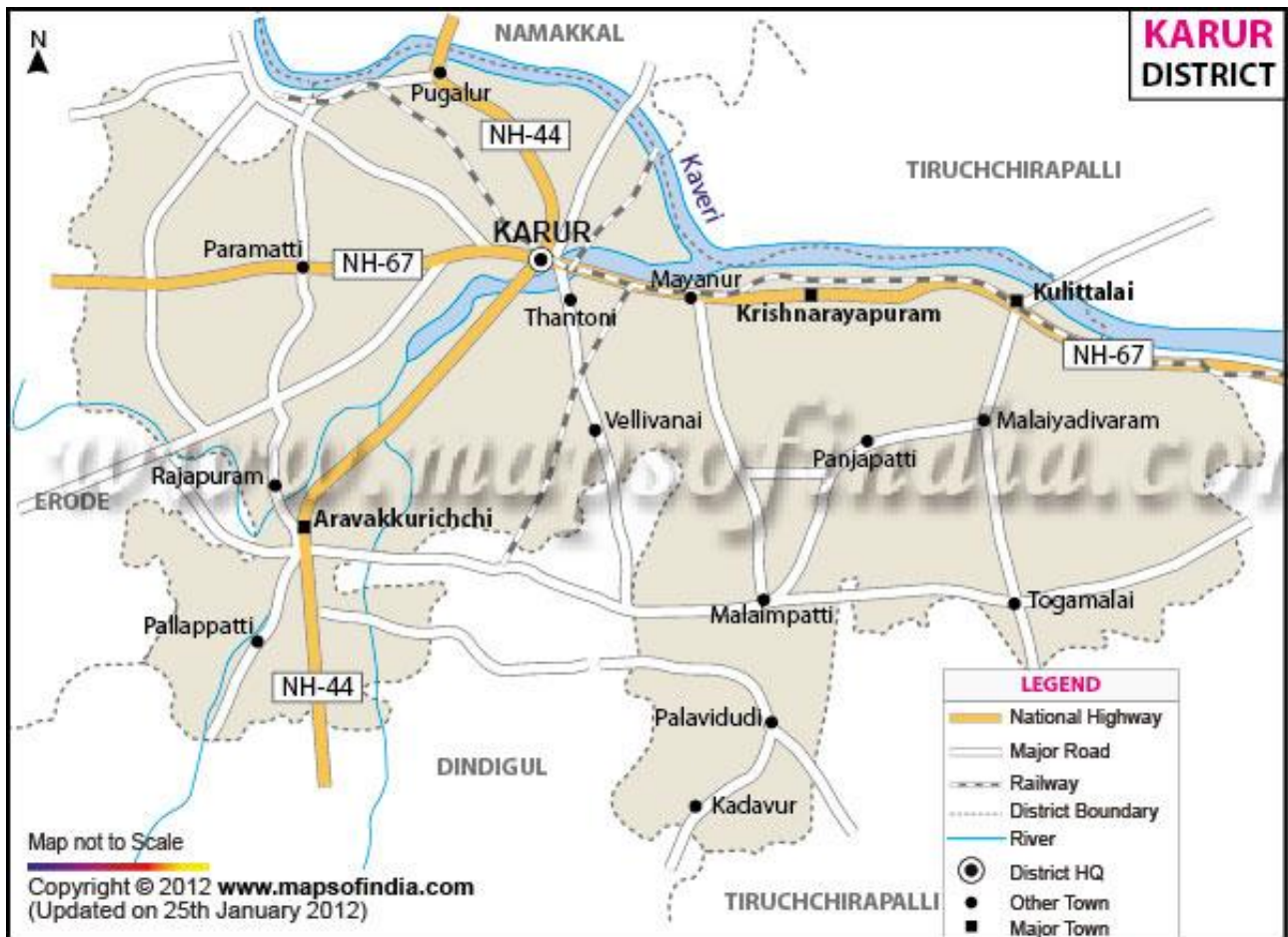


1. Introduction:-

In pursuance to the Gazette Notification, Ministry of Environment, Forest and Climate Change, the **Government of India Notification No. S.O.3611 (E) dated 25.07.2018** laid procedure for preparation of District Survey Report of minor minerals other than sand mining or river bed mining. The main purpose of preparation of District Survey Report is to identify the mineral resources and developing the mining activities along with other relevant data of the District.



2. Overview of Mining Activity in the District:-

The Karur District forms part of the Archean complex of peninsular gneiss. The general rock types of this area are Charnockite, Biotite gneiss, Migmatites and Anorthosites. Karur District is blessed with good reserves of Crystalline Limestone known as “**Palayam belt**” in Varavanai, Thennilai, Gudalur etc., villages in Kulithalai Taluk and the occurrences of good quality of pegmatite veins constituting with glassy Quartz and potash Feldspar in lensoid patches in Nagampalli and Pungambadi areas in Aravakurichi Taluk. The major mineral such as Limestone, Quartz and Feldspar and Magnesite and Dunite are exploited in Karur District and utilized in the mineral based industries.

The **Charnockite and Granite Gneiss rocks** are found to occur in K.Paramathi, Athur, Thennilai, Punnam, Kuppam, Munnur, Karudayampalayam, Anjur villages in Karur and Aravakurichi Taluk are exploited to produce building materials and road metal (Jelly) and over burden soil appear as gray to reddish in colour called as gravel.

The commercially known “**ColoumboZubrana**” the unique type in the **Multicoloured Granite / Granite Gneiss** category is occurring in Thogamalai, Naganur and Kazhugur Villages in Kulithalai Taluk. These rock type belong to minor mineral category. The arrangement of alternate layers of felsic and mafic minerals in linear pattern and exhibits wavy pattern in the rock and giving very good structure for the rock type. The well developed gneissic pattern with linear arrangement, the rock type have attracted the granite market and found to be suitable for the exploitation of granite blocks.

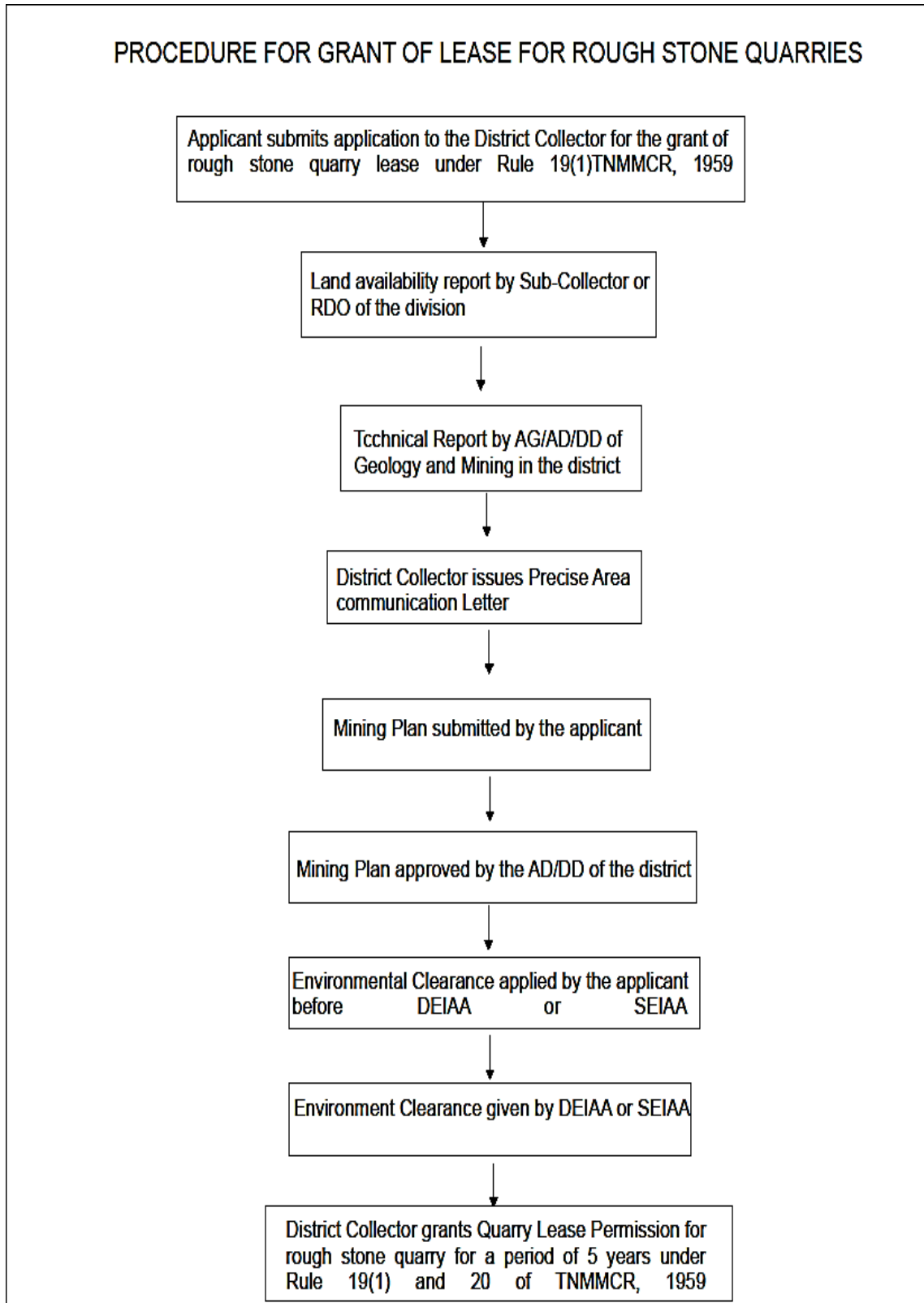
Calc-Gneiss (called as colonial white occurs in Pitchampatti Village of Karur Taluk are of export worthy quality commodity known at K.Pitchampatti Village.

Details of minor mineral quarry leases in patta and Government (poromboke) lands in the district

Table No.1 Details of quarrying leases in patta and poromboke lands in the district

S. No.	Name of the Mineral	Classification of Land	No.of Existing leases
1.	Limestone	Patta	14
		Government land	2
2.	Magnasite&Dunite	Patta	2
3.		Government land	-
4.	Quartz and Feldspar	Patta	55
		Government land	-
5.	Granite	Patta	49
		Government land	5
6.	Rough Stone	Patta Land	154
		Government Land	7
7.	Gravel/Earth	Patta	4

Table No.The Procedure for grant of lease for Quarry



The majority of the minerals available in this district and their brief details are as follows: -

a) Limestone:-

Low grade to Cement grade limestone is found extensively at Kulithalai Taluk (Thevarmalai, Melapaguthi, Varavanai, Vellalapatti, Keeranur, Pothuravuthampatti, Kalladai, Kaliyapatti etc., villages), at Aravakurichi Taluk (Esanatham, Ammapadi, Alamarathupatti, Thennilai etc., villages) and K.Pitchampatti of Karur Taluk. The limestone is being used at Cement industries, as fillers in the fertilizer and in the cement factories. Presently 30 leases are existing at Karur District.

b) Magnesite & Dunite quarry:-

Aravakurichi, Thenilai Latitude 10° 59' 03.29" Longitude 77° 53' 15.57".

c) Granite:-

There are good quality of hard rocks which are particularly available at Kulithalai and Aravakurichi Taluks. But the rocks available at Thogamalai, Naganur, Kalugur and Porunthalur of Kulithalai Taluk are of export worthy and they are being operated for the extraction of granite block both by M/s. TAMIN and private companies.

d) Quartz and Feldspar:-

Milky to glassy variety of Quartz and Potash feldspar with an average of 12% potash is the common economic mineral available extensively at Aravakurichi Taluk (Pungambadi-West, Nagampalli, Punjaikalakurichi, Pavithram, Soodamani, Venjamangudalur (East), Aravakurichi, Kodanthur (South), Rajapuram, Kodaiyur etc., villages) less prominently at Kulithalai Taluk (D.Edayapatti, Sengal, Varavanai, Pannapatti, Vadavambadi etc., Villages) and at Karur Taluk (Velliyanai South Village). High grade Quartz is being exported, low grade used in the manufacture of glass and Feldspar in the ceramic and tile manufacturing industries. Presently 42 leases are existing at Karur District.

e) Gemstones:-

Apart from the above good quality of Gem variety such as Ruby (cordierite in the cordierite sillimanite gneiss) and beryl (aquamarine in the pegmatite vein in acicular shapes) are the common man's hunt at Keeranur, Muthunaickenpatti, Varavanai and Pannapatti villages of Kulithalai Taluk. Other gem variety such glassy crystallised quartz, amethyst and moonstone (catsey etc., are also found in this area).

f) Roughstone:-

The Charnockite rocks are found to occur in K.Paramathi, Punnam areas etc., of Aravakurichi Taluk which are exploited to produce building materials and road metals.

3. General Profile of the District:-

Karur district lies between 10 °63' and 11°14 ' north latitude and 77 °90' and 78° 61' east longitude. Karur town is located on the bank of Amaravathi river. Karur is one of the oldest towns in the State of Tamil Nadu and has played a very significant role in the history and culture of the Tamils. Its history dates back over 2000 years, and has been a flourishing trading centre even in the early Sangam days. In the ancient and medieval times, the area was ruled by the Cheras, Gangas and Cholas. Karur was the capital of Cheras during the past Karur district came to existence on 30th September 1995 by bifurcation of Tiruchirappalli district. According to 2011 census, Karur district had a population of 10,76,588 with a sex-ratio of 1,015 females for every 1000 males. The district average literacy is 81.74%. The total area of Karur district is 2,895 square kilometer.

Karur consist of 7 Taluks viz., 1. Karur, 2.Kulithalai, 3.Aravakurichi, 4.Krishnarayapuram, 5.Kadavur, 6.Manmangalam, 7.Pugalur.

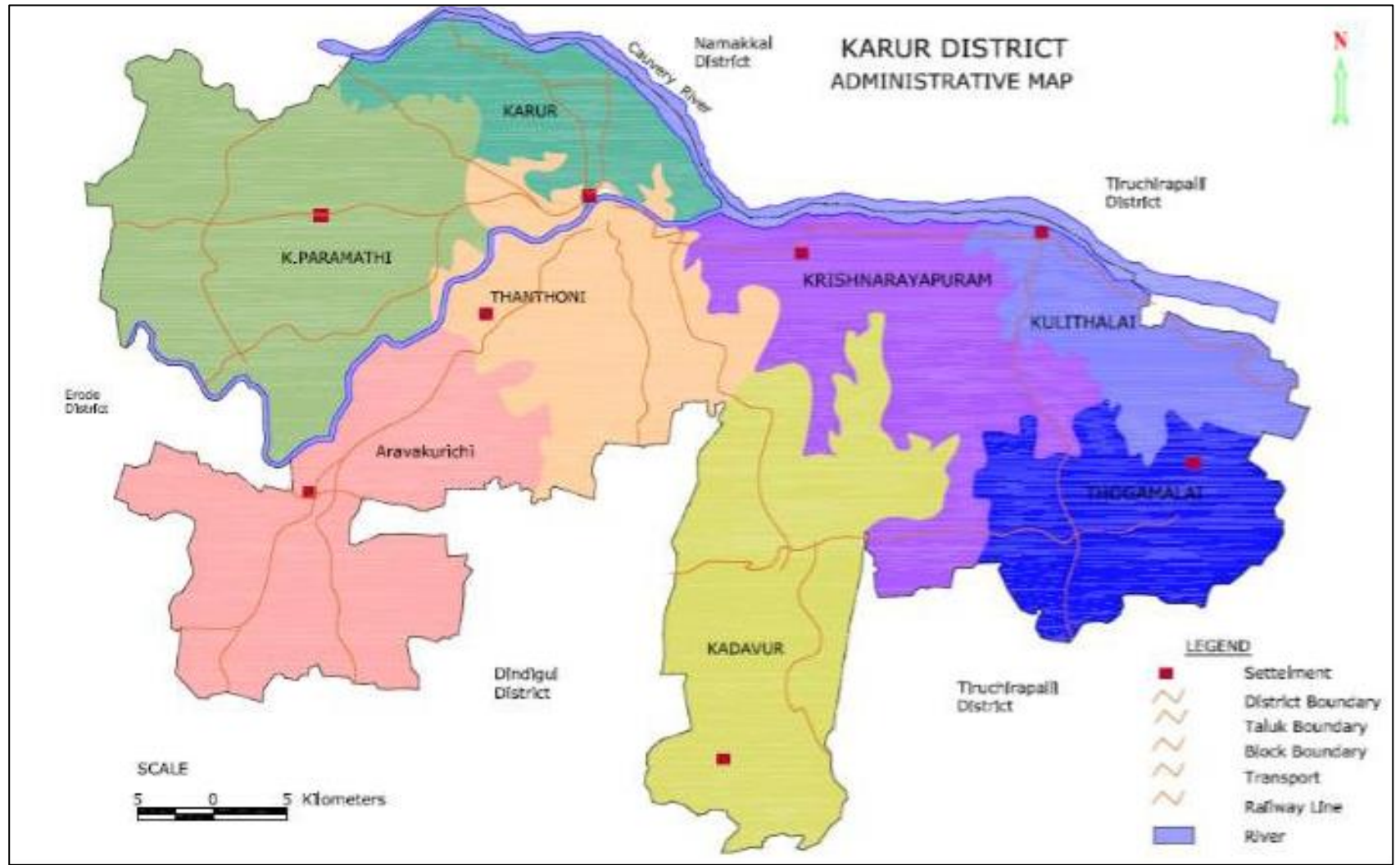
There are two national highways: NH-44 (North South Corridor Road (Kashmir to Kanyakumari)) Srinagar - Kanyakumari and NH-67 (Nagapattinam - Trichy - Karur - Coimbatore - Gudalur), which connect with other major towns.

The nearest airport is in Tiruchirappalli Airport (85 km). The nearest major sea port is at Thoothukudi (280 km).

DISTRICT AT A GLANCE :

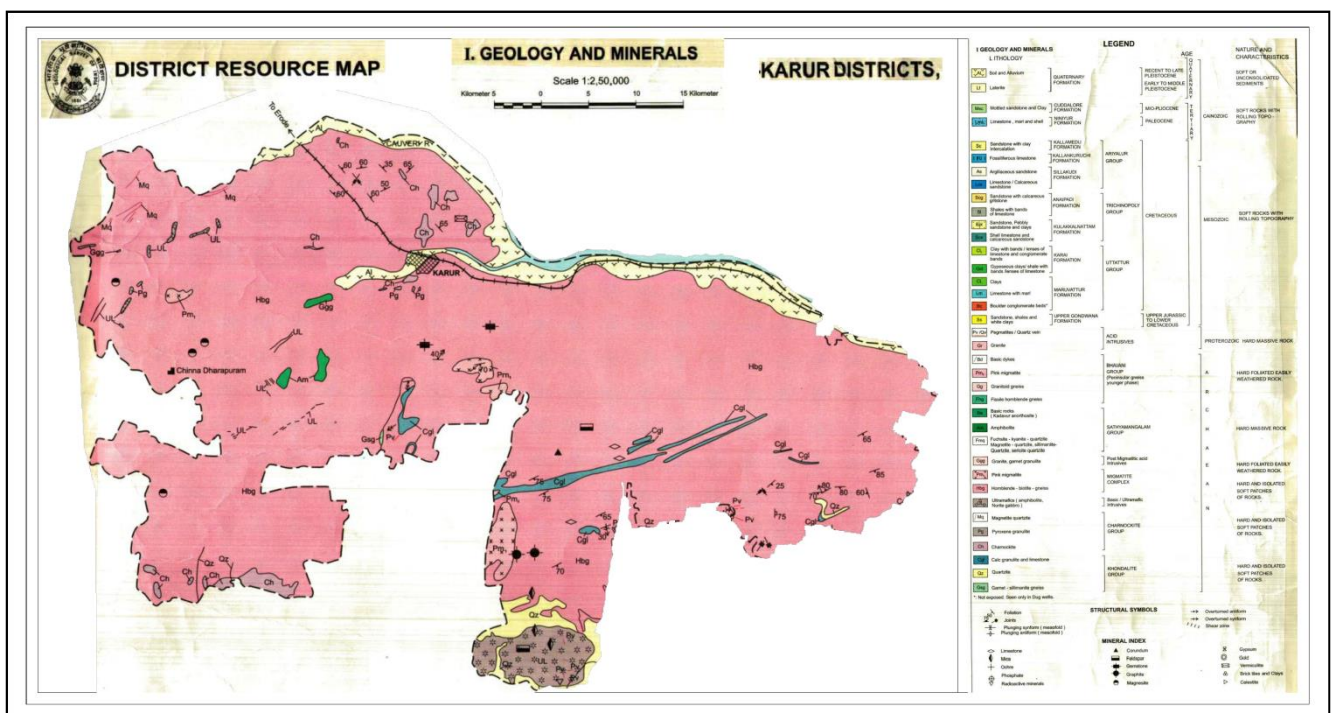
Particulars		Statistics	
Geographical features			
Geographical Data		2895.57 Sq.Kms	
i)Latitude		10.45” to 11.45” North	
ii)Longitude		77.45” to 78.07 East	
iii)Geographical Area			
Administrative Units			
i)Sub divisions		2	
ii)Tehsils		6	
iii)Sub – Tehsil		-	
v)Patwar Circle		-	
v)PanchayatSimitis		10	
vi) Nagar nigam		4	
vii) Nagar Palika 11		11	
viii) Gram Panchayat		158	
xi) Revenue villages		203	
x) Assembly Area			
II.Population			
Sex-wise			
i)Male		534392	
ii) Female		542196	
Rural Population		642415	
III.Agriculture			
Land Utilization			
i)Total Area		2010-2011	289557 Hec
ii)Forest Cover		2010-2011	6187 Hec
iii)Non Agriculture Land		2010-2011	37264 Hec
v)Cultivable Barren land		2010-2011	2901 Hec
Forest			
(i)Forest		2010-2011	6187 Hec
Livestock & Poultry			
Cattle			
i)Cows		2007	143953
ii)Buffaloes		2007	73067
Other Livestock			
i)Goats		2007	173591
ii) Pigs		2007	10205
iii)Dogs & Bitches			31746
IV) Railways (in km.)			
(i)Length of rail line		2010-2011	93.85

V) Roads			
(a) National Highway	2010-2011		118.8
(b) State Highway	2010-2011		222.731
(c) Main District Highway	2010-2011		348.120
(d) Other district & Rural Roads	2010-2011		3769.03
road/Agriculture Marketing Board Roads	2010-2011		
f) Kachacha Road	2010-2011		
VI) Communication			
(a) Telephone Connection	2010-2011		118268
(b) Post offices	2010-2011		246
(c) Telephone center	2010-2011		100
(d) Density of Telephone	2010-2011	0 Person	126
e) Density of Telephone	2010-2011	.Per KM	40
(f) PCO Rural	2010-2011	No.	1339
(g) PCO STD	2010-2011	No.	295
(h) Mobile	2010-2011		373474
(VII) Public Health			
(a) Allopathic Hospital	2010-2011		6
(b) Beds in Allopathic Hospitals	2010-2011		419
(c) Ayurvedic Hospital			-
(d) Beds in Ayurvedic Hospital			-
(e) Unani Hospitals			-
(f) Community Health centers			-
(g) Primary health centers			36
(h) Dispensaries			104
i) Sub Health Centers			168
(j) Private Hospitals			32
(VIII) Banking Commercial			
(a) Commercial Bank			53
(b) Rural Bank Products			52
(c) Co-operative bank products			98
(d) PLDB Branches			03
(IX) Education			
(a) Primary School			568
(b) Middle Schools			186
(c) Secondary & Senior Secondary Schools			107
(d) Colleges			22
(e) Technical University			-



4. Geology of the District:-

Geologically, the entire district can be classified into hard rock and sedimentary formations. Hard rock Formation: - More than 90 percent of the district is underlain by hard rock of Archaean age. The gneissic type of Formation is the major formation among the various types of hard rocks. Charnockite occurs in this district as pockets in Karur and Aravakurichitaluks. Quartzites which are resistant to weathering are also seen as patches in Charnockite and gneissic varieties and the above rock types are shown in Figure 3.5. Sedimentary Formation: - Recent alluvial deposits such as sand, silt, clay, gravel etc. which are transported sediments by river are found on the other side of Cauvery river in Karur, Krishnarayapuram and Kulithalaiblocks. These formations are overlying the hard rock.



The entire area of the district is a pediplain. The Rangamalai hills and Kadavur hills occurring in the southern side of the district constitutes the remnants of the much denuded Eastern Ghats and rise to heights of over 1031m above mean sea level. The district general slopes gently towards north east and forms a vast stretch of plain country till the eastern boarder of the district. There are numerous small residual hills represented by Ayyarmalai, Thanthonimalai and Velayuthampalayam hills. The general elevation of the area is ranging between 100 m and 200m above mean sealevel. The prominent geomorphic units identified in the district through interpretation of Satellite imagery are 1) Structural hill, 2) Pediments, 3)Shallow Pediments, 4) Buried Pediments and 5) Alluvial plain.

4.1 Soil:-

Soil types of the area are more important, since soil deposition is important for agricultural production and also for the recharge of groundwater. Different types of soil are derived from a geological formations. On the basis soil map of Karur district based on the survey by the Tamil Nadu Agricultural Department indicates four different types of soils viz., Red Soil, Thin Red Soil, Red Loam and River Alluvium Soil. The red soils are predominantly seen in Kadavur, Kulithalai, Krishnarayapuram, Thanthoni and Thogamalai blocks. The thin red soils are seen in Aravakurichi and K. Paramathy blocks. Major portion of Karur block is covered by red loom. Various types of crops raised in different types of soil in different parts of district.

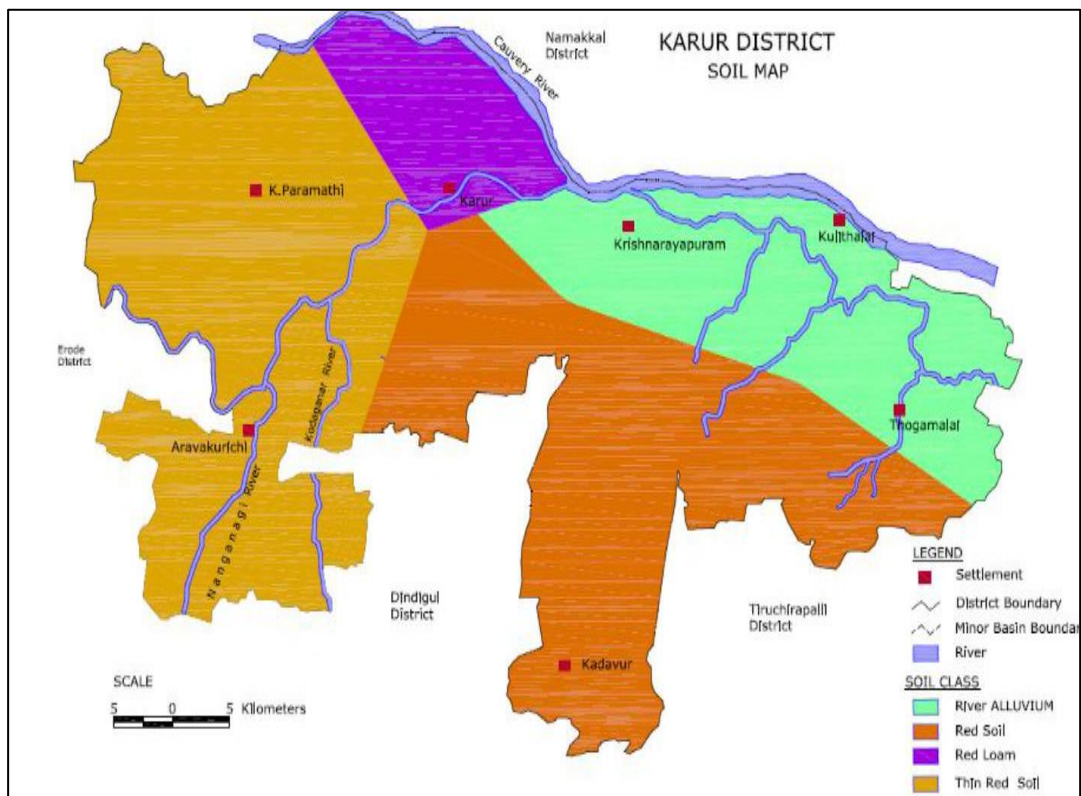


Fig: Karur District Soil Map

4.2. Geomorphology :-

The entire area of the district is a pediplain. The Rangamalai hills and Kadavur hills occurring in the southern side of the district constitutes the remnants of the much denuded Eastern Ghats and rise to heights of over 1031m above mean sea level. There are numerous small residual hills represented by Ayyarmalai, Thanthonimalai and Velayuthampalayam hills. The general elevation of the area is ranging between 100 m and 200m above mean sea level. The prominent geomorphic units identified in the district through interpretation of Satellite imagery are 1) Structural hill, 2) Pediments, 3) Shallow Pediments, 4) Buried Pediments and 5) Alluvial plain. An overall appraisal of groundwater occurrence in each geomorphic unit and the significance of its hydro geological characters are given, geomorphology and lineament details are given.

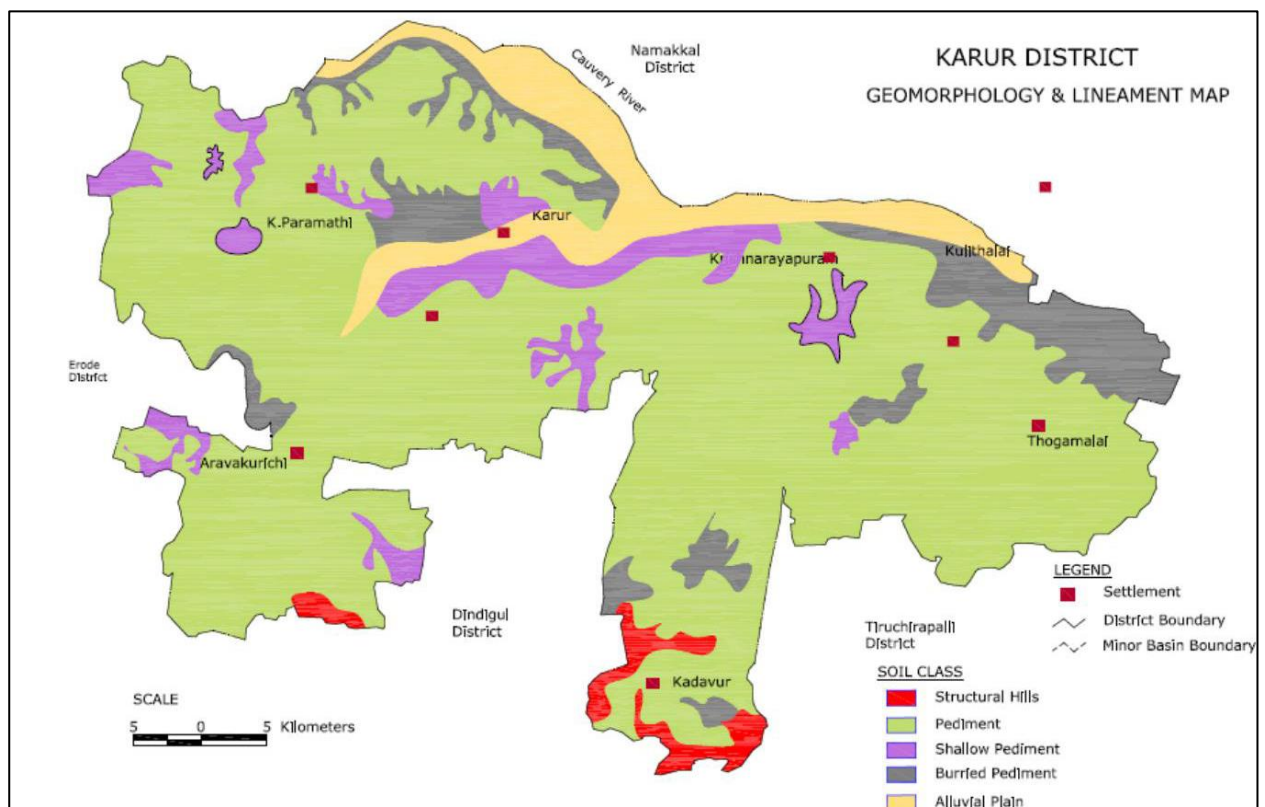


Fig: Karur District Geomorphology & Lineament Map

5. Drainage and Irrigation Pattern:-

Major part of Karur district is drained by Cauvery River. Amaravathi, Kodavanar and Pungar are the important rivers draining the western part of the district and the river Pungar drains in eastern part of the district. The drainage pattern, in general, is dendritic. All the rivers are seasonal and carry substantial flows during monsoon period.

S.No	Name of taluk	Area in ha.	No. of villages	Name of blocks	Area in ha.
1	Karur	60643	52	1. Karur	24335
2	Thanthoni	36308	26	2. Thanthoni	36308
26	2 Aravakurichi	97616	58	1. Aravakurichi	43689
22	2. K.Paramathi	53927	36	3 Kulithalai	49081
45	1.Kulithalai	18903	24	2. Thogamalai	30178
21	4 Krishnarayapur am	82217	48	1. Krishnarayapur am	39503
28	2. Kadavur	42714	20	Total	289557
203		289557	203		289557

Source: Department of Statistics, Karur The river Cauvery is flowing on the northern and eastern boundaries.

The river Amaravathi is flowing through Kparamathi, Aravakurichi, Thanthoni and Karur blocks and joins with Cauvery at Nerur. Kodavanar, which is one of the important tributary of Amaravathi River, drains the western part of the district. Originating in Rangamalai hills located in the boarder of Karur and Dindiguldistrict,. It flows from south to north and joins with the river Amaravathi at Karuvadampatti. The Nanganji river, flowing in the western part of the district, has its origin from the Kottaivali hills in Dindigul district. It flows towards north through Aravakurichi and K.Paramathi blocks and joins with the river Amaravathi at Ariyur. The Pungar river, flowing across the eastern part of the district, has its origin in the Kadavur hills located in the southern part of Karur district. It flows towards north through Kadavur and Krishnarayapuram blocks and joins with the river Cauvery at Timmachalapuram.

1.4 Irrigation Practices

The nine-fold lands use classification for the district is given below.

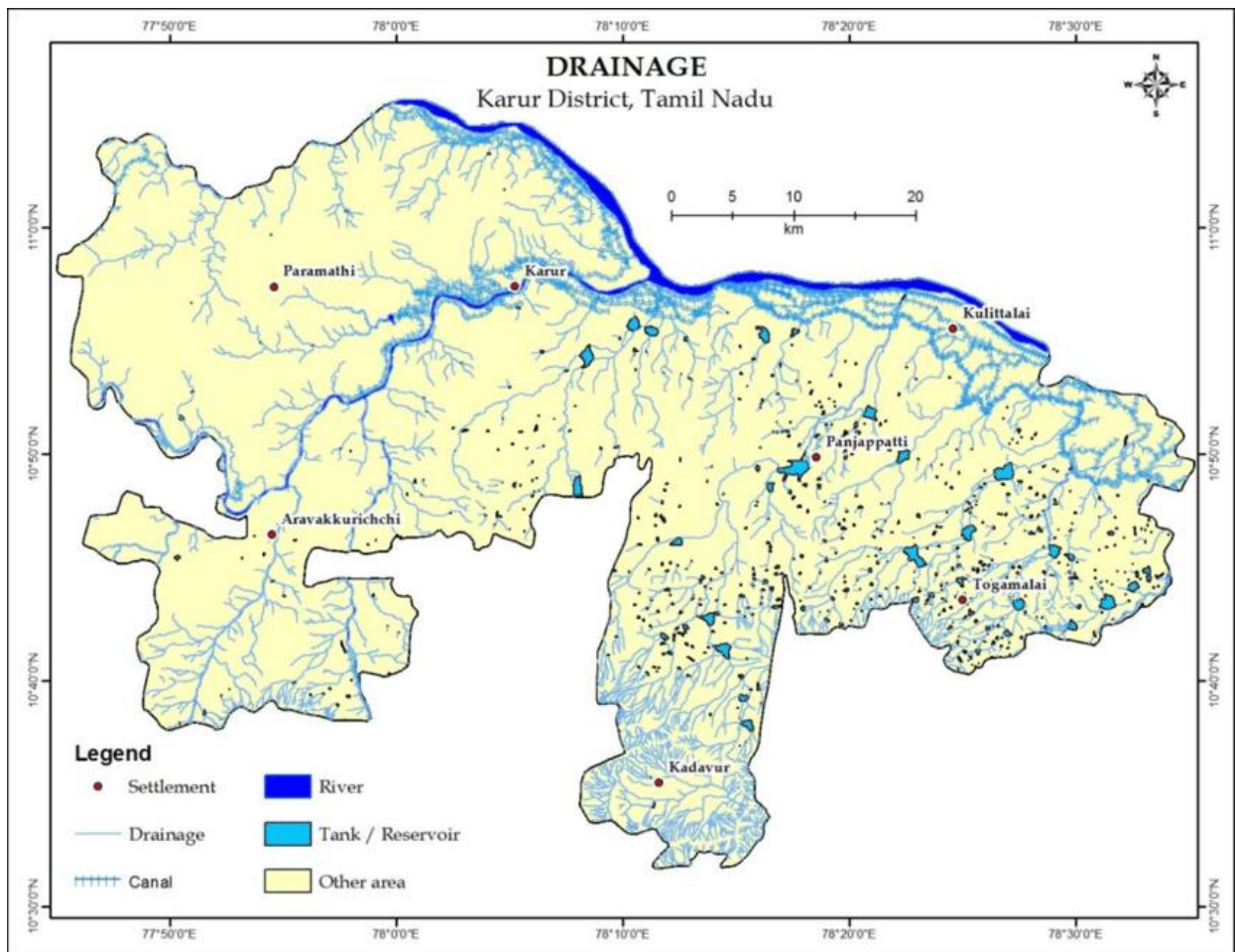
(2005-06)	S.No	Classification	Area (Ha)
1	Forests	6187	
2	Barren & Uncultivable Lands	2901	
3	Land put to non agricultural uses	37264	
4			

Cultivable Waste 67831 5 Permanent Pastures & other grazing lands 10801
 6 Groves not included in the area sown 1278 7 Current Fallows 4774 8
 Other Fallow Lands 46802 9 Net Area sown 111719 Total 289557 (Source:
 Department of Economics & Statistics, Govt. of Tamil Nadu) The data
 available indicate that an area of about 54709 ha, which is about 18.89
 percent of the total geographical area of the district is under irrigated
 agriculture.

Dug wells are the major source of water for irrigation in the district,
 accounting for about 59.97 percent of the total area irrigated in the district.
 Tube wells accounting for about 9.48 percent of the total area irrigated in
 the district. Of the net are irrigated, the canal irrigated area is only 29.45
 percent. The area irrigated under tank is 1.10 percent. It is observed that
 the well irrigation is the highest in Thogamalai block followed by Kadavur
 block. Canal irrigation is highest in Kulithalai block followed by
 Krishnarayapuram, Karur and K.Paramathy blocks. Block wise and source
 wise net area irrigated (2005-2006)

Sl.	Block	Canals	Tanks	Bore wells	Dug wells	Other Sources	Total Net Area Irrigated
1	Aravakurichi	0	39	1032	2908	0	3979
2	K.Paramathy	1605	0	864	1801	0	4270
3	Kadavur	0	140	954	5716	0	6810
4	Karur	2825	0	480	3458	0	6763
5	Krishnarayapuram	3225	163	460	5845	0	9693
6	Kulithalai	7654	104	140	1331	0	9229
7	Thanthoni	207	45	847	3918	0	5017
8	Thogamalai	598	110	410	7830	0	8948
9	Total	16114	601	5187	32807	0	54709

(Source: Department of Economics & Statistics, Govt. of Tamil Nadu).



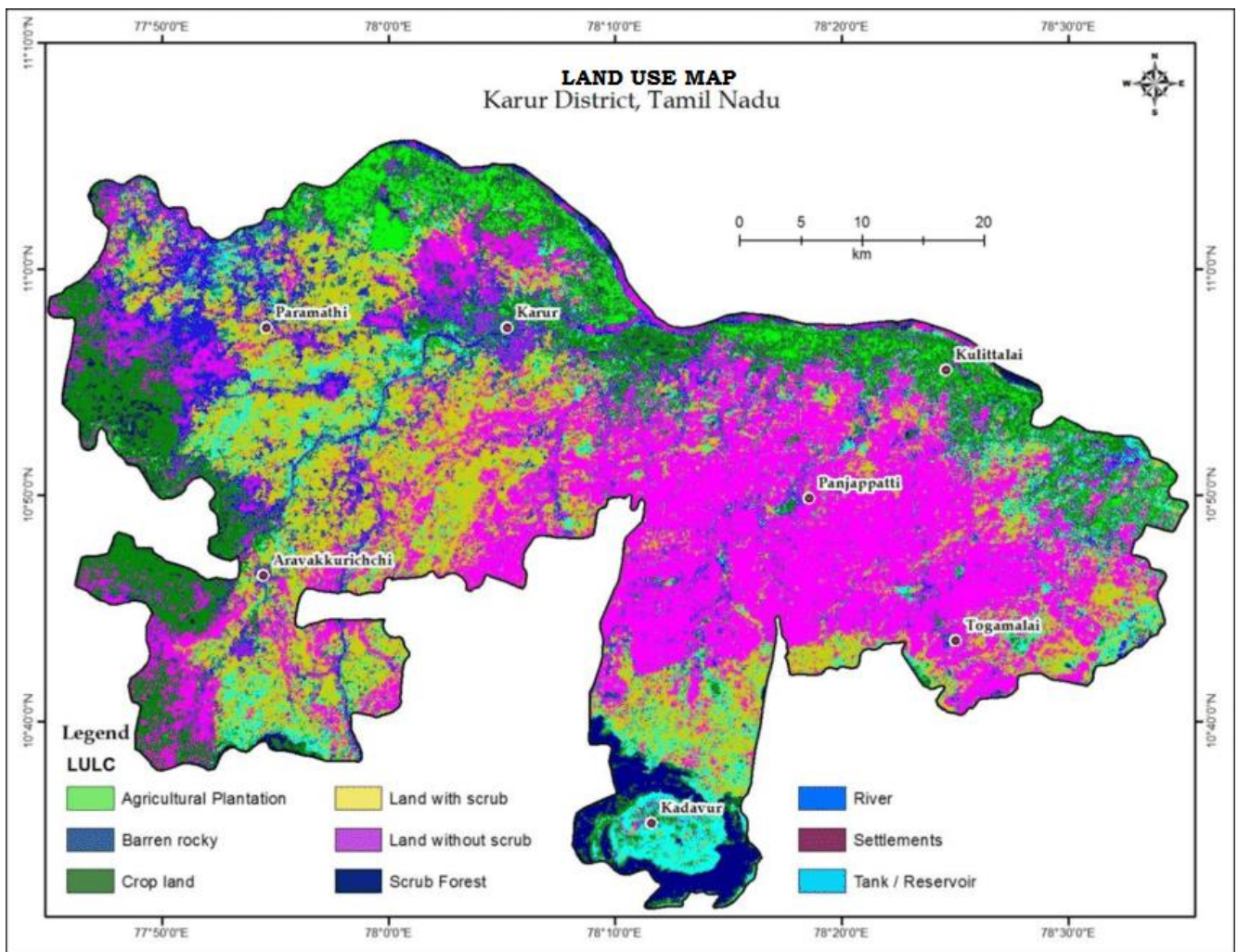
6. Land utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining, etc.,

Karur District is a part of cauvery delta region and utilization of land area in the district is up to 44.59%. 4.76% of the land area remains as other uncultivated land. 2.74% is forest area in Karur district. Black soil is the predominant soil type in this district accounting for 35.51% followed by laterite soil for 23.85%. The remaining 20.31% is sandy, coastal and alluvium soil. The main crops are paddy, banana, sugarcane, beetle leaf, grams&pulses, tapioca, kora grass, groundnuts, oilseeds, tropical vegetables, garland flowers, and medicinal herbs.

LAND UTILIZATION DETAILS:-

Sl. No.	Particulars	Area in ha	% to the Total geographical area
1	Total geographical area	289557	
2	Area under Forest	6187	2.14
3	Barren and uncultivable land	2901	1.00
4	Land put into non-agricultural uses	37264	12.87
5	Cultivable waste	67831	23.43
6	Permanent pastures and other grazing lands	10801	3.73
7	Miscellaneous tree crops and grooves not included in the net area sown	1278	0.44
8	Current Fallow	4774	1.65
9	Other Fallow	46802	16.16
10	Net Area Sown	111719	38.58
11	Area sown more than once	2835	0.98
12	Gross Cropped Area	114554	39.56

LAND USE MAP OF KARUR DISTRICT



7. Surface Water and Ground water scenario of the District:-

Ground Water:-

Out of the total groundwater recharge, about 10% is kept reserved for natural recharge during non-monsoon period. The balance is earmarked as a suitable groundwater recharge for further development of irrigation. When the groundwater development is more than 100%, it is categorized as over exploited. When it is between 90 and 100%, it is categorized as critical. When it is between 70 and 90%, it is categorized as semi-critical. When it is less than 70% it is categorized as safe.

The groundwater quality is being monitored by PWD by analysing water samples from the monitoring wells in pre and post monsoon period. In Karur district 18 shallow open wells and 21 boreholes were selected for groundwater monitoring since 1972. In 2005 report PWD states that the groundwater quality of both shallow open well and borehole in Aravakurchitaluk is moderate with TDS values ranging between 818 to 1591 mg/L in the villages Karveli, Pudevadi, Thirumanickampatti, Vattamangalam, Karudayampalayam, Esanatham, Nagampalli, Kodanthuran Sendamangalam. The poor water quality for drinking purposes is observed in the villages of Paraiyur and Venjamangudalur with TDS value of 2570 and 2536 mg/L respectively. In Karur taluk in general the groundwater quality is moderate in the shallow open well and bore hole with TDS values ranging between 799 to 1703 mg/L in the villages of Kaliyappagoundanur, Puliur, Kakkavadi, Kuppachiplayam, Pudupalayam, 136 Jellipatti and Jagathapi. Only one village namely Kuppam is having poor quality water with TDS value of 6664 mg/L and the water is not suitable even for agricultural purposes. In Krishnarayapuram taluk, the quality of water is good in the villages of Devarmalai, Vengampatti and Kannimarpalayam with TDS values ranging between 321 to 500 mg/L both in shallow open well and bore holes. The moderate quality is observed in the villages of Manchanayakanpatti, Valayakaranpudur and Palaviduthi with TDS values between 566 to 1482 mg/L. The poor quality of water is observed in the village of Vayalur with TDS value of 5205 mg/L. In Kulithalaitaluk, the quality is moderate in all

villages of Pulitheri, Nachchalur, Nallur and Pillaigodangipatti with TDS values ranging between 532 to 1313 mg/L. The quality of water in this district is generally good for irrigation with sodium adsorption ratio (SAR) less than 10. However the quality of water in Kuppam villages of Karur taluk, Vayalur villages of Krishnarayapuram Taluk is having poor quality water for irrigation with SAR value 17.8 and 10.5 respectively.

Ground Water is found beneath the earth's surface and is an important source of water in most of the Districts in the State. Ground Water is withdrawn for Agriculture, Municipal and industrial use. The depth at which the ground water is found is called Ground water Table. The district is classified into different blocks based on the ground water abstraction rate.

Over exploited (Greater than 100%)	Critical (Between 90 and 100%)	Semi - Critical (70 - 90%)	Safe (Less than 70%)
K.Paramathy, Kadavur, Mailampatti, Pallapatti, Thennilai, Panjapatti, Thoranakalpatti, Vangal, Velliyanai, Thogaimalai	Kattalai, Pugalur, Thalapatti	Karur	Aravakurichi, Chinnadharapuram, Kulithalai, Nangavaram, Chinthlavadi

Source : State Ground and Surface water resources Data Centre.

Surface water:-

- The entire area of this district is drained by the river Cauvery, which flows on the northern boundary of the district.
- The major river courses which come under Cauvery basin are Bhavani, Noyyal and Amaravathi.
- The tributary rivers namely Amaravathi, Kodaganar and Noyyal drain the western part of the district.

Hydrogeology:-

Karur district is underlain entirely by Archaean Crystalline formations with Recent alluvial deposits occurring along the river and streams courses. Weathered, fissured and fractured crystal linerocks and there centalluvial deposits constitute the important aquifer systems in the district.

The porous formation sin the district are represented by river alluvium. These alluvial deposits are confined to the Major River and stream courses only. Ground water occurs under phreatic conditions. The maximum saturated thickness of the sea quifers is upto 10 m depending upon the topographic conditions.

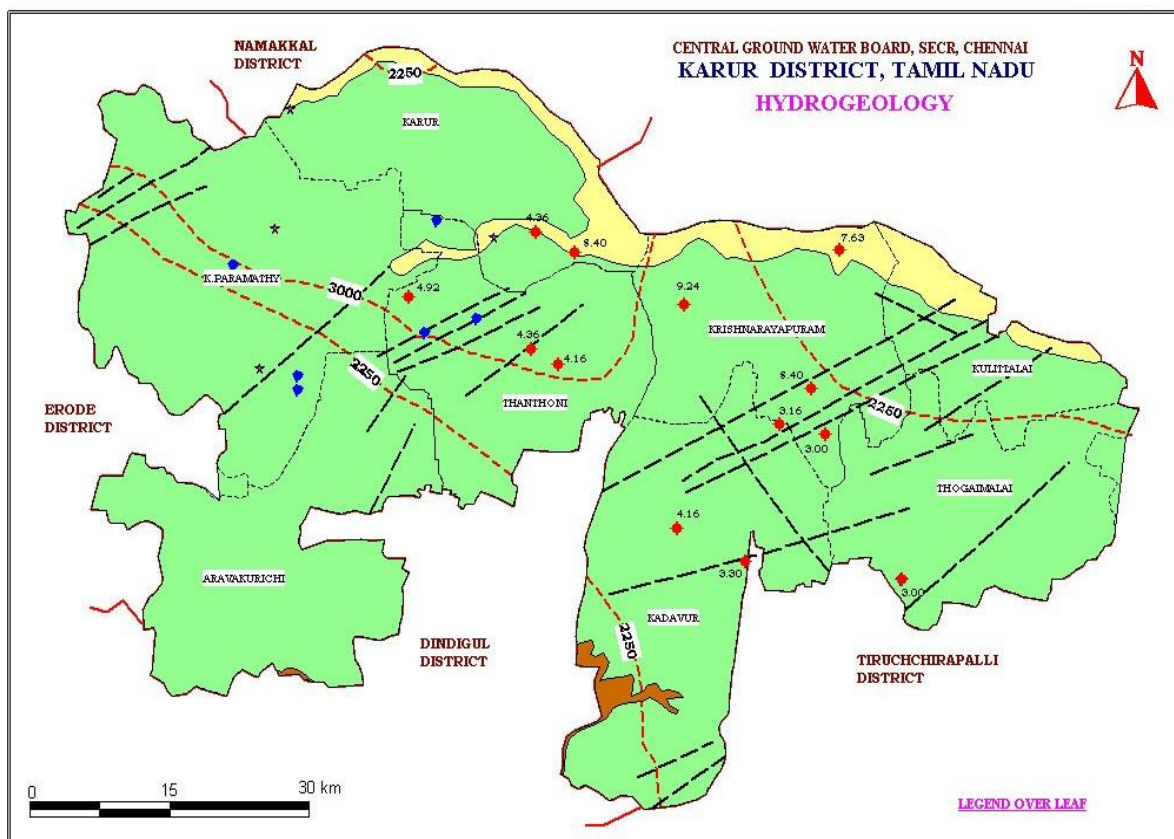
The hard consolidated crystalline rocks of Archaean age represent weathered, fissured and fractured formations of gneisses, granites, charnockites and other associated rocks. Ground water occurs under phreatic conditions in the weathered mantle and under semi-confined conditions in the fractured zones. The thickness of the weathered mantle of the hard rocks is varying from less than a meter to as much as 20.10 m. It is within the depth of 15m in major part of the district.

The Specific capacity of large diameter wells tested in crystalline rocks from 31 to 200 lpm / m. of drawdown. The yield characteristics of wells vary considerably depending on the topographic set-up, lithology and the degree of weathering.

The yield of bore wells drilled down to a depth of 70 to 100 m, by various state agencies mainly for domestic purposes ranged from 100 to 600 lpm. The yield of successful bore wells drilled down to a depth of 200 m bgl during the ground water exploration programme of Central Ground Water Board ranged from 0.50 to 14.00 lps. The aquifer and well parameters of the wells show wide variation.

The depth to water level in the district varied between 1.97 – 7.80 m bgl during pre- monsoon period (May 2006) and varied between 1.35 – 6.83 m bgl during post monsoon depth to water level (Jan 2007).

The seasonal fluctuation shows a rise in water level, which ranges from 0.46 to 1.98m. The piezometric head varied between 3.53 to 5.34 m bgl (May 2006) during pre monsoon and 2.04 to 7.59 m bgl during post monsoon.



Basin and sub-basin:-

Karur district is falling in Cauvery river basin as per the Irrigation Atlas of India. The district is divided into three minor basins, namely Kulithalai, Amaravathi and Thiruchimino basin.

8. Climate and Rainfall of the District:-

Rainfall:-

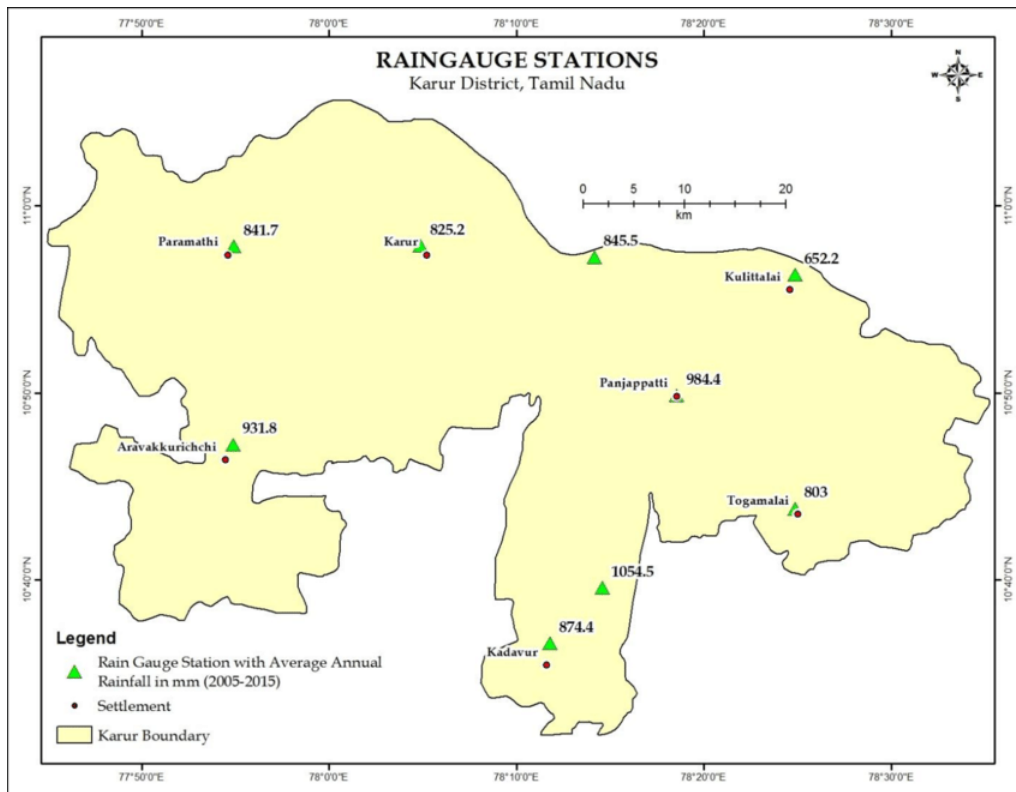
The district receives the rain under the influence of both southwest and northeast monsoons. The northeast monsoon chiefly contributes to the rainfall in the district. Most of the precipitation occurs in the form of cyclonic storms caused due to the depressions in Bay of Bengal. The southwest monsoon rainfall is highly erratic and summer rains are negligible. Rainfall data from three stations over the period 1901-2000 were utilised and a perusal of the analysis shows that the normal annual rainfall over the district varies from about 620 mm to 745 mm. It is the minimum around Aravakurichi (622.7mm) in the western part of the district. It gradually increases towards eastwards and attains a maximum around Kulithalai (744.6mm):

Climatic Conditions:-

The district enjoys a tropical climate. The period from March to May is generally hot and dry. The weather is pleasant during the period from November to January. Usually mornings are more humid than afternoons. The relative humidities are generally between 40 and 80%. But in the period from February to July the air is comparatively drier in the afternoon.

The mean maximum temperature ranges from 26.7 to 38.56 °C and the mean minimum temperature ranges from 18.7°C to 29.3°C. The day time heat is oppressive and the temperature is as high as 43.9°C. The lowest temperature recorded is of the order of 13.9°C.

Monthwise Rainfall details in Karur District for the last three years.



9. Details of mining leases in the Districts per the following format:- GRANITE

Sl. No.	Name of the Miner	Name of the lessee	Address & Contact No of Lessee	Mining lease Grant Order No & date	Area of Mining lease (ha)	Period of Mining lease (Initial)		Period of Mining lease 1 st /2 nd		Date of commencement of Mining Operation	Status Working/Non working/T emp. Working for dispatch etc.)	captive/ Non-captive	Obtained Environmental clearance (yes/No), If Yes letter No with date of grant of EC	Location of the Mining Lease (Latitude & Longitude)
						From	To	From	To					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1.	Multico lour Granite	Tvl.TAMIN Ltd.,	31.Kamarajar Salai Chepauk	3(D)No.22 Ind. (MME2) Dept.,	3.47.5 out of 8.36.0	6.08.2002	25.08.2022	6.08.2002	25.08.2022	6.08.2002	Non-Operation	Nil		78 24' 20.91 E 10.43.59.76 N
2.	Multico lour Granite	Tvl.TAMIN Ltd.,	31.Kamarajar Salai Chepauk	3(D)No.22 Ind. (MME2) Dept.,	0.80.0 out of 20.22.5	22.03.2003	21.02.2023	22.03.2003	21.02.2023	22.03.2003-	Non-Operation	Nil	No	78 24' 37 E 10.43.46 N
3.	Multico lour Granite	Tvl.TAMIN Ltd.,	31.Kamarajar Salai Chepauk	(MS)No.97 Ind. (MME1) Dept.,	4.18.5 out of 8.36.0	27.12.2003	26.12.2023	27.12.2003-	26.12.2023	27.12.2003-	Non-Operation	Nil		78 24' 37 E 10.43.46 N
4.	Multico lour Granite	Tvl.TAMIN Ltd.,	31.Kamarajar Salai Chepauk Chennai-5	Go (MS)No.14 Ind. (MME1) Dept., dt:27.1.2005	10.12.0 out of 10.63.5	27.01.2005-	26.01.2025	27.01.2005-	26.01.2025	27.01.2005-	Non-Operation	Nil		78 24' 37 E, 10.43.46 N
5.	Multico lour Granite	Tvl.TAMIN Ltd.,	31.Kamarajar Salai Chepauk Chennai-5	Go 3(D) no.70. Industries MME1 Department Dt:22.10.2008	0.92.5	18.12.2008 to	17.12.2038	18.12.2008 to	17.12.2038	18.12.2008 to	Non-Operation	Nil		78 24' 37 E 10.43.46 N
6.	Multico lour Granite	Millennium	Granites, 127-B Cauvery Nagar, Kulithalai	3(D) No.1 Ind. (MMB2) Dept., dt:04.01.2001	1.48.0 0.09.5 1.12.0 2.69.5	09.02.2001	08.02.2021	09.02.2001	08.02.2021	09.02.2001	Non-Operation	Nil	No	10°52'55 N 78°023 E
7.	Multico lour Granite	M. Gandhi,	Karattupatti, Andipatti Taluk Theni District	3(D) No. 108 Ind. (MMB2) Dept., dt:29.12.2000	0.75.5	30.10.2001	29.10.2021	30.10.2001	29.10.2021	30.10.2001	Non-Operation	Nil	No	10°44 N 78°23'E

8.	Multicolour Granite	P.R.P. Granites,	Keelavalavu Post Melur Taluk Madurai District	3(D) No. 112 Ind. (MMB2) Dept., dt:14.02.2001	0.50.5 0.49.5	30.10.2001-	29.10.2021	30.10.2001-	29.10.2021	30.10.2001-	Non-Operation	Nil	No	10°44' N 78°23' E
9.	Multicolour Granite	P.R.P. Granites,	Keelavalavu Post Melur Taluk Madurai District.	3(D)No. 15 Ind. (MMB2) Dept., dt:14.02.2001	0.71.0 0.20.5 0.65.5 1.57.0	30.10.2001-	29.10.2021	30.10.2001-	29.10.2021	30.10.2001-	Non-Operation	Nil	No	10°44' N 78°23'E
10.	Multicolour Granite	P.R.P. Granites,	Keelavalavu Post Melur Taluk Madurai District.	3(D)No. 109 Ind. (MMB2) Dept., dt:29.12.2000	2.16.5	30.10.2001-	29.10.2021	30.10.2001-	29.10.2021	30.10.2001-	Non-Operation	Nil	No	10°44' N 78°23'E
11.	Multicolour Granite	K. YusuffBasha,	4/59 Bharathi Street, Swarnapuri, Salem	3(D)No. 111 Ind. (MMB2) Dept., dt:29.12.2000	0.07.0 0.27.5 0.29.5 0.30.0 0.06.0 0.27.0 0.61.0 1.88.0	20.06.2002-	19.06.2022	20.06.2002-	19.06.2022	20.06.2002-	Non-Operation	Nil	No	10° 43' 24 78° 25' 00
12.	Multicolour Granite	E. Rengar,	Pathiripatti, KulithalaiTk Karur District.	Go No. 7 Ind. (MMB2) Dept., dt:02.02.2001	0.20.0	20.06.2002-	19.06.2022	20.06.2002-	19.06.2022	20.06.2002-	Operation	Nil	No	10°45'45.77 N 78°24'55.52E
13.	Multicolour Granite	Sri Balaji Granites,	21/7A, ChathramStreet, Trichy Road, Thogamalai Kulithalai Taluk. Karur District.	Go No. 20 Ind. (MMB2) Dept., dt:28.07.2003	1.16.0	23.09.2003-	22.09.2023	23.09.2003-	22.09.2023	23.09.2003-	Not Yet Commenced	Nil	No	10°44'50 N 78°25'0E
14.	Multicolour Granite	G.V. Granites,	19 G Main Road, Thogamalai, Kulithalai Taluk Karur District.	3(D) No. 84 Ind. (MMB2) Dept., dt:10.08.2004	0.62.5 0.60.0 0.04.5 0.12.0 1.39.0	21.09.2004-	20.09.2024	21.09.2004-	20.09.2024	21.09.2004-	Operation	Nil	SEIAA/TN/F.N O.5215/E.C/1(A)3374/2016, DATED:25.7.2	10°43'46 N 78°23'43 E
15.	Multicolour Granite	P.R.P. Exports,	Velu Complex, Madurai Main Road, Melur, Madurai Dist	3(D)No.113 Ind. (MMB2) Dept., dt:21.12.2004	0.04.0 0.12.0 0.09.0 0.18.5 0.18.0 0.20.5 0.06.0 0.02.0 0.07.0 0.50.5 0.09.5 0.27.0 0.26.0 2.10.0	21.01.2005-	20.01.2025	21.01.2005-	20.01.2025	21.01.2005-	Non-Operation	Nil	No	10°45'00 N 78°24'00 E

16.	Multicolour Granite	P.R.P. Exports,	Velu Complex, Madurai Main Road, Melur, Madurai Dist	3(D)No. 13 Ind. (MMB2) Dept., dt:14.03.2005	0.05.0 0.08.0 1.33.0 0.55.5 2.01.5	08.06.2005-	07.06.2025	08.06.2005-	07.06.2025	08.06.2005-	Non Operation	Nil	No	10°45'00 N 78°24'00 E
17.	Multicolour Granite	P.R.P. Granites,	Keelavalavu Post Melur Taluk Madurai District.	3(D)No. 71 Ind. (MMB2) Dept., dt:21.07.2005	1.35.5	28.07.2005-	27.07.2025	28.07.2005-	27.07.2025	28.07.2005-	Non Operation	Nil	No	10°44'03 N 78°24'00 E
18.	Multicolour Granite	P.R.P. Exports, Melur, Madurai Dist	Velu Complex, Madurai Main Road,	3(D)No. 67 Ind. (MMB2) Dept., dt:21.07.2005	0.09.5 0.80.5 0.18.0 0.07.5 0.06.5 1.22.0	28.07.2005-	27.07.2025	28.07.2005-	27.07.2025	28.07.2005-	Non Operation	Nil	No	10°45'00 N 78°24'00 E
19.	Multicolour Granite	E. Rengar,	Pathiripatti, Kulithalai Taluk	3(D)No. 37 Ind. (MMB2) Dept.,	0.81.0	16.08.2005	15.08.2025	16.08.2005	15.08.2025	16.08.2005	Non Operation	Nil		
20.	Multicolour Granite	M. Gandhi,	Karattupatti Andipatti Tk., Theni Dist.	3(D)No. 75 Ind. (MMB2) Dept., dt:02.11.2006	0.50.5 0.50.0 0.33.0 1.33.5	14.11.2006-	13.11.2026	14.11.2006-	13.11.2026	14.11.2006-	Operation	Nil	No	10°45'00 N 78°24'00 E
21.	Multicolour Granite	M. Singaram,	21/B Chathiram St Thogamalai Kulithalai Taluk	3(D) No. 4 Ind. (MMB2) Dept., dt:05.01.2007	0.68.5 0.32.5 1.01.0	03.02.2007	02.02.2027	03.02.2007	02.02.2027	03.02.2007	Not Yet Commenced	Nil	No	10°43'46 N 78°27'08 E
22.	Multicolour Granite	Omega Granite	3/63 Anna Nagar Sankari Road Karuveppampatti Tiruchengode Tk., Namakkal Dist.	No. 2 Ind. (MMB2) Dept., dt:03.01.2007	0.49.0 0.87.0 0.35.5 0.11.5 0.56.0 1.61.0 4.00.0	07.02.2007-	06.02.2027	07.02.2007-	06.02.2027	07.02.2007-	Non Operation	Nil	No	10°54'59 N 78°02'3 E
23.	Multicolour Granite	M. Singaram,	21/B Chathiram St Thogamalai Kulithalai Taluk	3(D) No.84 Ind. (MMB1) Dept., dt:14.11.2006	0.61.0 0.07.5 0.25.0 0.08.0 1.01.5	06.07.2007	05.07.2027	06.07.2007	05.07.2027	06.07.2007	Not Yet Commenced	Nil	No	10°43'46 N 78°27'08 E
24.	Multicolour Granite	Tvl. Madhucon Granites,	1/7-70 jublipuraKhamma Andhrapradesh.	3 (D) No.81/Ind. (MMB 11)	0.50.0 0.88.5 1.38.5	5.12.2008	04.12.2028	5.12.2008	04.12.2028	5.12.2008	Operation	Nil	SEIAA-TN/F.NO.5105 /EC/01(A)/321	10 46'40 N78 03'45"E

25.	Multicolour Granite	M/s. P.R.P. Exports,	Tberkkuthuru Village, Metur, Madurai District.	3(D) No.94/Ind. (MMB 11/ Dept. dt: 27.11.2008.	0.83.0 1.00.0 1.83.0	17.12.2008	16.12.2028	17.12.2008	16.12.2028	17.12.2008	Non - Operation	Nil	No	10°30'15 N 77°24'45E
26.	Multicolour Granite	M/s. P.R.P. Exports,	Tberkkuthuru Village, Metur, Madurai District.	3(D) No.91 Ind. /MMB11 dept. dt: 27.11.2008	0.20.0 0.20.0 0.17.0 0.07.0 0.20.0 0.17.5 0.19.0 0.20.5 0.25.0 0.10.0 0.27.5 0.23.5 0.25.5 0.26.0 0.37.0 1.62.0 4.77.5	17.12.2008	16.12.2028	17.12.2008	16.12.2028	17.12.2008	Non - Operation	Nil	No	10°30'15 N 77°24'45 E
27.	Multicolour Granite	M/s. P.R.P. Exports,	Tberkkuthuru Village, Metur, Madurai District.	3(D) No.96/Ind. MMB11/Dept. dt: 27.11.2008	0.83.5 1.11.5 1.95.0	17.12.2008	16.12.2028	17.12.2008	16.12.2028	17.12.2008	Non-Operation	Nil	No	10°30'15 N 77°24'45.E
28.	Multicolour Granite	M. Gandhi, S/o. Masanam,	Karuttupatti Village, Andipatti Taluk, Teni district.	3(D) No.123/Ind. MMB11 Dept. dt: 10.12.2008.	1.88.5 0.73.0 0.31.5 2.93.0	25.12.2008	24.12.2028	25.12.2008	24.12.2028	25.12.2008	Operation	Nil	No	9°25'00 N 78°22'30E
29.	Multicolour Granite	Thiru. M.Gandhi, S/o. Masanam,	Karuttupatti Village, Andipatti Taluk, Theni Dist.	3(D) nO.116/iND. mmb11 dEPT. DT:	0.20.0 0.19.5 0.41.0 0.97.5	26.12.2008	25.12.2028	26.12.2008	25.12.2028	26.12.2008		Nil	No	10°52'40 N 78°19'30 E
30.	Multicolour Granite	Thiru.K.S.Raja Mahendran,	Kudeer 2nd Floor, Valmiki Nagar, Thiruvanimiyur, Chennai.	3(D) No.25 /Ind/MMB2/Dept, Dated:27.05.2010.	0.22.0 0.02.5 0.02.5 0.01.5 0.02.5 0.05.5 0.50.0 0.61.5 0.28.0 0.53.5 2.29.0	14.06.2010	13.06.2030	14.06.2010	13.06.2030	14.06.2010 0	Non Operation	Nil	No	10 48'45 N78 07'40"E

31.	Multicolour Granite	Thiru.R.AnupkumarLohia,	2/467, 6th Main Road, Gomathipuram. Madurai.	G.O.(3D)No.15,Industries(MMB2) Department, dated :22.06.2012.	4.80.0	05.07.2012	04.07.2032	05.07.2012	04.07.2032	05.07.2012	Non Operation	Nil	SEIAA-TN/F.NO.2703/EC/01(A)/2429/2014, DATE;19.11.2015.	10 46'15"N78 03'34"E
32.	Multicolour Granite	Tvl.Blue Horse Granite	Survey No.133-1 2A Sivagangai Main Road Near Arabic College Varichur, Madurai District .	Go.No(3D) No.42 Industries (MMB2) Department Dt:20.09.2010	01.03.0	05.07.2013	04.07.2033	05.07.2013	04.07.2033	05.07.2013	Operation	Nil	SEIAA-TN/F.NO.4417/EC/01(A)/2822/2015, DATE;08.2.2016	10 41'42"N77 48'56"E
33.	Multicolour Granite	ThiruE.Dhanapal S/o ErrachiRddiyar	Old NO D/364 New No.D/11 UkkaraKaliyamman Street Anna Nagar Thennur , Trichy District.	Go 3(D) No. 3 Industries (MMB2) Department Dt:12.02.2014	0.89.0 0.08.5 0.40.5 0.20.0 0.20.0 0.61.0 0.27.0 0.75.5 0.40.0 0.26.5 0.81.0 4.89.0	21.02.2014	20.02.2034	21.02.2014	20.02.2034	21.02.2014	Operation	Nil	SEIAA-TN/F.NO.2108/EC No.1(a)/998/2013, DATE;10.02.2014.	10'53'12" N 78'18'31" E
34.	Multicolour Granite	Thiru.P.Sathish Kumar S/o Paranasivam	22 Sasthallam Ponnagaram Broadway Madurai 625 010.	Go No 3(D) Industries (MMB2) Department Dt:28.02.2014	0.08.0 0.67.5 0.35.5 1.11.0	04.03.2014	03.03.2034	04.03.2014	03.03.2034	04.03.2014	Operation	Nil	SEIAA/TN/F.NO.2246/E.C/1(A)1100/2013, DATED;27.2.2014	10'48'01" N 78'12'50" E
35.	Multicolour Granite	Tvl. Booma Stone Metals Karur District.	No.85 South Street Pasupathipalayam Post Karur Taluk	Go No 3(D) No.21 Industries (MMB2) Department Dt:16.07.2014	0.26.0 0.21.5 0.15.5 0.65.5 1.28.5	22.08.2014	21.08.2034	22.08.2014	21.08.2034	22.08.2014	Operation	Nil	SEIAA-TN/F.NO.2500/EC/01(A)/1425/2014, DATE;25.6.2014	10'51'12.41" N 78'15'85.9" E
36.	Multicolour Granite	M/s M.P.Granite	No.131/29 R.R.Complex KollapattiAnimoor Post Tiruchengodu Taluk Namakkal District.	Go No 3(D) No.10 Industries (MMB2) Department Dt: 23.01.2016	0.69.0 0.20.0 0.22.0 0.04.5 0.02.5 0.01.5 0.02.5 0.03.5 0.26.5 0.10.5 0.10.0	15.02.2016	14.02.2036	15.02.2016	14.02.2036	15.02.2016	Operation	Nil	SEIAA/TN/F.NO.4507/E.C/1(A)2654/2015, DATED;04.1.2016	10'46'35" N 78'05'04" E

					0.14.0 0.06.5 0.06.5 0.07.0 0.06.5 0.10.5 0.14.0 0.01.5 0.02.0 0.02.5 2.43.5										
37.	Multicolour Granite	Thiru.P.Ramachandran S/o.Paramasivam	12 Bharathiyar 5 th Steet SS Colony Ward – 18 Madurai District.	Go No 3(D) No.37 Industries (MMB2) Department Date: 19.07.2016	1.09.0 0.45.5 0.32.5 0.05.5 0.44.0 0.48.0 2.84.5	05.08.2016	04.08.2036	05.08.2016	04.08.2036	05.08.2016	Operation	Nil	SEIAA/TN/F.NO.5073/ E.C/1(A)3293/2016, DATED;11.7..2016	10'46'48 15" N 78'04'72'23" E	
38.	Multicolour Granite	Thiru.S.Ramachandran	Proprietor M/s.Sand Rock Impex Old No D/364, New No. D/11 Ukkirakaliamman Kovil Street, Anna Nagar, Thennur Trichy	Go No 3(D) No.49 Industries (MMB2) Department Date: 25.07.2016	1.61.0 1.57.5 1.71.5 4.90.0	09.08.2016	08.08.2036	09.08.2016	08.08.2036	09.08.2016	Operation	Nil	SEIAA/TN/F.NO.5087/ E.C/1(A)3235/2016, DATED;06.7..2016	10'46'27 08" N 78'03'16'29" E	
39.	Multicolour Granite	TVI.S.R.P Rock Exports	12/51, Maruthupandiyar Street, K.K.Nagar Madurai District	Go No 3(D) No.27 Industries (MMB.2) Department Date: 19.10.2015	0.48.0 0.86.0 2.26.0 3.60.0	29.11.2016	28.11.2036	29.11.2016	28.11.2036	29.11.2016	Operation	Nil	SEIAA- TN/F.NO.3693/EC /1(A)/2185/2015, DATE;1310.2015.	10'47' 00" N 78'04'40" E	
40.	Multicolour Granite	Tmt.V.Shanthi W/o. Velusamy	Kunnagoundampatty Cudalore Village Kulithalai Taluk Karur District .	Go No 3(D) No.68 Industries (MMB.2) Department Date: 28.11.2016	1.41.0 0.72.5 2.13.5	09.12.2016	08.12.2036	09.12.2016	08.12.2036	09.12.2016	Operation	Nil	SEIAA- TN/F.NO.5875/EC No.3895/2016, DATE;18.11.2016.	10'47'16 25" N 78'23'13'50" E	
41.	Multicolour Granite	ThiruE.Dhanapal S/o ErrachiRddiyar	Old NO D/364 New No.D/11 UkkaraKaliyamman Street Anna Nagar Thennur Trichy District.	Go No 3(D) No.7 Industries (MMB.2) Department Date: 11.08.2017	2.38.0 1.05.0 0.74.0 0.08.0 4.25.0	18.08.2017	17.08.2037	18.08.2017	17.08.2037	18.08.2017	Operation	Nil	Deiaa clearance - Dia/TN/MiN/7271/2017 /KRR EC No.62/2017/Mines/ dt:02.8.2017	10'46'27 08" N 78'03'16'29" E	

42.	Multicolour Granite	M/S.PRS Granite	D.No. Old No.7/2A New No.88 Gnanagiri Road Sivagasi	Go No 3(D) No.09 Industries (MMB.2) Department Date: 11.08.2017	0.18.0 0.61.0 0.33.5 0.45.0 0.05.5 0.31.0 0.04.0 0.06.5 0.14.0 0.03.5 0.14.0 0.03.0 0.17.5 0.08.2 2.64.7	18.08.2017	17.08.2037	18.08.2017	17.08.2037	---	Operation	Nil	Deiaa clearance - Dia/TN/MiN/6800/2017 /KRR EC No.60/2017/Mines/ dt:02.8.2017	10°45'31 15' 569" N 78'16'02 31'799" E
43.	Multicolour Granite	M/S.Himalaya Enter Prises	255/C4 Anna Nagar PillaiyarKoil Street Kulithalai Taluk, Karur District.	Go No 3(D) No.11 Industries (MMB.2) Department Date: 11.08.2017	3.31.5 0.23.0 3.54.5	18.08.2017	17.08.2037	18.08.2017	17.08.2037	---	Operation	Nil	Deiaa clearance - Dia/TN/MiN/7256/2017 61/KRR EC No.22/2017/Mines/ dt:02.8.2017	10°47'25 51" N 78'25'41 90 "E
44.	Multicolour Granite	M/s M.P.Granite	No.131/29 R.R.Complex KollapattiAnimoor Post Tiruchengodu Taluk Namakkal District.	Go No 3(D) No.10 Industries (MMB.2) Department Date: 11.08.2017	0.03.5 0.27.5 0.25.5 0.27.5 0.14.0 0.12.5 0.17.0 0.59.5 0.29.0 0.36.5 0.78.0 0.11.0 0.16.0 0.05.5 0.38.5 4.01.5	18.08.2017	17.08.2037	18.08.2017	17.08.2037	---	Operation	Nil	DEIAA-DIA/TN MINE/5622/2017-KRR-EC. NO.22/2017-MINES/02.8.2017	10°46'49 91" N 78'05'10 39 "E
45.	Multicolour Granite	M/S.Ananant ha Granites Hyderabad.	LLP Door No.8.2.293/82/A/5 01 Road No.36 Jubilee Hills	Go No 3(D) No.08 Industries (MMB.2) Department Date: 11.08.2017	1.21.5 0.66.0 0.35.0 2.22.5	21.08.2017	20.08.2037	21.08.2017	20.08.2037	---	Operation	Nil	Deiaa clearance - Dia/TN/MiN/6427/2017 /KRR EC No.41/2017/Mines/ dt:02.8.2017	10°43'00'879" N 78'04'01'45'311 "E

46.	Multicolour Granite	Thiru.K.Sakthivel S/o. Karuppannan	Porunthalur Village Kulithalai Taluk Karur District.	Go No 3(D) No.12 Industries (MMB.2) Department	2.51.5	05.09. 2017	04.09 .2037	05.09. 2017	04.09. 2037	---	Operation	Nil	Deiaa clearance - Dia/TN/MiN/5852/2017 /KRR EC No.17/2017/Mines/ dt:02.8.2017	10'47'38 84" N 78'27'00 25 "E
47.	Multicolour Granite	M/s. Patel Stone India,	No.24 & 25 HansaNivas, Second Floor, Supreme Layout Maruthi Nagar, Yelahanka, Bangaloru – 560064.	Go No 3(D) No.18 Industries (MMB.2) Department Date: 07.11.2017	0.40.5 0.34.5 0.19.5 0.11.0 0.23.5 0.21.0 0.84.5 0.04.0	22.11. 2017	23.11 .2037	22.11. 2017	23.11. 2037	--	Not Yet Commenc ed	Nil	Deiaa clearance - Dia/TN/MiN/7339/2017 /KRR EC No.66/2017/Mines/ dt:14.10.2017	10'45'13 57 195" N 78'15'46 13 091 "E
48.	Multicolour Granite	Sri Vigneshwara Enter Prises ,	6/152, KulithalaiManappa rai Main Road, A.udaiyapatty, Kalugur Village, Kulithalai Taluk, Karur District	Go No 3(D) No.17 Industries (MMB.2) Department Date: 07.11.2017	3.38.0 0.83.0 4.21.0	28.11. 2017	27.11 .2037	28.11. 2017	27.11. 2037	--	Not Yet Commenc ed	Nil	Deiaa clearance - Dia/TN/MiN/8048/2017 /KRR EC No.74/2017/Mines/ dt:14.10.2017	10'47'16 99" N 78'25'56 75 "E
49.	Multicolour Granite	M/s Apple Granites	S.F.No.299/1, 2 Kallai Village Kulithalai Taluk Karur Dt.	Go 3(D)No.3 Industries (MMB.2) Department Date:	0.46.0 0.03.5 0.03.0 0.31.0 0.43.0	21.02. 2018	20.02 .2038	21.02. 2018	20.02. 2038	--	Not Yet Commenc ed	Nil	Deiaa clearance - Dia/TN/MiN/9619/2017 /KRR EC No.88/2017/Mines/ dt:18.1.2018	10'47'36 45" N 78'27'04 12 "E
50.	Multicolour Granite	M/s V.B.S. Exports	No.38, Srinivasa Nagar 1 st street Thiran Nagar	Go No 3(D) No.05 Industries (MMB 2)	1.84.0 0.33.5 0.63.0 2.80.5	21.02. 2018	20.02 .2038	21.02. 2018	20.02. 2038	--	Operation	Nil	Deiaa clearance - Dia/TN/MiN/12199/201 8/KRR EC No.93/2018/Mines/	10'47'31 49" N 78'26'50 96 "E
51.	Multicolour Granite	Thiru.A.Irulap pan	D.No.2/135 Mallakottai village & Post Thirupathur TK	Go No 3(D) No.04 Industries (MMB 2)	0.94.0 0.17.0 0.18.5 0.13.5	21.02. 2018	20.02 .2038	21.02. 2018	20.02. 2038	--	Operation	Nil	Deiaa clearance - Dia/TN/MiN/11994/201 7/KRR EC No.92/2017/Mines/	10'51'35 35" N 78'12'25 66 "E
52.	Multicolour Granite	Thiru. K.Deivendran	4/143 Lake Area Uthangudi Madurai Dt	Go No 3(D) No.07 Industries (MMB 2)	0.07.5 0.23.0 0.14.0 0.12.0	20.03. 2018	19.03 .2038	20.03. 2018	19.03. 2038	--	Operation	Nil	Deiaa clearance - Dia/TN/MiN/13050/201 8/KRR EC No.95/2018/Mines/	10'52'40 80" N 78'16'58 82 "E

53.	Multicolour Granite	Thiru.P.Habib ullaSait, S/o.Peer Mohamed,	No.10/10-Pattai, Karungalakudi, Melur T.K, Madurai D.T	Go No 3(D) No.08 Industries (MMB.2) Department Date: 22.2.2018	0.01.5 0.08.0 0.04.0 0.06.0 0.12.0 0.27.5 0.12.0 0.05.25 0.14.0 0.06.0 0.08.0 0.04.0 0.07.0 0.03.0 0.02.0 0.02.0 0.08.0 0.12.0 0.20.25 0.12.0 0.40.5 0.39.0 0.31.0	04.4.2 018	03.04 .2038	04.4.2 018	03.04. 2038	Not Yet Commence d	Not Yet Commenc ed	Nil	DEIAA-DIA/TN MINE/12346/2018- KRR- EC. NO.94/2018- MINES/16.2.2018	10'44'48 25" N 78'20'17 74 "E
54.	Multicolour Granite	Smt.RajraniL ohia, W/o.Ravishan karLohia,	2/467, 6 th Main Road, Gomathi Puram, Madurai		2.39.5 0.34.0 1.55.0 4.28.5	06.12. 2018	05.12 .2038	06.12. 2018	05.12. 2038	Not Yet Commence d	Not Yet Commenc ed	Nil	Deiaa clearance - Dia/TN/MiN/8381/2018 /KRR EC No.130/2018/Mines/ dt:02.11.2018	10'46'35 34" N 78'03'30 17 "E

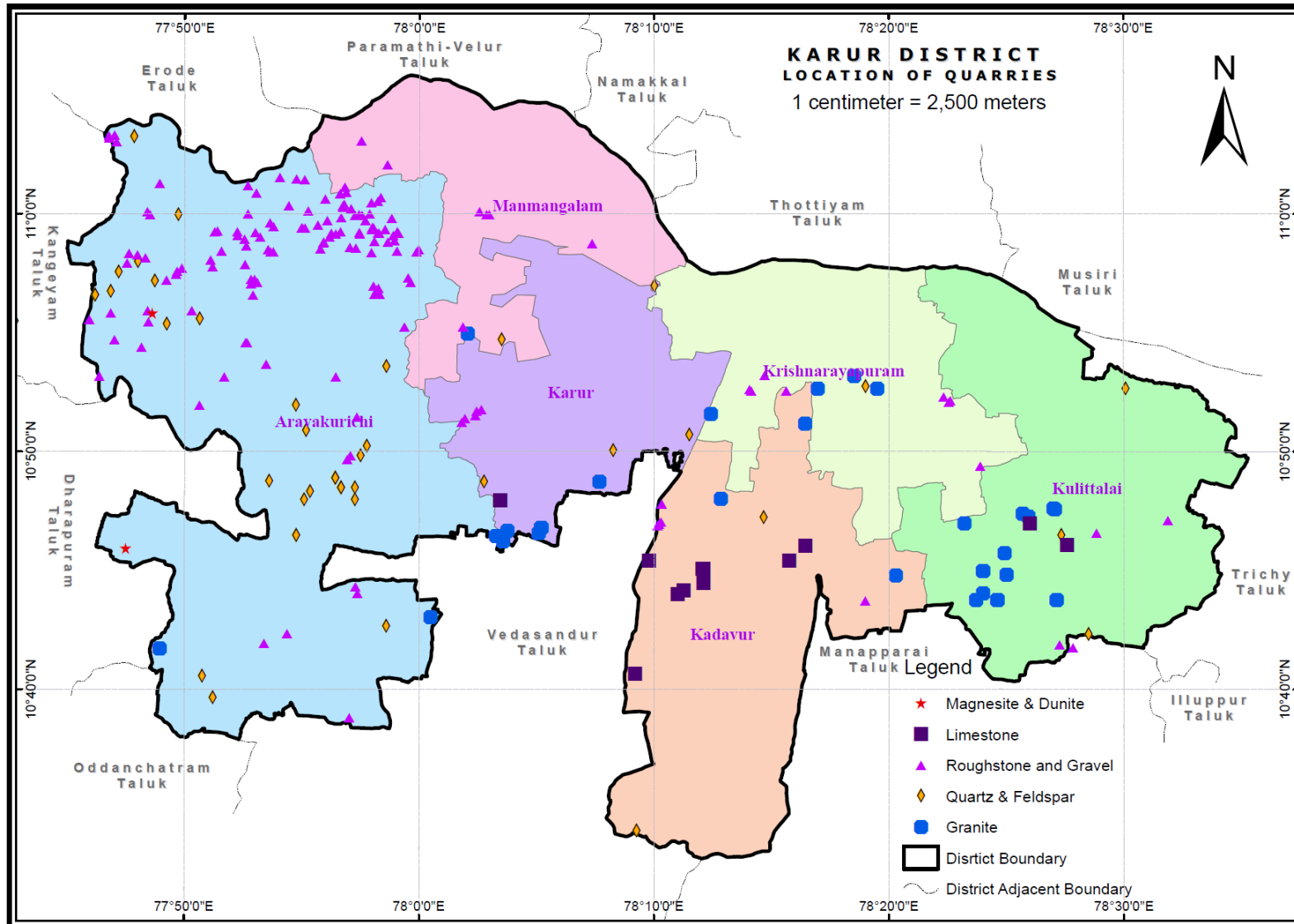
10. Details of Seigniorage Fee Received in last three years (2016-17 to 2018-19):-

Year	Seigniorage Fee (In Rs.)
2016 - 17	121848548
2017 – 18	87127646
2018 – 19	74304234

11. Details of Production in last three years (2016-17 to 2018-19):-

Year	Production
2016 - 17	53976.821
2017 – 18	40017.969
2018 – 19	31099.1

12. Mineral Map of the District:-



12.01. FIELD PHOTOGRAPHS OF THE GRANITE QUARRY:

There are good qualities of hard rocks which are particularly available at Kulithalai and Aravakurichi Taluks. But the rocks available at Thogamalai, Naganur, Kalugur and Porunthalur of Kulithalai Taluk are of export worthy and they are being operated for the extraction of granite block both by M/s. TAMIN and private companies. Calc-Gneiss (called as colonial white) occurs in Pitchampatti Village of Karur Taluk are of export worthy quality.



Tvl. Maducon Granites K/Pitchampatti, Karur Taluk latitude 10° 43' 50.34" Longitude 78° 24' 56.57", Multicolour Granite.

13.List of Letter of Intent (LOI) Holders in the District along with its validity as per the following format:-

Sl. No.	Name of the Mineral	Name of the lessee	Address & contact no. of letter of Intent holder	Letter of Intent Grant order No. & date	Area of mining lease to be allotted (Ha)	Validity of LOI	Use (Captive/ Non-captive)	Location of the Mining lease (Latitude & Longitude)
1	Multicolour Granite	K.M.S Granites	Thiru.K.M.S Granites, No.3/65 A, S.K.linePhudhur Entry Road,Salem	R.C.No.268/Mines/2018 dated:29.05.2018	1.68.0	---	---	10'46'55.27 N to 10'47'02.38 N 78'03'40'87 to E 78'03'45'64 E
2	Multicolour Granite	P.Velmani,	Thiru.P.Velmani, S/o.Palanigounder, Narasingapuram Post, Nethaji Nagar, Attur Taluk, Salem District.	R.C.No.108/Mines/ 2018 dated:02..2018	2.02.5	---	---	10'46'55.27 N to 10'47'02.38 N 78'03'40'87 to E 78'03'45'64 E

14. Total mineral reserves available in the District:-

The rocks type around Karur can be broadly classified into Khondalite and Charnockite Groups of rocks. Khondalite Group in this area is essentially made up of calc-granulite/ crystalline limestone and garnetiferoussillimanite gneiss, with minor bands of quartzite. Charnockite Group on the other hand includes the acid to intermediate charnockite with minor bands of two pyroxene granulite. Both the group of rocks were later migmatized and reconstituted giving rise to pink coloured migmatite comprising hornblende biotite gneiss, as well as garnet biotite gneiss and garnetiferousquartzofeldspathic granulite. The intrusions of younger pink granite as well as pink pegmatoidal granite had converted part of the grey migmatite into pink migmatitic gneiss and pink augen gneiss. The white garnetiferousquartzofeldspathic granulite occurring east of Karur is considered to be a reconstituted garnetiferoussillimanite gneiss while the pink augen gneiss well developed near Dindigul is due to blastic growth of pink potash Feldspar augens with in the grey biotite gneiss. A number of minor pegmatite and quartz veins represent the last stage intrusive activity in the area. The tentative geological succession of the rock types is as follows (TableI):

Table I GEOLOGICAL FORMATION OF THE DISTRICT

Quaternary	Recent	Laterite and soil Pegmatite veins/ quartz veins
Proterozoic	Acid intrusives	Pink augen gneiss and migmatite Pink medium grained granite/ pegmatoidal granite
	Pink Migmatite	Hornblende biotite gneiss/ Garnet biotite gneiss Garnetiferousquartzofeldspathic granulite
Archaean	Charnockite Group and KhondaliteGroup	Pyroxene Granulite Charnockite (acid to intermediate) Calc granulite/ Crystalline limestone Garnetiferoussillimanite gneiss/ Quartzite

	ROCK TYPE	COMMERCIAL NAME
i)	Garnetiferousquartzo-feldspathic granulite	Kashmir White
ii)	Pink migmatite/ Augen gneiss	Tiger Skin
iii)	Pink medium grained granite	Vanjinagaram Pink
iv)	Pink granite gneiss	Raw Silk

REGIONAL STRUCTURE

Regional foliation trend of the rock types in Melur area swerves from NE-SW to ENEWSW direction dipping either east or westwards with dip amounts ranging between 50an 80 depicting a broad antiformal fold with axial plane trending along ENE-WSW direction and plunging at low angles towards ENE direction. The garnetiferousquartzo-feldspathicgranulite viz. Kashmir White bands are located mainly in the limb portions of the major fold. The pink medium grained granite viz.Vanjinagaram Pink has been intruded mainly along the weak plane of the above major fold axis and in turn has influenced the adjoining grey granite/ grey migmatite rocks with pink permeations, giving rise to the formation of pink and grey augen gneiss viz. Tiger Skin. Due to the cross folding of the above major fold mainly along NNW- SSE direction, puckering effect (microfolds) besides development of minor step like fractures are seen in the Tiger Skin deposit. Minor folds trending along ENE-WSW direction are also noticed mainly in the Kashmir White bands. Some of the fractures and cleavages are seen filled by pegmatites and quartz veins, especially in Tiger Skin deposit. Apart from the above mentioned structural features, no other major structural disturbance which may affect production of commercial granite could be deciphered in Melur area.

15. Quality/ Grade of Mineral available in the district: -

Multi Coloured Granites are available in the District.

Characteristics of Granite

Characteristics	Physical properties
Moisture Content %	0.15
Dry Density	2.60 to 2.68
Apparent Resistivity	2.75
Water absorption	0.50
Porosity	1 to 2
Hardness	6 to 7

16. Use of Mineral:-

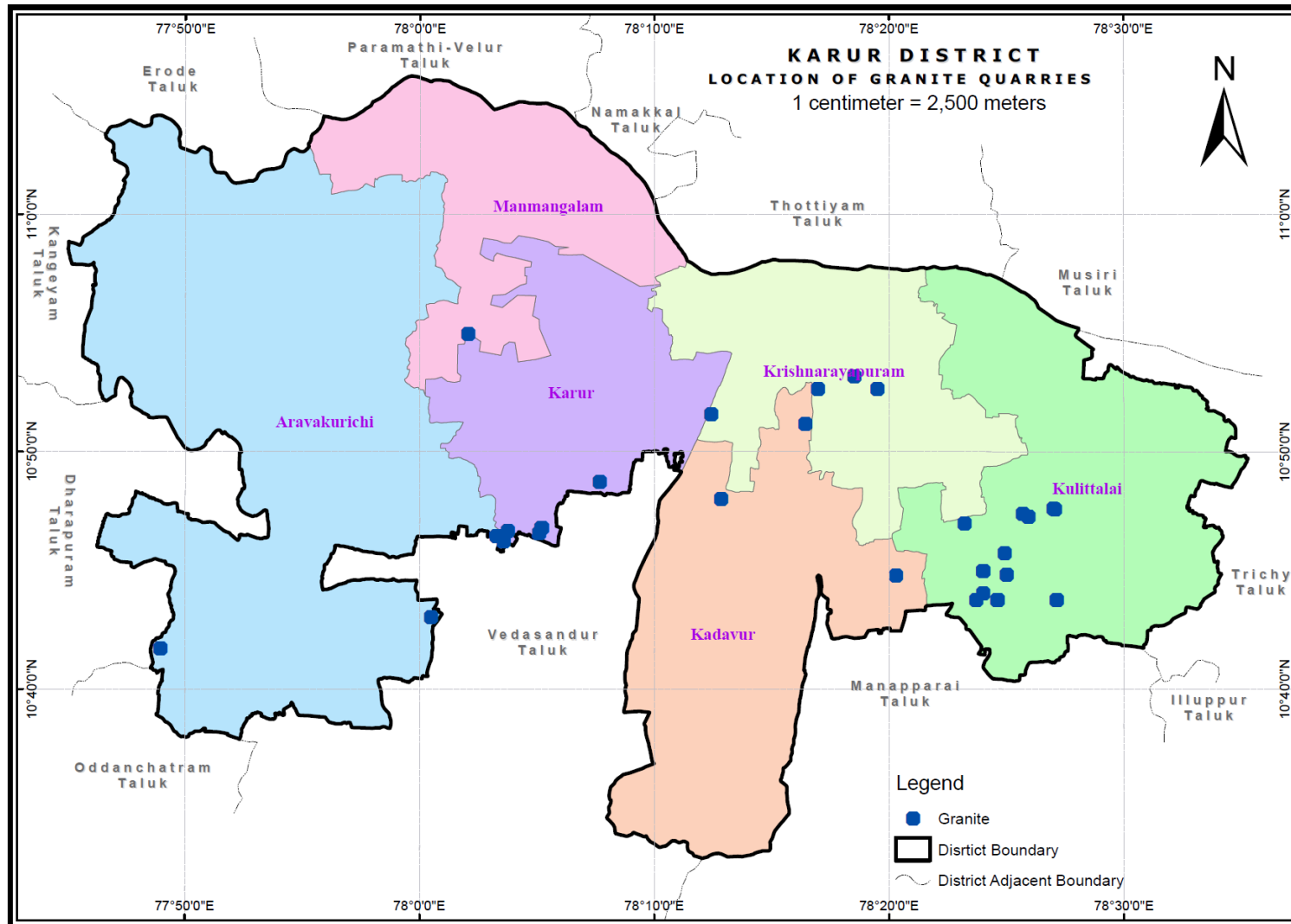
Granite is the most sought-after among all building stones. Presently, cut and polished granite slabs of 20 mm thickness are preferred for flooring, while tiles of 10 or 12 mm thickness are used for cladding. In addition, gravestones and monuments of various shapes and sizes are also in vogue. The flexibility of the cutting tools have engendered creation of many artifacts of granite for decorative purposes.

Granite also finds its application in making garden furniture, such as, benches, fountains and many other articles which are used for landscaping and/or decorative purposes. The cut-to-size small blocks are used as cobblestone, kerbstone, road sidings and for many other innovative purposes.

17. Demand and supply of the Mineral in the last three years:-

The Multicolour Granit available in the district is mainly used as a raw material for construction work and Export.

18. Mining leases marked on the Map of the District:-



19.Details of the area of where there is a cluster of mining viz., number of mining leases, location (latitude and longitude):-

SlNo.	No.of quarrying leases	Name of village & Taluk	Location	
			Latitute	Longitude
1	7	Thogamalai Village, Kulithalai T.K.,	10.43.59.76 N	78 24' 20.91 E
2	12	Naganur village, Kulithalai T.K.,	10.43.46 N	78 24' 37 E,
3	6	Kalugur village, Kulithalai T.K.,	10°44' N	78°23'E
4	2	Kodaiyur village, Aravakurichi T.K.,	10°52'55 N	78°023 E
5	8	K.Pitchmapatty, Karur T.K.,	10 46'40 N	78 03'45"E
6	4	Veeriyapalayam village, Krishnarayapuram T.K.,	10°30'15 N	77°24'45 E
7	1	Pannappatty village, Kadavur T.K.,	10'48'01" N	78'12'50" E
8	1	Paganatham village, Karur T.K.,	10'51'12.41" N	78'15'85.9" E
9	1	Sengal village, Krishnarayapuram T.K.,	10'46'27 08" N	78'03'16'29" E
10	1	Sivayam village, Krishnarayapuram	10'47'16 25" N	78'23'13'50" E
11	1	Venjamankudalur village, Aravakurichi T.K.,	10'46'27 08" N	78'03'16'29" E
12	2	Thennilai village, Aravakurichi T.K.,	10'45'31 15' 569" N	78'16'02 31'799" E
13	2	Kallai village, Kulithalai T.K.,	10'47'36 45" N	78'27'04 12 "E
14	1	Kosur village, Kadavur T.K.,	10'44'48 25" N	78'20'17 74 "E
15	2	Gudalur village, Kulithalai T.K.,	10'47'25 51" N	78'25'41 90 "E
16	1	Nallur village, Kulithalai T.K.,	10'47'38 84" N	78'27'00 25 "E
17	1	Sithalavai village, Krishnarayapuram T.K.,	10'51'35 35" N	78'12'25 66 "E
18	1	Inunganoor village, Aravakurichi T.K.,	10 41'42"N	77 48'56"E
	54			

20. Details of Eco – Sensitive Area, if any, in the District:-

Nil.

21. Impact on the Environment (Air, Water, Noise, Soil Flora & Fauna, Land use, Agriculture, Forest etc.) due to Mining Activity:-

Generally, the Environmental impacts can be categorized as either primary or secondary. Primary impacts are those, which are attributed directly by the project, secondary impacts are those, which are indirectly induced and typically include the associated investment and changed pattern of social and economic activities by the proposed action.

The impact has been ascertained for the project assuming that the pollution due to mining activity has been completely spelled out under the baseline environmental status for the entire ROM which is proposed to exploit from the mines.

Air

Mining Operations are carried out by opencast semi mechanized/ Mechanized method, dust particles are generated due to various activities like, Excavation, Loading, handling of mineral and transportation. The air quality in the mining area depends upon the nature and concentration of emissions and meteorological conditions.

The major air pollutants due to mining activity includes:-

- Particulate Matter (Dust) of various sizes.
- Gases, such as, Sulphur Dioxide, Oxides of Nitrogen, Carbon Monoxide etc., from vehicular exhaust.
- Dust is the single Air pollutant observed in the open cast mines. Diesel operating drilling machines, small amount of blasting and movement of machinery/ vehicles produce NO_x,SO₂and CO emissions, usually at low levels. Dust can be of significant nuisance surrounding land users and potential health risk in some circumstances.

Water

Impact

The mining operation leads to intersect the water table cause ground water depletion.

Due to the interruption surface water sources like River, Nallah, Odai etc., surface water system, Drainage pattern of the area is altered.

Noise

Noise pollution is mainly due to operation of Machineries and occasional plying of machineries. These activities will create Noise pollution in the surrounding area.

Land Environment

The topography of the area will change, due to the Topographical changes the entire Eco system will be altered.

Flora and Fauna

The impact on biodiversity is difficult to quantify because of its diverse and dynamic characteristics.

Mining activities generally result in the deforestation, land degradation, water, air and noise pollution which directly or indirectly affect the faunal and floral status of the project area.

However, occurrence and magnitude of these impacts are entirely dependent upon the project location, mode of operation and technology involved.

22. Remedial Measure to mitigate the impact of Mining on the Environment:-

Air

Mitigated measures suggested for air pollution controls are based on the baseline ambient air quality of the area

The following measures are proposed to adopted in the mines such as,

- Dust generation shall be reduced by using sharp teeth of shovels.
- Wet drilling shall be carried out to contain the dust.
- Controlled blasting techniques shall be adopted.
- Water spraying on haul roads, service roads and overburden dumps will help in reducing considerable dust pollution.
- Proper and regular maintenance of mining equipment's have to be considered.
- Transport of material in trucks covered with tarpaulin.
- The mine pit water can be utilized for dust suppression in and around mine areas.
- Information on wind direction and meteorology will be considered while planning, so that pollutants, which cannot be fully suppressed by engineering technique, will be prevented from reaching the nearby agriculture area.
- Comprehensive green belt around overburden dumps has to be carried out to reduce to fugitive dust emissions in order to create clean and healthy environment.

Water

- Construction of garland drains to divert surface run-off into the mining area.
- Construction of check dams / gully plugs at strategic places to arrest silt wash off from broken up area.
- Retaining walls with weep hole will be constructed around the mine boundaries to arrest silt wash off.
- The mined out pits shall be converted into the water reservoir at the end of mine life. This will help in recharging ground water table by acting as a water harvesting structure.
- Periodic analysis of mine pit water and ground water quality in nearby villages.
- Domestic sewage from site office & urinals/latrines provided in ML is discharged in septic tank followed by soak pits.

Noise

Mitigation measures

- Periodic maintenance of machinery, equipment's shall be ensured to keep the noise generated at minimum.
- Development of thick green belt around mining area and haul roads to reduce the noise.
- Provision of earplugs to workers exposed to high noise generating activities. Workers and operators at work site will be provided with earmuffs.
- Conducting periodical medical checkup of all workers for any noise related health problems.
- Proper training to personnel to create awareness about adverse noise level effects.
- Periodic noise monitoring at suitable locations in the mining area and nearby habitations to assess efficacy of adopted control measures.
- During the blasting, optimum Spacing, Burden and charging of holes will be made under the supervision of competent qualified mines foreman, Mate as approved by Director of Mines safety.

Biological Environment

MITIGATION MEASURES:

- Development of gap filling saplings in the safety barrier left around the quarry area.
- Carrying out thick greenbelt with local flora species predominantly with long canopy leaves on the inactive mined out upper benches.
- Development of dense poly-culture plantation using local flora species in the mining area at conceptual stage.
- Adoption of suitable air pollution control measures as suggested above.
- Transport of materials in trucks covered with tarpaulin.
- Construction of garland drains and settling tank to arrest silt wash off from lease area.

- Construction of retention walls around lower boundary of mining area to arrest silt washoff and roll down boulders.
- Retaining walls with weep hole will be constructed around the mine boundaries to arrest silt wash off.

23. Reclamation of Mined out area (Best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan):-

Under Rule 23A, Mine Closure Plan: Every mine shall have Mine Closure Plan, which shall be of two types:-

- (i) Progressive mine closure plan; and
- (ii) Final mine closure plan.

Conceptual Final Landform-

The broad rehabilitation objective for the post-quarry landform is to establish a similar land use on the disturbed areas, with the exception of the final void. The topography of the final landform will consist of a large number of stepped benches formed in an amphitheater configuration, each with a re-vegetated bench.

Figure 1 shows plan and sectional views of the final landform. Until such time that extraction has ceased, rehabilitation will occur around the perimeter of the pit only along the benches, and will not involve the pit floor. The primary purpose of rehabilitation during the operational phase is to mitigate any visual impacts.



Figure 1: Example of Bench Rehabilitation

Once operations have ceased, all buildings and infrastructure will be removed. These areas will be reshaped and ripped where necessary for top-soiling and re-vegetation. The top benches will be vegetated with appropriate native species. The lower benches will be formed as a shallow depression of retention pond/ rain water harvesting structure.

Rehabilitation and Re-vegetation

Rehabilitation of the site will be undertaken once extraction is complete. As the extraction progresses through the resource, 5 m wide benches will be left every 5 m of depth to provide a horizontal platform on which native flora species will be established.

The plantation in the mine lease area also includes gap filling plantation on the safety barrier zone left around the mine lease area. Gap filling plantation has been carried out in the safety barrier zone left around the mine lease area from the beginning of the mining operations.

Additional plantation will be carried out in the inactive mining area. Grass and bushes will be planted in areas prone to erosion. Other areas will be spread with organic manures and planted with local species.

The characteristics of this vegetation will resemble that of the natural environment except for the early growth, which may be a protective cover crop of non-seeding annuals. Before re-vegetation, the land will be properly prepared by spreading the top soil, which is rich in organic contents along with mulches and organic manure. Vegetation will be self-sufficient after planting and require no fertilizers or maintenance.

The re-vegetation program will re-establish native tree / shrub / ground cover and will stabilize reshaped and benched areas. Benches will be deep ripped to actively promote infiltration of water which will enhance soil moisture requirements for direct tree seeding and minimize surface runoff to underlying benches. Re-vegetation will also visually screen disturbed areas and will re-establish habitat for native fauna.

24. Risk Assessment & Disaster Management Plan:-

The Disaster Management Plan (DMP) is supposed to be a dynamic, changing, document focusing on continual improvement of emergency response planning and arrangements.

The disaster management plan is aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities. For effective implementation of the disaster management plan, it should be widely circulated and personnel training through rehearsals/induction conducted by the respective department from time to time.

General Responsibilities of Employees during an Emergency:

During an emergency, it becomes more enhanced and pronounced when an emergency warning is raised, the workers in-

charge, should adopt safe and emergency shut down and attend any prescribed duty as essential employee. If no such responsibility is assigned, he should adopt a safe course to assembly point and await instructions. He should not resort to spread panic. On the other hand, he must assist emergency personnel towards objectives of DMP.

Co-ordination with Local Authorities:

The mine manager who is responsible for emergency will always keep a jeep ready at site. In case any eventualities the victim will be taken to the nearby hospitals after carrying out the first aid at site. A certified first aid certificate holder will be responsible to carry out the first aid at site. The mine manager should collect and have adequate information of the nearby hospitals, fire station, police station, village panchayat heads, taxi stands, medical shop, district revenue authorities etc., and use them efficiently during the case of emergency.

25. Details of the Occupation Health issues in the District. (Last five-year date of number of patients of Silicosis & Tuberculosis is also needs to be submitted):-

As per the guidelines of the Mine Rules 1955, occupational health safety stipulated by the ILO/WHO. The proponent's will take all necessary precautions. Normal sanitary facilities should be provided within the lease area. The management will carry out periodic health checkup of workers.

Occupational hazards involved in mines are related to dust pollution, Noise pollution, blasting and injuries from moving machineries & equipment and fall from high places. DGMS has given necessary guidelines for safety against these occupational hazards. The management will strictly follow these guidelines.

All necessary first aid and medical facilities will be provided to the workers. The mine shall be well equipped with Personal Protective Equipment (PPE). Further all the necessary protective equipment's such as helmets, safety goggles, earplugs, earmuffs, etc. will be provided to persons working in mines as per Mines Rules. Alloperators and mechanics will be trained to handle fire-fighting equipment's.

26. Plantation of Green Belt development in respect of leases already granted in the District:-

Green Belt Development

- ❖ A well planned Green Belt with multi rows (Three tier) preferably with long canopy leaves shall be developed with dense plantations around the boundary and haul rods to prevent air, dust noise propagation to undesired places. Efforts will be taken for the enhancement of survival rate since the soil is alkaline in nature.

Species Recommended for Plantation

Following points have been considered while recommending the species for plantation:

- ❖ Natural growth of existing species and survival rate of various species.
- ❖ Suitability of a particular plant species for a particular type of area.
- ❖ Creating of bio-diversity.
- ❖ Fast growing, thick canopy cover, perennial and evergreen large leaf area,
- ❖ Efficient in absorbing pollutants without major effects on natural growth.
- ❖ The following species may be considered primarily for plantation best suited for the prevailing climatic condition in the area.

RECOMMENDED SPECIES TO PLANT IN THE GREENBELT

S.No	Name of the plant (Botanical)	Family Name	Common Name	Habit
1.	<i>Azadirachta indica</i>	<i>Meliaceae</i>	Neem, Vembu	Tree
2.	<i>Albizia falcataria</i>	<i>Fabaceae</i>	Tamarind, Puliyamaram	Tree
3.	<i>Polyalthia longifolia</i>	<i>Annonaceae</i>	Kattumaram	Tree
4.	<i>Borassus flabellifer</i>	<i>Areaceae</i>	Palmyra Palm	Tree

27. Any other information:-

The well developed Environmental management plan and Remedial measures is proposed to carry out in all mining areas in the District.

CER/CSR activities shall be carried out by providing social and welfare measures to the local community of the nearby villages. The main activities would be like drinking water facilities for the government schools children, public toilets to the local community and government schools, conducting free medical camps, providing solar lights to the villages besides encouraging the local cultural activities of the area. Any other CSR and CER activities as guided by the DEIAA/SEIAA during the grant of Environmental Clearance should be implemented.

This District Survey Report has been prepared in a short span of time by doing rapid field work. The details related to the occurrence of mineral resources and other data of the district are subject to updation from time to time. Before grant of any quarry lease, the parameters related to geosciences and sustainable developments are to be considered on the basis of ground reality.

The Karur District is having very large deposits of Charnockite rock which is the raw material for the production of aggregates and M-sand. M-sand is the need of the hour to replace the utilisation of river sand. The Charnockite / Rough Stones are crushed in the crushing units for the manufacture of aggregates and M-sand which gives direct and indirect employment to the local people. Preferences and encouragements can be given to the Entrepreneurs for set up of new units for the production of M-sand.

The Quartz deposits found in Karur District is poor quality and the quantity available is very less. The Quartz from this area is utilized in the glass industry. The Feldspar deposits are low in quality which is used in the ceramic tiles manufacturing industry.

The Granite deposits found in Karur District is Pink, Pale White and Bluish Grey in colour. Since these are not premium granite varieties, the demand in the market is very low and hence the production of granite blocks is very less.

The quantity of River Sand available in Karur District is very meagre which cannot be exploited for public purpose. The rate of replenishment is very very low.

The introduction of e-permit system and implementation of Mineral Dealers Rule and the despatch slips / transit permits with tampered proof security features and tracking of mined out minerals will fetch more revenue to the State Exchequer as well as sustainable development.

Deputy Director,
Geology and Mining,
Karur.

District Collector,
Karur.

