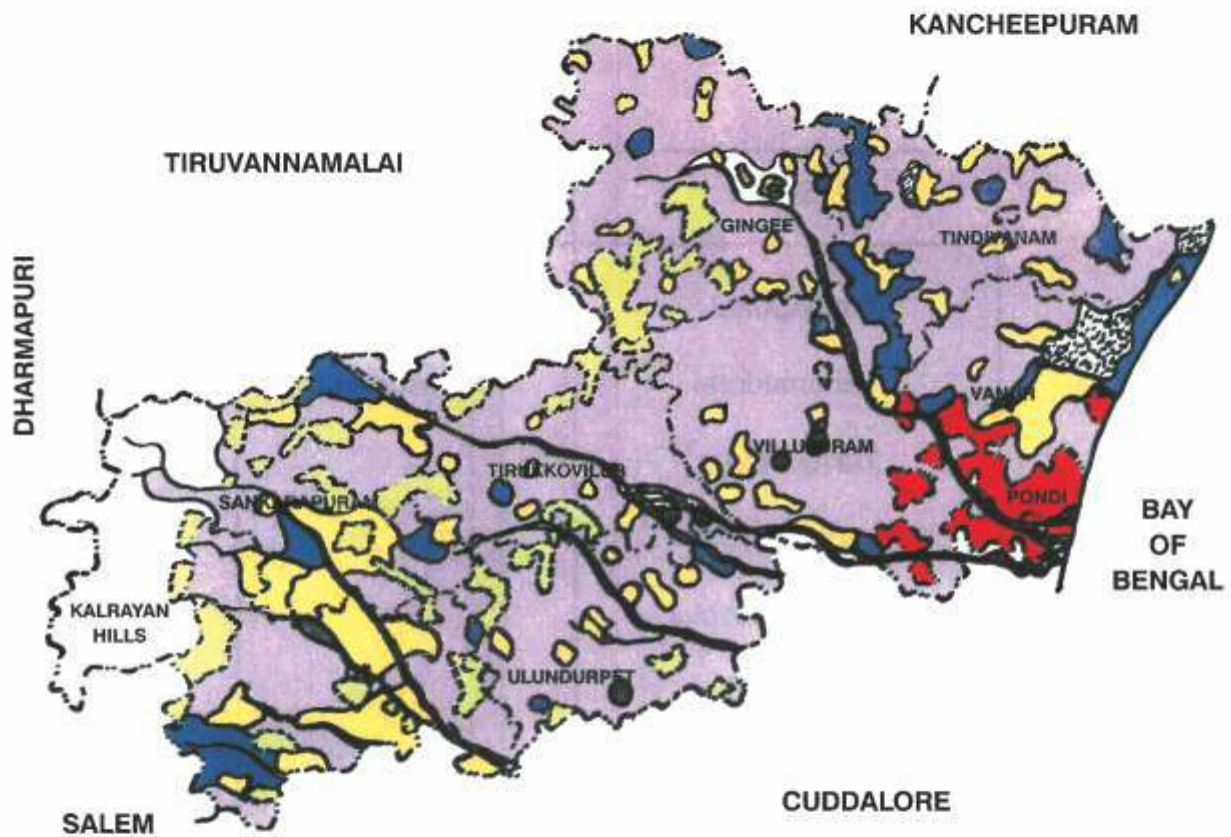
## LEGEND

- SLOW
- MODERATELY SLOW
- MODERATELY RAPID
- RAPID

## WATER HOLDING CAPACITY

| Low<br>(0 – 20%)      | Medium<br>(21 – 50%) | High<br>(Above 50%) |
|-----------------------|----------------------|---------------------|
| Mangadu               | Vadavalam            | Ammapettai          |
| Mahabalipuram         | Vadalapakkam         | Vanur               |
| Pachol                | Vadathesasalur       |                     |
|                       | Lalapettai           |                     |
|                       | Idamyanpattu         |                     |
|                       | Arasanatham          |                     |
|                       | Vadamadurai          |                     |
| <b>Area (ha) 9613</b> | <b>173250</b>        | <b>65709</b>        |

# WATER HOLDING CAPACITY VILLUPURAM DISTRICT



### REFERENCE

- · · · — STATE BOUNDARY
- · · · — DISTRICT BOUNDARY
- · · — TALUK BOUNDARY
- — — COASTAL BOUNDARY
-  RIVERS & GULLY
-  FOREST BOUNDARY

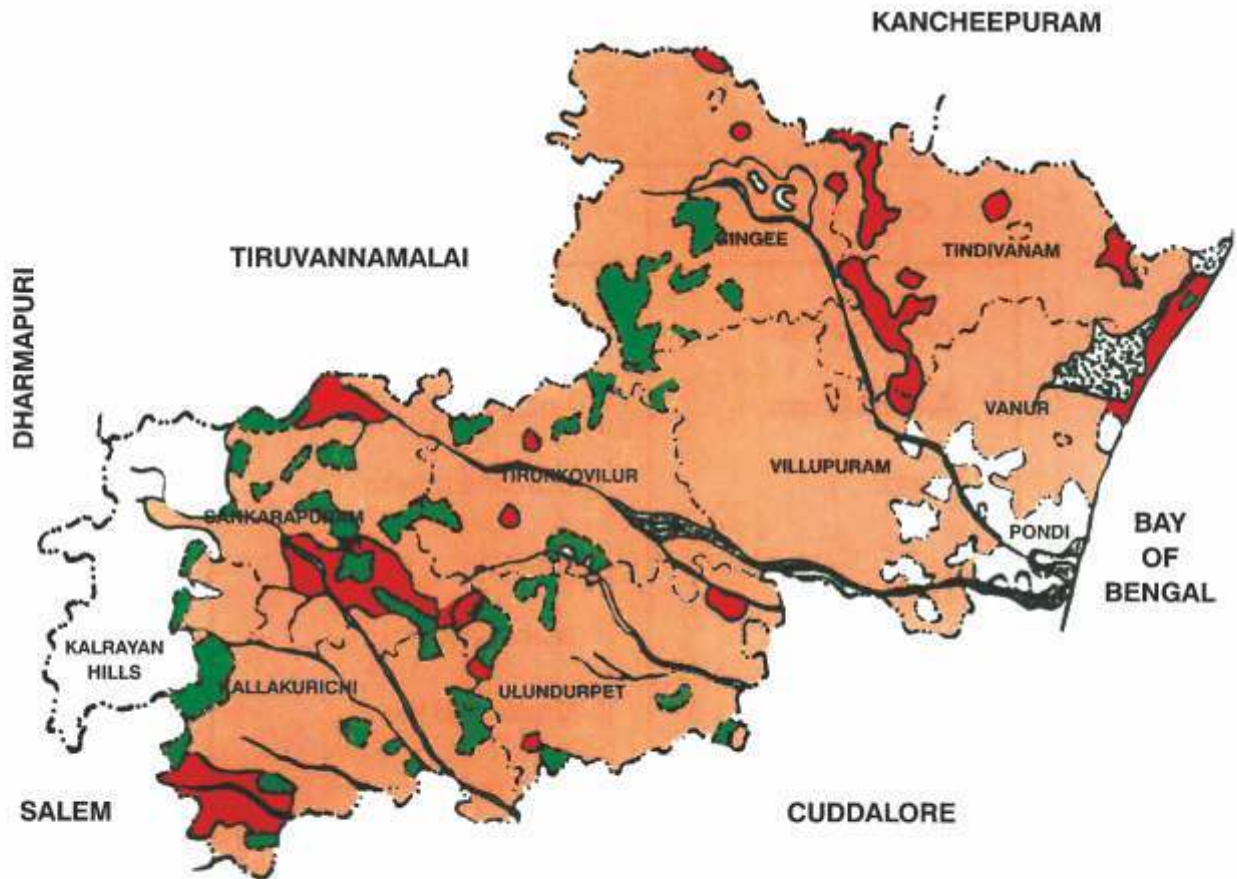
### LEGEND

-  LOW
-  MEDIUM
-  HIGH

## EROSION

| Slight                  | Moderate      |
|-------------------------|---------------|
| Ammapettai              | Pachol        |
| Vadamadurai             | Mahabalipuram |
| Idamyampattu            |               |
| Lalapettai              |               |
| Vadathesalur            |               |
| Vadalapakkam            |               |
| Arasanatham             |               |
| Mangadu                 |               |
| Vadavalam               |               |
| Vanur                   |               |
| <b>Area (ha)</b> 239950 | 8622          |

# EROSION VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
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- COASTAL BOUNDARY
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- FOREST BOUNDARY

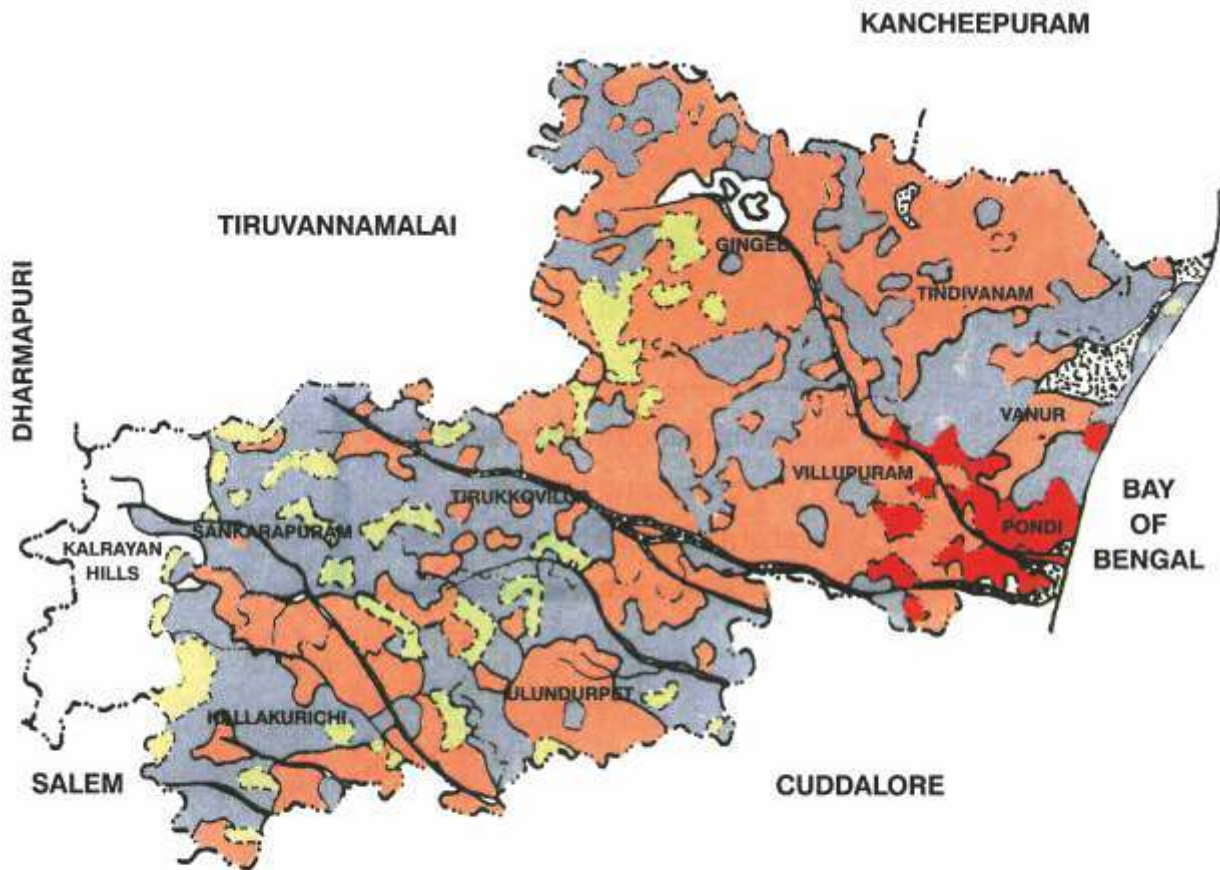
## LEGEND

- SLIGHT
- MODERATE

## CALCAREOUSNESS

| Calcareous              | Non Calcareous |
|-------------------------|----------------|
| Ammapettai              | Idamyanpattu   |
| Arasanatham             | Lalapettai     |
| Vanur                   | Vadathesalur   |
|                         | Pachol         |
|                         | Mahabalipuram  |
|                         | Vadalapakkam   |
|                         | Mangadu        |
|                         | Vadavalam      |
|                         | Vadamadurai    |
| <b>Area (ha) 137080</b> | <b>111492</b>  |

# CALCAREOUSNESS VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

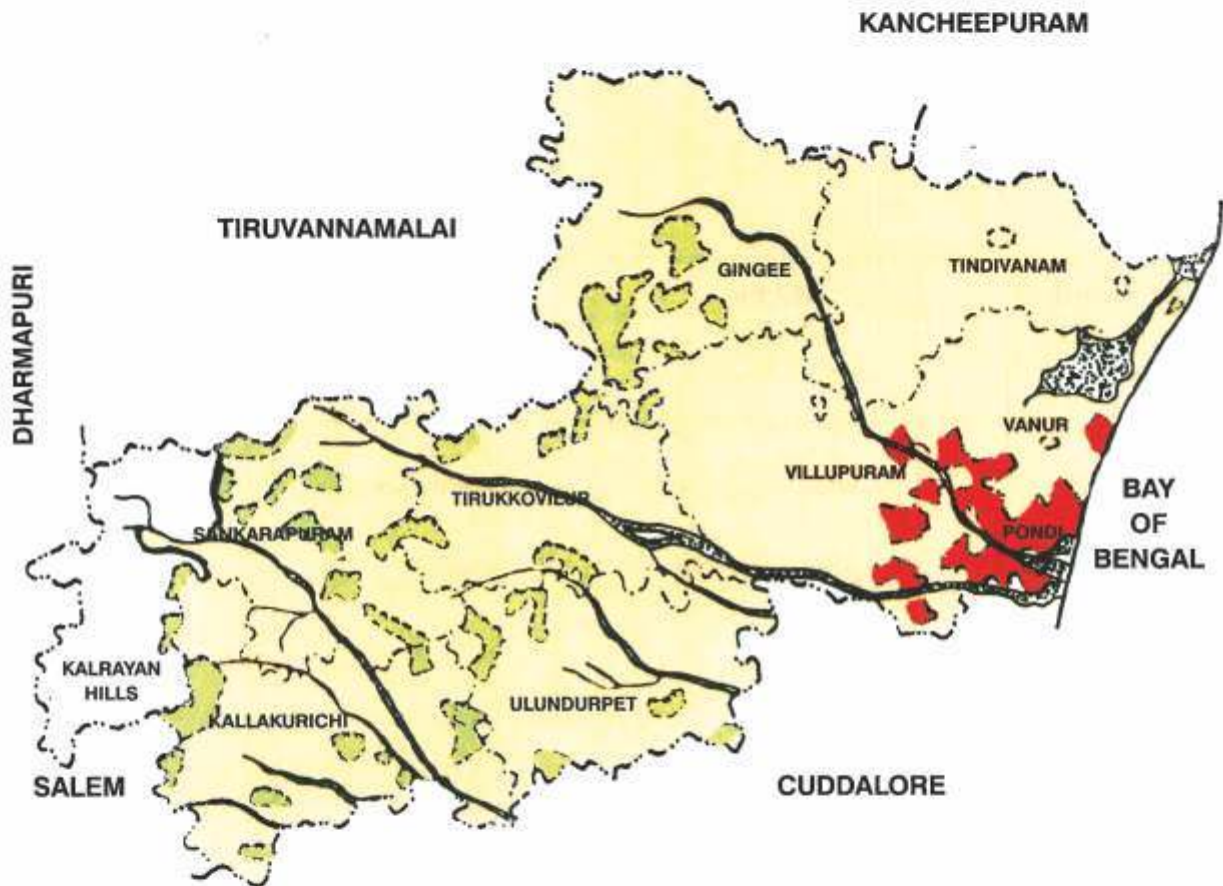
## LEGEND

- CALCAREOUS
- NON CALCAREOUS

## SALINITY

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

# SALINITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- — COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

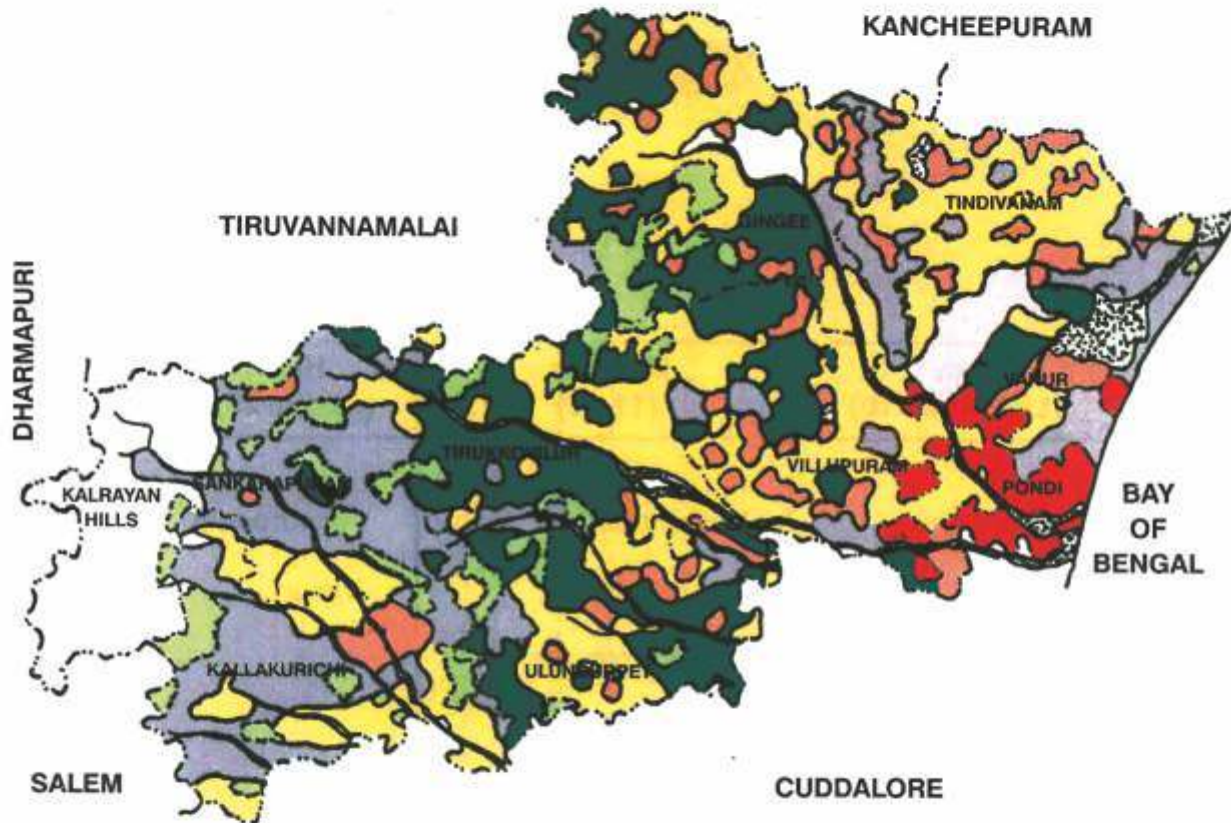
## LEGEND

- NON SALINE

## SOIL REACTION

| Neutral<br>(pH 6.6-7.3)   | Mildly<br>alkaline<br>(pH 7.4-7.8) | Moderately<br>alkaline<br>(pH 7.9-8.4) | Strongly<br>alkaline<br>(pH 8.5-9.0) |
|---|------------------------------------|--|--------------------------------------|
| Lalapettai<br>Vadethesasalur<br>Pachol<br>Mahabalipuram<br>Vadalapakkam<br>Mangadu<br>Vadavalam | Vadamadurai<br>Idamyarpattu        | Ammapettai<br>Arasnatham               | Vanur                                |
| <b>Area (ha) 61130</b>  | <b>50362</b>                       | <b>97507</b>                           | <b>39573</b>                         |

# SOIL REACTION VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — TALUK BOUNDARY
- — COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY

## LEGEND

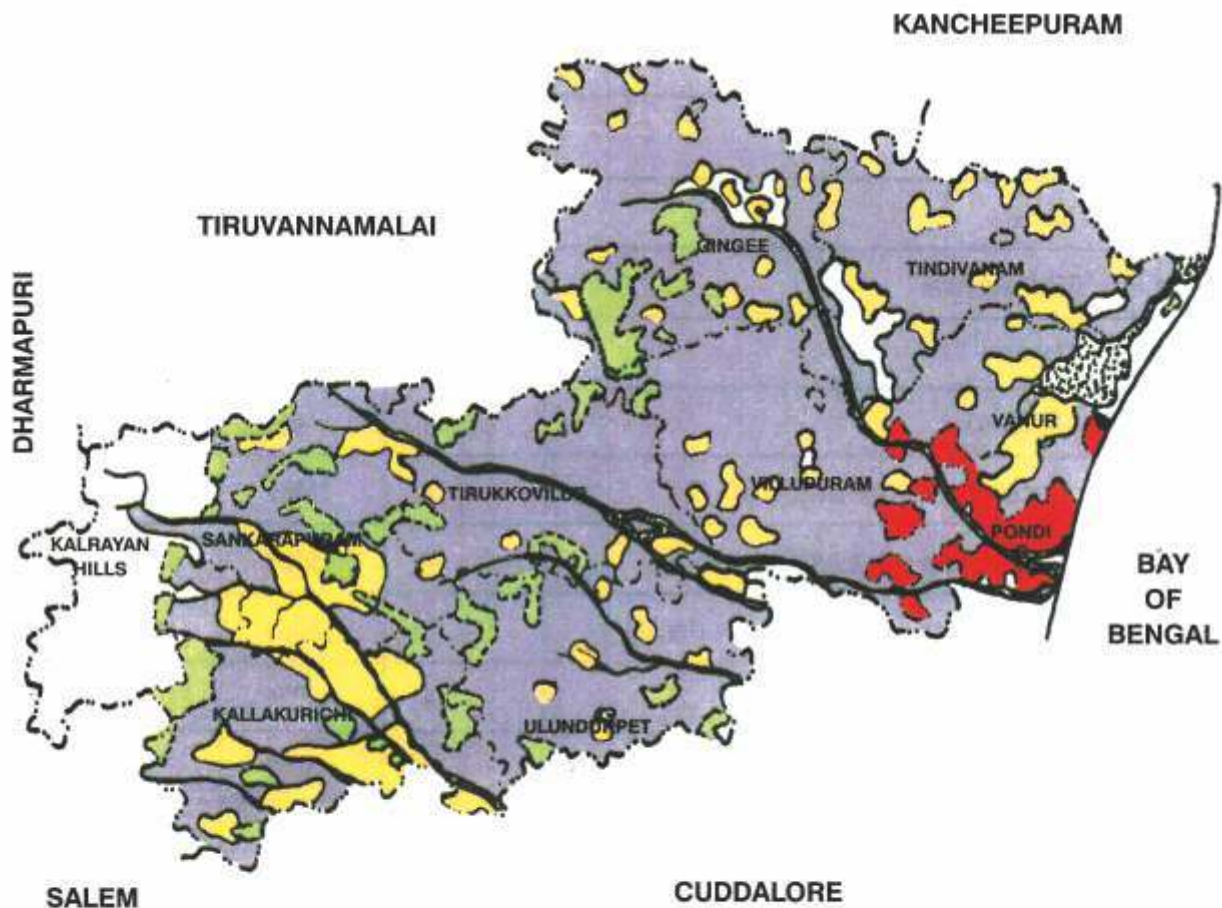
- NEUTRAL
- MILDLY ALKALINE
- MODERATELY ALKALINE
- STRONGLY ALKALINE

## CATION EXCHANGE CAPACITY

Unit : (C mol(p<sup>1</sup>) / kg of soil)

| Low<br>(Less than 10)       | Medium<br>(11-25)   | High<br>(Above 25)  |
|-----------------------------|---|---------------------|
| Lalapettai<br>Mahabalipuram | Vadamadurai<br>Idamyanpattu<br>Vadathesasalur<br>Pachol<br>Mangadu<br>Arasanatham<br>Vadalapakkam | Ammapettai<br>Vanur |
| Area (ha) 1594              | 181269  | 65709               |

# CATION EXCHANGE CAPACITY VILLUPURAM DISTRICT



## REFERENCE

- · · · — STATE BOUNDARY
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## LEGEND

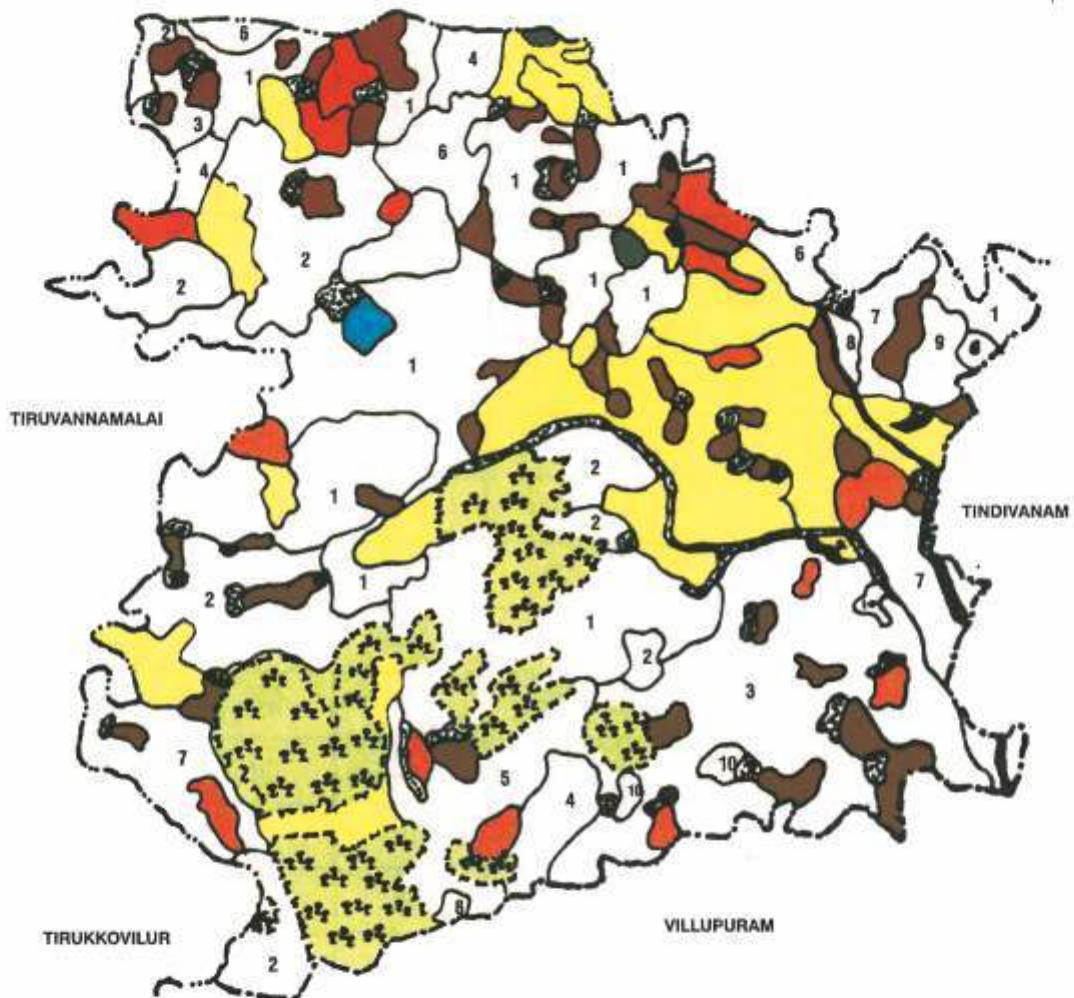
- LOW
- MEDIUM
- HIGH

# SOILS

## GINGEE TALUK

| Soil Series                            | Map Symbol | Extent        |               |
|--|------------|---------------|---------------|
|  |            | ha            | %             |
| 1) Arasanatham                         | Anm        | 4300          | 4.06          |
| 2) Vanur                               | Vnr        | 3582          | 3.37          |
| 3) Vadamadurai                         | Vdm        | 3456          | 3.26          |
| 4) Pachol                              | Phl        | 560           | 0.53          |
| 5) Mangadu                             | Mgd        | 428           | 0.40          |
| 6) Arasanatham + Vadamadurai           | 1          | 11468         | 10.80         |
| 7) Vadamadurai + Arasanatham           | 2          | 15129         | 14.26         |
| 8) Vadamadurai + Arasanatham + Pachol  | 3          | 6093          | 5.74          |
| 9) Pachol + Vadamadurai                | 4          | 1024          | 0.96          |
| 10) Vadamadurai + Pachol + Arasanatham | 5          | 3482          | 3.28          |
| 11) Vadamadurai + Pachol               | 6          | 11955         | 11.26         |
| 12) Arasanatham + Pachol               | 7          | 4070          | 3.83          |
| 13) Arasanatham + Vanur                | 8          | 777           | 0.73          |
| 14) Pachol + Arasanatham               | 9          | 1461          | 1.38          |
| 15) Vanur + Arasanatham                | 10         | 2099          | 2.00          |
| <b>Total</b>                           |            | <b>69884</b>  | <b>65.86</b>  |
| <b>Forest</b>                          |            | <b>11903</b>  | <b>11.22</b>  |
| <b>Others</b>                          |            | <b>24330</b>  | <b>22.92</b>  |
| <b>Grand Total</b>                     |            | <b>106117</b> | <b>100.00</b> |

# SOILS GINGEE TALUK



## REFERENCE

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

## LEGEND

- VANUR
- ARASANATHAM
- MANGADU
- VADM
- PACHOL
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                       | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------|---------------------------------|----|-----|----------------------|
|                               | N                               | P  | K   |                      |
| <b>GINGEE PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Arukampondi                | 72                              | -  | 201 | Anm, Phl.            |
| 2. Anaiyeri                   | 63                              | 12 | 142 | Vdm, Phl, Anm.       |
| 3. Ananthapuram               | 80                              | -  | 202 | Vdm, Phl, Anm.       |
| 4. Anjaancheri                | 64                              | 11 | 146 | Vdm, Anm.            |
| 5. Appampattu                 | 79                              | -  | 122 | Vdm, Phl, Anm        |
| 6. Athiyur                    | 80                              | 19 | 85  | Vdm, Phl, Anm        |
| 7. Bharathanthangal           | 73                              | 18 | 104 | Anm, Vdm.            |
| 8. Chinnaponnampondi          | 66                              | -  | 142 | Anm, Vdm             |
| 9. Devathanampettai           | 70                              | -  | 98  | Vdm, Anm.            |
| 10. Gangavaram                | 66                              | -  | 70  | Vdm, Anm, Phl        |
| 11. Gingee                    | 58                              | -  | 102 | Vdm, Anm, Phl        |
| 12. Jambodi                   | 64                              | -  | 136 | Vdm, Anm.            |
| 13. Jeyankondam               | 83                              | 15 | 76  | Vdm, Anm.            |
| 14. Kaanagaram                | 65                              | 12 | 136 | Vdm, Anm.            |
| 15. Kaarai                    | 56                              | 14 | 76  | Vdm, Phl, Anm        |
| 16. Kadaipoondi               | 78                              | -  | 84  | Vnr.                 |
| 17. Kadakkankuppam.           | 78                              | -  | 92  | Anm, Phl.            |
| 18. Kanjoor                   | 71                              | 12 | 135 | Vdm, Phl.            |
| 19. Kattusithanur             | 66                              | -  | 150 | Vdm, Phl.            |
| 20. Kavarai                   | 57                              | -  | 68  | Vdm, Phl.            |
| 21. Konalur                   | 66                              | -  | 141 | Vdm, Phl, Anm        |
| 22. Keezhmalai                | 68                              | 12 | 132 | Vdm, Phl, Anm        |
| 23. Konai                     | 88                              | -  | 70  | Anm, Vdm             |
| 24. Kommedu                   | 67                              | 11 | 140 | Vdm, Phl, Anm        |

| Village                   | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|---------------------------|---------------------------------|----|-----|----------------------|
|                           | N                               | P  | K   |                      |
| 25. Madampoondi           | 82                              | -  | 80  | Vdm, Phl.            |
| 26. Mattapara             | 62                              | -  | 112 | Vdm, Anm.            |
| 27. Madavanthangal        | 59                              | 10 | 439 | Vdm, Anm.            |
| 28. Mallarasankuppam      | 64                              | 10 | 142 | Vdm, Anm.            |
| 29. Manalapadi            | 48                              | -  | 176 | Anm, Vdm.            |
| 30. Meenambur             | 71                              | 12 | 95  | Vdm, Phl, Anm        |
| 31. Melareengunam         | 65                              | -  | 145 | Vdm, Phl             |
| 32. Melpappampadi         | 70                              | -  | 131 | Vdm, Anm             |
| 33. Nagalampattu          | 87                              | -  | 149 | Vdm, Mbm.            |
| 34. Nallalpillai petravel | 64                              | -  | 126 | Vdm, Vnr.            |
| 35. Narasingarayanpettai  | 85                              | -  | 157 | Vdm, Anm.            |
| 36. Nayampadi             | 67                              | -  | 141 | Anm, Vdm.            |
| 37. Ooranithangal         | 80                              | -  | 162 | Vdm, Anm.            |
| 38. OttamPattu            | 56                              | -  | 72  | Vdm, Phl, Anm        |
| 39. Othiyathur            | 70                              | -  | 137 | Anm, Vdm.            |
| 40. Padipallam            | 72                              | -  | 137 | Anm, Vdm             |
| 41. Padivalam             | 78                              | 15 | 127 | Vdm, Phl.            |
| 42. Pakkam                | 85                              | -  | 170 | Vdm, Anm.            |
| 43. Palapattu             | 80                              | 11 | 110 | Vdm, Phl, Anm        |
| 44. Pasumalaithangal      | 70                              | -  | 98  | Anm, Vdm.            |
| 45. Perunkappur           | 120                             | -  | 154 | Anm, Vdm.            |
| 46. Periyatur             | 64                              | -  | 126 | Anm, Vdm.            |
| 47. Ponpathi              | 66                              | 11 | 82  | Vdm, Anm.            |
| 48. Ponnanghuppam         | 83                              | -  | 52  | Vdm, Anm             |
| 49. Pothuvai              | 67                              | 13 | 125 | Vdm, Anm.            |
| 50. pudupalayam           | 70                              | 13 | 132 | Vdm, Anm.            |
| 51. Pulivadi              | 107                             | -  | 90  | Vdm, Phl, Anm        |

| Village                | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------|---------------------------------|----|-----|----------------------|
|                        | N                               | P  | K   |                      |
| 52. Puthagaram         | 66                              | -  | 134 | Vdm, Anm.            |
| 53. Puvipattu          | 80                              | -  | 110 | Vdm, Anm.            |
| 54. Sakkarapuram       | 74                              | 6  | 137 | Vdm, Anm.            |
| 55. Sathiyamangalam    | 14                              | -  | 138 | Anm, Vdm, Vnr        |
| 56. Semmedu            | 69                              | -  | 150 | Vdm, Vnr.            |
| 57. Semalur            | 84                              | 14 | 86  | Anm, Vdm.            |
| 58. Sethavarai         | 62                              | -  | 130 | Vdm, Phl.            |
| 59. Sirukadambur       | 65                              | 13 | 136 | Vdm, Anm.            |
| 60. Sirunampoondi      | 63                              | 14 | 145 | Anm, Vdm.            |
| 61. Sithampoondi       | 85                              | -  | 134 | Anm, Vdm.            |
| 62. Thaathankuppam     | 87                              | 21 | 144 | Vdm, Phl.            |
| 63. Thadagam           | 72                              | -  | 140 | Vdm, Phl,Anm.        |
| 64. Thachampattu       | 67                              | -  | 80  | Vdm, Phl, Anm        |
| 65. Thandavasamuthiram | 77                              | 12 | 88  | Vdm, Phl, Anm        |
| 66. Thuthipattu        | 75                              | -  | 207 | Vdm, Phl, Anm        |
| 67. Varikkal           | 62                              | -  | 66  | Vdm, Phl, Anm        |
| 68. Veeramanallur      | 65                              | -  | 151 | Vdm, Phl, Anm        |

### MELMALAIYANUR PANCHAYAT UNION

|                   |    |    |     |                |
|-------------------|----|----|-----|----------------|
| 1. Aathipattu     | 54 | -  | 231 | Anm, Vdm.      |
| 2. Annamangalam   | 73 | -  | 70  | Anm, Vdm.      |
| 3. Chokkanandal   | 68 | -  | 140 | Anm, Vdm, Phl. |
| 4. Chokkalam      | 70 | -  | 142 | Vnr, Vdm.      |
| 5. Chinnanolambai | 60 | -  | 98  | Vnr.           |
| 6. Davandavadi    | 60 | -  | 203 | Anm, Phl.      |
| 7. Devanur        | 60 | -  | 220 | Anm, Vdm.      |
| 8. Embalam        | 68 | -  | 142 | Anm, Vdm.      |
| 9. Eyyakundram    | 66 | 12 | 140 | Anm, Vdm.      |

| Village              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|----------------------|---------------------------------|----|-----|----------------------|
|                      | N                               | P  | K   |                      |
| 10. Eyyol            | 79                              | -  | 88  | Anm,Vdm,Phl.         |
| 11. Gangapuram       | 69                              | -  | 144 | Anm,Vdm.             |
| 12. Kadali           | 63                              | -  | 140 | Vdm,Anm.             |
| 13. Kadapanandal     | 83                              | -  | 151 | Vdm,Anm.             |
| 14. Kaivadhanthangal | 66                              | -  | 142 | Vnr.                 |
| 15. Kaithnapattu     | 63                              | -  | 134 | Anm,Vdm,Vnr.         |
| 16. Kammanthangal    | 86                              | 31 | 80  | Anm,Vdm,Phl.         |
| 17. Kappalampadi     | 67                              | -  | 142 | Vdm,Anm.             |
| 18. Kizhavampoondi   | 66                              | -  | 87  | Anm,Phl.             |
| 19. Kottampoondi     | 71                              | -  | 140 | Vnr.                 |
| 20. Kodampadi        | 67                              | 13 | 142 | Anm.                 |
| 21. Kodukkankuppam   | 61                              | -  | 52  | Anm,Phl.             |
| 22. Kovilpuraiyur    | 76                              | -  | 81  | Vdm,Anm.             |
| 23. Kozhappanur      | 72                              | -  | 143 | Anm.                 |
| 24. Kundalampattu    | 70                              | -  | 212 | Vdm,Anm.             |
| 25. Maahandal        | 99                              | -  | 98  | Anm,Vdm.             |
| 26. Marakonam        | 68                              | -  | 149 | Anm,Vdm,Phl.         |
| 27. Maavanandal      | 63                              | -  | 121 | Vdm,Anm.             |
| 28. Melarungunam.    | 65                              | -  | 145 | Anm,Vdm.             |
| 29. Melmaampattu     | 66                              | -  | 145 | Anm,Vdm.             |
| 30. Melmannanur      | 54                              | -  | 166 | Anm,Vdm.             |
| 31. Melmalaiyanur    | 93                              | 18 | 60  | Anm,Vdv,Mgd.         |
| 32. Melmannanur      | 54                              | -  | 166 | Anm,Vdm.             |
| 33. Melnemili        | 66                              | 13 | 144 | Anm,Phl,Vdm.         |
| 34. Mel Pudupattu    | -                               | -  | -   | Anm, Vdm.            |
| 35. Nandhipuram      | 66                              | 12 | 144 | Anm,Vdm,Vnr.         |
| 36. Nochalur         | 68                              | -  | 146 | Vdm,Anm,Vdv.         |
| 37. Pappanthangal    | 62                              | -  | 136 | Vnr,Anm,Vdm.         |

| Village              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|----------------------|---------------------------------|----|-----|----------------------|
|                      | N                               | P  | K   |                      |
| 38. Paraiyanpattu    | 64                              | -  | 138 | Anm,Vdm,Phl.         |
| 39. Paraiyanthangal  | 64                              | -  | 62  | Anm,Phl.             |
| 40. Paritthipuram    | 64                              | -  | 139 | Vnr.                 |
| 41. Pazhampoondi     | 68                              | -  | 153 | Anm,Mbm.             |
| 42. Periyanolambai   | 62                              | -  | 140 | Anm, Mbm             |
| 43. Porkunam         | 67                              | 11 | 133 | Vdm,Anm.             |
| 44. Peruvalur        | 65                              | -  | 143 | Vnr,Anm,Phl.         |
| 45. Rhinnanur        | 67                              | 13 | 135 | Anm,Vdm,Phl.         |
| 46. Saathampadi      | 69                              | -  | 115 | Anm,Phl,Vnr.         |
| 47. Saathamputhur    | 68                              | 13 | 149 | Anm,Vdm.             |
| 48. Sattunandal      | 67                              | -  | 145 | Anm,Vdm.             |
| 49. Samathamkuppam   | 61                              | 12 | 145 | Vnr,Vdm.             |
| 50. Sangilikuppam    | 67                              | -  | 141 | Vdm,Anm,Vnr.         |
| 51. Seeyapoondi      | 67                              | -  | 52  | Anm,Vdm.             |
| 52. Sevalaparai      | 70                              | -  | 126 | Anm,Vdm,Vnr.         |
| 53. Sindagampoondi   | 85                              | 35 | 134 | Anm,Phl,Vdm.         |
| 54. Sindhipattu      | 67                              | -  | 151 | Vdm,Anm.             |
| 55. Siruthalaipoondi | 65                              | -  | 50  | Anm,Phl,Vdm.         |
| 56. Sitheri          | 68                              | -  | 141 | Vdm,Anm.             |
| 57. Thaayanur        | 63                              | -  | 79  | Anm,Vdm.             |
| 58. Thenpaalai       | 67                              | -  | 142 | Anm,Vdm,Vnr.         |
| 59. Thorapadi        | 66                              | -  | 144 | Anm,Vdm.             |
| 60. Unmanandal       | 87                              | -  | 134 | Anm,Vnr.             |
| 61. Vadapaalai       | 104                             | 14 | 156 | Anm,Vdm              |
| 62. Vadavatti        | 67                              | 12 | 142 | Anm,Vdm,Vnr.         |
| 63. Vadugapoondi     | 71                              | -  | 87  | Vdm,Anm,Vnr.         |
| 64. Valathi          | 78                              | 7  | 138 | Anm,Vdm.             |
| 65. Vankkampadi      | 68                              | 12 | 148 | Anm,Vdm.             |

| Village                      | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------------|---------------------------------|----|-----|----------------------|
|                              | N                               | P  | K   |                      |
| <b>VALLAMPANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aamur                     | 72                              | -  | 144 | Vnr,Anm.             |
| 2. Aanathur                  | 72                              | -  | 151 | Vdm,Anm.             |
| 3. Agalur                    | 75                              | -  | 99  | -                    |
| 4. Anangur                   | 65                              | -  | 140 | Phl,Vdm.             |
| 5. Anilaadi                  | 73                              | -  | 70  | Vdm,Phl.             |
| 6. Arugavur                  | 80                              | -  | 142 | Vdm,Phl.             |
| 7. Chellapirati              | 60                              | 14 | 92  | Anm,Vdm.             |
| 8. Echehur                   | 63                              | 9  | 150 | Vdm,Anm.             |
| 9. Edamalai                  | 63                              | 10 | 124 | Phl,Anm.             |
| 10. Errampattu               | 74                              | 9  | 142 | -                    |
| 11. Ethaanemili              | 68                              | 6  | 135 | -                    |
| 12. Illodu                   | 69                              | 7  | 55  | Vdm,Anm.             |
| 13. Indarasankuppam          | 66                              | -  | 148 | Phl,Vdm.             |
| 14. Irumpuli                 | 66                              | -  | 140 | Anm.                 |
| 15. Kaariyamangalam          | 58                              | -  | 106 | Vdm,Anm.             |
| 16. Kalladikuppam            | 70                              | 11 | 102 | Vnr,Anm.             |
| 17. Kallapuliyur             | 76                              | 10 | 66  | Anm.                 |
| 18. Kallavipattu             | 86                              | -  | 118 | Vdm,Anm.             |
| 19. Kammandur                | 81                              | 32 | 83  | Vdm,Phl.             |
| 20. Kalaiyur                 | 58                              | -  | 186 | Vdm,Phl.             |
| 21. Kandamanallur            | 72                              | 9  | 87  | Anm,Vdm.             |
| 22. Kappai                   | 70                              | 12 | 150 | Vdm,Phl.             |

| Village                 | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------|---------------------------------|----|-----|----------------------|
|                         | N                               | P  | K   |                      |
| 23. Karunguli           | 65                              | -  | 145 | Vdm.                 |
| 24. Keehzaiyur          | 71                              | -  | 108 | Vdm,Phl.             |
| 25. Keezhmmampattu      | 74                              | -  | 108 | Vnr,Anm.             |
| 26. keezhvailamur       | 66                              | -  | 137 | -                    |
| 27. Kongarapattu        | 72                              | -  | 132 | Vdm,Phl.             |
| 28. Kuravanandal        | 72                              | 9  | 135 | Anm,Phl.             |
| 29. Kurinjipadi         | 56                              | 9  | 100 | Vdm,Phl.             |
| 30. Mahadevimangalam    | 63                              | -  | 142 | Anm,Vdm.             |
| 31. Maniampattu         | 65                              | -  | 137 | Vdm,Phl.             |
| 32. Marur               | 85                              | 15 | 159 | Vnr,Anm.             |
| 33. Melathipakkam       | 68                              | -  | 178 | Anm,Vdm.             |
| 34. Melathur            | 64                              | -  | 135 | Phl,Vdm.             |
| 35. Melolakkur          | 77                              | -  | 74  | Anm,Vdm.             |
| 36. Modaiyur            | 81                              | -  | 89  | Vdm,Phl.             |
| 37. Mukkunam            | 72                              | -  | 138 | Vdm, Anm.            |
| 38. Naagandur           | 75                              | -  | 63  | Vnr,Anm.             |
| 39. Nangilikondon       | 70                              | -  | 146 | Vdm,Anm.             |
| 40. Nangiyanandal       | 66                              | 12 | 142 | Phl,Vdm.             |
| 41. Nattarmangalam      | 88                              | 16 | 150 | Vnr,Anm.             |
| 42. Neeraperuthanagaram | 68                              | 12 | 128 | Anm,Phl.             |
| 43. Neganur             | 56                              | 10 | 144 | Vdm,Anm.             |
| 44. Pallikulam          | 78                              | -  | 223 | Phl,Vdm.             |
| 45. Panapakam           | 78                              | 17 | 120 | Vdm,Phl.             |
| 46. Pennagar            | 63                              | -  | 142 | Vdv,Anm.             |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 47. Perumpoondi       | 68                              | -  | 136 | Anm,Vnr.             |
| 48. Perumpukai        | 80                              | 14 | 82  | Vdm,Anm.             |
| 49. Pootheri          | 72                              | 9  | 148 | Anm,Mdm.             |
| 50. Perampattu        | 64                              | -  | 135 | Vnr,Anm.             |
| 51. Sandhisaatchi     | 67                              | -  | 141 | Vdm,Anm.             |
| 52. Servilagam        | 84                              | 14 | 152 | Vdm,Anm,Phl.         |
| 53. Sethuvaraganallur | 77                              | 17 | 86  | Vdm,Anm.             |
| 54. Sorathur          | 67                              | -  | 142 | Vdm,Phl.             |
| 55. Thaiyur           | 64                              | -  | 84  | Vdm,Phl.             |
| 56. Thendupakkam      | 72                              | -  | 186 | Vdm,Phl.             |
| 57. Thiruvampattu     | 72                              | -  | 161 | Vnr,Anm.             |
| 58. Thendur           | 71                              | -  | 118 | Anm,Tvot.            |
| 59. Udayananthal      | 80                              | 19 | 162 | Anm,Vdm.             |
| 60. Vadatharam        | 68                              | 12 | 142 | Vnr,Anm.             |
| 61. Vadavanur         | 64                              | 11 | 142 | Anm,Vdm.             |
| 62. Vallam            | 68                              | -  | 48  | Vdm,Anm.             |
| 63. Vavaalkundram     | 68                              | 11 | 145 | Vnr,Phl.             |
| 64. Veeranamur        | 80                              | -  | 90  | Vdm,Anm.             |
| 65. Vilvamadevi       | 78                              | 14 | 72  | Vnr,Phl.             |
| 66. Virupattu         | 70                              | 20 | 147 | Vdm,Anm.             |

- Data not available

## LAND CAPABILITY

### GINGEE TALUK

| Area (ha) | Land Capability Classification | Soil Series | Limitation                            | Needs                                    |
|-----------|--------------------------------|-------------|---------------------------------------|--|
| 3456      | II e                           | Vadamadurai | Erosion                               | Soil conservation                        |
| 4300      | II s                           | Arasanatham | Moderate alkalinity<br>Calcareousness | Soil reclamation                         |
| 428       | II s                           | Mangadu     | Sub-surface texture                   | Soil texture improvement                 |
| 3582      | III sw                         | Vanur       | Alkalinity<br>sub surface drainage    | Improving drainage<br>Selection of crops |
| 560       | IV se                          | Pachol      | Shallow depth erosion                 | Selection of crops,<br>Soil conservation |

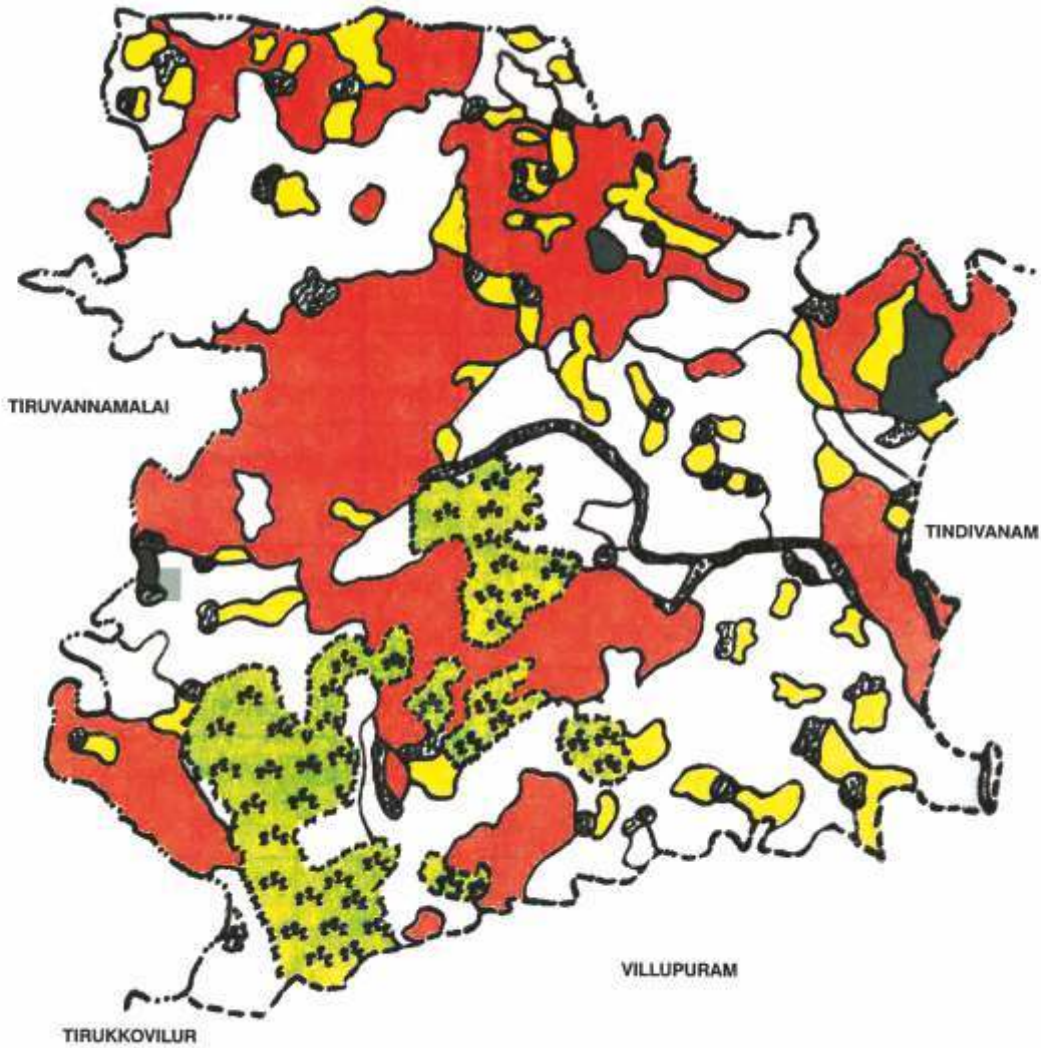
#### **Class**

- 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 severe limitations for sustained use under agriculture.

#### **Sub-class**

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY GINGEE TALUK



## REFERENCE

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

## LEGEND

- II e
- II s
- III sw
- IV se

## LAND IRRIGABILITY

### GINGEE TALUK

| Area (ha) | Irrigability Classification | Soil Series | Limitation   |
|-----------|-----------------------------|-------------|--|
| 3456      | 2 s                         | Vadamadurai | Low water holding capability                           |
| 4300      | 2 s                         | Arasanatham | Moderate alkalinity in the sub surface                 |
| 3582      | 2sd                         | Vanur       | Alkalinity, slow permeability in the sub surface layer |
| 428       | 2 ds                        | Mangadu     | Floods, stratification                                 |
| 560       | 4 st                        | Pachol      | Shallow soil depth, gravels and erosion.               |

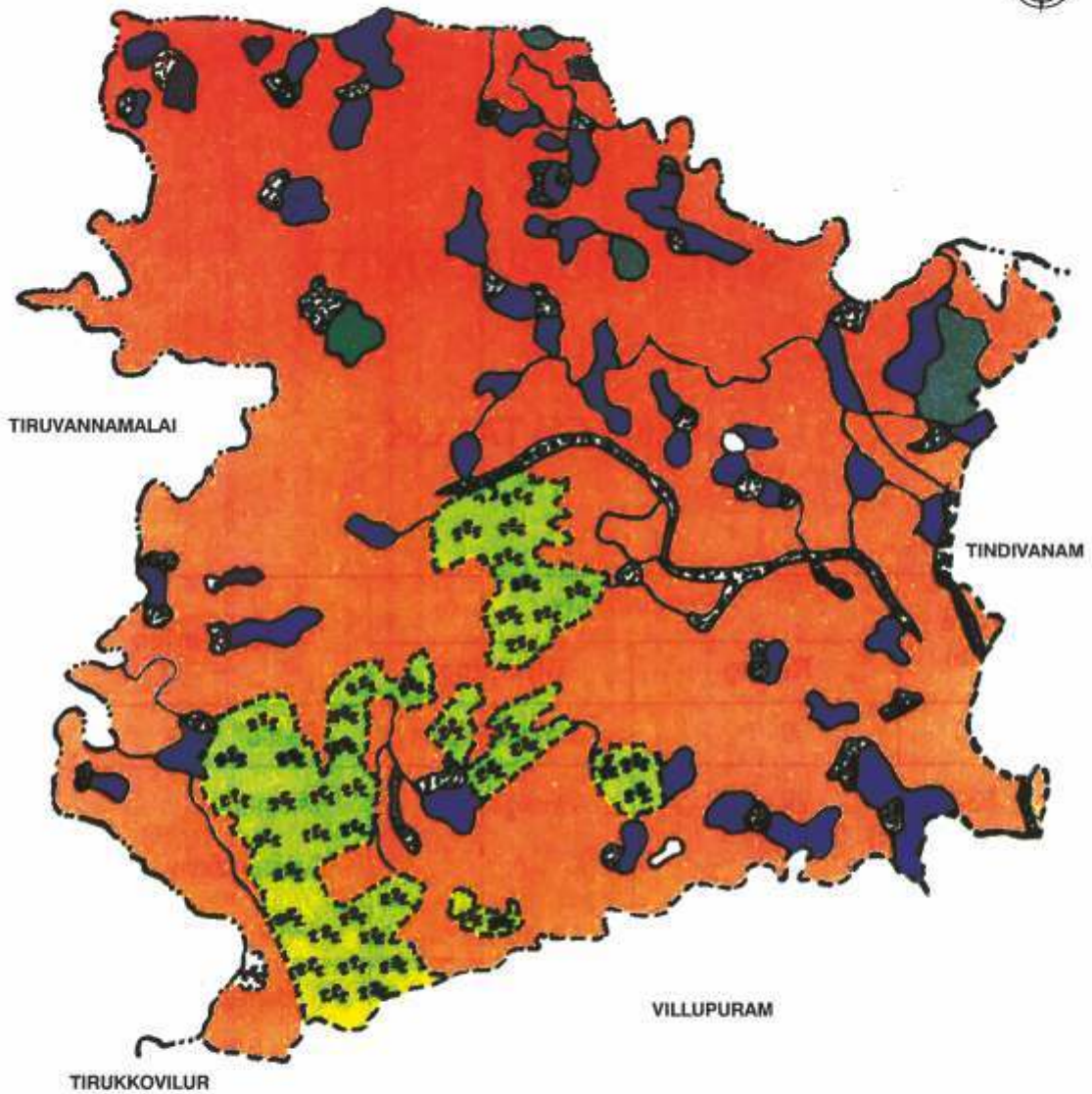
#### **Class**

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

#### **Sub Class**

- s - Soil limitations
- t - Topography
- d - Drainage

# LAND IRRIGABILITY GINGEE TALUK



## REFERENCE

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

## LEGEND

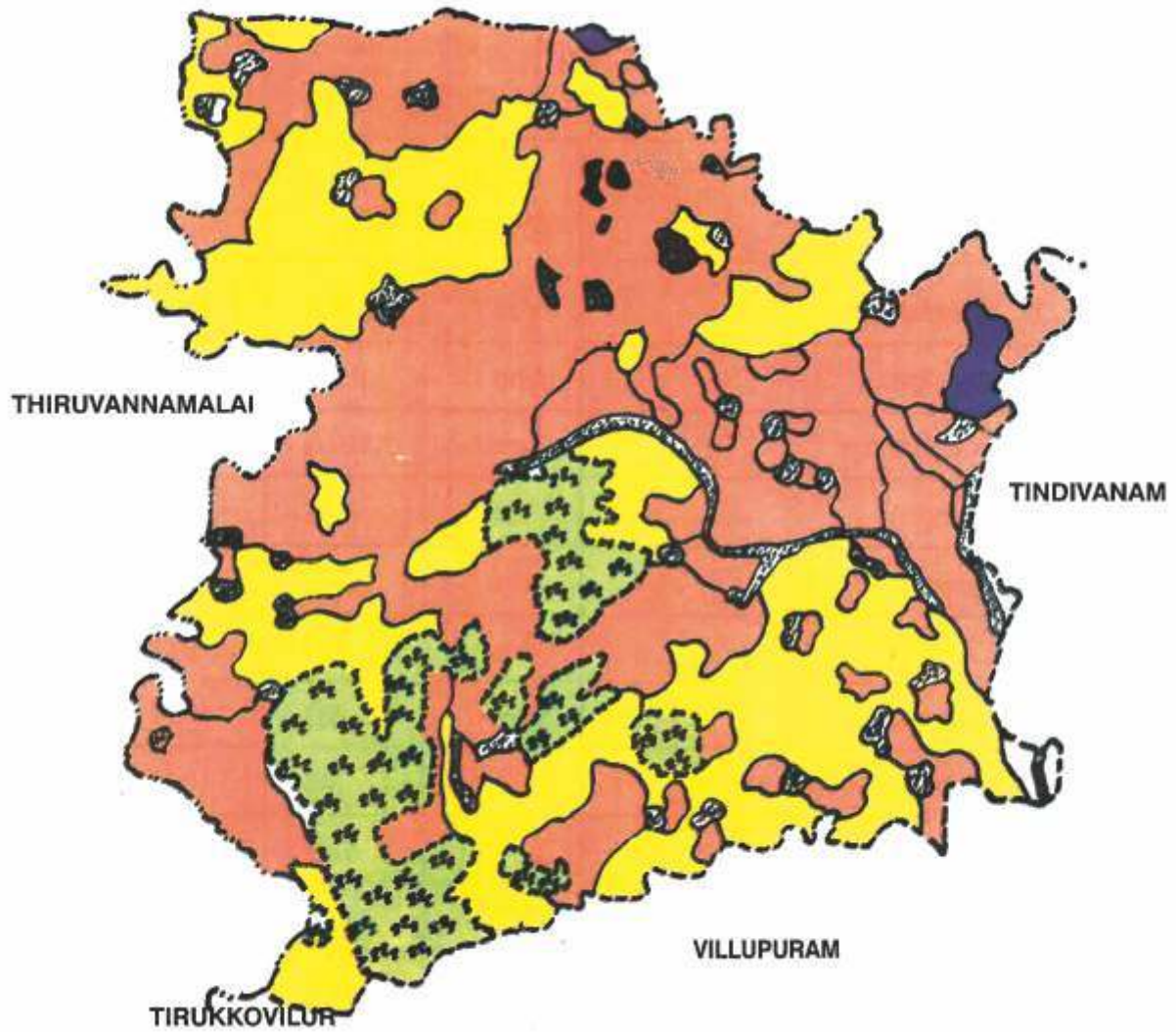
- 2 s
- 2 sd
- 2 ds
- 4 st

## SOIL PRODUCTIVITY

### GINGEE TALUK

| Area<br>(ha) | Productivity |                | Soil Series                     |
|--------------|--------------|----------------|---------------------------------|
|              | Rating       | Grouping       |                                 |
| 560          | 0 - 7        | Extremely poor | Pachol                          |
| 8310         | 20 - 34      | Average        | Mangadu<br>Arasanatham<br>Vanur |
| 3456         | 35-64        | Good           | Vadamadurai                     |

# SOIL PRODUCTIVITY GINGEE TALUK



## REFERENCE

- DISTRICT BOUNDARY
- - - TALUK BOUNDARY
- COASTAL BOUNDARY
- ~ RIVERS & GULLY
- ▨ FOREST BOUNDARY
- ⊙ TANKS

## LEGEND

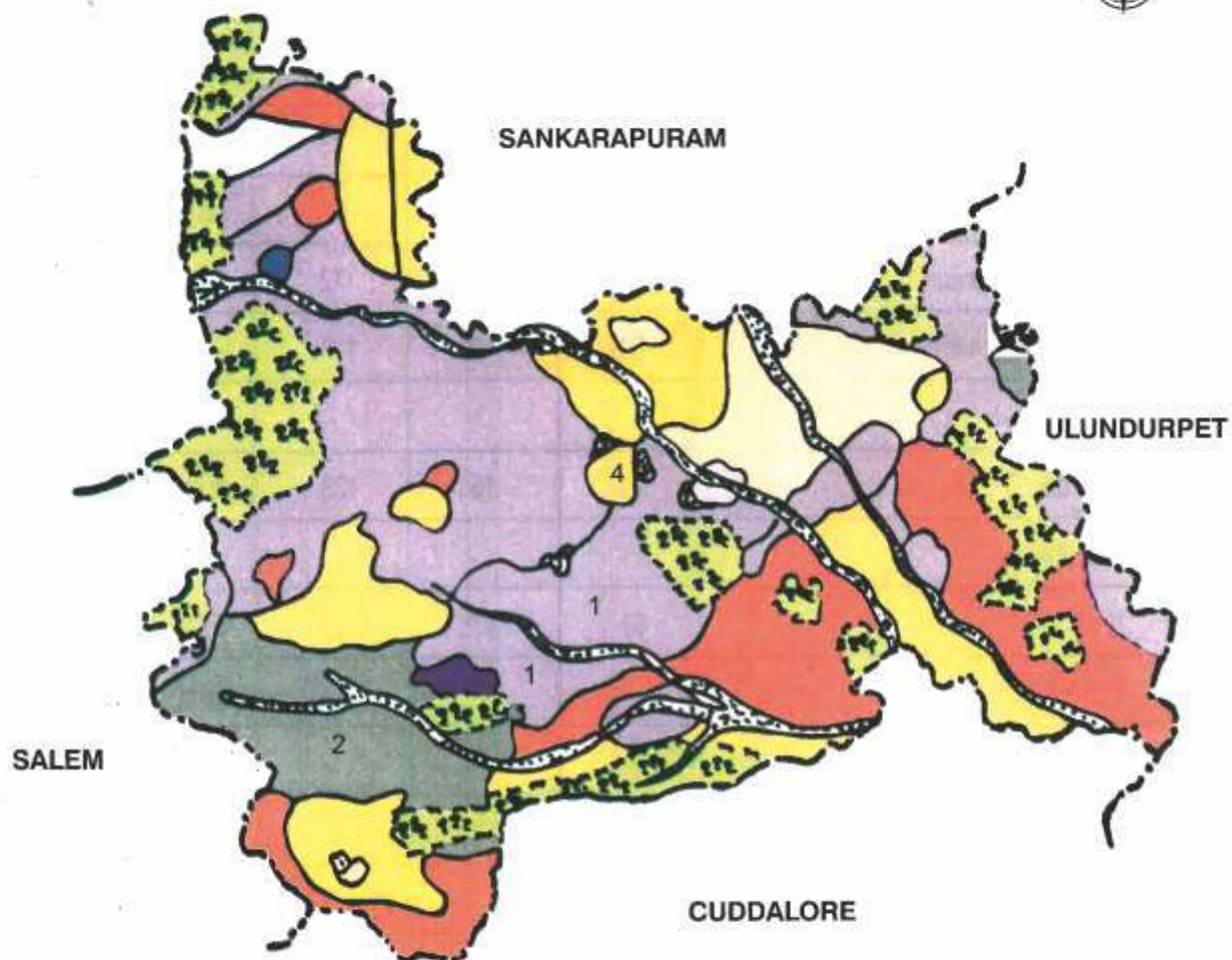
- EXTREMELY POOR
- AVERAGE
- GOOD

## SOILS

### KALLAKURICHI TALUK

| Soil Series                   | Map Symbol | Extent       |              |
|-------------------------------|------------|--------------|--------------|
|                               |            | ha           | %            |
| 1 Vadathesasalur              | Vds        | 24654        | 25.08        |
| 2 Ammapettai                  | Amp        | 15945        | 16.22        |
| 3 Arasanatham                 | Anm        | 14099        | 14.34        |
| 4 Pachol                      | Phi        | 4277         | 4.35         |
| 5 Vanur                       | Vnr        | 4089         | 4.16         |
| 6 Lalapettai                  | Lip        | 620          | 0.63         |
| 7 Vadamadurai                 | Vdm        | 563          | 0.57         |
| 8 Vadavalam                   | Vdv        | 518          | 0.53         |
| 9 Vadathesasalur + Lalapettai | 1          | 4761         | 4.85         |
| 10 Pachol + Lalapettai        | 2          | 14006        | 14.25        |
| 11 Vadathesasalur + Pachol    | 3          | 1063         | 1.08         |
| 12 Ammapettai + Vanur         | 4          | 4415         | 4.49         |
| <b>Total</b>                  |            | <b>89010</b> | <b>90.55</b> |
| <b>Forest</b>                 |            | <b>9291</b>  | <b>9.45</b>  |
| <b>Grand Total</b>            |            | <b>98301</b> | <b>100.0</b> |

# SOILS KALLAKURICHI TALUK



## REFERENCE

- DISTRICT BOUNDARY
- - - TALUK BOUNDARY
- COASTAL BOUNDARY
- ~ RIVERS & GULLY
- ▨ FOREST BOUNDARY
- ⊙ TANKS

## LEGEND

- ARASANATHAM
- AMMAPETTAI
- VADATHESALUR
- VADAVARAM
- VANUR
- VADAMADURAI
- PACHOL
- LALAPET
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                             | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------------|---------------------------------|----|-----|----------------------|
|                                     | N                               | P  | K   |                      |
| <b>KALLAKURICHI PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1 Agarakottalam                     | 62                              | 12 | 69  | Amp, Vdv             |
| 2 Alathur                           | 80                              | 7  | 72  | Amp, Vnr             |
| 3 Anaikaraiottalam                  | -                               | -  | -   | Amp, Anm             |
| 4 Ariyaperumanur                    | 80                              | 7  | 72  | Anm                  |
| 5 Eduthavangnatham                  | 64                              | 9  | 117 | Vds, Vdv, Llp        |
| 6 Emaper                            | -                               | -  | -   | Vds                  |
| 7 Eravaar                           | 73                              | 15 | 123 | Amp, Vnr             |
| 8 Ilatchiyam                        | -                               | -  | -   | Vnr                  |
| 9 Indolai                           | 61                              | 23 | 104 | Vds                  |
| 10 Kallakurichi                     | -                               | -  | -   | Amp, Vds             |
| 11 Kalleri kuppam                   | -                               | -  | -   | Amp, Vds             |
| 12 Karadichithoor                   | 72                              | 10 | 88  | Amp, Vnr             |
| 13 Kilpoondi                        | -                               | -  | -   | Vds, Llp             |
| 14 Marudur                          | 81                              | 12 | 84  | Anm, Amp             |
| 15 Maathur                          | 71                              | 22 | 120 | Amp, Vnr             |
| 16 Madhavacheri                     | 88                              | 7  | 75  | Amp, Vnr             |
| 17 Malaikottalam                    | 88                              | 14 | 96  | Vnr, Vdv             |
| 18 Mammalai                         | 62                              | 12 | 116 | Anm, Vnr, Amp        |
| 19 Melur                            | 90                              | 9  | 92  | Vds, Amp             |
| 20 Mokur                            | 84                              | 12 | 110 | Vds, Amp             |
| 21 Neelamangalam                    | 100                             | 9  | 87  | Amp, Vnr             |
| 22 Niraimathi                       | 88                              | 13 | 110 | Vnr, Amp             |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 23 Paalsrampattu      | 87                              | 16 | 102 | Amp, Vnr             |
| 24 Paramonatham       | 68                              | 18 | 130 | Amp, Vnr, Phl        |
| 25 Parigam            | 59                              | 14 | 123 | Vdv                  |
| 26 Perumangalam       | 69                              | 17 | 102 | Vds, Llp, Anm        |
| 27 Peruvangur         | 82                              | 18 | 116 | Amp                  |
| 28 Perasakuruchi      | 75                              | 8  | 119 | Amp, Vds             |
| 29 Pakkiravasi        | 64                              | 11 | 110 | Vnr, Anm             |
| 30 Sembadackurchi     | 82                              | 10 | 130 | Vds, Amp             |
| 31 Sirumonpalam       | -                               | -  | -   | Anm, Vnr             |
| 32 Simvathor          | 83                              | 15 | 88  | Vds, Vnr             |
| 33 Thavadaipattu      | 91                              | 12 | 100 | Amp, Vnr             |
| 34 Thandelai          | 95                              | 33 | 200 | Amp, Vdv             |
| 35 Thenkeeranur       | 68                              | 14 | 98  | Amp                  |
| 36 Then porasalur     | 48                              | 19 | 104 | Vnr                  |
| 37 Vaanavaretti       | 91                              | 9  | 86  | Vnr                  |
| 38 Vanivadei          | 92                              | 15 | 111 | Vds                  |
| 39 Varadhupanur       | 89                              | 13 | 66  | Vnr                  |
| 40 Veeracholapuram    | 50                              | 11 | 62  | Vnr                  |
| 41 Velambar           | 68                              | 14 | 117 | Vds, Vnr             |
| 42 Vinaitheerthepuram | 68                              | 11 | 130 | Vds, Llp             |

| Village                            | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------------------|---------------------------------|----|-----|----------------------|
|                                    | N                               | P  | K   |                      |
| <b>CHINNASALEM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Ammaiyagaram                    | 74                              | 13 | 99  | Phl, Llp             |
| 2. Anumanmangal                    | 92                              | 26 | 188 | Anm, Amp             |
| 3. Chinnaselam                     | -                               | -  | -   | Amp, Llp             |
| 4. Eesandhai                       | 82                              | 14 | 136 | Vds, Llp             |
| 5. Elavaadi                        | 68                              | 8  | 125 | Amp, Vds, Phl        |
| 6. Elaiyaathur                     | 86                              | 8  | 112 | Vds                  |
| 7. Eriyor                          | 60                              | 18 | 123 | Amp, Vnr             |
| 8. Eravaayapattinam                | 74                              | 26 | 204 | Vds                  |
| 9. Karanur                         | 74                              | 12 | 98  | Vds                  |
| 10. Kachiropalayam                 | -                               | -  | -   | Vds, Vnr             |
| 11. Kadathur                       | 72                              | 12 | 102 | Vds                  |
| 12. Kalakmuthiram                  | 84                              | -  | 112 | Phl, Llp             |
| 13. Kallguatham                    | 92                              | 17 | 120 | Vds                  |
| 14. Karundelakurichi               | 94                              | 11 | 102 | Phl, Vnm, Llp        |
| 15. Karunkuli                      | 76                              | 12 | 122 | Amp, Vnm, Vds        |
| 16. Kilkuppam                      | -                               | -  | -   | Amp, Vnr, Phl        |
| 17. Kugaiyur                       | 62                              | 17 | 112 | Anm, Amp             |
| 18. Kuraal                         | 99                              | -  | 182 | Amp, Anm             |
| 19. Kudhiraissandal                | 79                              | 17 | 117 | Vds                  |
| 20. Maravanatham                   | -                               | -  | -   | Amp, Vds             |
| 21. Mattigai kurichi               | 69                              | 40 | 168 | Vds                  |
| 22. Melnariyapnor                  | 53                              | 11 | 108 | Amp, Phl             |
| 23. Moongilpaadi                   | 95                              | 5  | 125 | Amp, Phl             |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 24. Nallasevapuram    | -                               | -  | -   | Vds, Llp             |
| 25. Nallaathur        | 76                              | 11 | 118 | Vds                  |
| 26. Namasivayapuram   | 82                              | 15 | 86  | Vds, Amp             |
| 27. Nainarpalayam     | 64                              | 18 | 76  | Phl, Llp             |
| 28. Pavittambadi      | 95                              | 11 | 112 | Vds                  |
| 29. Pandiankuppam     | 74                              | -  | 114 | Vds, Anm, Amp        |
| 30. Pethanur          | 65                              | 14 | 100 | Vds, Llp             |
| 31. Pethasamudiram    | 73                              | 14 | 81  | Phl, Llp             |
| 32. Poondi            | 75                              | 5  | 55  | Phl, Llp             |
| 33. Pookkambadi       | -                               | -  | -   | Anm, Amp             |
| 34. Rayappanur        | 72                              | 8  | 126 | Phl, Llp             |
| 35. Rayarpalayam      | 86                              | 19 | 126 | Vdv, Vds, Llp        |
| 36. Sadayanipattu     | 73                              | 8  | 135 | Vds                  |
| 37. Semba kurichi     | 82                              | 12 | 192 | Amp, Vnr, Anm        |
| 38. Thaathathripuram  | 68                              | 11 | 98  | Phl, Llp             |
| 39. Thagarai          | 69                              | -  | 94  | Vds                  |
| 40. Then ponparappi   | -                               | -  | -   | Amp, Phl, Llp        |
| 41. Thensettianangal  | 71                              | 10 | 136 | Vds, Amp             |
| 42. Thenriruvalur     | 82                              | -  | 149 | Vds, Llp, Anm        |
| 43. Thimmapuram       | 71                              | 10 | 112 | Vds, Anm             |
| 44. Thottapaadi       | 64                              | 17 | 100 | Phl, Llp             |
| 45. Thottiam          | 70                              | 9  | 98  | Vds, Anm             |
| 46. Olagamkaalan      | 72                              | 9  | 88  | Vds, Anm             |
| 47. Olagianallur      | 84                              | 17 | 100 | Vds, Anm             |
| 48. Vadakanondal      | -                               | -  | -   | Vnr, Vds             |
| 49. Vasudevanur       | 69                              | 7  | 144 | Phl, Llp             |
| 50. Vettipermalagaram | 64                              | 8  | 100 | Vds, Amp             |

| Village                              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------------------------|---------------------------------|----|-----|----------------------|
|                                      | N                               | P  | K   |                      |
| <b>THIYAGADURGAM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Asakalathur                       | 87                              | 24 | 108 | Anm                  |
| 2. Chinnamampattu                    | 72                              | -  | 81  | Vnr, Vds             |
| 3. Eyyanur                           | 70                              | 17 | 123 | Anm                  |
| 4. Girupeedepuram                    | 66                              | 9  | 105 | Anm, Vds             |
| 5. Iranji                            | 92                              | 14 | 82  | Anm                  |
| 6. Kachakudi                         | 65                              | 18 | 95  | Anm                  |
| 7. Kalayanallur                      | -                               | -  | -   | Anm                  |
| 8. Kanangur                          | 71                              | 18 | 105 | Vnr, Vds             |
| 9. Kandaachimangalam                 | 46                              | 18 | 81  | Amp, Vds             |
| 10. Kongarayarpalayam                | 87                              | 30 | 130 | Anm, Vds             |
| 11. Koondaloor                       | 73                              | 18 | 103 | Amp, Vds             |
| 12. Koothakugi                       | 64                              | 69 | 102 | Anm                  |
| 13. Kotaiyur                         | 72                              | 16 | 103 | Vds, Lip             |
| 14. Kudiyenellur                     | 67                              | 16 | 162 | Anm                  |
| 15. Madam                            | 73                              | 18 | 98  | Vnr                  |
| 16. Magur                            | -                               | -  | -   | Vnr, Amp             |
| 17. Minnaiyur                        | 77                              | 52 | 122 | Anm, Vds             |
| 18. Mudiyanur                        | 58                              | 40 | 140 | Vnr, Vdv             |
| 19. Nagalur                          | 89                              | 14 | 118 | Amp, Vds             |
| 20. Pallakacheri                     | 84                              | -  | 98  | Anm, Vdv             |
| 21. Panayangaal                      | 71                              | 17 | 98  | Anm, Vdv             |
| 22. Peelamedu                        | 71                              | 19 | 106 | Anm                  |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 23. Poraiyur          | -                               | -  | -   | Anm, Vds             |
| 24. Porsakurichi      | 62                              | 20 | 137 | Amp, Vds             |
| 25. Prithvimangalam   | 61                              | 15 | 146 | Vnr, Amp             |
| 26. Pudhuchimedu      | 70                              | 27 | 100 | Vnr                  |
| 27. Sathanur          | 66                              | 18 | 97  | Vnr                  |
| 28. Sirunagalur       | 82                              | 18 | 110 | Vds, Anm             |
| 29. Siruval           | -                               | -  | -   | Vds                  |
| 30. Sitheri           | -                               | -  | -   | Vnr                  |
| 31. Sogaiyur          | 63                              | 24 | 117 | Anm                  |
| 32. Somanathapuram    | -                               | -  | -   | Vnr                  |
| 33. Thennerikuppam    | -                               | -  | -   | Phl                  |
| 34. Thimalai          | 85                              | 24 | 150 | Vds, Phl             |
| 35. Thiyagai          | 6                               | 20 | 194 | Vds, Vnr             |
| 36. Udayamaattu       | -                               | -  | -   | Vds                  |
| 37. Udayanaachi       | 71                              | 16 | 108 | Anm, Phl             |
| 38. Vadapoondi        | 74                              | 15 | 78  | Vds, Amp             |
| 39. Vadathesasalur    | 80                              | 54 | 118 | Vds, Vnr             |
| 40. Varanjaram        | 92                              | 19 | 102 | Vnr, Amp             |
| 41. Vazhavandankuppam | 74                              | 18 | 90  | Vds                  |
| 42. Velakurchi        | 72                              | 12 | 102 | Amp                  |
| 43. Vengilum          | 73                              | 18 | 97  | Anm, Vdv             |
| 44. Vilakkur          | 75                              | 19 | 96  | Amp, Vnr             |
| 45. Virukaiyur        | 71                              | 24 | 85  | Phl, Llp             |

- Data not available

## LAND CAPABILITY

### KALLAKURICHI TALUK

| Area (ha) | Land Capability Classification | Soil Series              | Limitation                                | Needs                                    |
|-----------|--------------------------------|--------------------------|---|--|
| 563       | II e                           | Vadamadurai<br>Vadavalam | Erosion                                   | Selection of crops                       |
| 14099     | II s                           | Arasanatham              | Moderate<br>alkallinity<br>Calcareousness | Soil reclamation                         |
| 620       | III se                         | Lalapettai               | Shallow depth<br>gravels                  | Soil Texture<br>improvement              |
| 24654     | III se                         | Vadathesasalur           | erosion                                   | soil conservation                        |
| 15945     | III sw                         | Ammapettai               | Heavy texture<br>poor drainge             | Improving drainage<br>selection of crops |
| 4089      | III sw                         | Vanur                    | Alkalinity<br>sub-surface<br>drainage     | Selection of crops                       |
| 4277      | IV se                          | Pachol                   | Shallow depth,<br>erosion, gravels        | Selection of crops<br>Soil conservation  |

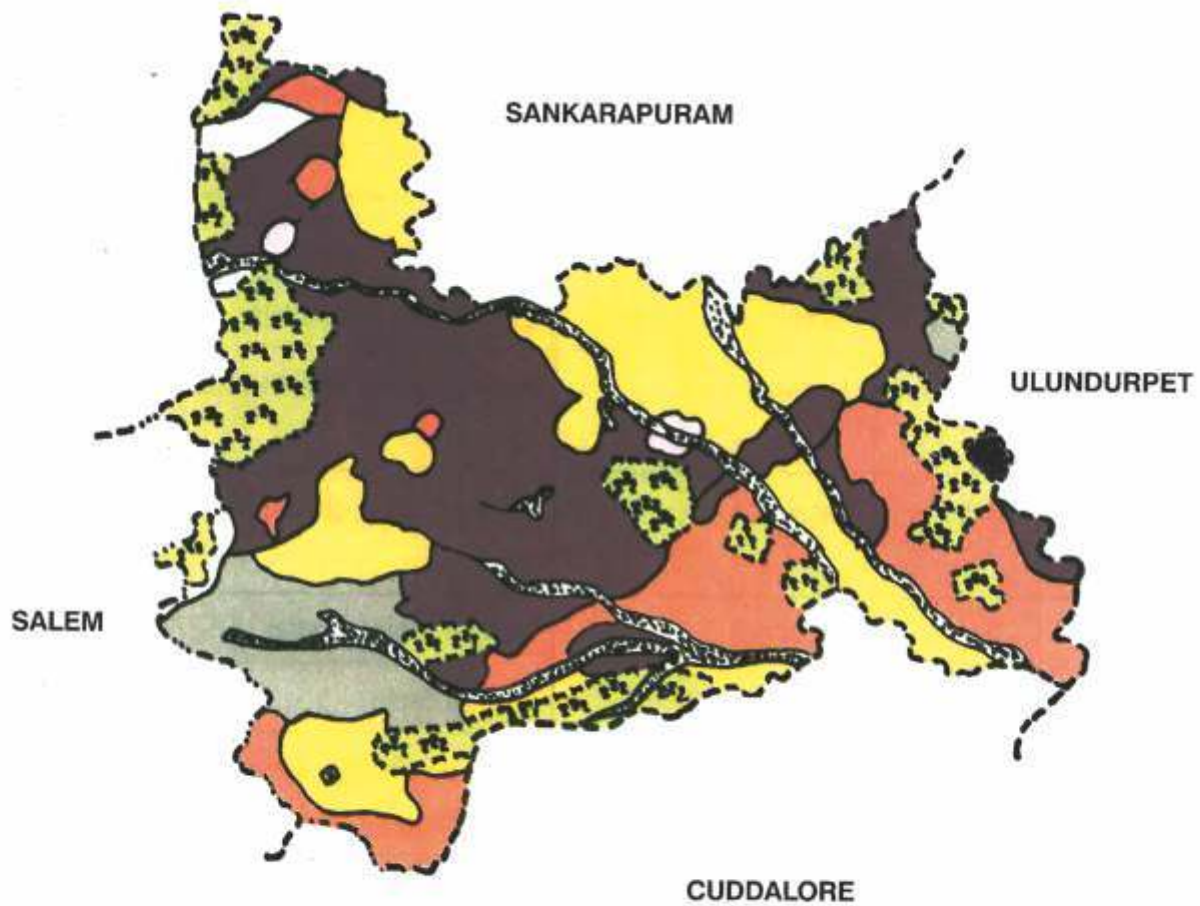
#### **Class**

- 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 severe limitations for sustained use under agriculture.

#### **Sub-class**

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY KALLAKURICHI TALUK



## REFERENCE

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

## LEGEND

- II e
- II s
- III se
- III sw
- IV se

## LAND IRRIGABILITY

### KALLAKURICHI TALUK

| Area (ha) | Irrigability Classification | Soil Series     | Limitation                                       |
|-----------|-----------------------------|-----------------|--|
| 563       | 2 s                         | Vadamadurai     | Low Water holding capability in surface soil     |
| 518       | 2 s                         | Vadavalam       | Sub- surface permeability                        |
| 14099     | 2 d                         | Arasanatham     | Moderate alkalinity in the sub surface           |
| 4089      | 2 sd                        | Vanur           | Alkalinity, slow permeability in the sub surface |
| 620       | 3 s                         | Lalapettai      | Shallow depth, gravels                           |
| 24654     | 3 s                         | Vadsathesasalur | Shallow depth                                    |
| 15945     | 3 sd                        | Ammapettai      | Moderate alkalinity, slow permeability           |
| 4277      | 4 st                        | Pachol          | Shallow depth, erosion, gravels                  |

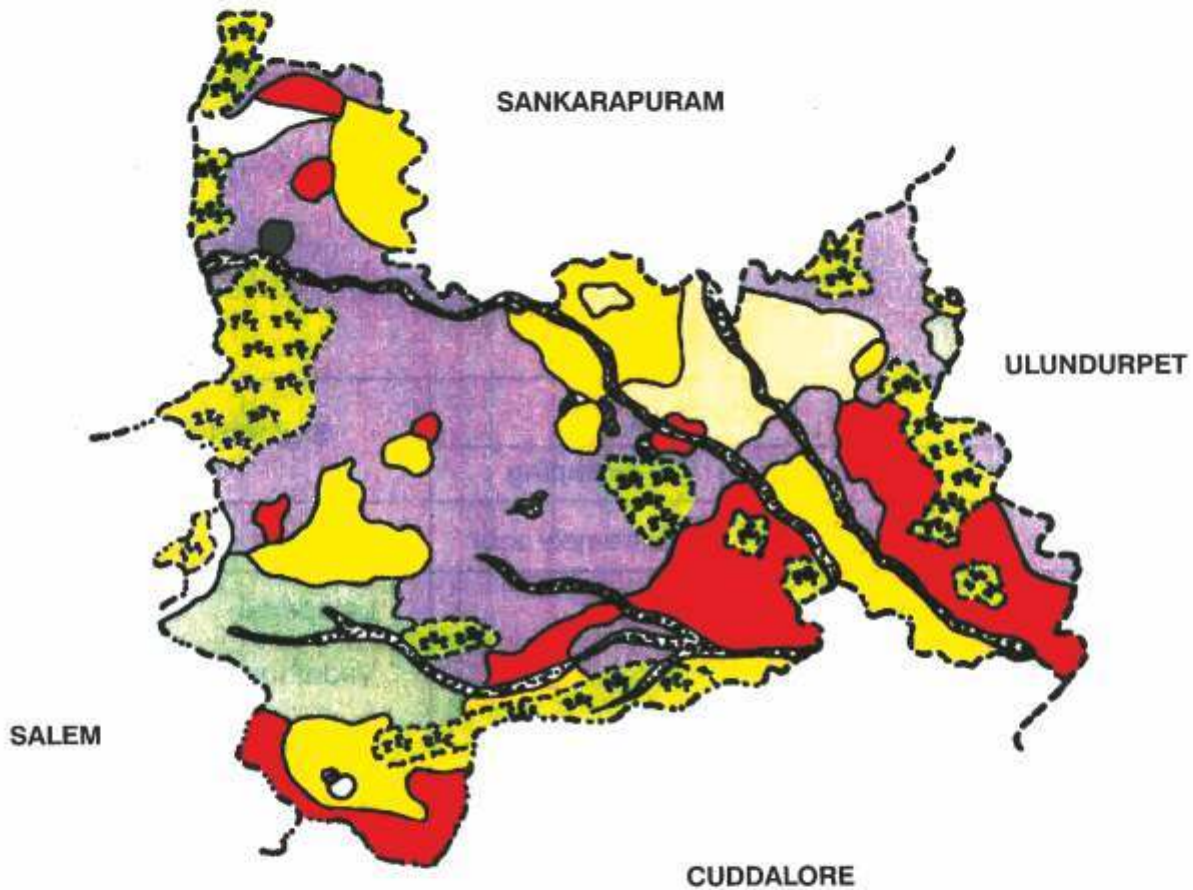
#### **Class**

- 2 Land that have moderate limitation for sustained use under irrigation.
- 3 Lands that have severe limitations for sustained use under irrigation.
4. Lands that have very severe limitations for sustained use under irrigation.

#### **Sub class**

s - Soil limitation  
t - Topography  
d - Drainage

# LAND IRRIGABILITY KALLAKURICHI TALUK



## REFERENCE

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

## LEGEND

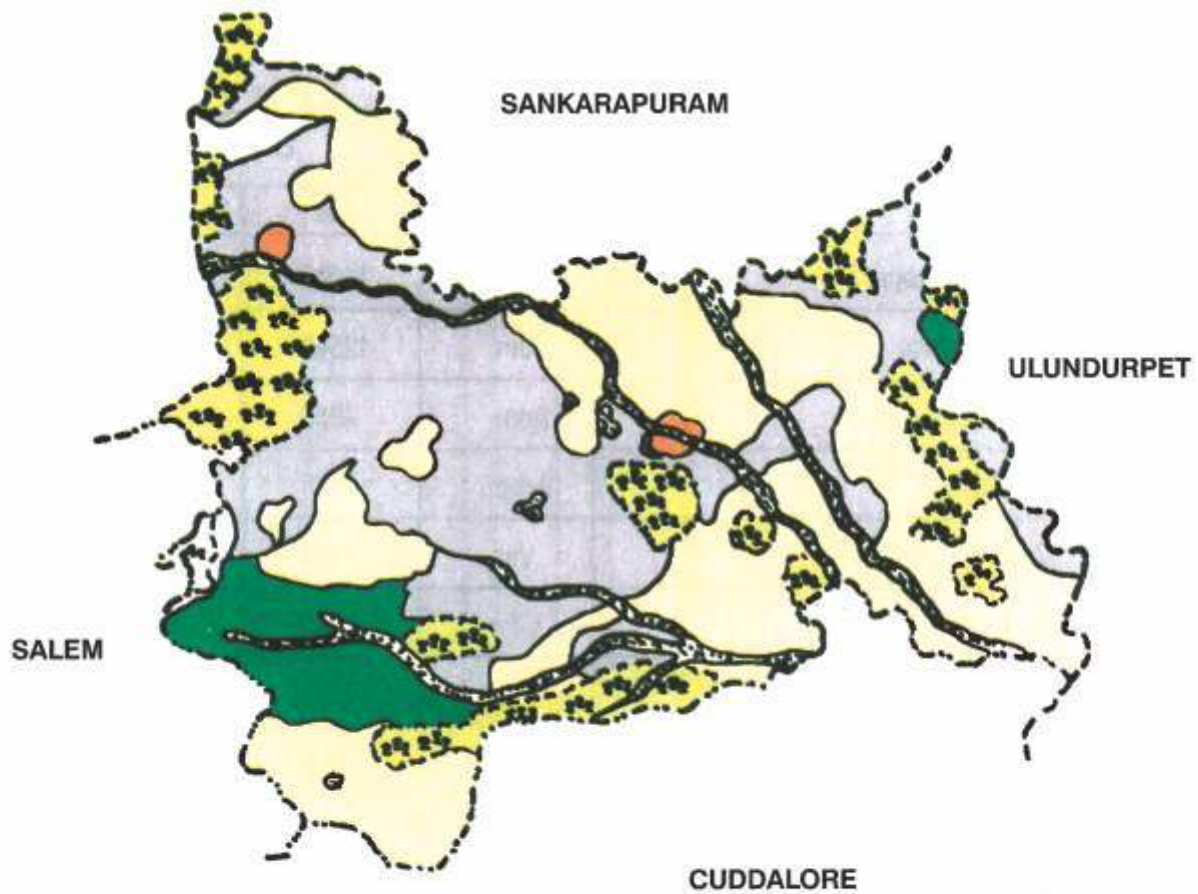
- 2 s
- 2 d
- 2 sd
- 3 s
- 3 sd
- 4 st

## SOIL PRODUCTIVITY

### KALLAKURICHI TALUK

| Area<br>(ha) | Productivity |                | Soil Series  |
|--------------|--------------|----------------|--|
|              | Rating       | Grouping       |  |
| 4277         | 0.7          | Extremely poor | Pachol   |
| 59407        | 8-19         | Poor           | Lalapettai<br>Vadathesasalur<br>Arasanatham<br>Ammapettai<br>Vanur |
| 1081         | 35-64        | Good           | Vadavalam<br>Vadamadurai   |

# SOIL PRODUCTIVITY KALLAKURICHI TALUK



## REFERENCE

- · · — DISTRICT BOUNDARY
- - - - - TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY
- TANKS

## LEGEND

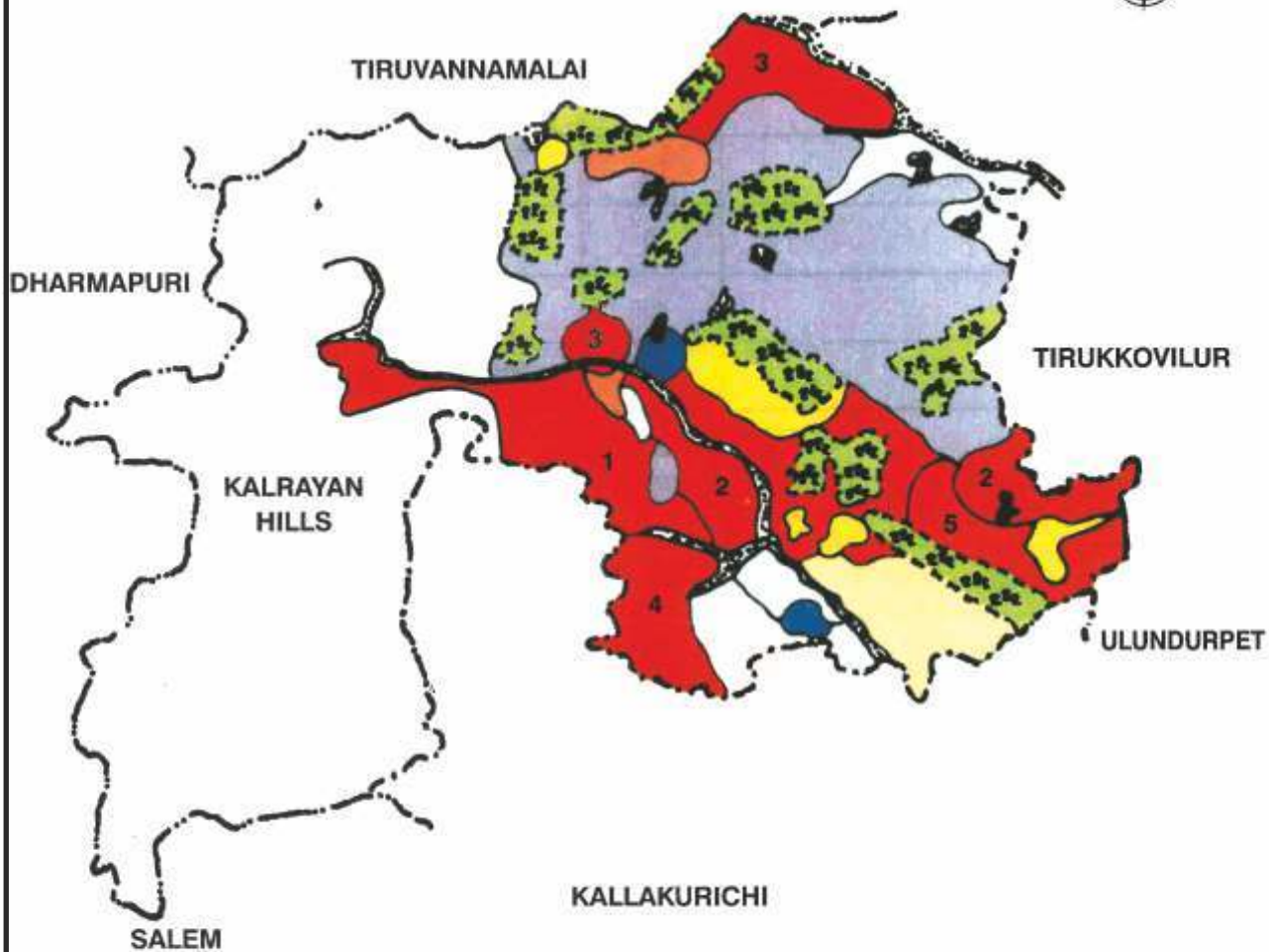
- EXTREMELY POOR
- POOR
- AVERAGE
- GOOD

## SOILS

### SANKARAPURAM TALUK

| Soil Series                  | Map Symbol | Extent        |              |
|------------------------------|------------|---------------|--------------|
|                              |            | ha            | %            |
| 1 Vadathesalur               | Vds        | 18000         | 13.67        |
| 2 Vadamadurai                | Vdm        | 12542         | 9.52         |
| 3 Arasantham                 | Anm        | 4856          | 3.69         |
| 4 Ammapettai                 | Amp        | 4662          | 3.54         |
| 5 Vanur                      | Vnr        | 4144          | 3.15         |
| 6 Vadavalam                  | Vdv        | 1095          | 0.83         |
| 7 Vadathesalur + Pachol      | 1          | 3238          | 2.46         |
| 8 Pachol + Vadamadurai       | 2          | 8960          | 6.80         |
| 9 Pachol + Lalapettai        | 3          | 9219          | 7.00         |
| 10 Ammapettai + Vanur        | 4          | 3367          | 2.56         |
| 11 Arasanatham + Vadamadurai | 5          | 2282          | 1.73         |
| <b>Total</b>                 |            | <b>72365</b>  | <b>54.94</b> |
| <b>Forest</b>                |            | <b>41102</b>  | <b>31.20</b> |
| <b>Others</b>                |            | <b>18249</b>  | <b>13.86</b> |
| <b>Grand Total</b>           |            | <b>131716</b> | <b>100.0</b> |

# SOILS SANKRAPURAM TALUK



## REFERENCE

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

## LEGEND

- VANUR
- VADAMADURAI
- VADA THESALUR
- AMMAPETTAI
- VADAVARAM
- ARASANATHAM
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------------------------|---------------------------------|----|-----|----------------------|
|                                      | N                               | P  | K   |                      |
| <b>RISHIVANDIYAM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Ariyalur                          | 60                              | 32 | 96  | Vds.                 |
| 2. Arunbakkampattu                   | 95                              | -  | 120 | Vds.                 |
| 3. Athiyur                           | 40                              | -  | 90  | Vdm.                 |
| 4. Avaniyur                          | 70                              | 12 | 140 | Phl.                 |
| 5. Eandal                            | 82                              | 15 | 105 | Vdm.                 |
| 6. Eduthanur                         | 80                              | 15 | 140 | Vds.                 |
| 7. Irudayapattu                      | 70                              | 14 | 56  | Phl, Vds.            |
| 8. Jampadai                          | 70                              | 15 | 60  | Vdm, Phl.            |
| 9. Kadambur                          | 70                              | 12 | 60  | Amp.                 |
| 10. Kaduvanur                        | 95                              | -  | 180 | Vds.                 |
| 11. Keezhpadi                        | 70                              | 14 | 160 | Phl, Vds.            |
| 12. Kanniyur                         | 40                              | 15 | 100 | Vds.                 |
| 13. L.Kondalur                       | 72                              | 16 | 75  | Anm, Vds.            |
| 14. Maiyanur                         | 80                              | -  | 100 | Phl, Vdm.            |
| 15. Mandagapadi                      | 80                              | -  | 120 | Anm, Vdm.            |
| 16. Mangalam                         | -                               | -  | -   | Phl.                 |
| 17. Maniyandal                       | 52                              | -  | 80  | Vds.                 |
| 18. Marur                            | 80                              | -  | 70  | Vds, Amp.            |
| 19. Melapazhangur                    | 70                              | 7  | 90  | Phl, Vds.            |
| 20. Munivaazhai                      | 70                              | 12 | 105 | Phl, Vds.            |
| 21. Muttiyam                         | 30                              | -  | 110 | Anm, Vdm.            |
| 22. Nurolai                          | 86                              | 10 | 76  | Anm.                 |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 23. Odiyandal         | 60                              | 14 | 92  | Vds, Amp.            |
| 24. Paakkam           | 84                              | 16 | 130 | Vds, Vdl.            |
| 25. Pavaar            | 80                              | 30 | 75  | Phl, Vdm.            |
| 26. Pavandur          | 50                              | -  | 100 | Anm, Vdm             |
| 27. Pazhayasiruvangur | 80                              | 12 | 100 | Phl, Vdm.            |
| 28. Peraal            | 70                              | 10 | 75  | Anm, Vdm.            |
| 29. Periyakolliyur    | 100                             | 12 | 150 | Phl, Vdm             |
| 30. Periyapagandai    | 100                             | 14 | 105 | Vdm.                 |
| 31. Porapalampattu    | 75                              | 12 | 75  | Phl, Vdm.            |
| 32. Pullipattu        | 87                              | -  | 120 | Phl, Vdm.            |
| 33. Rishivandiyam     | 80                              | -  | 80  | Anm, Vdm.            |
| 34. Sathaputhur       | 65                              | -  | 80  | Anm, Vdm.            |
| 35. Suthamalai        | 60                              | 10 | 130 | Phl.                 |
| 36. Sirupathanallur   | 92                              | 12 | 200 | Phl, Vdm.            |
| 37. Siruppanandal     | 75                              | -  | 102 | Vdm.                 |
| 38. Sirupalaiyur      | 80                              | -  | 130 | Vdm, Amp.            |
| 39. Thiruvanrangam    | 87                              | -  | 150 | Phl, Vdm.            |
| 40. Thozhuvanhangal   | 60                              | 7  | 80  | Vds, Vdm.            |
| 41. Vannapuram        | 80                              | -  | 90  | Vds, Vdm.            |
| 42. Vadammaamandur    | 30                              | 10 | 50  | Phl, Vdm.            |
| 43. Velananthal       | 70                              | 12 | 100 | Anm.                 |
| 44. Vengilam          | 60                              | -  | 60  | Anm, Vdm.            |
| 45. Yaal              | 75                              | -  | 55  | Phl, Vdm.            |

| Village                             | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------------|---------------------------------|----|-----|----------------------|
|                                     | N                               | P  | K   |                      |
| <b>SANKARAPURAM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aarur                            | 70                              | 14 | 100 | Phl                  |
| 2. Arasampattu                      | 65                              | 8  | 120 | Phl                  |
| 3. Arasananpattu                    | 79                              | 10 | 111 | Vnr                  |
| 4. Arulampadi                       | 77                              | 16 | 94  | Vds                  |
| 5. Brahmakundam                     | 60                              | 13 | 100 | Vnr                  |
| 6. Cholampattu                      | 50                              | 15 | 92  | Vnr, Vds.            |
| 7. Kattuvanjur                      | -                               | -  | -   | Vds, Phl.            |
| 8. Keelapattu                       | 60                              | 12 | 75  | Phl, Vdm             |
| 9. Kidankudayanpattu                | 72                              | 15 | 82  | Phl, Vdm             |
| 10. Kosappadi                       | 55                              | 15 | 92  | Vnr, Phl             |
| 11. Luckynaickenpatti               | 73                              | 16 | 79  | Vds, Vdm             |
| 12. Mallaapuram                     | -                               | -  | -   | Vds, Vdm             |
| 13. Manalur                         | 50                              | 22 | 90  | Vnr, Vds             |
| 14. Manjaputhanur                   | 32                              | -  | 55  | Phl, Vdm             |
| 15. Melsirurallur                   | 70                              | 12 | 85  | Vds, Phl             |
| 16. Mookanur                        | 72                              | 15 | 146 | Vds, Vdv             |
| 17. Moongilthuraipattu              | 68                              | 12 | 92  | Phl                  |
| 18. Nedumanur                       | 70                              | -  | 200 | Vnr, Vds, Phl        |
| 19. Oorangani                       | 69                              | 15 | 72  | Phl, Vdv             |
| 20. Paandelam                       | 71                              | 14 | 78  | Vds                  |
| 21. Palayanur                       | 44                              | 15 | 86  | Phl                  |
| 22. Paranjipattu                    | 60                              | 12 | 80  | Vnr                  |
| 23. Poykkunam                       | 80                              | 13 | 85  | Vnr                  |
| 24. Poottai                         | 75                              | 13 | 106 | Vds, Phl             |

| Village                  | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------------|---------------------------------|----|-----|----------------------|
|                          | N                               | P  | K   |                      |
| 25. Porusapattu          | 50                              | 12 | 80  | Phl, Anm             |
| 26. Poruvalur            | -                               | -  | -   | Phl                  |
| 27. Pudupattu            | 75                              | 16 | 73  | Vds, Vdv             |
| 28. Puthirampattu        | 60                              | 8  | 102 | Vds, Phl             |
| 29. Raavuthanellur       | 80                              | 8  | 160 | Vds                  |
| 30. Rayappanur           | 80                              | -  | 200 | Phl                  |
| 31. Ramarajapuram        | 73                              | 15 | 121 | Phl                  |
| 32. Rayesamudram         | -                               | -  | -   | Vds                  |
| 33. Sankarapuram         | -                               | -  | -   | Vnr                  |
| 34. Sittanthangal        | -                               | -  | -   | Phl                  |
| 35. Sembarayanpattu      | 79                              | 16 | 100 | Vds, Phl             |
| 36. Seshasamuthiram      | 30                              | -  | 50  | Amp, Vnr             |
| 37. Sevapuram            | -                               | -  | -   | Vds                  |
| 38. S.Kolathur           | 78                              | -  | 112 | Vds, Phl             |
| 39. Sowndiravallipalayam | 72                              | -  | 62  | Vnr, Amp             |
| 40. Thimaanandal         | -                               | -  | -   | Phl                  |
| 41. Thigarajapuram       | 70                              | 14 | 170 | Phl                  |
| 42. Olagalapadi          | 46                              | 12 | 88  | Vds, Phl             |
| 43. Olagudayampattu      | -                               | -  | -   | Vdv                  |
| 44. Vadekeeranur         | 72                              | 18 | 69  | Vds                  |
| 45. Ponparappi           | 70                              | 14 | 120 | Vds                  |
| 46. Vadasettiyanandal    | 76                              | 8  | 104 | Phl                  |
| 47. Vadasiruvalur        | 46                              | -  | 90  | Phl, Amp             |
| 48. Valliyampattu        | 75                              | 22 | 80  | Phl                  |
| 49. Varakur              | 50                              | 30 | 82  | Phl, Vds             |
| 50. Viriyur              | 75                              | 18 | 120 | Phl                  |

- Data not available

## LAND CAPABILITY

### SANKARAPURAM TALUK

| Area (ha) | Land Capability Classification | Soil Series    | Limitation                       | Needs   |
|-----------|--------------------------------|----------------|----------------------------------|---|
| 12542     | II e                           | Vadamadurai    | Erosion                          | Soil conservation                             |
| 1095      | II e                           | Vadavalam      | Erosion                          | Soil conservation                             |
| 4856      | II s                           | Arasanatham    | Moderate alkalinity              | Soil reclamation                              |
| 18000     | III se                         | Vadathesasalur | More of Gravels, Erosion         | Soil texture improvement<br>soil conservation |
| 4662      | III sw                         | Ammapettai     | Heavy texture<br>poor drainage   | Improving drainage<br>selection of crops      |
| 4144      | III sw                         | Vanur          | Alkalinity, sub surface drainage | Improving drainage<br>Selection of crops      |

#### **Class**

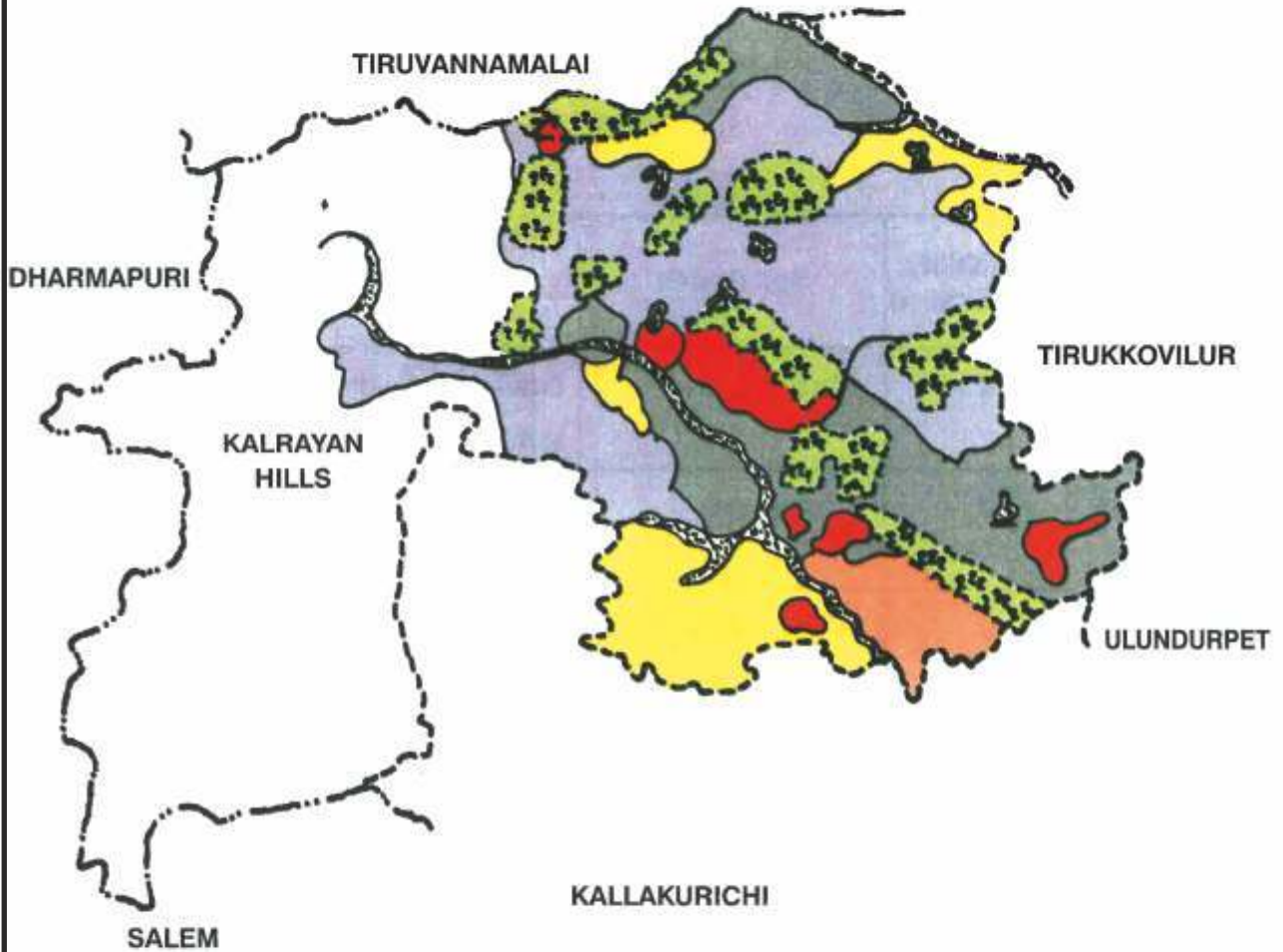
II. Good cultivable lands that have moderate limitations for sustained use under agriculture.


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

#### **Sub-class**

e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY SANKRAPURAM TALUK



- REFERENCE**
- DISTRICT BOUNDARY
  - TALUK BOUNDARY
  - COASTAL BOUNDARY
  - ~~~~~ RIVERS & GULLY
  - ===== FOREST BOUNDARY
  -  TANKS

- LEGEND**
-  II e
  -  II s
  -  III se
  -  III sw
  -  IV se

## LAND IRRIGABILITY

### SANKRAPURAM TALUK

| Area (ha) | Irrigability Classification | Soil Series    | Limitation                                       |
|-----------|-----------------------------|----------------|--|
| 12542     | 2 s                         | Vadamadurai    | Low water holding capacity in surface            |
| 1095      | 2 d                         | Vadavalam      | Sub surface permeability                         |
| 4856      | 2 s                         | Arasanatham    | Moderate alkalinity in the sub surface           |
| 4144      | 2 sd                        | Vanur          | Alkalinity, slow permeability in the sub surface |
| 18000     | 3 s                         | Vadathesasalur | Shallow depth                                    |
| 4662      | 3 sd                        | Ammapettai     | Moderate alkalinity, slow permeability           |

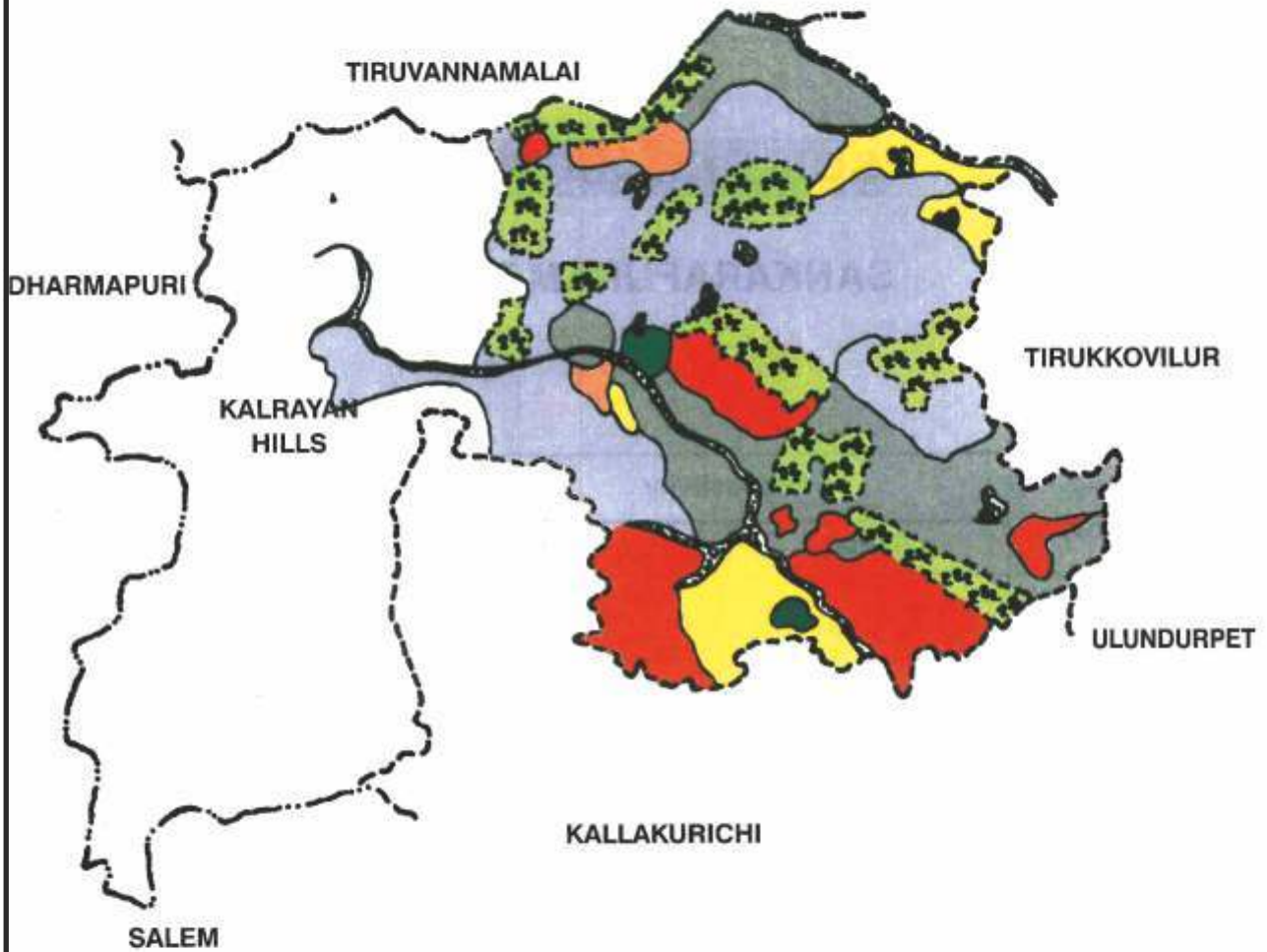
#### **Class**

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

#### **Sub class**

s – Soil limitation  
t – Topography  
d – Drainage

# LAND IRRIGABILITY SANKARAPURAM TALUK



- REFERENCE**
- DISTRICT BOUNDARY
  - - - TALUK BOUNDARY
  - COASTAL BOUNDARY
  - RIVERS & GULLY
  - FOREST BOUNDARY
  - TANKS

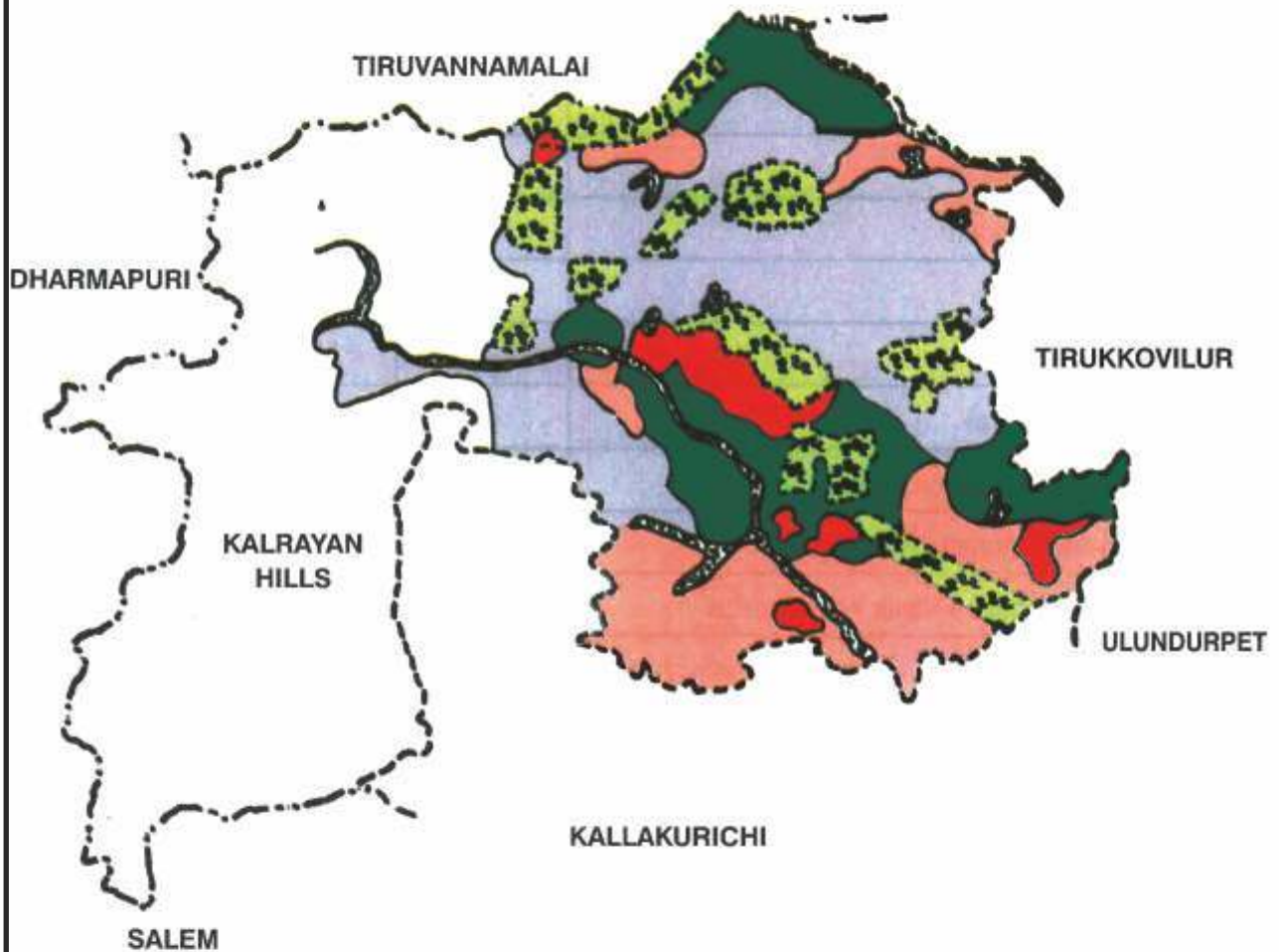
- LEGEND**
- 2 s
  - 2 d
  - 2 sd
  - 3 s
  - 3 sd
  - 4 st

## SOIL PRODUCTIVITY

### SANKARAPURAM TALUK

| Area<br>(ha) | Productivity |          | Soil Series                        |
|--------------|--------------|----------|------------------------------------|
|              | Rating       | Grouping |                                    |
| 18000        | 8 – 19       | Poor     | Vadathesasalur                     |
| 13662        | 20 – 34      | Average  | Arasanatham<br>Ammapettai<br>Vanur |
| 13637        | 35 – 64      | Good     | Vadavalam<br>Vadamadurai           |

# SOIL PRODUCTIVITY SANKRAPURAM TALUK



## REFERENCE

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

## LEGEND

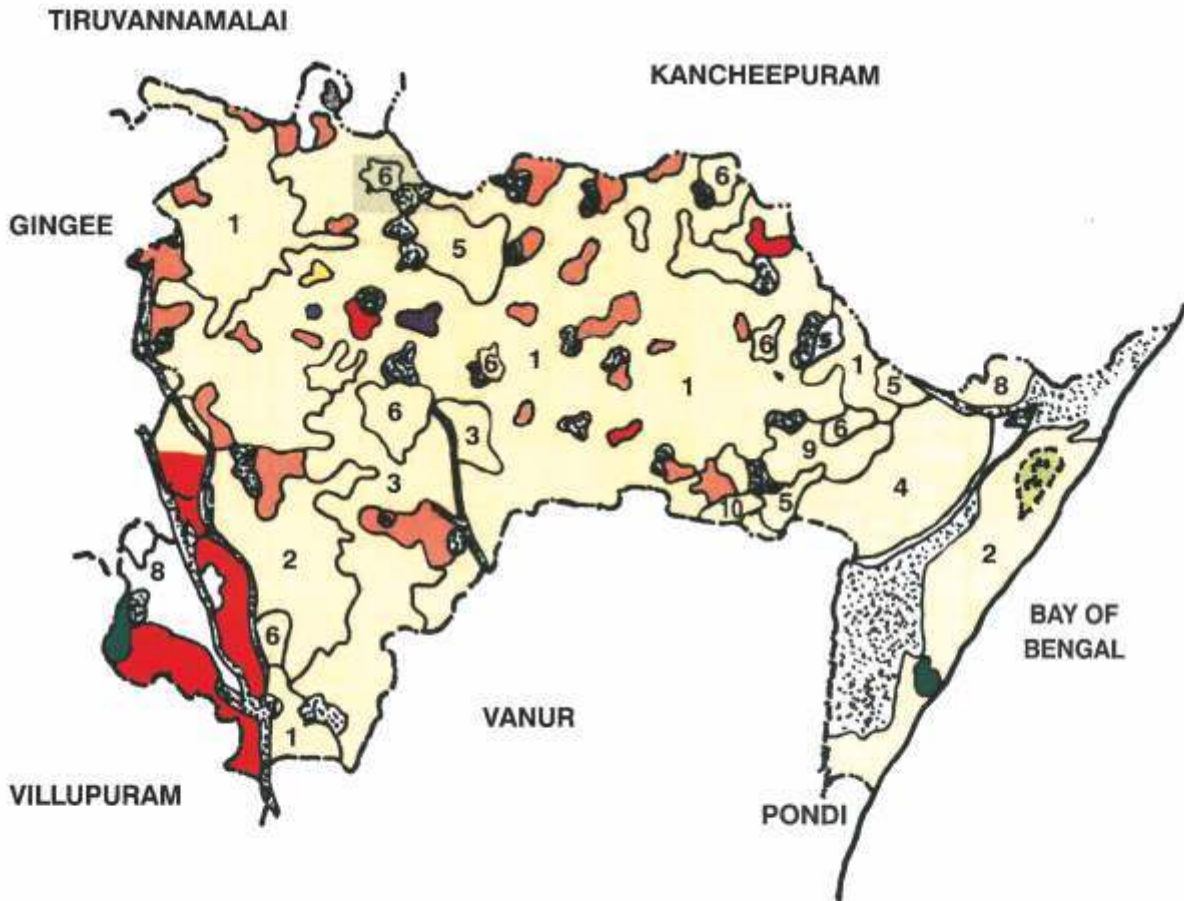
- EXTREMELY POOR
- POOR
- AVERAGE
- GOOD

## SOILS

### TINDIVANAM TALUK

| Soil Series                               | Map Symbol | Extent        |               |
|---|------------|---------------|---------------|
|   |            | ha            | %             |
| 1. Arasanatham                            | Anm        | 7745          | 7.60          |
| 2. Vanur                                  | Vnr        | 6476          | 6.36          |
| 3. Ammapettai                             | Amp        | 896           | 0.88          |
| 4. Vadalapakkam                           | Vdl        | 563           | 0.55          |
| 5. Mangadu                                | Mgd        | 461           | 0.45          |
| 6. Pachol                                 | Phl        | 307           | 0.30          |
| 7. Vadamadurai                            | Vdm        | 180           | 0.18          |
| 8. Pachol + Arasanatham                   | 1          | 23169         | 22.74         |
| 9. Mahabalipuram + Arasanatham            | 2          | 4664          | 4.58          |
| 10. Arasanatham + Vanur + Ammapettai      | 3          | 5786          | 5.68          |
| 11. Vadamadurai + Arasanatham + Vadavalam | 4          | 1480          | 1.49          |
| 12. Vanur + Arasanatham                   | 5          | 1814          | 1.75          |
| 13. Arasanatham + Vanur                   | 6          | 2663          | 2.61          |
| 14. Arasanatham + Pachol                  | 7          | 538           | 0.53          |
| 15. Vadamadurai + Arasanatham             | 8          | 2660          | 2.62          |
| 16. Pachol + Vadavalam                    | 9          | 600           | 0.59          |
| 17. Vadavalam + Pachol                    | 10         | 255           | 0.25          |
| 18. Vanur + Mangadu + Arasanatham         | 11         | 480           | 0.47          |
| <b>Total</b>                              |            | <b>60737</b>  | <b>59.62</b>  |
| <b>Forest</b>                             |            | <b>1098</b>   | <b>1.08</b>   |
| <b>Others</b>                             |            | <b>40032</b>  | <b>39.30</b>  |
| <b>Grand Total</b>                        |            | <b>101867</b> | <b>100.00</b> |

# SOILS TINDIVANAM TALUK



- REFERENCE**
- DISTRICT BOUNDARY
  - ..... TALUK BOUNDARY
  - COASTAL BOUNDARY
  - RIVERS & GULLY
  - FOREST BOUNDARY
  - TANKS

**LEGEND**

- Arsn ARASANATHAM
- Vnr VANUR
- Pachol PACHOL
- Vdt VADALAPAKKAM
- Ammapetta AMMAPETTAI
- Vdm VADAMADURAI
- Mangadu MANGADU
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                           | Village Fertility Index (kg/ac) |     |     | Dominant Soil Series |
|-----------------------------------|---------------------------------|-----|-----|----------------------|
|                                   | N                               | P   | K   |                      |
| <b>MARAKKANAM PANCHAYAT UNION</b> |                                 |     |     |                      |
| 1. Aadavallikuttai                | 71                              | 16  | 82  | Vdl, Anm             |
| 2. Aalapakkam                     | 68                              | 13  | 86  | Mgd, Anm             |
| 3. Akshikadu                      | 71                              | 40  | 89  | Mgd, Anm, Mbm        |
| 4. Aathur                         | 116                             | 44  | 131 | Vdl, Anm             |
| 5. Adarai                         | 85                              | 36  | 82  | Vdl, Anm             |
| 6. Alathur                        | 123                             | 37  | 221 | Vdl, Anm             |
| 7. Anumandhai                     | 97                              | 31  | 222 | Mgd, Anm             |
| 8. Avarampattu                    | 80                              | 35  | 150 | Vdl, Anm             |
| 9. Guruvampettai                  | 129                             | 11  | 166 | Anm                  |
| 10. Irayanur                      | 113                             | 28  | 306 | Anm, Vnr             |
| 11. Jakkampettai                  | 59                              | 11  | 82  | Anm, Phl             |
| 12. Kaandhadu                     | 140                             | 29  | 240 | Vdm, Anm, Vdl        |
| 13. Kovadi                        | 132                             | 18  | 352 | Vdl                  |
| 14. Karunavur                     | 58                              | 9   | 174 | Phl, Anm             |
| 15. Kattalai                      | 138                             | -   | 246 | Phl, Anm             |
| 16. Karur                         | 122                             | 31  | 194 | Phl, Anm             |
| 17. Keelperadikuppam              | 59                              | 25  | 148 | Phl, Anm             |
| 18. Keelpudupattu                 | 106                             | 19  | 135 | Anm, Vdl             |
| 19. Kilsithanur                   | 89                              | 11  | 54  | Vnr, Anm             |
| 20. Kesavanayakkanpalayam         | 71                              | 8   | 104 | Anm, Vdl             |
| 21. Kolathur                      | 56                              | 7   | 120 | Anm, Vdm             |
| 22. Koonimedu                     | 123                             | 227 | 200 | Vnr, Anm             |
| 23. Maanur                        | 120                             | 13  | 167 | Anm, Vnr, Vdm        |
| 24. Munnur                        | 125                             | 29  | 270 | Anm, Vnr             |

| Village            | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------|---------------------------------|----|-----|----------------------|
|                    | N                               | P  | K   |                      |
| 25. Marakkanam     | 97                              | 26 | 127 | Vnr, Anm             |
| 26. Molasur        | 115                             | 39 | 250 | Vnr, Anm             |
| 27. Murukeri       | 124                             | 26 | 136 | Anm, Vdm             |
| 28. Nadupakkam     | 124                             | 31 | 328 | Vdm, Anm, Vdl        |
| 29. Nakalapakkam   | 126                             | 32 | 225 | Vnr, Anm             |
| 30. Nagar          | 57                              | 30 | 115 | Mbm, Anm             |
| 31. Nallur         | 157                             | 32 | 192 | Phl, Anm             |
| 32. Omandur        | 149                             | 36 | 288 | Vnr                  |
| 33. Omippar        | 122                             | -  | 204 | Vdm, Anm, Vdl        |
| 34. Perani         | 80                              | 35 | 85  | Vnr, Anm             |
| 35. Panjumedu      | 85                              | 23 | 178 | Mbm, Anm             |
| 36. Raganallur     | 78                              | 28 | 68  | Phl, Anm             |
| 37. Saalavathi     | 68                              | 16 | 108 | Anm, Vnr, Vdv        |
| 38. Settikuppam    | 76                              | 27 | 108 | Mgd, Mbm, Anm        |
| 39. Sevankuppam    | 111                             | 31 | 142 | Mgd, Mbm, Anm        |
| 40. Singanandal    | 80                              | 26 | 114 | Anm, Vdm             |
| 41. singanur       | 80                              | 7  | 103 | Anm, Phl             |
| 42. Siruvadi       | 135                             | 32 | 292 | Anm, Vnr, Vdm        |
| 43. Thirukkanur    | 89                              | 31 | 120 | Vdm, Anm, Vdv        |
| 44. Vada Alapakkam | 64                              | 16 | 85  | Vdv, Vnr             |
| 45. Vada Agaram    | 67                              | 18 | 66  | Mbm, Anm             |
| 46. vadakodipakkam | 64                              | 32 | 98  | Anm, Vnr, Phl        |
| 47. vadanerkunam   | 65                              | 15 | 80  | Phl, Vnm             |
| 48. Vaidapakkam    | 75                              | 23 | 78  | Phl, Anm             |
| 49. Varagupattu    | 86                              | 15 | 81  | Anm, Vnr             |
| 50. Vengai         | 80                              | 20 | 80  | Anm, Phl             |
| 51. Vepperi        | 82                              | 15 | 126 | Anm, Vdm, Vnr        |
| 52. Vittalapuram   | 90                              | 19 | 100 | Anm, Vnr             |

| Village                       | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------|---------------------------------|----|-----|----------------------|
|                               | N                               | P  | K   |                      |
| <b>MAILAM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aakkur                     | 109                             | 32 | 166 | Phl, Anm             |
| 2. Aalagramam                 | 120                             | 29 | 223 | Vnr                  |
| 3. Aathikuppam                | 118                             | 18 | 216 | Anm                  |
| 4. Anganikuppam               | -                               | -  | -   | Phl, Anm             |
| 5. Ariyankuppam               | -                               | -  | -   | Vnr, Anm, Vdl        |
| 6. Avaiyakuppam               | 132                             | 28 | 229 | Vnr, Anm             |
| 7. Chinnanarkunam             | 76                              | 15 | 70  | Vnr, Phl, Vdl        |
| 8. Elamangalam                | 60                              | 5  | 92  | Vnr, Phl, Anm        |
| 9. Ezhai                      | 36                              | 11 | 146 | Vnr                  |
| 10. Ganapathipattu            | 158                             | 34 | 300 | Phl, Anm, Vnr        |
| 11. Kaattusiviri              | 130                             | 29 | 229 | Phl, Anm             |
| 12. Kallakolathur             | 68                              | 19 | 80  | Anm, Vdm             |
| 13. Kanniyam                  | 70                              | -  | 128 | Anm, Amp             |
| 14. Kodima                    | 93                              | 36 | 92  | Vnr, Vdv             |
| 15. Kollur                    | 124                             | 29 | 202 | Phl, Vnr             |
| 16. Kolliankunam              | 148                             | 33 | 207 | Phl, Anm             |
| 17. Konamangalam              | 56                              | 11 | 119 | Anm                  |
| 18. Kooteripattu              | 122                             | 15 | 124 | Phl, Anm             |
| 19. Kovalur                   | 52                              | 20 | 121 | Amp, Phl, Anm        |
| 20. Mailam                    | 120                             | -  | 140 | Phl, Anm             |
| 21. Manampoondi               | -                               | -  | -   | Phl, Anm             |
| 22. Melperadikuppam           | 117                             | -  | 98  | Anm, Phl             |
| 23. Muttyur                   | 87                              | 29 | 110 | Anm, Phl             |
| 24. Muppali                   | 124                             | 34 | 192 | Vnr, Mbm             |
| 25. Naduvarandal              | 75                              | -  | 127 | Phl, Anm             |
| 26. Nallanur                  | 60                              | 27 | 106 | Phl, Anm             |

| Village              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|----------------------|---------------------------------|----|-----|----------------------|
|                      | N                               | P  | K   |                      |
| 27. Nedimozhiyanur   | 74                              | 12 | 108 | Anm, Vnr             |
| 28. Ongur            | -                               | -  | -   | Vnr, Anm             |
| 29. Paampoondi       | 80                              | 24 | 124 | Vdm                  |
| 30. Paathiraapuliyur | 79                              | 98 | 70  | Vnr, Anm             |
| 31. Palapattu        | 84                              | 24 | 135 | Vnr                  |
| 32. Peramandur       | 191                             | 59 | 252 | Phl, Anm, Vnr        |
| 33. Perai            | 135                             | 30 | 260 | Vnr, Anm             |
| 34. Periyathachanur  | 123                             | 30 | 223 | Vnr, Anm, Vdl        |
| 35. Puliyatur        | 73                              | 4  | 90  | Phl, Anm, Vnr        |
| 36. Rettanai         | 69                              | 24 | 85  | Anm, Phl, Vnr        |
| 37. Saalai           | 122                             | 13 | 179 | Phl, Anm, Vnr        |
| 38. Sendiyampakkam   | 116                             | -  | 197 | Anm, Amp             |
| 39. Sendur           | 152                             | 32 | 208 | Anm, Vdm             |
| 40. Sithanai         | 68                              | 15 | 65  | Vnr, Anm             |
| 41. Sothamangalam    | -                               | -  | -   | Anm, Vdm             |
| 42. Thanial          | 69                              | 13 | 104 | Phl, Anm, Vnr        |
| 43. Thazhuthaali     | 85                              | -  | 102 | Anm, Vnr, Amp        |
| 44. Thenalipakkam    | 68                              | 13 | 86  | Amp                  |
| 45. Thenkolapakkam   | 80                              | 18 | 114 | Anm, Vnr, Amp        |
| 46. Thenkeripettu    | 70                              | -  | 128 | Vdv, Anm             |
| 47. Vidur            | 126                             | 26 | 226 | Phl, Anm, Vnr        |
| 48. Velliyatur       | 188                             | -  | 318 | Vdl, Anm, Phl        |
| 49. Vempoondi        | 57                              | 6  | 87  | Phl, Anm, Vdl        |
| 50. Vilagampaadi     | 57                              | 6  | 104 | Phl, Anm             |
| 51. Vilukkam         | 145                             | 19 | 117 | Vnr, Phl, Anm        |
| 52. V.Nallalam       | 122                             | 37 | 211 | Anm, Vnr             |
| 53. V.Paanjalum      | 106                             | 13 | 120 | Anm, Phl             |

| Village                        | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------------------|---------------------------------|----|-----|----------------------|
|                                | N                               | P  | K   |                      |
| <b>OLAKKUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aalehipakkam                | 126                             | 32 | 135 | Vnr, Anm, Amp        |
| 2. Aavanippur                  | 124                             | 16 | 123 | Anm, Phl             |
| 3. Ammananapakkam              | 95                              | 18 | 186 | Anm, Phl, Vnr        |
| 4. Andapattu                   | 131                             | 35 | 171 | Anm, Phl, Vnr        |
| 5. Athipakkam                  | 118                             | 18 | 216 | Vnr, Phl, Anm        |
| 6. Eppakkam                    | 58                              | 14 | 120 | Vnr, Anm, Phl        |
| 7. Evalur                      | 117                             | 19 | 210 | Vnr, Anm, Phl        |
| 8. Kadavampakkam               | 60                              | 16 | 82  | Anm, Vnr             |
| 9. Kalapakkam                  | 80                              | 27 | 94  | Phl, Anm             |
| 10. Kambur                     | 128                             | 29 | 224 | Vnr, Anm             |
| 11. Karikkampattu              | 106                             | 19 | 80  | Vnr, Anm             |
| 12. Karuppur                   | 69                              | 11 | 106 | Vnr, Anm             |
| 13. Karuvampakkam              | 71                              | 15 | 80  | Vnr, Anm             |
| 14. Keeladhanur                | 118                             | 40 | 71  | Anm, Phl, Vnr        |
| 15. Keelcoodalar               | 63                              | 31 | 76  | Vnr, Anm             |
| 16. Keelkaranai                | 71                              | 18 | 82  | Anm, Phl, Vnr        |
| 17. Keel mavilangai            | 85                              | 31 | 100 | Phl, Anm             |
| 18. Keelmalayanur              | 104                             | 29 | 150 | Phl, Anm             |
| 19. Kilmannur                  | 110                             | 22 | 136 | Anm, Amp             |
| 20. Kil Nemil                  | 120                             | 24 | 155 | Phl, Anm, Vnr        |
| 21. Kil seyur                  | 71                              | 18 | 125 | Phl, Anm, Vnr        |
| 22. Kiranthipuram              | 40                              | 44 | 86  | Vnr, Phl             |
| 23. Kodiyam                    | 40                              | 48 | 80  | Phl, Anm             |
| 24. Kovalur                    | 68                              | 24 | 116 | Amp, Phl             |
| 25. Kuttukolathor              | 102                             | 11 | 120 | Vnr, Anm             |
| 26. Kumappakkam                | 127                             | 12 | 167 | Vnr, Anm             |
| 27. Maampakkam                 | 84                              | -  | 112 | Phl, Anm             |
| 28. Mangalam                   | 115                             | 24 | 117 | Phl, Anm             |

| Village            | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------|---------------------------------|----|-----|----------------------|
|                    | N                               | P  | K   |                      |
| 29. Meladhanor     | 115                             | 39 | 72  | Anm, Vnr, Phl        |
| 30. Melmaavilangai | 115                             | 15 | 35  | Phl, Anm, Vnr        |
| 31. Melpakkam      | 124                             | 20 | 154 | Anm, Phl             |
| 32. Melpettai      | 77                              | -  | 182 | Mgd, Anm             |
| 33. Mel siviri     | 77                              | -  | 71  | Phl, Anm, Vnr        |
| 34. Nagavanam      | 82                              | 18 | 141 | Phl, Anm, Vnr        |
| 35. Nallathur      | 123                             | 27 | 206 | Vnr, Anm             |
| 36. Nangunam       | 136                             | 20 | 150 | Anm, Vnr             |
| 37. Naramaagani    | 81                              | 14 | 126 | Phl, Anm, Vnr        |
| 38. Nedunthondi    | 76                              | 10 | 88  | Phl, Anm, Vnr        |
| 39. Nolampur       | 123                             | 32 | 210 | Anm, Phl, Vdv        |
| 40. Olakkur        | 123                             | 27 | 204 | Anm, Vnr             |
| 41. Ooral          | 85                              | 40 | 98  | Vdv                  |
| 42. Paangkulathur  | 84                              | -  | 124 | Vnr, Anm             |
| 43. Pattanam       | 123                             | 32 | 208 | Vdv, Anm             |
| 44. Peraperi       | 120                             | 19 | 130 | Phl, Vnv             |
| 45. Puliyur        | 125                             | 25 | 194 | Vnr, Anm             |
| 46. Purangarai     | 121                             | 26 | 76  | Anm, Phl             |
| 47. Saaram         | 120                             | -  | 175 | Vnr, Anm             |
| 48. Saathanur      | 123                             | 24 | 222 | Vnr, Anm             |
| 49. Sembakkam      | 67                              | -  | 98  | Phl, Vnr, Anm        |
| 50. Senthamangalam | 130                             | 26 | 241 | Phl, Anm             |
| 51. Singaanikuppam | 84                              | -  | 102 | Phl, Anm, Vdu        |
| 52. Sitheripattu   | 68                              | 16 | 129 | Vnr, Anm, Phl        |
| 53. Thengaapakkam  | 84                              | 24 | 146 | Anm, Phl             |
| 54. Thennampoondi  | 118                             | 40 | 109 | Vnr, Phl, Anm        |
| 55. Vadampoondi    | 148                             | 32 | 194 | Phl                  |
| 56. Venmaniyathur  | 59                              | 6  | 79  | Phl, Anm, Amp        |

- Data not available

## LAND CAPABILITY

### TINDIVANAM TALUK

| Area (ha) | Land Capability Classification | Soil Series                 | Limitation                            | Needs  |
|-----------|--------------------------------|-----------------------------|---------------------------------------|--|
| 180       | II e                           | Vadamadurai<br>Vadalapakkam | Erosion                               | Soil conservation                              |
| 7745      | II s                           | Arasanatham                 | Moderate alkalinity<br>Calcareousness | Soil reclamation                               |
| 461       | II s                           | Mangadu                     | Sub surface texture                   | Soil texture improvement,<br>soil conservation |
| 896       | III sw                         | Ammapettai                  | Heavy texture drainage                | Improving drainage<br>selection of crops       |
| 6476      | III sw                         | Vanur                       | Alkalinity<br>sub surface drainage    | Improving drainage<br>selection of crops       |
| 307       | IV se                          | Pachol                      | Shallow depth erosion, gravels        | Selection of crops<br>soil conservation        |

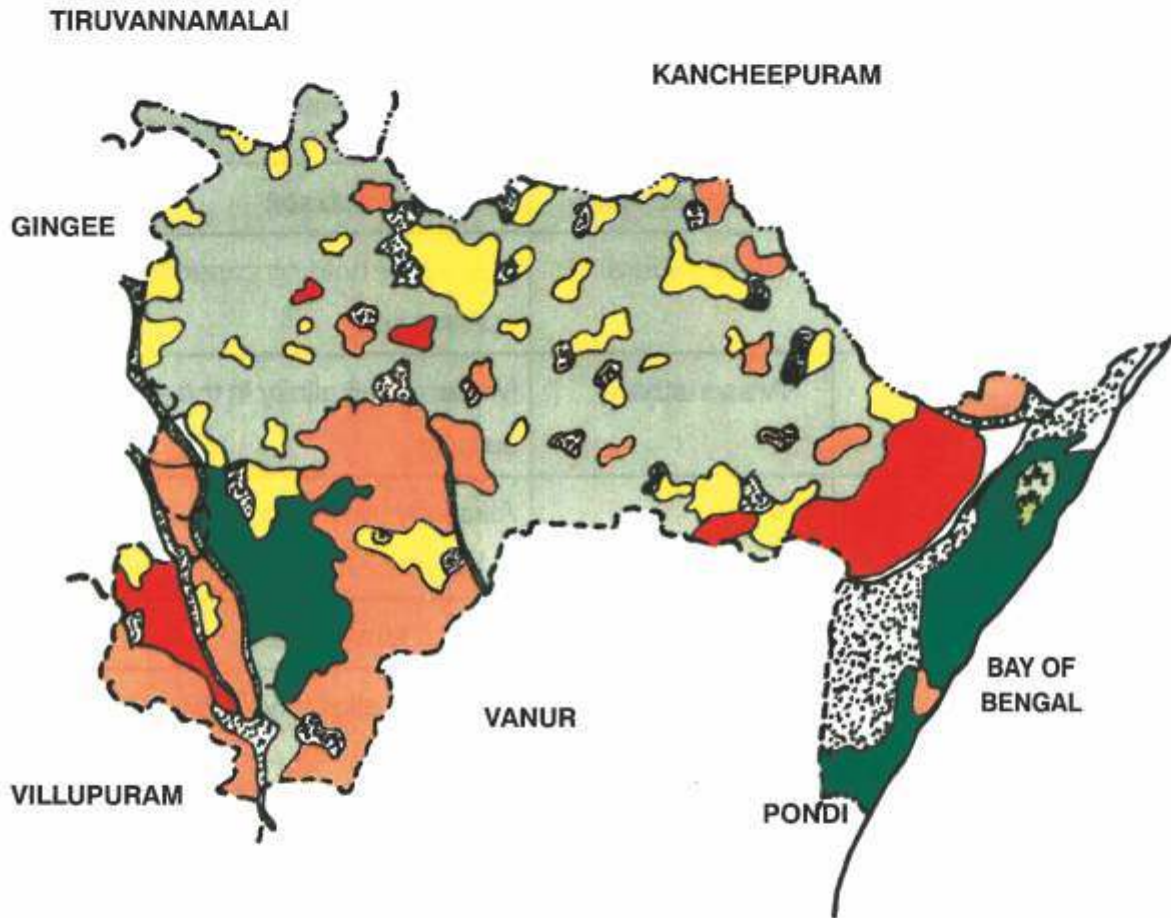
#### **Class**

- 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 severe limitations for sustained use under agriculture.

#### **Sub-class**

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY TINDIVANAM TALUK



## REFERENCE

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

## LEGEND

- II e
- II s
- III sw
- IV s
- IV se

## LAND IRRIGABILITY

### TINDIVANAM TALUK

| Area (ha) | Irrigability Classification | Soil Series  | Limitation   |
|-----------|-----------------------------|--------------|--|
| 563       | 2 s                         | Vadalapakkam | Gravels in sub soil                                    |
| 180       | 2 s                         | Vadamadurai  | Low water holding capacity in surface soil             |
| 7745      | 2 s                         | Arasanatham  | Moderate alkalinity in the sub surface                 |
| 6476      | 2 sd                        | Vanur        | Alkalinity, slow permeability in the sub surface layer |
| 461       | 2 ds                        | Mangadu      | Floods, stratification                                 |
| 876       | 3 sd                        | Ammapettai   | Moderate alkalinity, slow permeability                 |
| 307       | 4 st                        | Pachol       | Shallowness, gravels, erosion                          |

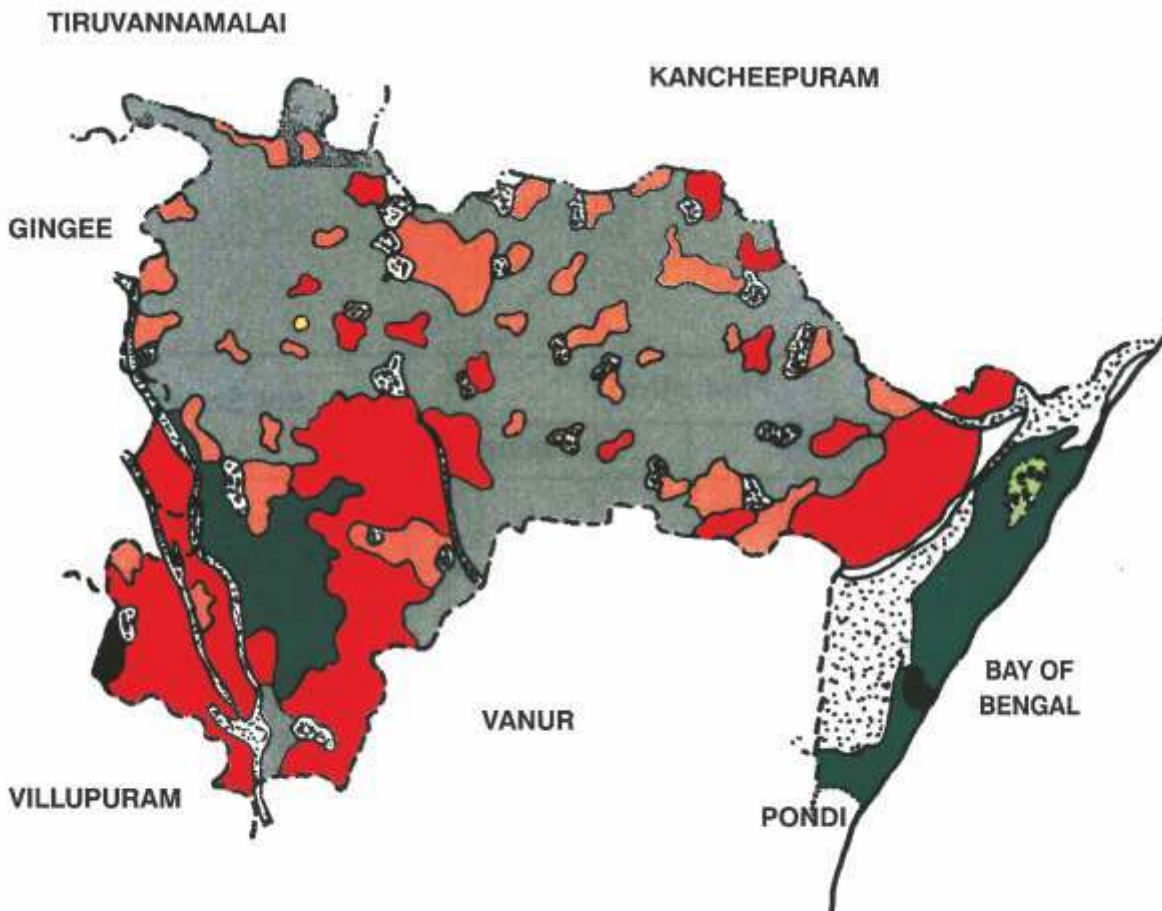
#### **Class**

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

#### **Sub class**

- s - Soil limitation  
t - Topography  
d - Drainage

# LAND IRRIGABILITY TINDIVANAM TALUK



## REFERENCE

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

## LEGEND

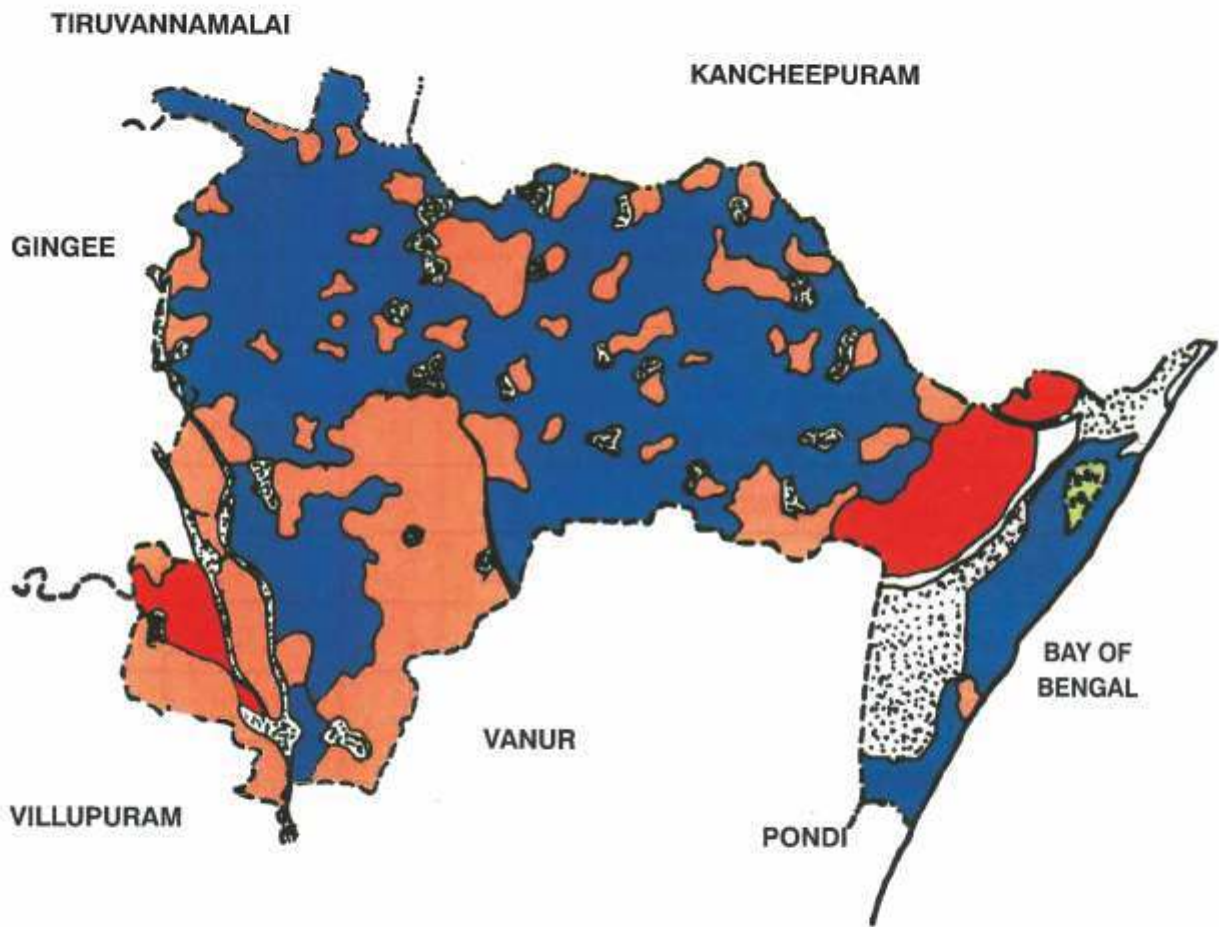
- 2 s
- 2 sd
- 2 ds
- 3 sd
- 4 sl
- 4 sd

## SOIL PRODUCTIVITY

### TINDIVANAM TALUK

| Area<br>(ha) | Productivity |                | Soil Series   |
|--------------|--------------|----------------|---|
|              | Rating       | Grouping       |   |
| 307          | 0 – 7        | Extremely poor | Pachol  |
| 16141        | 20 – 34      | Average        | Mangadu<br>Arasanatham<br>Ammapettai<br>Vadalapakkam<br>Vanur |
| 180          | 35 – 64      | Good           | Vadamadurai   |

# SOIL PRODUCTIVITY TINDIVANAM TALUK



## REFERENCE

- · · · — STATE BOUNDARY
- · · — DISTRICT BOUNDARY
- · — · — TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- FOREST BOUNDARY
- TANKS

## LEGEND

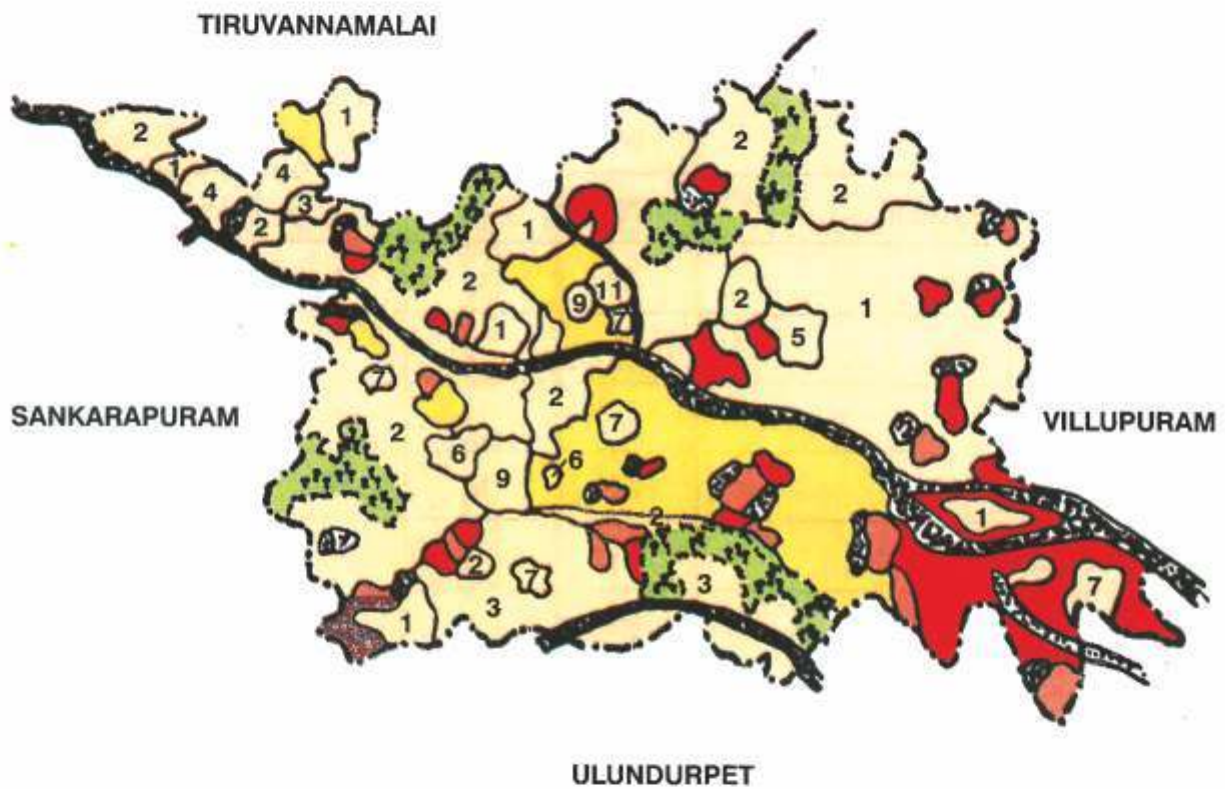
- EXTREMELY POOR
- AVERAGE
- GOOD

## SOILS

### TIRUKKOVILUR TALUK

| Soil Series                           | Map Symbol | Extent       |               |
|---------------------------------------|------------|--------------|---------------|
|                                       |            | ha           | %             |
| 1 Vadamadurai                         | Vdm        | 6691         | 9.17          |
| 2 Arasanatham                         | Anm        | 5683         | 7.79          |
| 3 Vanur                               | Vnr        | 3993         | 5.47          |
| 4 Arasnatham + Vadamadurai            | 1          | 12130        | 16.62         |
| 5 Vadamadurai + Arasanatham           | 2          | 7075         | 9.70          |
| 6 Vadavalam + Vadamadurai             | 3          | 3819         | 5.23          |
| 7 Vadavalam + Arasanatham             | 4          | 950          | 1.30          |
| 8 Vadamadurai + Pachol                | 5          | 526          | 0.72          |
| 9 Arasanatham + Pachol                | 6          | 1040         | 1.43          |
| 10 Vanur + Arasanatham                | 7          | 1894         | 2.60          |
| 11 Pachol + Arasanatham               | 8          | 510          | 0.70          |
| 12 Vadamadurai + Arasanatham + Pachol | 9          | 640          | 0.87          |
| <b>Total</b>                          |            | <b>44951</b> | <b>61.60</b>  |
| <b>Forest</b>                         |            | <b>2401</b>  | <b>3.29</b>   |
| <b>Others</b>                         |            | <b>25617</b> | <b>35.11</b>  |
| <b>Grand Total</b>                    |            | <b>72969</b> | <b>100.00</b> |

# SOILS TIRUKKOVILUR TALUK



## REFERENCE

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

## LEGEND

-  Vdm VADAMADURAI
-  Vnr VANUR
-  Arsm ARASANATHAM
-  SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                             | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------------|---------------------------------|----|-----|----------------------|
|                                     | N                               | P  | K   |                      |
| <b>TIRUKKOVILUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aalur                            | 70                              | 11 | 131 | Anm                  |
| 2. Athanamarudur                    | 84                              | -  | 165 | Vdm, Anm, Mbm        |
| 3. Ariyur                           | 72                              | -  | 168 | Vdm, Vdl, Vnr        |
| 4. Arumpakkam                       | 67                              | -  | 148 | Vdm, Vdl, Vnr        |
| 5. Aruthangudi                      | 64                              | -  | 155 | Vdm, Anm             |
| 6. Cholapandipuram                  | 70                              | -  | 152 | Vdl, Vdm             |
| 7. Deviagaram                       | 72                              | -  | 147 | Vdl, Vdm             |
| 8. Edaiyur                          | 66                              | 8  | 363 | Mbm, Mgd             |
| 9. Elrampattu                       | 87                              | 16 | 124 | Vdm, Anm             |
| 10. Eravalam                        | 79                              | 16 | 130 | Vnr                  |
| 11. J.Sithamur                      | 70                              | -  | 142 | Vdm, Anm             |
| 12. Kaadiyar                        | 80                              | -  | 102 | Vdm, Anm             |
| 13. Kattupaiyur                     | 61                              | 9  | 186 | Vdl, Vdm, Anm        |
| 14. Kanaganandal                    | 82                              | -  | 130 | Vdm, Anm, Phi        |
| 15. Karadi                          | 76                              | -  | 92  | Vdm, Anm, Vnr        |
| 16. Kodyur                          | 61                              | 12 | 145 | Vdm, Anm             |
| 17. Komalur                         | 68                              | -  | 155 | Vdm, Anm, Phi        |
| 18. Konagalavadi                    | 68                              | -  | 117 | Vnr, Vdm, Anm        |
| 19. Kozhapparai                     | 61                              | 9  | 151 | Vdm, Anm, Phi        |
| 20. Mayyur                          | 59                              | 14 | 126 | Mbm, Mgd             |
| 21. Mudalur                         | 77                              | -  | 485 | Vdm, Anm             |
| 22. Mudiyanur                       | 72                              | 9  | 185 | Vdm, Anm             |

| Village             | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|---------------------|---------------------------------|----|-----|----------------------|
|                     | N                               | P  | K   |                      |
| 23. Mozanur         | 71                              | 9  | 148 | Vdm, Anm             |
| 24. Nariyandal      | 16                              | -  | 143 | Vdm, Anm             |
| 25. Nedumudaiyan    | 66                              | 13 | 163 | Vdm, Anm, Phl        |
| 26. Paadiyandal     | 84                              | 16 | 75  | Anm, Phl             |
| 27. Panappadi       | 59                              | -  | 133 | Vdm, Anm, Phl        |
| 28. Periyatur       | 62                              | 11 | 191 | Vnr                  |
| 29. Ponniyandal     | 58                              | -  | 113 | Vdm, Anm, Phl        |
| 30. Poomari         | 73                              | -  | 152 | Anm, Vdm             |
| 31. Saangiyam       | 73                              | -  | 155 | Vdl, Vdm, Anm        |
| 32. Sengamankollai  | 75                              | -  | 162 | Vdl, Vdm, Anm        |
| 33. Sivanaarthangal | 84                              | 12 | 91  | Vdm, Anm, Phl        |
| 34. Thangadi        | 84                              | 16 | 121 | Vdm, Mdm             |
| 35. Thimchur        | 59                              | 13 | 98  | Anm, Phl             |
| 36. Thanaganandal   | 72                              | -  | 165 | Vdm, Anm, Phl        |
| 37. Thimpanandel    | 86                              | 15 | 332 | Vdm, Anm, Vnr        |
| 38. Thurrinjipattu  | 72                              | -  | 152 | Vdm, Anm, Vnr        |
| 39. Vaangur         | 68                              | -  | 151 | Vdm, Vdl, Vnr        |
| 40. Vadakkunemili   | 76                              | -  | 78  | Anm, Vdm             |
| 41. Vadamalaiyanur  | 72                              | -  | 180 | Vdm, Anm             |
| 42. Vadamaruthur    | 84                              | -  | 88  | Vdm, Anm, Vnr        |
| 43. Villivalem      | 65                              | -  | 129 | Vdm, Anm             |

| Village                                 | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|---|---------------------------------|----|-----|----------------------|
|   | N                               | P  | K   |                      |
| <b>THIRUVENNAIALLUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aadur                                | 72                              | -  | 153 | Anm                  |
| 2. Andrayanallur                        | 78                              | -  | 150 | Phl                  |
| 3. Arunkurukkai                         | 67                              | -  | 153 | Vdm, Anm             |
| 4. Chinnasewalai                        | 72                              | -  | 147 | Anm, Vnr             |
| 5. C.Meyyur                             | 71                              | -  | 48  | Vdm, Anm             |
| 6. Elandhurai                           | 65                              | -  | 144 | Anm, Phl, Mbm        |
| 7. Emaper                               | 65                              | -  | 148 | Anm, Phl, Mbm        |
| 8. Enathimangalam                       | 78                              | -  | 53  | Anm, Vdm, Vnr        |
| 9. Eralur                               | 82                              | -  | 149 | Vdm                  |
| 10. Konalavadi                          | 87                              | 32 | 109 | Vdm, Anm             |
| 11. Manakuppam                          | 70                              | -  | 155 | Vnm                  |
| 12. Melamangalam                        | 73                              | -  | 79  | Anm                  |
| 13. Paavandur                           | 74                              | -  | 146 | Vnr, Anm             |
| 14. Panapakkam                          | 81                              | -  | 57  | Mbm, Anm             |
| 15. Pennaivalam                         | 77                              | 5  | 122 | Vnr, Vdm             |
| 16. Semmar                              | 83                              | -  | 61  | Vdm, Anm             |
| 17. Srithaamungur                       | 91                              | 16 | 98  | Anm, Vdm             |
| 18. Sithalingamangalam                  | 76                              | -  | 80  | Vdm, Anm             |
| 19. Sirumdadurai                        | 58                              | -  | 97  | Vnr, Anm             |
| 20. Siruvanur                           | 70                              | -  | 86  | Vnr, Anm             |
| 21. Thiruvennaiallur                    | -                               | -  | -   | Vnr, Anm             |
| 22. Vazhayampattu                       | 77                              | -  | 99  | Anm                  |

| Village                         | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|---------------------------------|---------------------------------|----|-----|----------------------|
|                                 | N                               | P  | K   |                      |
| <b>MUGAIYUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aaalapadi                    | 62                              | -  | 206 | Vdm, Anm             |
| 2. Aayandur                     | 72                              | 18 | 91  | Vdm, Anm             |
| 3. Adukkam                      | 62                              | -  | 148 | Vdm, Anm             |
| 4. Andhili                      | 78                              | -  | 164 | Anm, Phl             |
| 5. Arkadu                       | 72                              | -  | 146 | Vnr, Vdm             |
| 6. Aralavadi                    | 78                              | -  | 119 | Anm, Phl             |
| 7. Arumoolai                    | 87                              | -  | 82  | Mbm, Anm, Phl        |
| 8. Athichanur                   | 61                              | -  | 151 | Anm, Vdm             |
| 9. Athipaakkam                  | 66                              | -  | 150 | Vdm, Anm             |
| 10. Athiyandal                  | 81                              | -  | 192 | Vdm, Anm             |
| 11. Devaradiyarkuppam           | 87                              | 18 | 115 | Vdm, Vdl             |
| 12. Emaper                      | 66                              | -  | 110 | Anm, Phl             |
| 13. Kadaganur                   | 53                              | 10 | 114 | Vdm, Anm             |
| 14. Kaangayanur                 | 58                              | 6  | 126 | Vdm, Anm             |
| 15. Kallandal                   | 86                              | 36 | 184 | Anm                  |
| 16. Kandaachipuram              | 69                              | -  | 88  | Vdm, Anm             |
| 17. Kozhudirampattu             | 75                              | -  | 69  | Vdm, Mbm             |
| 18. Kuladeepamangalam           | 63                              | -  | 145 | Vdm, Anm             |
| 19. Manampoondi                 | 62                              | 8  | 146 | Vnr, Anm             |
| 20. Melandal                    | 86                              | -  | 88  | Vdm, Anm             |
| 21. Mugaiyur                    | 63                              | -  | 230 | Vdm, Anm             |
| 22. Murukkampadi                | 70                              | 13 | 98  | Anm, Vdm             |
| 23. Nerkunam                    | 82                              | -  | 85  | Anm                  |
| 24. Othiyathur                  | 61                              | -  | 169 | Vdm, Anm, Vnr        |
| 25. Ottampattu                  | 67                              | -  | 112 | Vdm, Anm, Vnr        |
| 26. Paramur                     | 54                              | -  | 128 | Vdm, Anm             |
| 27. Pilarampattu                | 61                              | -  | 138 | Vdm, Anm             |
| 28. Pudupalayam                 | -                               | -  | -   | Vdm, Anm             |
| 29. Sathiakandanur              | 78                              | -  | 199 | Vdm, Anm             |
| 30. Vadakarathazhanur           | 70                              | -  | 109 | Vdm, Anm             |
| 31. Vasanthakrishnapuram        | 84                              | -  | 292 | Vdm, Anm             |
| 32. Veeracholapuram             | 87                              | 16 | 98  | Vdm, Mbm             |
| 33. Veerangipuram               | 68                              | -  | 148 | Vdm, Anm             |
| 34. Veerapandi                  | 70                              | 10 | 151 | Anm, Vdm             |
| 35. Vellamputtur                | 73                              | -  | 108 | Anm, Phl             |

- Data not available

## LAND CAPABILITY

### TIRUKKOVILUR TALUK

| Area (ha) | Land Capability Classification | Soil Series | Limitation                          | Needs                                  |
|-----------|--------------------------------|-------------|-------------------------------------|--|
| 6691      | II e                           | Vadamadurai | Erosion                             | Soil conservation                      |
| 5683      | II s                           | Arasanatham | Moderate alkalinity, calcareousness | Soil reclamation                       |
| 3993      | II sw                          | Vanur       | Alkalinity, sub-surface drainage    | Improving drainage, selection of crops |

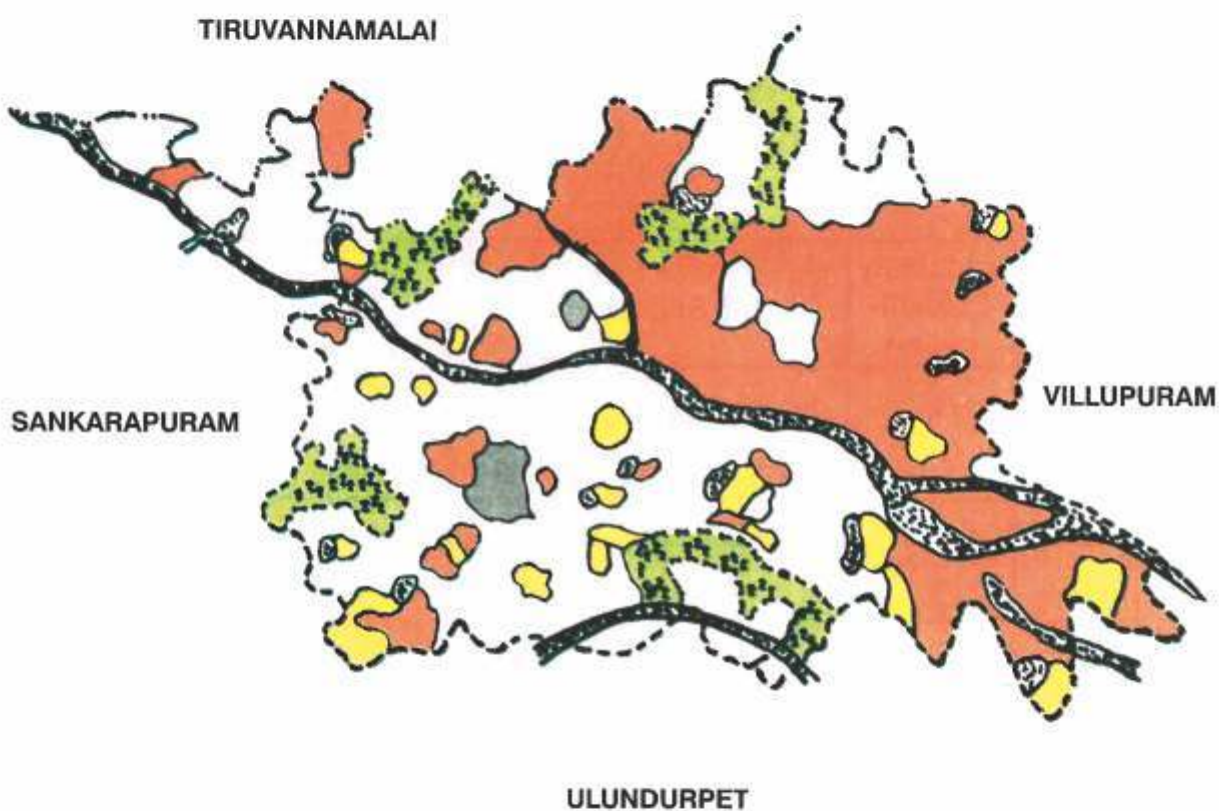
#### Class

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

#### Sub-class

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY TIRUKKOVILUR TALUK



## REFERENCE

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

## LEGEND

- II e
- II s
- III se
- IV se

## LAND IRRIGABILITY

### TIRUKOVILUR TALUK

| Area (ha) | Irrigability Classification | Soil Series | Limitation                                       |
|-----------|-----------------------------|-------------|--|
| 6691      | 2 s                         | Vadamadurai | Low to water holding capability in the surface   |
| 5683      | 2 s                         | Arasanatham | Moderat alkalinity in the sub surface            |
| 3993      | 2 sd                        | Vanur       | Alkalinity, slow permeability in the sub surface |

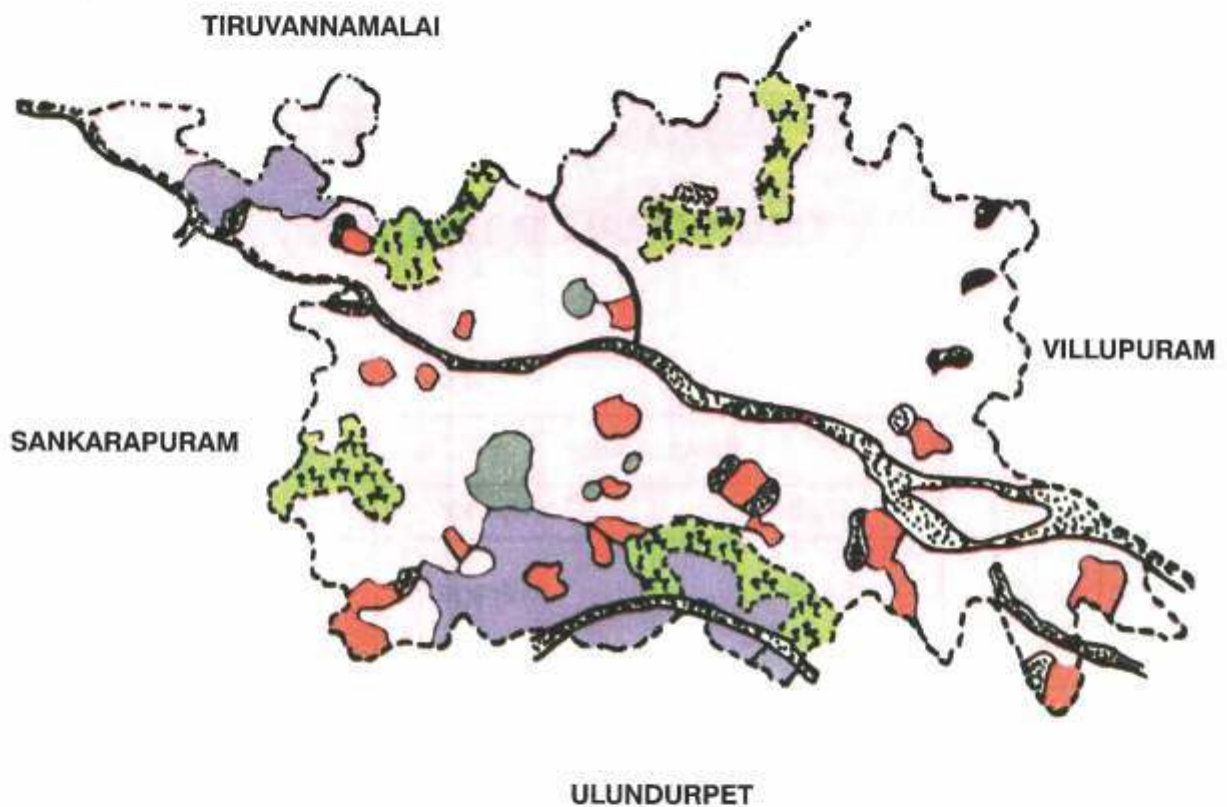
#### **Class**

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

#### **Sub class**

- S - Soil limitation  
d - Drainage

# LAND IRRIGABILITY TIRUKKOVILUR TALUK



## REFERENCE

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

## LEGEND

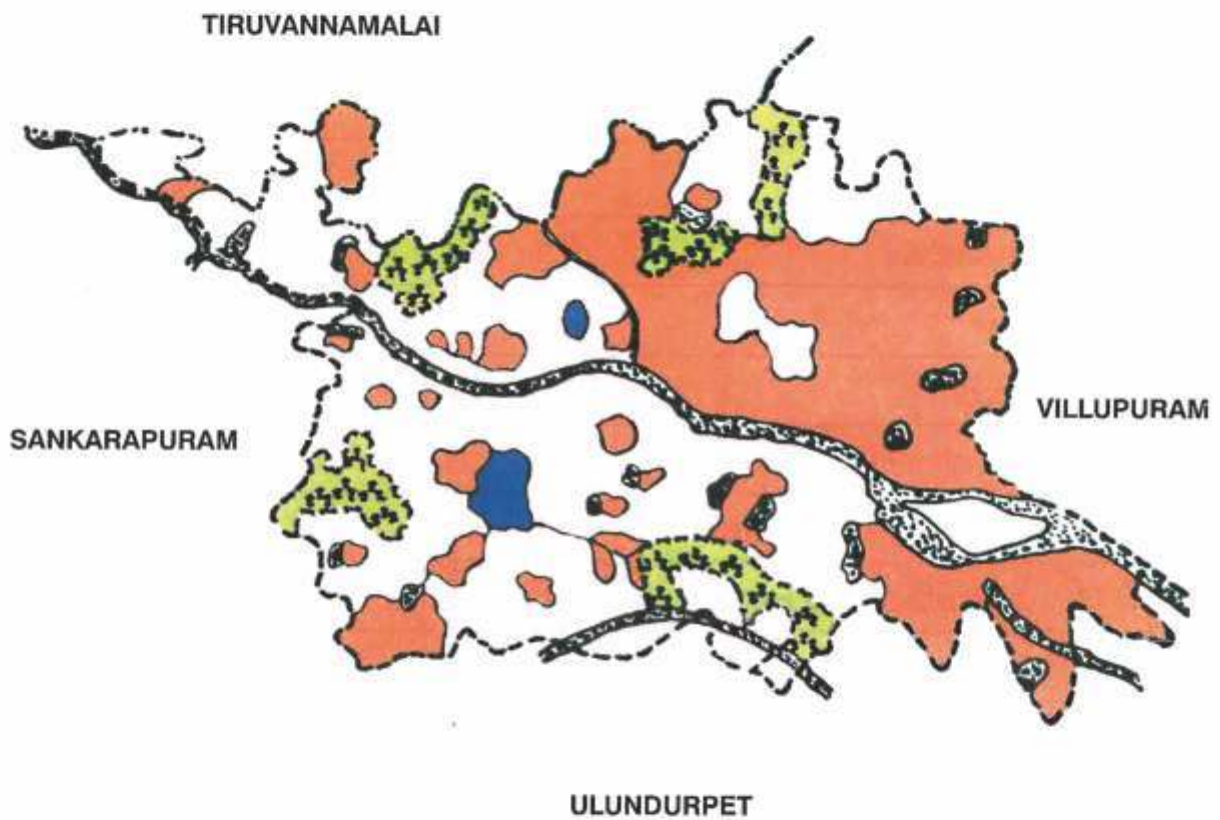
- ☐ 2 s
- ☐ 2 d
- ☐ 2 sd
- ☐ 4 sd

## SOIL PRODUCTIVITY

### TIRUKKOVILUR TALUK

| Area<br>(ha) | Productivity |          | Soil Series          |
|--------------|--------------|----------|----------------------|
|              | Rating       | Grouping |                      |
| 9676         | 20-34        | Average  | Arasanatham<br>Vanur |
| 6691         | 35-64        | Good     | Vadamadurai          |

# SOIL PRODUCTIVITY TIRUKKOVILUR TALUK



## REFERENCE

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

## LEGEND

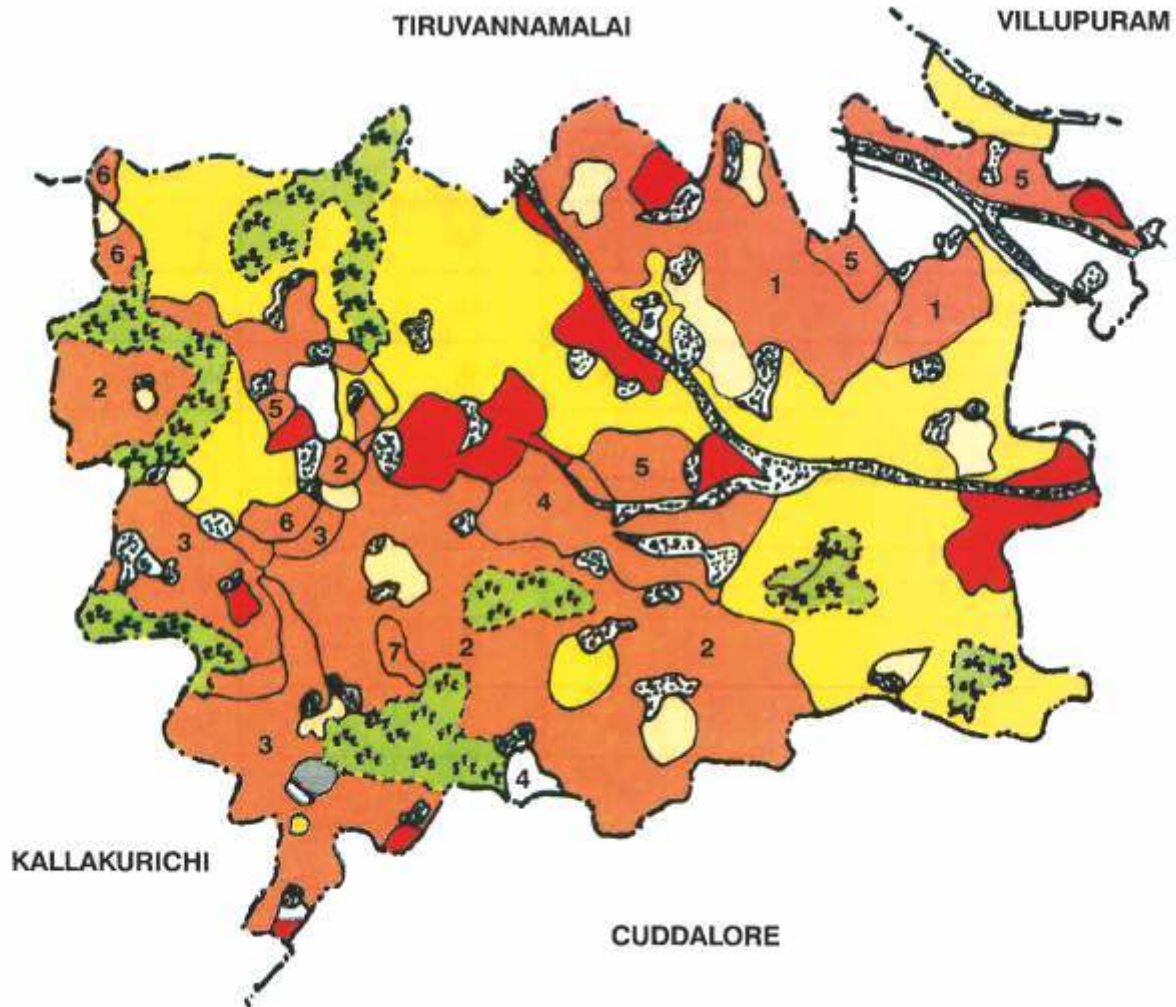
- EXTREMELY POOR
- AVERAGE
- GOOD

## SOILS

### ULUNDURPET TALUK

| Soil Series                  | Map Symbol | Extent       |              |
|------------------------------|------------|--------------|--------------|
|                              |            | ha           | %            |
| 1. Vadamadurai               | Vdm        | 16281        | 21.94        |
| 2. Arasanatham               | Anm        | 4813         | 6.49         |
| 3. Vanur                     | Vnr        | 4044         | 5.45         |
| 4. Pachol                    | Phl        | 1644         | 2.22         |
| 5. Vadavalam + Vadamadurai   | 1          | 8141         | 10.98        |
| 6. Arasanatham + Vadamadurai | 2          | 9293         | 12.52        |
| 7. Vadamadurai + Arasanatham | 3          | 4992         | 6.73         |
| 8. Arasanatham + Vanur       | 4          | 2739         | 3.69         |
| 9. Vanur + Arasanatham       | 5          | 2867         | 3.86         |
| 10. Vadavalam + Arasanatham  | 6          | 1254         | 1.69         |
| <b>Total</b>                 |            | <b>56068</b> | <b>75.57</b> |
| <b>Forest</b>                |            | <b>3767</b>  | <b>5.07</b>  |
| <b>Others</b>                |            | <b>14373</b> | <b>19.36</b> |
| <b>Grand Total</b>           |            | <b>74208</b> | <b>100.0</b> |

# SOILS ULUNDURPET TALUK



## REFERENCE

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

## LEGEND

- Phi PACHOL
- Vdm VADAMADURAI
- Vdm ARASANATHAM
- Vdm VANUR
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                             | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------------------------|---------------------------------|----|-----|----------------------|
|                                     | N                               | P  | K   |                      |
| <b>THIRUNAVALUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aarinatham                       | 91                              | 24 | 115 | Vdm                  |
| 2. Aathanur                         | 85                              | 14 | 156 | Anm, Vdm, Vds        |
| 3. A.Kurumbar                       | 68                              | 12 | 173 | -                    |
| 4. Andikuzhi                        | 85                              | 12 | 117 | Vdm, Anm             |
| 5. Athur                            | 85                              | 14 | 156 | Vnr, Vdm             |
| 6. Deviyandal                       | 56                              | 14 | 107 | Vnr, Vdm             |
| 7. East Maruthur                    | 82                              | 10 | 142 | Vdm                  |
| 8. Eswarakandanallur                | 76                              | -  | 138 | Vdm                  |
| 9. Irundai                          | 58                              | -  | 105 | Vdm, Vdl             |
| 10. Kalamaruthur                    | 66                              | 25 | 105 | Vnr, Anm             |
| 11. Kalavanur                       | 72                              | 12 | 112 | -                    |
| 12. Kallakurichi                    | 88                              | -  | 128 | Vdm, Anm             |
| 13. Kanipattu                       | 81                              | 12 | 105 | Anm                  |
| 14. Koovaagam                       | 66                              | 17 | 117 | Vnr, Vdm             |
| 15. Koratoor                        | 63                              | -  | 51  | Vdm, Vnr             |
| 16. Madappattu                      | 69                              | 11 | 100 | Vdm                  |
| 17. Madhiyanoor                     | 57                              | 13 | 117 | Vdm                  |
| 18. Meppuliyur                      | 62                              | -  | 184 | Vdm                  |
| 19. Mettathur                       | 66                              | 16 | 116 | Vdm, Vnr             |
| 20. Nachiyarpettai                  | 83                              | 12 | 105 | Vdm                  |
| 21. Nagari                          | 77                              | 12 | 85  | Vdm, Anm, Vnr        |
| 22. Nannaaram                       | 92                              | 15 | 127 | Vdm                  |

| Village           | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-------------------|---------------------------------|----|-----|----------------------|
|                   | N                               | P  | K   |                      |
| 23. Nemili        | 57                              | -  | 174 | Anm                  |
| 24. Odappankuppam | 64                              | -  | 144 | Vdm                  |
| 25. Orathur       | 84                              | 18 | 132 | Anm, Vnr             |
| 26. Paandur       | 79                              | -  | 99  | Vdm, Anm             |
| 27. Parikkal      | 67                              | -  | 154 | Vdm, Vdl             |
| 28. Perumpakkam   | 115                             | -  | 257 | Vnr                  |
| 29. Perumpattu    | 72                              | -  | 114 | Anm, Vnr             |
| 30. Semmannadal   | 72                              | -  | 221 | Vdm                  |
| 31. Sendamangalam | 76                              | -  | 83  | Vdm                  |
| 32. Sendandu      | 116                             | -  | 122 | Anm, Vdm             |
| 33. Senkurichi    | 82                              | -  | 138 | Vdm                  |
| 34. Siruthanur    | 72                              | 8  | 124 | Vdm                  |
| 35. Sirulappattu  | 74                              | 14 | 130 | Vdm                  |
| 36. Somasipalayam | 75                              | -  | 171 | Vnr, Vdm             |
| 37. Thirumanallur | 78                              | -  | 201 | Vnr, Vdm             |
| 38. Vanampattu    | 71                              | 12 | 85  | Vdm, Anm             |
| 39. Vellur        | 82                              | -  | 96  | Anm, Anm             |

| Village                           | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------------------|---------------------------------|----|-----|----------------------|
|                                   | N                               | P  | K   |                      |
| <b>ULUNDURPET PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aasanur                        | 56                              | -  | 174 | Vdm, Anm             |
| 2. Alangiri                       | 64                              | 18 | 176 | Vds                  |
| 3. Anganur                        | 71                              | 6  | 148 | Vdm, Anm             |
| 4. Athipakkam                     | 72                              | 10 | 121 | Vdm                  |
| 5. Ellaigramam                    | 60                              | 9  | 81  | Vdm                  |
| 6. Eraiyur                        | 71                              | -  | 112 | Anm, Vnr             |
| 7. Kaattunemili                   | 62                              | -  | 173 | Anm, Vnr             |
| 8. Kaattusellur                   | 72                              | 8  | 76  | Vdm                  |
| 9. Kattukadaiyar                  | 76                              | -  | 102 | Vdm, Vdl             |
| 10. Kiliyur                       | 87                              | -  | 75  | Vdm                  |
| 11. Kittanur                      | 80                              | -  | 174 | Vdm                  |
| 12. Kolathur                      | 76                              | 11 | 132 | Vdm, Vnr             |
| 13. Konalavadi                    | 58                              | -  | 201 | Vdm, Anm             |
| 14. Konamangalam                  | 92                              | -  | 124 | Vdm, Anm             |
| 15. Kumaramangalam                | 95                              | -  | 108 | Mbm, Vdm             |
| 16. Kunnathur                     | 75                              | 12 | 121 | Vdm, Anm             |
| 17. Kunjaram                      | 68                              | -  | 105 | Anm, Vdm             |
| 18. Maghavarayanur                | 89                              | 16 | 121 | Vdm, Anm             |
| 19. Moolasamuthiram               | 59                              | 10 | 124 | anm, Vdn             |
| 20. Nedumanur                     | 77                              | 12 | 126 | Vdm, Anm             |
| 21. Neyvanai                      | 67                              | -  | 138 | Vdm, Anm             |
| 22. Nonayavadi                    | 72                              | 20 | 146 | Vdm, Anm             |

| Village               | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|-----------------------|---------------------------------|----|-----|----------------------|
|                       | N                               | P  | K   |                      |
| 23. Paali             | 86                              | 9  | 182 | Vdm, Anm             |
| 24. Pallavadi         | 106                             | -  | 184 | Vdm, Anm             |
| 25. Pariyandal        | 61                              | 12 | 216 | Vdm, Anm, Vnr        |
| 26. Periyakurukai     | 76                              | 9  | 184 | anm, Vdm             |
| 27. Pidaagam          | 78                              | 16 | 104 | Vdm                  |
| 28. P.Malaiyanur      | 56                              | 12 | 138 |                      |
| 29. Puthamangalam     | 73                              | -  | 160 | Vdm, Anm             |
| 30. Pugaipatti        | 74                              | -  | 162 | Vdm                  |
| 31. Pullur            | 84                              | -  | 118 | Anm, Vnm, Anm        |
| 32. Ragunathapuram    | 88                              | 12 | 111 | Vdm                  |
| 33. Ravutharayanpuram | 92                              | 8  | 152 | Anm                  |
| 34. saathanur         | 73                              | 9  | 62  | Vdm, Anm             |
| 35. Sikkampattu       | 68                              | -  | 172 | Vdm                  |
| 36. Sembiamadevi      | 75                              | 12 | 105 | Vnr, Anm, Vdm        |
| 37. Sikkadu           | 61                              | 11 | 184 | Vdm, Anm             |
| 38. Sirupakkam        | 80                              | 14 | 120 | Vdm, Vnr             |
| 39. Sridevi           | 58                              | 16 | 194 | Vdm, Anm             |
| 40. Thenkunam         | 74                              | -  | 175 | Vdm                  |
| 41. Thirupayer        | 84                              | -  | 152 | Vdm, Anm             |
| 42. Vadakarumbur      | 62                              | 10 | 147 |                      |
| 43. Vadammampakkam    | 86                              | 14 | 133 |                      |
| 44. Veeramangalam     | 63                              | -  | 172 | Vdm, Anm             |
| 45. Vellaiyar         | 60                              | -  | 98  | Vdm, Vnr             |

- Data not available

## LAND CAPABILITY

### ULUNDURPET TALUK

| Area (ha) | Land Capability Classification | Soil Series | Limitation                          | Needs                                  |
|-----------|--------------------------------|-------------|-------------------------------------|--|
| 16281     | II e                           | Vadamadurai | Erosion                             | Soil conservation                      |
| 4813      | II s                           | Arasanatham | Moderate alkalinity, calcareousness | Soil reclamation                       |
| 4044      | II sw                          | Vanur       | Alkalinity, sub surface drainage    | Improving drainage, selection of crops |
| 1644      | IV se                          | Pachol      | Shallow depth, erosion, gravels     | Selection of crops, soil conservation  |

#### **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 severe limitations for sustained use under agriculture.

#### **Sub-class**

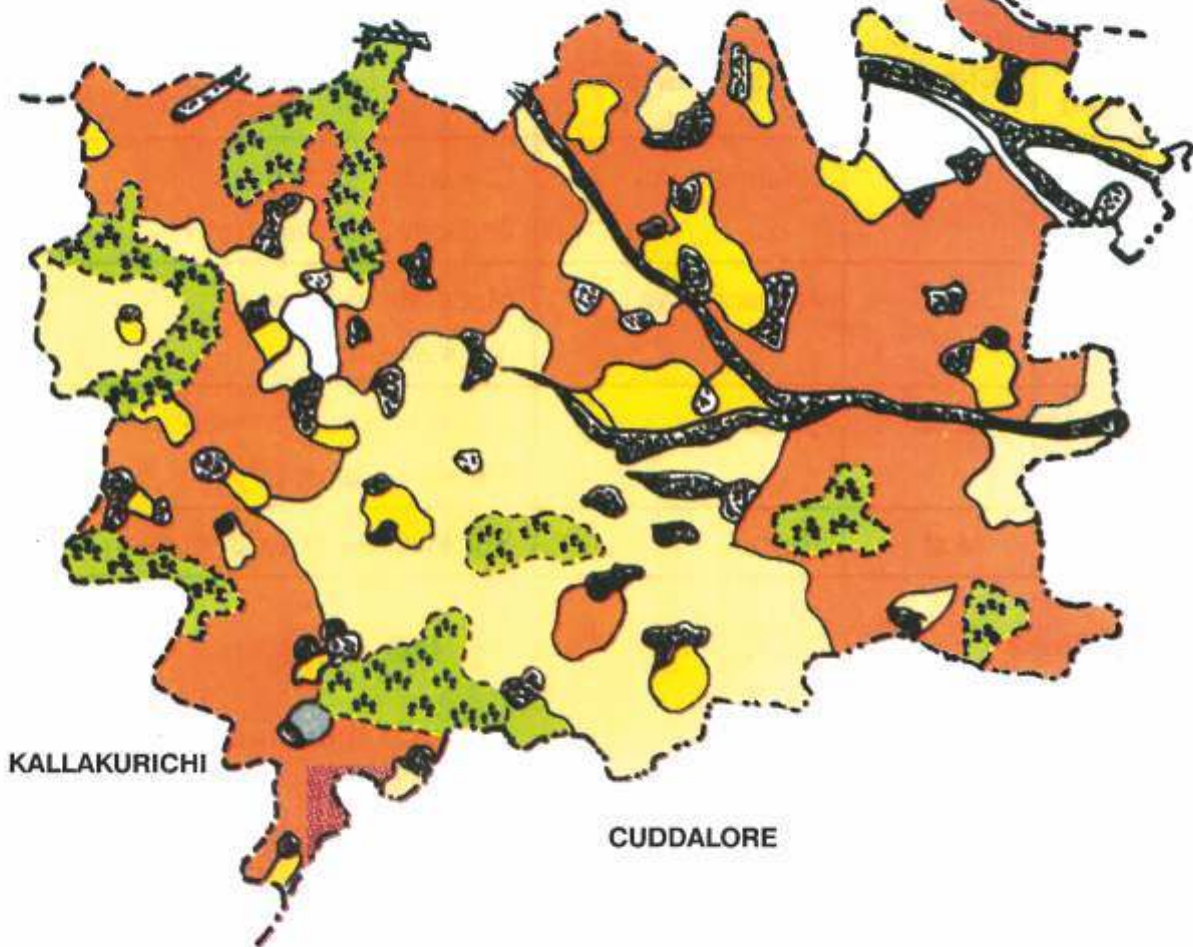
- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY ULUNDURPET TALUK



TIRUVANNAMALAI

VILLUPURAM



KALLAKURICHI

CUDDALORE

## REFERENCE

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

## LEGEND

- II e
- II s
- III sw
- IV se

## LAND IRRIGABILITY

### ULUNDURPET TALUK

| Area (ha) | Irrigability Classification | Soil Series | Limitation                                       |
|-----------|-----------------------------|-------------|--|
| 16281     | 2 s                         | Vadamadurai | Low water holding capacity in surface soil       |
| 4813      | 2 s                         | Arasanatham | Moderate alkalinity in the sub surface           |
| 4044      | 2 sd                        | Vanur       | Alkalinity, slow permeability in the sub-surface |
| 1644      | 4 st                        | Pachol      | Shallowness, gravels, erosion                    |

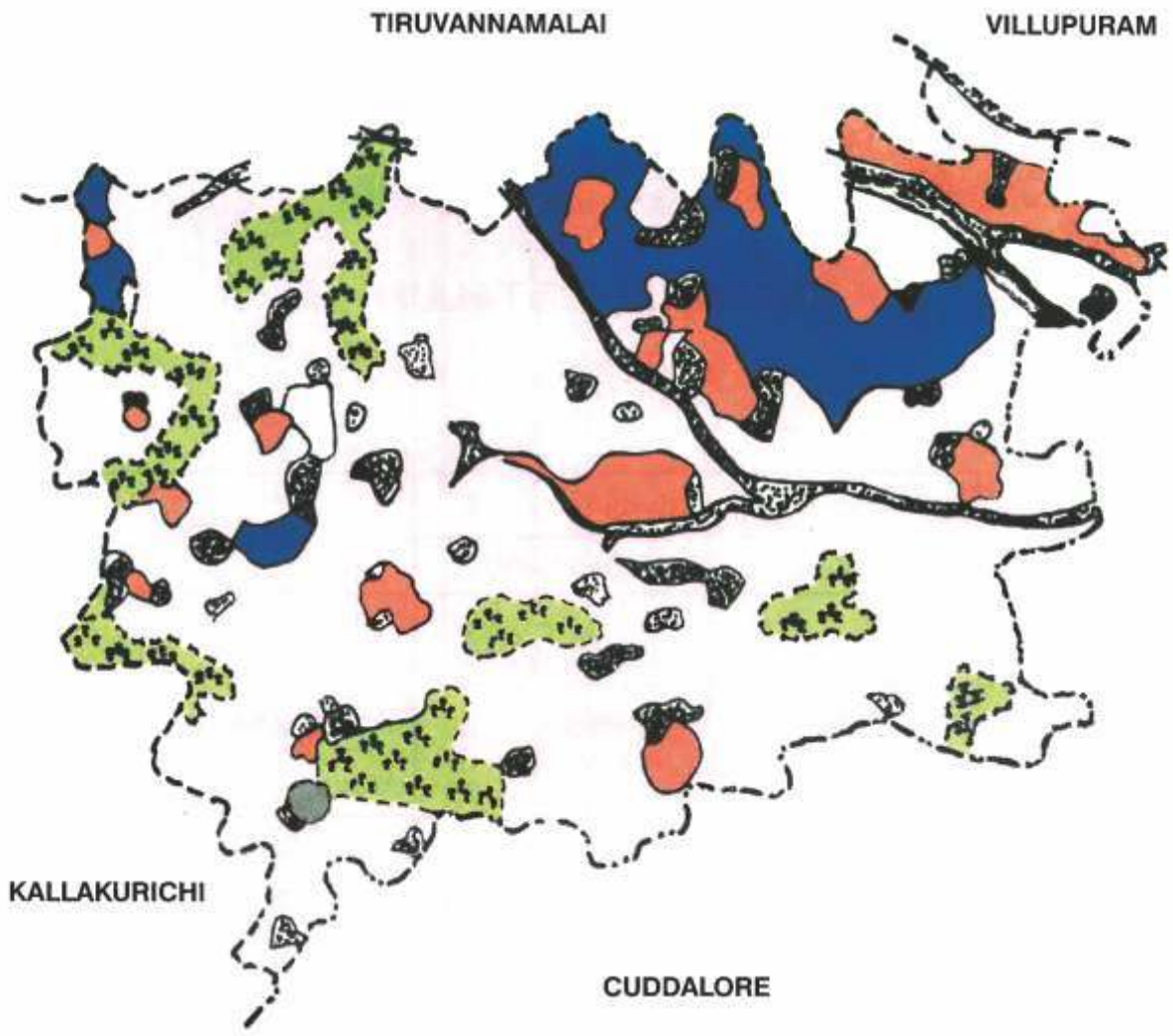
#### Class

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

#### Sub class

- s- Soil limitation
- t- Topography
- d- Drainage

# LAND IRRIGABILITY ULUNDURPET TALUK



## REFERENCE

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

## LEGEND

- 2 d
- 2 sd
- 4 st

## SOIL PRODUCTIVITY

### ULUNDURPET TALUK

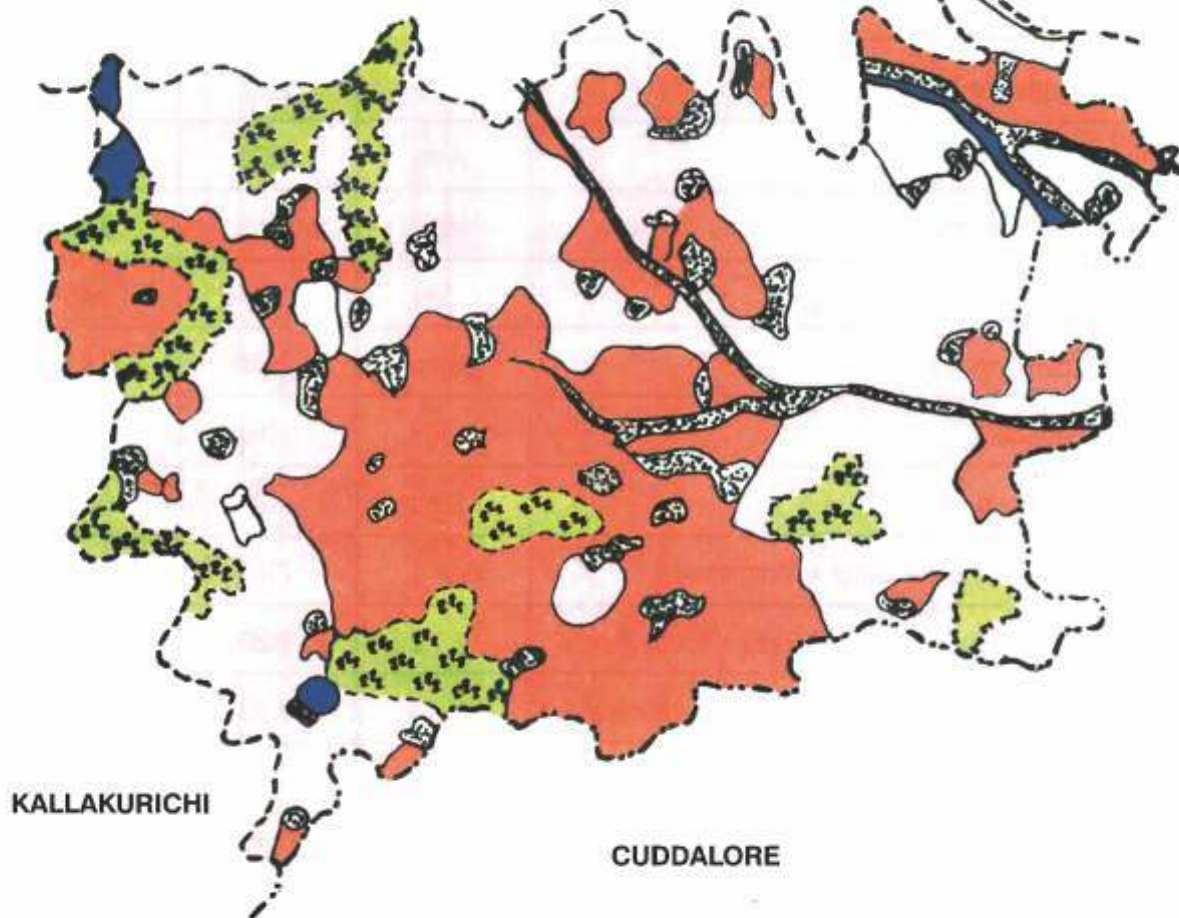
| Area<br>(ha) | Productivity |                | Soil Series          |
|--------------|--------------|----------------|----------------------|
|              | Rating       | Grouping       |                      |
| 1644         | 0 - 7        | Extremely poor | Pachol               |
| 8857         | 20 - 34      | Average        | Arasanatham<br>Vanur |
| 16281        | 35 - 64      | Good           | Vadamadurai          |

# SOIL PRODUCTIVITY ULUNDURPET TALUK



TIRUVANNAMALAI

VILLUPURAM



KALLAKURICHI

CUDDALORE

## REFERENCE

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

## LEGEND

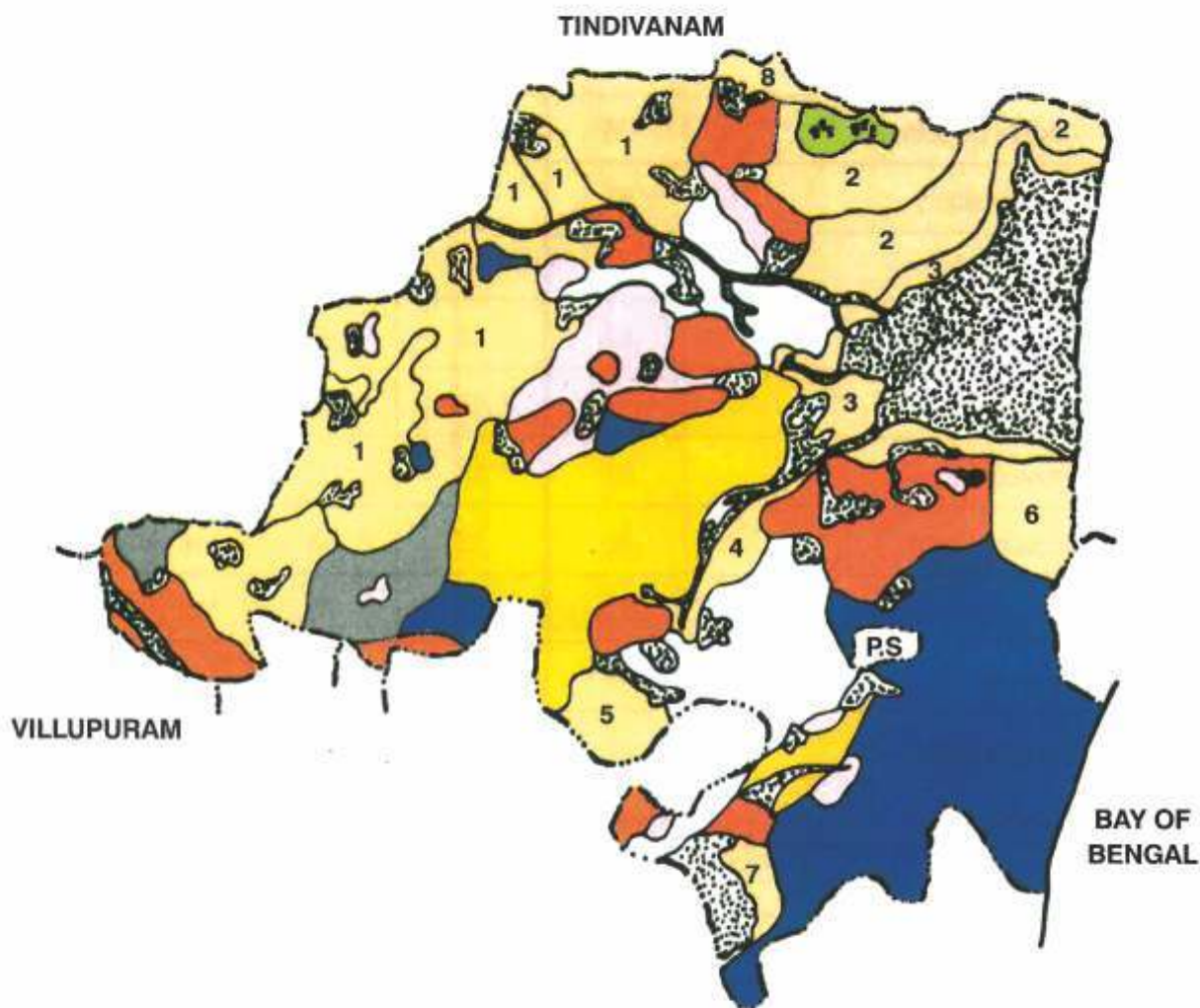
- EXTREMELY POOR
- AVERAGE
- GOOD

## SOILS

### VANUR TALUK

| S.No. | Soil Series                            | Map Symbol | Extent       |              |
|-------|--|------------|--------------|--------------|
|       |  |            | ha           | %            |
| 1.    | Vadavalam                              | Vvm        | 6067         | 13.34        |
| 2.    | Ammapettai                             | Amp        | 4633         | 10.19        |
| 3.    | Vadamadurai                            | Vdm        | 4352         | 9.57         |
| 4.    | Vanur                                  | Vnr        | 4311         | 9.48         |
| 5.    | Idamyanpattu                           | Imp        | 2534         | 5.57         |
| 6.    | Pachol                                 | Phl        | 860          | 1.89         |
| 7.    | Mangadu                                | Mgd        | 102          | 0.22         |
| 8.    | Idamyanpattu + Vanur + Ammapettai      | 1          | 7168         | 15.76        |
| 9.    | Vadamadurai + Idamyanpattu + Vadavalam | 2          | 2880         | 6.33         |
| 10.   | Idamyanpattu + Vadavalam + Vadamadurai | 3          | 1218         | 2.68         |
| 11.   | Vanur + Mangadu + Idamyanpattu         | 4          | 7270         | 15.98        |
| 12.   | Vanur + Ammapettai                     | 5          | 333          | 0.73         |
| 13.   | Idamyanpattu + Vadavalam               | 6          | 920          | 2.02         |
| 14.   | Vadamadurai+Idamyanpattu               | 7          | 666          | 1.46         |
|       | <b>Total</b>                           |            | <b>43314</b> | <b>95.22</b> |
|       | <b>Others</b>                          |            | <b>2173</b>  | <b>4.78</b>  |
|       | <b>Grand Total</b>                     |            | <b>45483</b> | <b>100.0</b> |

# SOILS VANUR TALUK



- REFERENCE**
- STATE BOUNDARY
  - TALUK BOUNDARY
  - COASTAL BOUNDARY
  - RIVERS & GULLY
  - TANKS
  - P.S. PONDICHERRY STATE

PONDICHERRY

- LEGEND**
- Vdn VADAMADURAI
  - Vnr VANUR
  - Vdv VADAVALAM
  - Phi PACHOL
  - Imp IDAMYANPATTU
  - Amp AMMAPETTAI
  - SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                      | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------------|---------------------------------|----|-----|----------------------|
|                              | N                               | P  | K   |                      |
| <b>VANUR PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aabirampattu              | 64                              | 15 | 131 | Vnr, Amp.            |
| 2. Aachirampattu             | 66                              | 17 | 86  | Amp, Imp.            |
| 3. Aadhanappattu             | 65                              | 17 | 97  | Imp, Vnr, Amp.       |
| 4. Aanapakkam                | 83                              | -  | 77  | Vnr, Mgd, Imp.       |
| 5. Agasapattu                | 89                              | 16 | 99  | Amp.                 |
| 6. Aiveli                    | 81                              | 16 | 88  | Vnr, Imp.            |
| 7. Ambulakai                 | 85                              | 17 | 110 | Imp, Vnr, Amp.       |
| 8. Aruvadai                  | 62                              | 14 | 90  | Vnr, Mgd, Imp.       |
| 9. Aruvapakkam               | 66                              | 18 | 83  | Imp, Vnr, Amp.       |
| 10. Bommiyarpalayam          | 71                              | 13 | 72  | Vdl.                 |
| 11. Eadaseri                 | 68                              | 17 | 116 | Vnr, Mgd, Imp.       |
| 12. Idamyanpattu             | 68                              | 20 | 121 | Vnr, Phl, Imp.       |
| 13. Eraiyur                  | 48                              | 11 | 84  | Imp, Vnr, Amp.       |
| 14. Ilavampattu              | 70                              | 19 | 106 | Vnr, Imp.            |
| 15. Irumbai                  | 60                              | 12 | 109 | Vdl, Imp.            |
| 16. Kaarattai                | 63                              | 11 | 105 | Vdm, Imp, Vdl.       |
| 17. Kaayalmedu               | 78                              | 19 | 80  | Vdm, Imp, Vdl.       |
| 18. Kadangampattu            | 64                              | 12 | 86  | Vdl, Phl.            |
| 19. Kadaperikuppam           | 72                              | 19 | 120 | Amp, Imp, Vnr.       |
| 20. Karasanur                | 75                              | 11 | 102 | Imp, Vnr, Amp.       |
| 21. Kazhuperumpakkam         | 92                              | 13 | 100 | Vnr, Mgd, Vdl.       |
| 22. Keezhpakkam              | 74                              | 15 | 72  | Vdm, Imp, Vdl.       |

| Village                | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------|---------------------------------|----|-----|----------------------|
|                        | N                               | P  | K   |                      |
| 23. Keezhkoothampakkam | 75                              | 15 | 80  | Imp, Vnr.            |
| 24. Kodur              | 80                              | 16 | 85  | Vnr, Mgd, Imp.       |
| 25. Komadippattu       | 64                              | -  | 165 | Vdm, Mgd, Imp.       |
| 26. Kondalakuppam      | 56                              | 12 | 80  | Vdl, Phl.            |
| 27. Kondamur           | 52                              | 14 | 83  | Vnr, Amp, Imp.       |
| 28. Konjihangalam      | 65                              | 10 | 80  | Vdm, Imp, Vdl.       |
| 29. Koraikeni          | 62                              | 14 | 82  | Imp.                 |
| 30. Kotakuppam         | 68                              | 13 | 74  | Imp, Vnr.            |
| 31. Kootrampattu       | 80                              | 18 | 75  |                      |
| 32. Kazhuvarai         | 64                              | -  | 146 | Imp, Vdl.            |
| 33. Kamilampattu       | 65                              | 12 | 80  | Vnr, Imp.            |
| 34. Kunnam             | 71                              | 11 | 110 | Imp, Vnr, Amp.       |
| 35. Maathur            | 75                              | 15 | 86  | Vdl, Imp.            |
| 36. Murukkam           | 65                              | 14 | 80  | Imp, Vnr, Amp.       |
| 37. Nallaavoor         | 50                              | 11 | 85  | Imp, Vnr.            |
| 38. Nemili             | 57                              | 15 | 94  | Imp, Vnr, Amp.       |
| 39. Nesal              | 60                              | -  | 60  | Vnr, Imp.            |
| 40. Ottai              | 84                              | 14 | 144 | Amp, Vnr.            |
| 41. Ozhudiyampattu     | 73                              | 9  | 60  | Vnr, Mgd, Amp.       |
| 42. Parangai           | 80                              | 12 | 134 | Vdm, Phl.            |
| 43. Parikkalpattu      | 66                              | 18 | 106 | Imp, Vnr, Amp.       |
| 44. Peraavoor          | 20                              | 5  | 36  | Imp, Vnr, Amp.       |
| 45. Perambai           | 72                              | 22 | 108 | Vdl.                 |
| 46. Perumpakkam        | 64                              | 12 | 82  | Imp, Vnr, Amp.       |
| 47. Pompur             | 63                              | 18 | 139 | Vnr, Imp, Phl.       |

| Village              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|----------------------|---------------------------------|----|-----|----------------------|
|                      | N                               | P  | K   |                      |
| 48. Poothurai        | 49                              | 12 | 66  | Vdm, Imp, Vdl.       |
| 49. Pudupakkam       | 84                              | -  | 77  | Vdm, Imp, Vdl.       |
| 50. Pulichapallam    | 61                              | 13 | 116 | Amp, Imp.            |
| 51. Raykottai        | 51                              | 19 | 86  | Vnr, Amp.            |
| 52. Rayapudukuppam   | 58                              | 18 | 81  | Vdm.                 |
| 53. Semangalam       | 72                              | 15 | 58  | Vdm.                 |
| 54. Sengamedu        | 75                              | 15 | 58  | Vdm.                 |
| 55. Seruvani         | 49                              | 8  | 86  | Imp, Phl.            |
| 56. Siruvanur        | 93                              | 10 | 91  | Imp, Vnr, Amp.       |
| 57. Sivanapakkam     | 85                              | 12 | 80  | Vdm, Imp, Vdl.       |
| 58. Thailapuram      | 55                              | 16 | 85  | Vdm, Imp.            |
| 59. Therkunam        | 52                              | 29 | 60  | Imp, Amp.            |
| 60. Thiruchitrapalam | 40                              | 28 | 56  | Vdm, Vnr.            |
| 61. Thiruvakkarai    | 46                              | 24 | 54  | Imp.                 |
| 62. Thalanur         | 64                              | 22 | 86  | Phl, Vdl.            |
| 63. Thiruvel         | 60                              | 24 | 82  | Amp, Vdm.            |
| 64. Ulagaapuram      | 80                              | -  | 105 | Vdm, Phl.            |
| 65. Uppuvelur        | 63                              | 14 | 98  | Vdm, Imp, Vdl.       |
| 66. Vilvanatham      | 66                              | 15 | 86  | Vnr, Imp.            |
| 67. V.Parangani      | 80                              | 12 | 134 | Vdm, Imp.            |

| Village                      | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------------|---------------------------------|----|-----|----------------------|
|                              | N                               | P  | K   |                      |
| <b>KANAI PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aadhanur                  | 75                              | -  | 95  | Vnr, Phl.            |
| 2. Agaram Sithamur           | 70                              | 6  | 76  | Vdm, Anm, Vnr.       |
| 3. Auniyur                   | 73                              | 9  | 81  | Vdm, Vdl, Anm.       |
| 4. Anumandapuram             | 70                              | 10 | 100 | Vnr, Anm.            |
| 5. Ariyaamurthirukkai        | 59                              | 9  | 71  | Anm, Vdm.            |
| 6. Ariyur                    | 60                              | 15 | 74  | Anm, Vnr.            |
| 7. Athiyurthirukkai          | 90                              | 8  | 85  | Anm, Vnr.            |
| 8. C.N.Palayam               | 56                              | 7  | 67  | Anm.                 |
| 9. Ezhusempon                | 64                              | 9  | 76  | Vdm, Vdl.            |
| 10. Kaangayanur              | 62                              | -  | 100 | Anm, Vnr.            |
| 11. Kadaiyam                 | 82                              | 7  | 100 | Anm, Phl             |
| 12. Kalpattu                 | 70                              | 12 | 100 | Vnr.                 |
| 13. Kakkanur                 | 80                              | 8  | 95  | Vnr, Anm.            |
| 14. Kanai                    | 58                              | -  | 104 | Anm.                 |
| 15. Kanjanur                 | 36                              | -  | 98  | Anm, Vdm, Vdl.       |
| 16. Karungalipattu           | 59                              | -  | 100 | Vnr, Anm.            |
| 17. Karuvatchi               | 59                              | 9  | 82  | Anm, Vnr.            |
| 18. Kedar                    | 60                              | 12 | 70  | Vdm, Anm.            |
| 19. Kondur                   | 64                              | -  | 108 | Anm.                 |
| 20. Kothamangalam            | 62                              | -  | 101 | Anm                  |
| 21. Kuppam                   | 66                              | -  | 95  | Vnr.                 |
| 22. Malligaipattu            | 68                              | 7  | 81  | Vnr, Anm.            |
| 23. Mambalapattu             | 60                              | -  | 80  | Anm, Vdm.            |
| 24. Melkaranai               | 68                              | -  | 76  | Anm, Vdm.            |
| 25. Nallapalayam             | 69                              | -  | 80  | Phl, Anm.            |
| 26. Nangaathur               | 68                              | 6  | 85  | Vnr, Anm.            |
| 27. Palliyandhur             | 71                              | -  | 80  | Vnr, Anm.            |
| 28. Panamalai                | 78                              | -  | 83  | Vnr, Vdm.            |
| 29. Perumbakkam              | 80                              | -  | 80  | Vnr, Mbm.            |
| 30. Perugalampoondi          | 78                              | 11 | 84  | Vnr, Vdm.            |
| 31. Perur                    | 81                              | -  | 99  | Anm.                 |
| 32. Saalavanur               | 79                              | -  | 105 | Vdm, Vnr.            |
| 33. Sangeethamangalam        | 80                              | 9  | 90  | Vnr                  |
| 34. Semmedu                  | 60                              | 8  | 106 | Vdm, Vdl.            |
| 35. Siruvaakur               | 75                              | -  | 125 | Vnr, Anm.            |
| 36. Siruvaalai               | 70                              | -  | 75  | Anm, Phl.            |
| 37. Sitheri                  | 71                              | 7  | 120 | Vdm, Vdl.            |

- Data not available

## LAND CAPABILITY

### VANUR TALUK

| Area (ha) | Land Capability Classification | Soil Series  | Limitation                       | Needs                                 |
|-----------|--------------------------------|--------------|----------------------------------|---------------------------------------|
| 4352      | II e                           | Vadamadurai  | Erosion                          | Soil Conservation                     |
| 6067      | II e                           | Vadavalam    | Erosion                          | Soil Conservation                     |
| 102       | II s                           | Mangadu      | Sub-surface texture              | Texture improvement                   |
| 4633      | II sw                          | Ammapettai   | Heavy texture, drainage          | Improving drainage selection of crops |
| 4311      | II sw                          | Vanur        | Alkalinity, sub surface drainage | Improving drainage selection of crops |
| 2534      | III se                         | Idamyanpattu | Shallow depth, gravels, erosion  | Texture improvement soil conservation |
| 860       | IV se                          | Pachol       | Shallow depth, erosion, gravels  | Selection of crops soil conservation  |

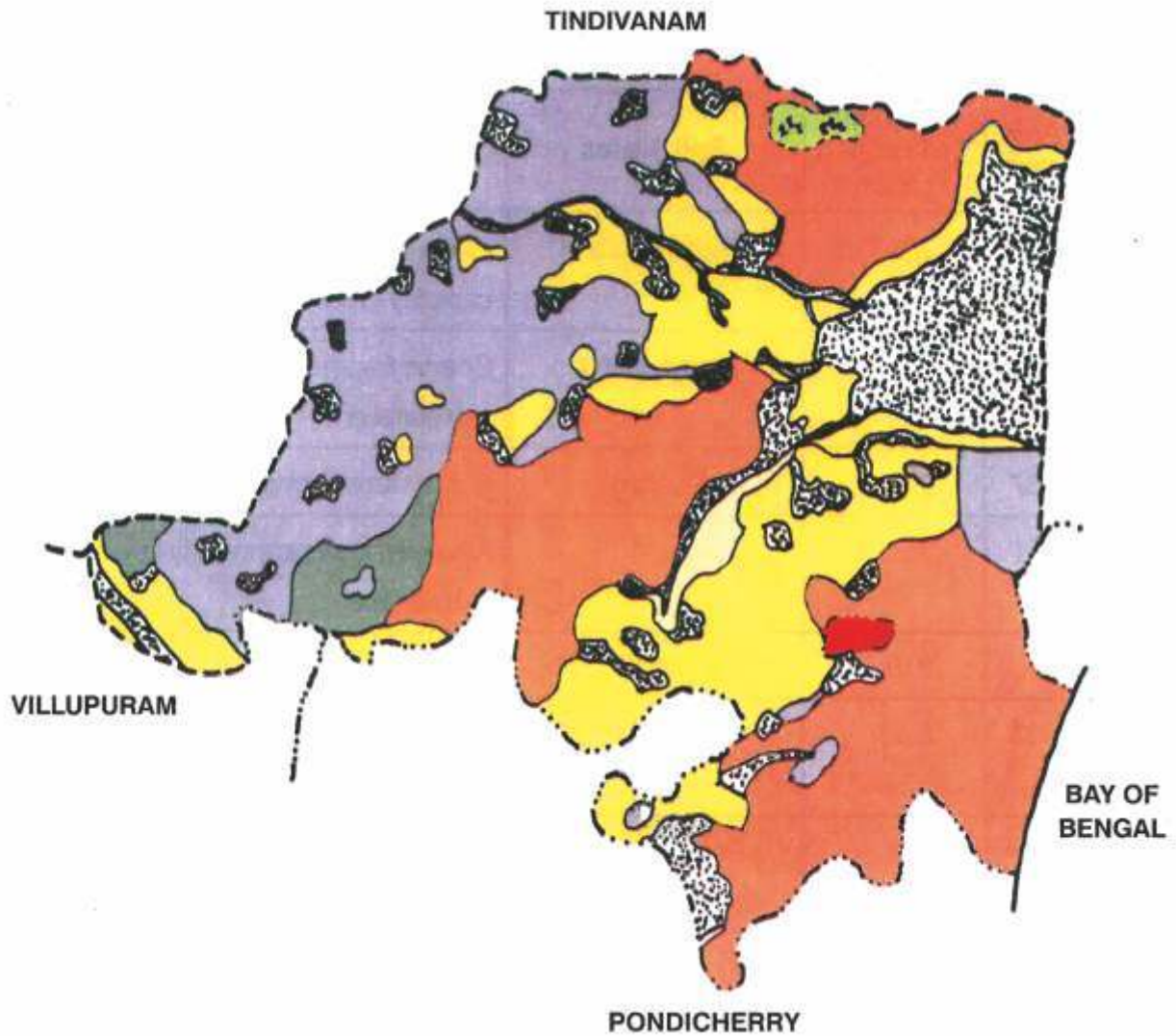
#### Class

- 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 severe limitations for sustained use under agriculture.

#### Sub-class

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY VANUR TALUK



## REFERENCE

- STATE BOUNDARY
- - - - - TALUK BOUNDARY
- COASTAL BOUNDARY
- ~ RIVERS & GULLY
- TANKS
- PONDICHERRY STATE

## LEGEND

- II e
- II s
- III se
- III sw
- IV se

## LAND IRRIGABILITY

### VANUR TALUK

| Area (ha) | Irrigability Classification | Soil Series  | Limitation                                   |
|-----------|-----------------------------|--------------|--|
| 4352      | 2 s                         | Vadamadurai  | Low water holding capacity in sub surface    |
| 2534      | 2 s                         | Idamyanpattu | Coarse fragment in the sub surface           |
| 6067      | 2 d                         | Vadavalam    | Sub surface permeability.                    |
| 4311      | 2 sd                        | Vanur        | Alkalinity, slow permeability in sub surface |
| 102       | 2 ds                        | Mangadu      | Floods, stratification                       |
| 4633      | 3 sd                        | Ammapettai   | Moderate alkalinity<br>slow permeability     |
| 860       | 4 st                        | Pachol       | Shallow soil depth<br>gravels, erosion       |

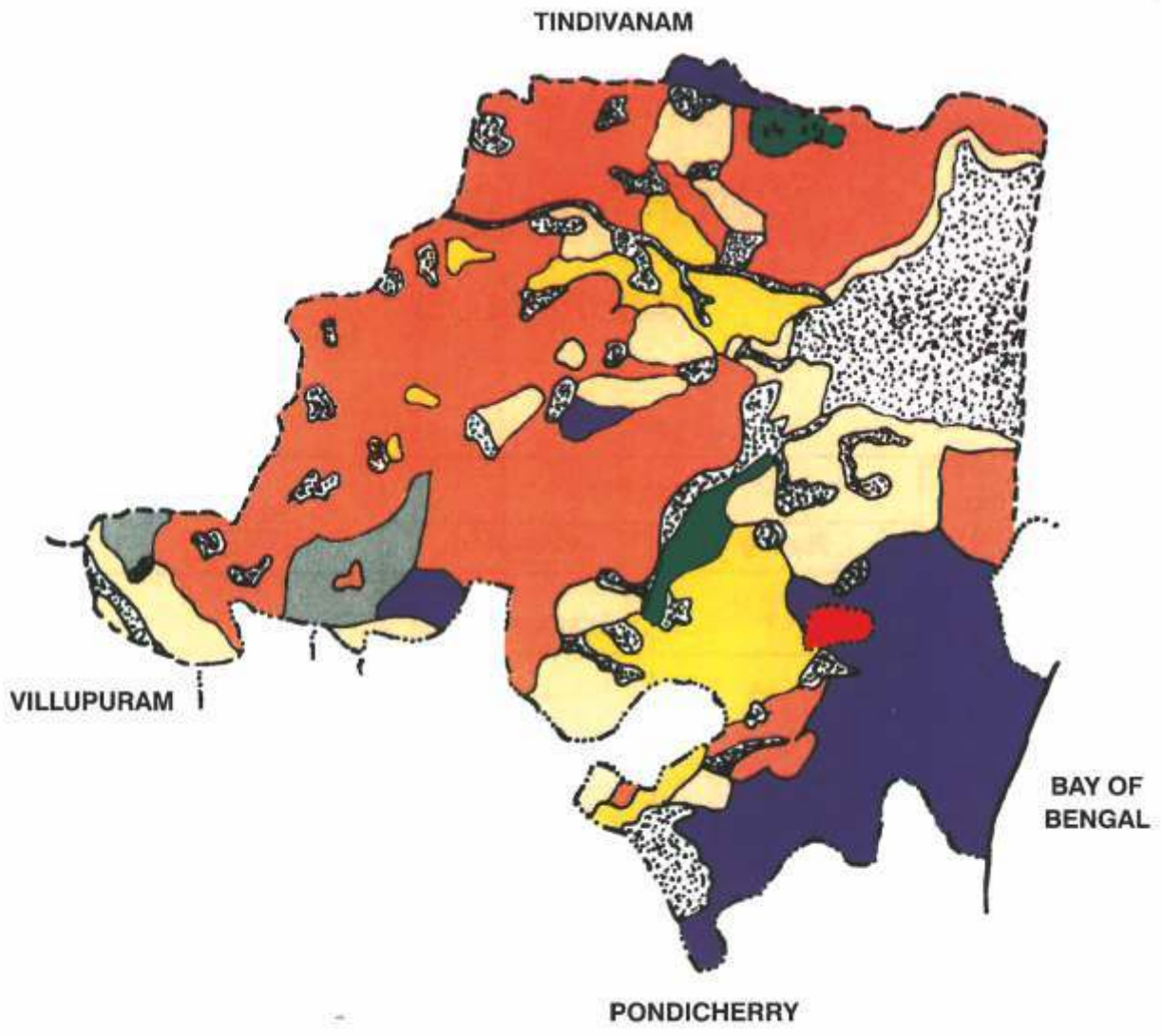
#### Class

- 2 Land that have moderate limitation for sustained use under irrigation.
- 3 Lands that have severe limitations for sustained use under irrigation.
4. Lands that have very severe limitations for sustained use under irrigation.

#### Sub class

s - Soil limitation  
t - Topography  
d - Drainage

# LAND IRRIGABILITY VANUR TALUK



- REFERENCE**
- STATE BOUNDARY
  - TALUK BOUNDARY
  - COASTAL BOUNDARY
  - ~ RIVERS & GULLY
  - ⊗ TANKS
  - Ⓟ PONDICHERRY STATE

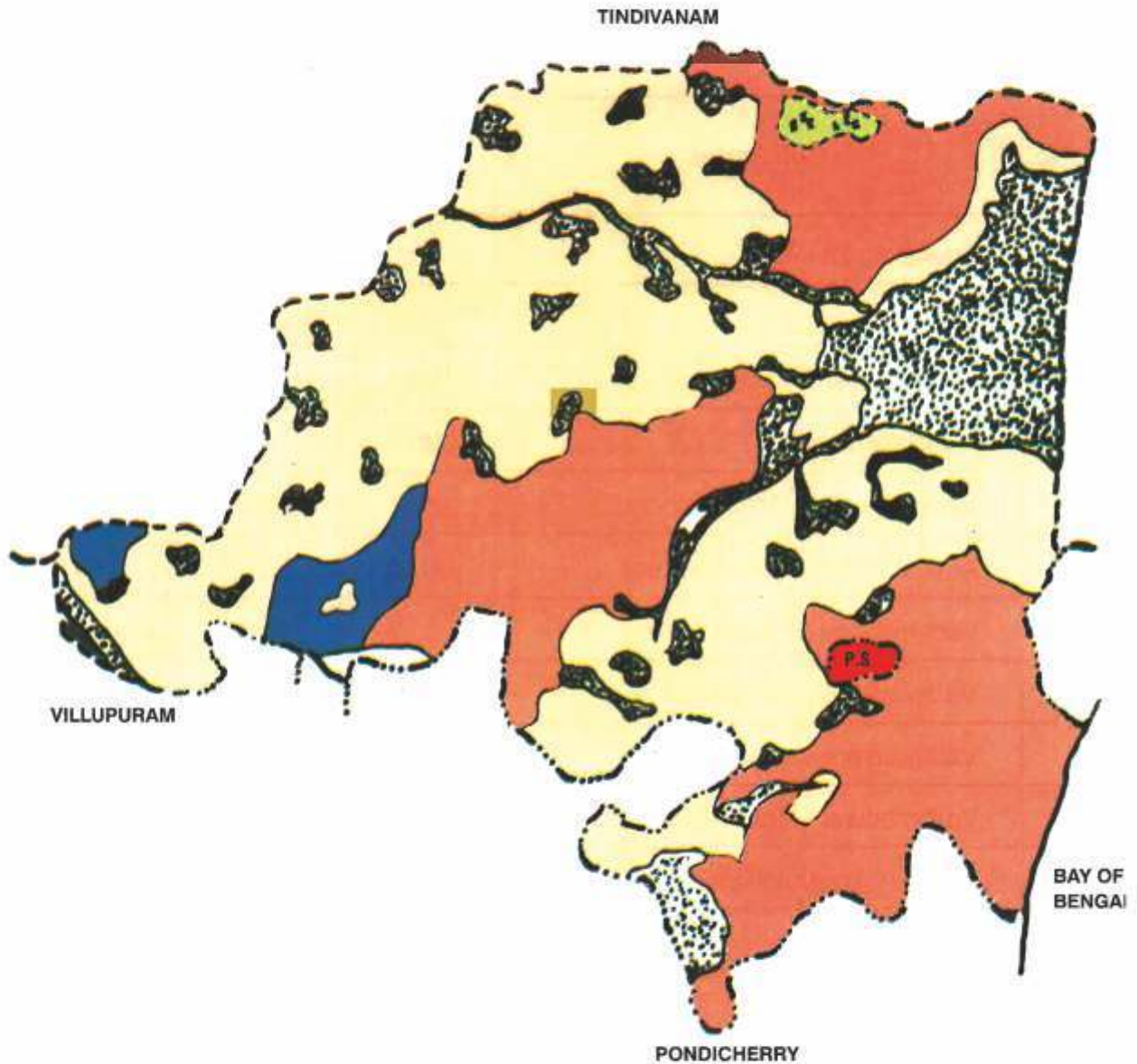
- LEGEND**
- 2 s
  - 2 d
  - 2 sd
  - 4 st
  - 2 ds
  - 3 sd

## SOIL PRODUCTIVITY

### VANUR TALUK

| Area<br>(ha) | Productivity |                | Soil Series                                    |
|--------------|--------------|----------------|--|
|              | Rating       | Grouping       |  |
| 860          | 0 - 7        | Extremely poor | Pachol   |
| 11580        | 20 - 34      | Average        | Mangadu<br>Vanur<br>Ammapettai<br>Idamyanpattu |
| 11019        | 35 - 64      | Good           | Vadavalam<br>Vadamadurai                       |

# SOIL PRODUCTIVITY VANUR TALUK



## REFERENCE

- STATE BOUNDARY
- - - TALUK BOUNDARY
- COASTAL BOUNDARY
- ~ RIVERS & GULLY
- ☼ TANKS
- PONDICHERRY STATE

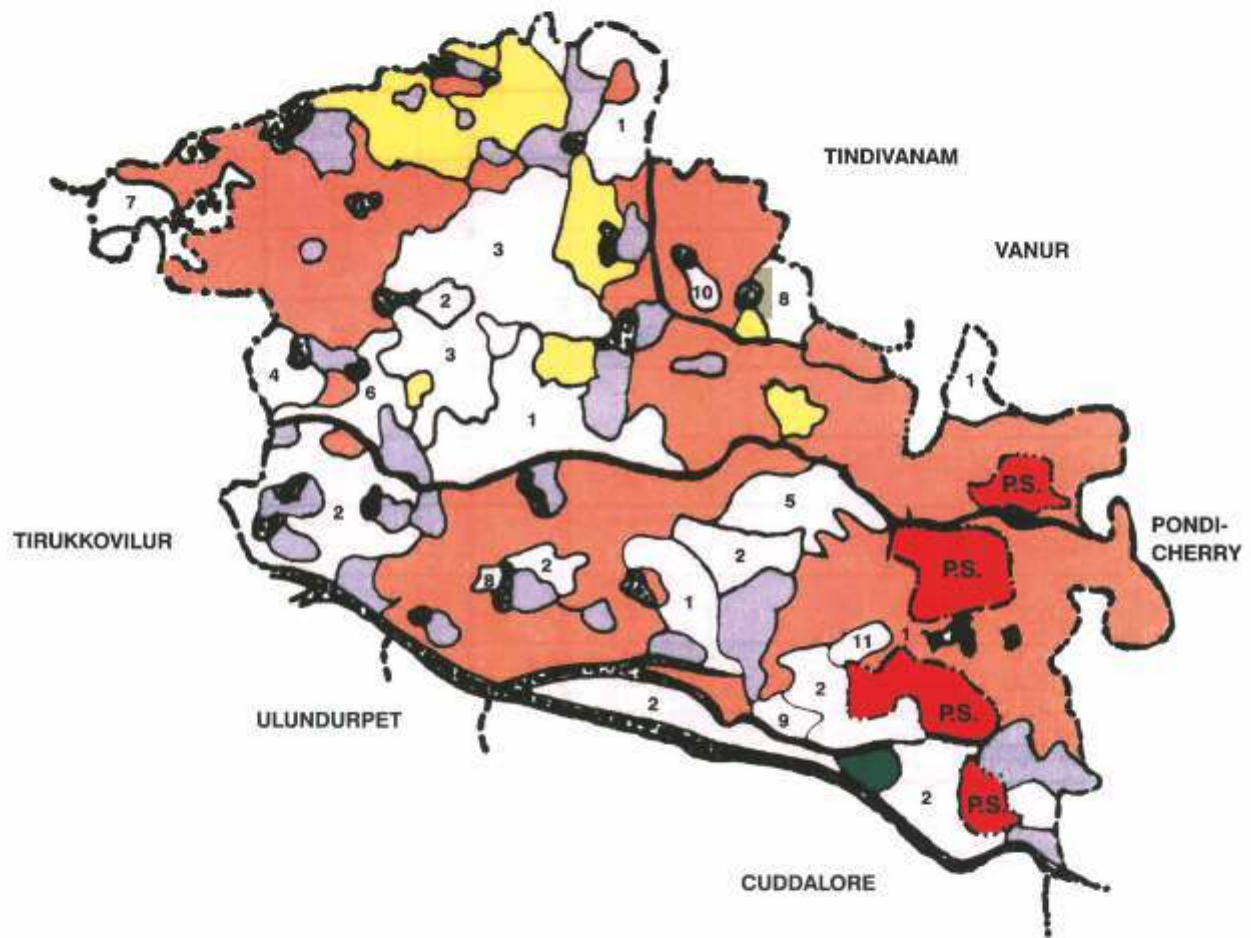
## LEGEND

- EXTREMELY POOR
- AVERAGE
- GOOD

**SOILS****VILLUPURAM TALUK**

| S.No.              | Soil Series                 | Map Symbol | Extent       |              |
|--------------------|-----------------------------|------------|--------------|--------------|
|                    |                             |            | ha           | %            |
| 1)                 | Arasanatham                 | Anm        | 29875        | 32.64        |
| 2)                 | Vanur                       | Vnr        | 8934         | 9.76         |
| 3)                 | Vadamadurai                 | Vdm        | 3763         | 4.11         |
| 4)                 | Mahabalipuram               | Mbm        | 974          | 1.06         |
| 5)                 | Vadamadurai + Arasanatham   | 1          | 2485         | 2.72         |
| 6)                 | Arasanatham + Vadamadurai   | 2          | 6067         | 6.63         |
| 7)                 | Vadamadurai + Vadavalam     | 3          | 3762         | 4.11         |
| 8)                 | Vadavalam + Arasanatham     | 4          | 3584         | 3.91         |
| 9)                 | Vadavalam + Vadamadurai     | 5          | 1638         | 1.79         |
| 10)                | Vadamadurai + Mahabalipuram | 6          | 563          | 0.61         |
| 11)                | Pachol + Arasanatham        | 7          | 794          | 0.87         |
| 12)                | Vanur + Arasanatham         | 8          | 1178         | 1.29         |
| 13)                | Vanur + Vadamadurai         | 9          | 614          | 0.67         |
| 14)                | Arasanatham + Vanur         | 10         | 640          | 0.70         |
| <b>Total</b>       |                             |            | <b>64871</b> | <b>70.87</b> |
| <b>Forest</b>      |                             |            | <b>2135</b>  | <b>2.33</b>  |
| <b>Others</b>      |                             |            | <b>24532</b> | <b>26.80</b> |
| <b>Grand Total</b> |                             |            | <b>91538</b> | <b>100.0</b> |

# SOILS VILLUPURAM TALUK



## REFERENCE

- · · · — STATE BOUNDARY
- · · · — TALUK BOUNDARY
- — — COASTAL BOUNDARY
- RIVERS & GULLY
- TANKS
- PONDICHERRY STATE

## LEGEND

- Vnr VANUR
- Vdm VADAMADURAI
- Ann ARASANATHAM
- MAGABALIPURAM
- SOIL ASSOCIATION

## VILLAGEWISE FERTILITY STATUS AND SOIL SERIES

| Village                          | Village Fertility Index (kg/ac) |   |     | Dominant Soil Series |
|----------------------------------|---------------------------------|---|-----|----------------------|
|                                  | N                               | P | K   |                      |
| <b>KOLIYANUR PANCHAYAT UNION</b> |                                 |   |     |                      |
| 1. Alathur                       | 75                              | 7 | 80  | Anm, Vnr.            |
| 2. Aanangar                      | 80                              | 4 | 90  | Vnr, Anm.            |
| 3. Aasaarangkuppam               | 90                              | - | 100 | Anm.                 |
| 4. Arasamangalam                 | 100                             | - | 75  | Mbm, Mgd.            |
| 5. Athiyurthirukkai              | 85                              | - | 100 | Anm, Vnr.            |
| 6. Ayyankoilpattu                | 90                              | 2 | 70  | Vnr, Anm.            |
| 7. Cholampoondi                  | 80                              | - | 80  | Anm.                 |
| 8. Cholaganur                    | -                               | - | -   | Anm.                 |
| 9. Dhalavanur                    | 75                              | - | 100 | Anm, Vdm.            |
| 10. Edapalayam                   | -                               | - | -   | Anm.                 |
| 11. Emmanthangal                 | 75                              | - | 95  | Anm.                 |
| 12. Ilangadu                     | -                               | - | -   | Vdm, Anm.            |
| 13. Kaakuppam                    | 115                             | - | 86  | Anm.                 |
| 14. Kaavanipakkam                | 112                             | - | 96  | Vnr, Anm.            |
| 15. Kallapattu                   | 100                             | - | 106 | Vdu, Vdm.            |
| 16. Kandamangalam                | 105                             | 7 | 85  | Anm.                 |
| 17. Kilperumbakkam               | -                               | - | -   | Vum                  |
| 18. Kolathur                     | 100                             | - | 92  | Anm, Vnr             |
| 19. Koliayanur                   | 100                             | 8 | 85  | Anm, Vdm.            |
| 20. Kondangi                     | 110                             | - | 106 | Anm                  |
| 21. Kudimiankuppam               | -                               | - | -   | Mbm, Anm             |
| 22. Maharajapuram                | -                               | - | -   | Mbm, Anm.            |

| Village                | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------|---------------------------------|----|-----|----------------------|
|                        | N                               | P  | K   |                      |
| 23. Maragathapuram     | 120                             | 5  | 90  | Anm.                 |
| 24. Melpadhi           | 115                             | -  | 89  | Anm.                 |
| 25. Mettupalayam       | 95                              | -  | 95  | Mbm, Anm.            |
| 26. Nannedu            | 90                              | -  | 90  | Anm.                 |
| 27. Nannuttimpalayam   | -                               | -  | -   | Anm, Vnr.            |
| 28. Naraiyur           | 100                             | 4  | 95  | Vnr, Vdm.            |
| 29. N.Ariyanur         | 95                              | 3  | 76  | Anm.                 |
| 30. Omkodi             | -                               | -  | -   | Anm.                 |
| 31. Paanaampattu       | 95                              | -  | 100 | Vnr, Vdm             |
| 32. Pallur             | 80                              | -  | 80  | Mbm, Vnr.            |
| 33. Poyyapakkam        | 85                              | -  | 90  | Anm.                 |
| 34. Saalaigramam       | 75                              | 7  | 73  | Anm                  |
| 35. Saalampalayam      | 90                              | 6  | 70  | Anm, Vnr.            |
| 36. Saathipattu        | 75                              | -  | 70  | Anm, Vnr.            |
| 37. Sengaadu           | 80                              | -  | 92  | Anm                  |
| 38. Serdhanur          | 85                              | 8  | 100 | Anm, Vdm, Mbm.       |
| 39. Thennamadevi       | 100                             | -  | 70  | Vnr, Anm             |
| 40. Thirupaakanur      | 80                              | 10 | 75  | Anm, Vdm             |
| 41. Thiruvaamathur     | 65                              | -  | 85  | Anm                  |
| 42. Thokkavidi         | 80                              | -  | 80  | Anm                  |
| 43. Thondanthanur      | 70                              | 10 | 85  | Vdm, Anm.            |
| 44. Vaduganathankuppam | -                               | -  | -   | Anm, Vdr.            |
| 45. Valavanur          | -                               | -  | -   | Mbm                  |
| 46. Veliyampokkam      | 75                              | 9  | 80  | Anm                  |
| 47. Viralikuppam       | 100                             | 6  | 70  | Anm, Vnr.            |
| 48. Viluthasethi       | 75                              | -  | 65  | Anm, Vdm.            |

| Village                              | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|--------------------------------------|---------------------------------|----|-----|----------------------|
|                                      | N                               | P  | K   |                      |
| <b>KANDAMANGALAM PANCHAYAT UNION</b> |                                 |    |     |                      |
| 1. Aaliyur                           | 72                              | 6  | 90  | Anm                  |
| 2. Ammanankuppam                     | -                               | -  | -   | Anm.                 |
| 3. Arpissampalayam                   | 92                              | -  | 100 | Vdm, Anm             |
| 4. Chinnababusamudram                | 90                              | 9  | 100 | Vnr, Anm.            |
| 5. Chokkampattu                      | -                               | -  | -   | Anm.                 |
| 6. Kalingamalai                      | -                               | -  | -   | Anm, Vnr.            |
| 7. Kalinjikuppam                     | 108                             | 13 | 92  | Anm, Vdm.            |
| 8. Kallipattu                        | 104                             | -  | 85  | Vnr, Anm, Mbm.       |
| 9. Kandamangalam                     | 110                             | 10 | 80  | Anm.                 |
| 10. Kengarampalayam                  | 96                              | 10 | 85  | Anm, Vnr.            |
| 11. Kodukur                          | 92                              | -  | 85  | Vdm, Anm.            |
| 12. Kondur                           | 95                              | -  | 100 | Anm.                 |
| 13. Kothampakkam                     | 96                              | 9  | 106 | Anm, Mbm.            |
| 14. Krishnapuram                     | 92                              | -  | 97  | Anm, Vnr.            |
| 15. Kumulam                          | 106                             | -  | 107 | Anm.                 |
| 16. Kuvithirampattu                  | 102                             | -  | 90  | Anm.                 |
| 17. Maangkuppam                      | -                               | -  | -   | Anm.                 |
| 18. Mathur                           | 100                             | -  | 108 | Anm                  |
| 19. Malrajan Kuppam                  | -                               | -  | -   | Mbm, Anm.            |
| 20. Mandakapattu                     | 110                             | 10 | 102 | Vnr, Anm.            |
| 21. Mokshakulam                      | 112                             | 10 | 97  | Anm, Phl.            |
| 22. Mudaliampuppam                   | -                               | -  | -   | Vdm, Anm, Vnr.       |

| Village                | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------|---------------------------------|----|-----|----------------------|
|                        | N                               | P  | K   |                      |
| 23. Mutrampattu        | 104                             | -  | 100 | Anm.                 |
| 24. Narkunam           | 96                              | -  | 85  | Anm.                 |
| 25. Navmalkapper       | 92                              | -  | 96  | Anm.                 |
| 26. Orathur            | -                               | -  | -   | Vnr, Anm.            |
| 27. Pakkam             | 105                             | -  | 90  | Anm.                 |
| 28. Pakkiralayam       | 82                              | 9  | 120 | Anm.                 |
| 29. Pallicheri         | -                               | -  | -   | Anm, Mbm.            |
| 30. Pallinaliyanur     | 102                             | -  | 95  | Vdm, Anm.            |
| 31. Pallipadupattu     | 76                              | -  | 92  | Anm.                 |
| 32. Pallitheenal       | 86                              | 10 | 92  | Anm.                 |
| 33. Panchamadevi       | 12                              | -  | 110 | Vnr, Vdm.            |
| 34. Perichembakkam     | -                               | -  | -   | Anm, Vdm.            |
| 35. P.Puthur           | 98                              | -  | 82  | Anm.                 |
| 36. Parasureddipalayam | 90                              | 12 | 100 | Mbm, Vnr.            |
| 37. Periababusamudram  | 97                              | -  | 80  | Vnr.                 |
| 38. Poovarasamkuppam   | 76                              | 13 | 92  | Mbm, Anm.            |
| 39. Seshanganur        | 92                              | -  | 90  | Anm,                 |
| 40. Siruvandaru        | 108                             | 6  | 90  | Anm, Vnr.            |
| 41. Sorapur            | 107                             | -  | 114 | Anm, Vnr.            |
| 42. Soravurkeelpathi   | 130                             | -  | 97  | Anm.                 |
| 43. Soravurkeelpathi   | 100                             | 6  | 91  | Anm, Vdm.            |
| 44. Thirumangalam      | 102                             | 7  | 95  | Anm.                 |
| 45. Vadavaambalam      | 95                              | -  | 104 | Mbm, Mgd, Anm.       |
| 46. Veeramur           | 80                              | 8  | 92  | Vdm.                 |

| Village                           | Village Fertility Index ( kg/ac) |    |     | Dominant Soil Series |
|-----------------------------------|----------------------------------|----|-----|----------------------|
|                                   | N                                | P  | K   |                      |
| <b>VIKRAVANDI PANCHAYAT UNION</b> |                                  |    |     |                      |
| 1. Aasoor                         | 110                              | 12 | 90  | Vnr, Vdm.            |
| 2. Avadayarpattu                  | 95                               | -  | 100 | Vnr, Anm.            |
| 3. Ayyuragaram                    | 86                               | 9  | 105 | Vnr, Vdm.            |
| 4. Brahmadesam                    | 94                               | -  | 108 | Vnr, Anm.            |
| 5. Chinnathachchur                | 86                               | -  | 120 | Anm, Vdm.            |
| 6. Erhchamkuppam                  | 91                               | 7  | 87  | Vnr.                 |
| 7. Ennayiram                      | 77                               | -  | 85  | Anm.                 |
| 8. Esaalam                        | 80                               | -  | 80  | Vdm, Anm.            |
| 9. Kappiyampuliyur                | 84                               | 8  | 84  | Anm.                 |
| 10. Kaspakkarantai                | 91                               | -  | 97  | Vnr, Phl.            |
| 11. Konttiyampoondi               | 82                               | -  | 110 | Anm.                 |
| 12. Kongarampoondi                | 96                               | 7  | 120 | Anm.                 |
| 13. Kundalapuliyur                | 82                               | -  | 108 | Anm, Phl.            |
| 14. Kuthaampoondi                 | 88                               | -  | 115 | Anm, Vdm.            |
| 15. Madurapakkam                  | 110                              | 9  | 107 | Anm.                 |
| 16. Mandagapattu                  | 106                              | -  | 112 | Vnr, Anm.            |
| 17. Melkondhal                    | 100                              | -  | 108 | Anm, Vnr.            |
| 18. Moongilpattu                  | 82                               | 10 | 97  | Anm.                 |
| 19. Mundiampakkam                 | 76                               | -  | 101 | Vdm, Anm, Vnr.       |
| 20. Muttathur                     | 87                               | -  | 98  | Vdm, Vnr.            |
| 21. Nagar                         | 98                               | -  | 76  | Vdm, Vnr.            |
| 22. Nandivaadi                    | 106                              | 15 | 80  | Vnr.                 |

| Village                | Village Fertility Index (kg/ac) |    |     | Dominant Soil Series |
|------------------------|---------------------------------|----|-----|----------------------|
|                        | N                               | P  | K   |                      |
| 23. Narasinganur       | 88                              | -  | 90  | Vdm, Anm.            |
| 24. Nemoor             | 94                              | 14 | 102 | Anm, Vdm.            |
| 25. Orathur            | 114                             | -  | 78  | Vnr, Anm.            |
| 26. Paapanampattu      | 99                              | -  | 90  | Vnr, Vdm.            |
| 27. Pagandai           | 108                             | 17 | 76  | Anm.                 |
| 28. Panapakkam         | 110                             | -  | 91  | Anm, Vdm.            |
| 29. Panayapuram        | 90                              | -  | 67  | Anm, Vnr.            |
| 30. Pidaripatti        | 98                              | 14 | 94  | Vdm, Anm.            |
| 31. Radhapuram         | 80                              | -  | 92  | Anm, Vdm.            |
| 32. Saalai             | 96                              | -  | 90  | Anm.                 |
| 33. Sathanur           | 55                              | -  | 82  | Phi, Anm.            |
| 34. Siruvallikuppam    | 82                              | -  | 92  | Vdm.                 |
| 35. Thennavirayanpattu | 91                              | 5  | 90  | Anm.                 |
| 36. Thenper            | 108                             | -  | 82  | Vnr, Vdm.            |
| 37. Thirunandipuram    | 90                              | -  | 87  | Anm, Vdm.            |
| 38. Thumbur            | 81                              | 5  | 92  | Anm, Vdm.            |
| 39. Thuravi            | 76                              | -  | 90  | Mbm, Phi, Anm.       |
| 40. Vaakkur            | 80                              | -  | 92  | Anm, Vdm.            |
| 41. Vadakuchipalayam   | 86                              | 11 | 86  | Anm, Vdm.            |
| 42. Velaiyindal        | 77                              | 11 | 96  | Vnr, Vdm.            |
| 43. Vembi              | 78                              | -  | 109 | Vdm, Anm.            |
| 44. Vettakkadu         | 82                              | 10 | 106 | Vdm, Anm, Mbm.       |

## LAND CAPABILITY

### VILLUPURAM TALUK

| Area (ha) | Land Capability Classification | Soil Series | Limitation                          | Needs                                 |
|-----------|--------------------------------|-------------|-------------------------------------|---------------------------------------|
| 3763      | II e                           | Vadamadurai | Erosion                             | Soil conservation                     |
| 29875     | II s                           | Arasanatham | Moderate alkalinity, calcareousness | Soil reclamation                      |
| 8934      | III sw                         | Vanur       | Alkalinity, sub surface drainage.   | Improving drainage selection of crops |

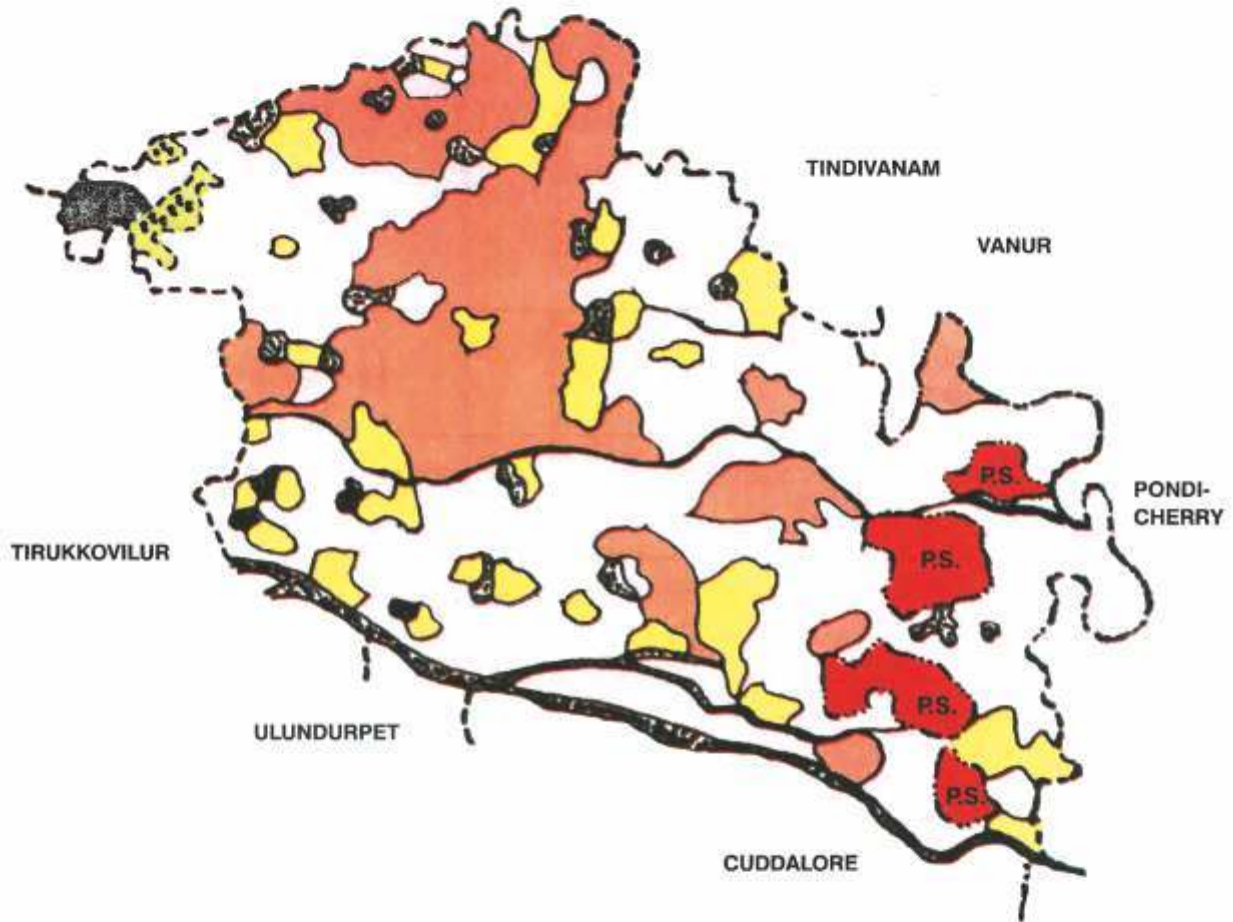
#### Class

- II. Good cultivable lands that have moderate limitations for sustained use under agriculture.
- III. Moderately good cultivable lands that have severe limitations for sustained use under agriculture.

#### Sub-class

- e - Erosion & run off  
w - Excess water  
s - Root zone limitation

# LAND CAPABILITY VILLUPURAM TALUK



## REFERENCE

- · · · — STATE BOUNDARY
- TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- TANKS
- PONDICHERRY STATE

## LEGEND

- II e
- II s
- III sw
- III se

## LAND IRRIGABILITY

### VILLUPURAM TALUK

| Area (ha) | Irrigability Classification | Soil Series | Limitation                                       |
|-----------|-----------------------------|-------------|--|
| 3763      | 2 s                         | Vadamadurai | Low water holding capacity in surface soil       |
| 29875     | 2 s                         | Arasanatham | Moderate alkalinity the sub surface              |
| 8934      | 2 sd                        | Vanur       | Alkalinity, slow permeability in the sub surface |

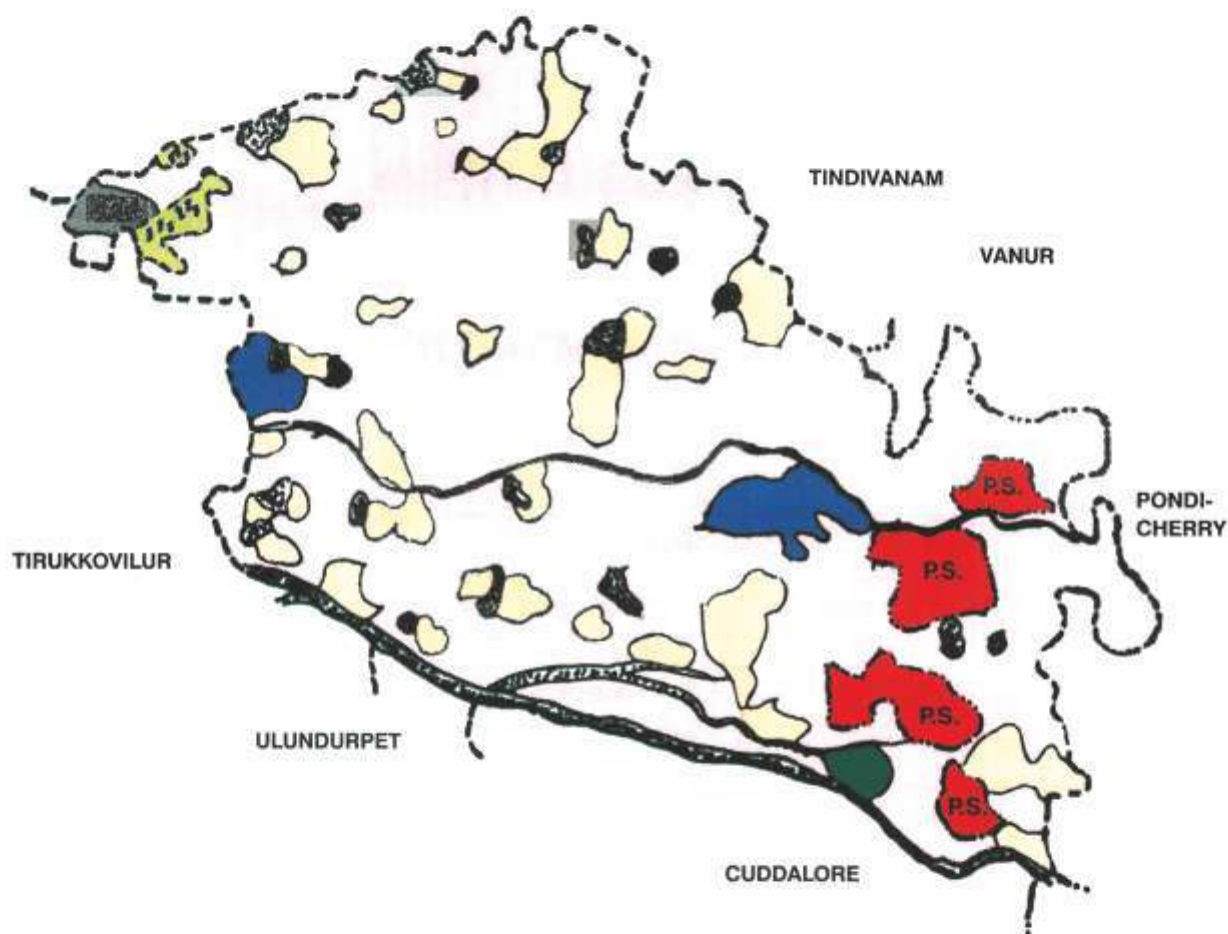
#### Class

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

#### Sub class

- s - Soil limitation  
d - Drainage

# LAND IRRIGABILITY VILLUPURAM TALUK



## REFERENCE

- STATE BOUNDARY
- TALUK BOUNDARY
- COASTAL BOUNDARY
- RIVERS & GULLY
- TANKS
- P.S. PONDICHERRY STATE

## LEGEND

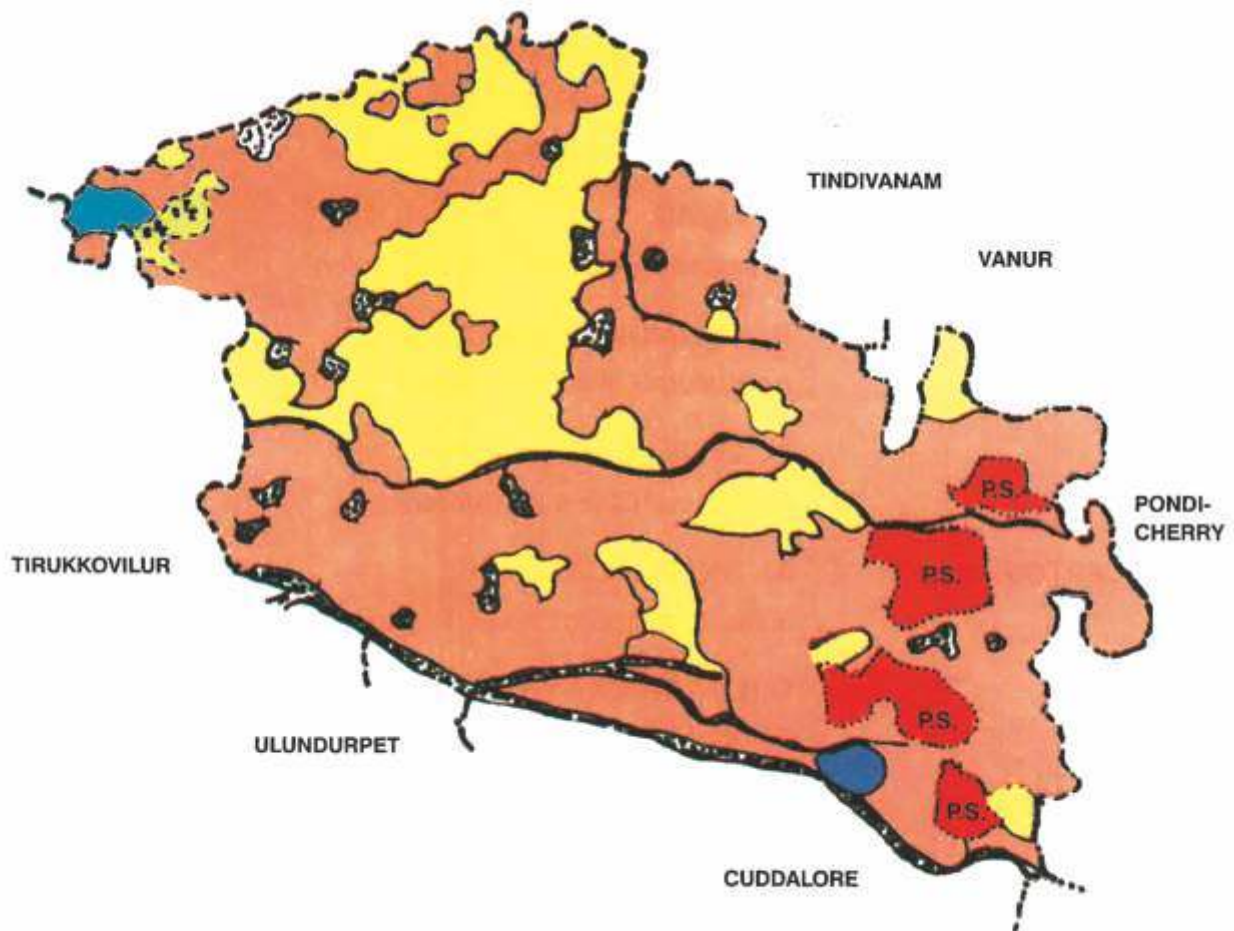
- 2 s
- 2 d
- 2 sd
- 4 st
- 4 sd

## SOIL PRODUCTIVITY

### VILLUPURAM TALUK

| Area<br>(ha) | Productivity |          | Soil Series          |
|--------------|--------------|----------|----------------------|
|              | Rating       | Grouping |                      |
| 38809        | 20 - 34      | Average  | Vanur<br>Arasanatham |
| 3763         | 35 - 64      | Good     | Vadamadurai          |

# SOIL PRODUCTIVITY VILLUPURAM TALUK



## REFERENCE

- · · · — STATE BOUNDARY
- - - - - TALUK BOUNDARY
- COASTAL BOUNDARY
- ~~~~~ RIVERS & GULLY
-  TANKS
-  PONDICHERRY STATE

## LEGEND

-  EXTREMELY POOR
-  AVERAGE
-  GOOD

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ii). Reconnaissance Soil Survey Reports  
published by Soil Survey & Land organization, Vellore  
iii). Village Level Fertility Status Compiled by  
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