DISTRICT SURVEY REPORT OF THIRUVARUR DISTRICT



DEPARTMENT OF GEOLOGY

AND MINES

THIRUVARUR DISTRICT

Contents

5.No	Cnapter	Page No.
1.0	Permeable	1
	1.1 Introduction	1
	1.2 Location And Accessibility:	2
2.0	Overview of Mining Activity in the District;	4
3.0	The List of Mining Leases in the District with location, area and	7
	period of validity;	
4.0	Details of Royalty or Revenue received in last three years;	22
5.0	Detail of Production of Sand or Bajri or minor mineral in last	29
	three years;	
6.0	General Profile of the District	26
7.0	Basin And Sub-Basin	32
8.0	Drainage	32
9.0	Irrigation	32
10.0	Soil	32
11.0.	Physiography Of The District	32
12.0	Climate and Rainfall	33
13.0	Forest Resources	35
14.0	Flora and fauna:	35
16.0	Over View Of Geology Of Tamilnadu	39
	16.G eology and Mineral wealth of the District	39

17.0	Field Photographs of Mining / Quarrying	67
18.0	Conclusion	71

List of Figure

S.No	Chapter	Page No.
1	Fig No.1.Location Plan	3
2.0	Fig No.2 District Geology (Mineral Map)	4
3.0	Fig No.3 District Map	30
4.0	Fig No.4 Taluk Map	31
5.0	Fig No.5 Rainfall data of Tamilnadu	34
6.0	Fig No.6 Wild life Protected areas in Tamilnadu	36
7.0	Fig No.7 . Geological Map Of Tamilnadu And Pondicherry	37
8.0	Fig No. 8 Toposheet Index Map of Thiruvarur District	38
9.0	Fig.No. 9 . Field Photographs	67

List of Table

S.No	Chapter	Page No.
1.0	Table No.1 List of Major Mineral Leases	7
2.0	Leases granted on minor minerals (savudu) during the year	11
	2015 - 2016	
3.0	Tab.No.3 Lease Granted On Minor Mineral (Savudu)	15
	2016-2017	
4.0	Table No.4 Mineral wise / levy wise / month wise mineral	19
	Revenue collection for the year 2015 – 2016	
5.0	Table No. 5 Mineral Wise / Levy Wise / Month Wise Mineral	20
	Revenue Collection For The Year 2016 – 2017	
6.0	Table no.6 Mineral Wise / Levy Wise / Month Wise Mineral	23
	Revenue Collection For The Year 2017 – 2018	
7.0	Table No.7 District Glance-details	26
8.0	Tab.No.8 Irrigation details	32
9.0	Table No9 .Rain fall data	37

OF THIRUVARUR

1.0 PERMEABLE

In conjunction to the Ministry of Environment, Forest and Climate Change, the Government of India Notification No.SO 141 (E) dated 15.01.2016 and SO 190 (E) dated 20.01.2016 the District Level Environment Impact Assessment Authority (DEIAA) and District Environment Appraisal Committee (DEAC) were constituted in Thiruvarur District for the grant of Environmental Clearance for category "B2" projects for quarrying of Minor Minerals.

The main purpose of preparation of District Survey Report is to identify the mineral resources and develop the mining activities along with relevant current geological data of the District. The DEAC will scrutinize and screen scope of the category "B2" projects and the DEIAA will grant Environmental Clearance based on the recommendations of the DEAC for the Minor Minerals on the basis of District Survey Report. This District Mineral Survey Report is prepared on the basis of field work carried out in Thiruvarur district by the official from Geological Survey of India and Directorate of Geology and Mining, (ThiruvarurDistrict), Govt. of Tamilnadu. The following District Survey Report (DSR) report prepared based on the guidelines by MOEF S.O. 3611(E). dt 25.July 2018.

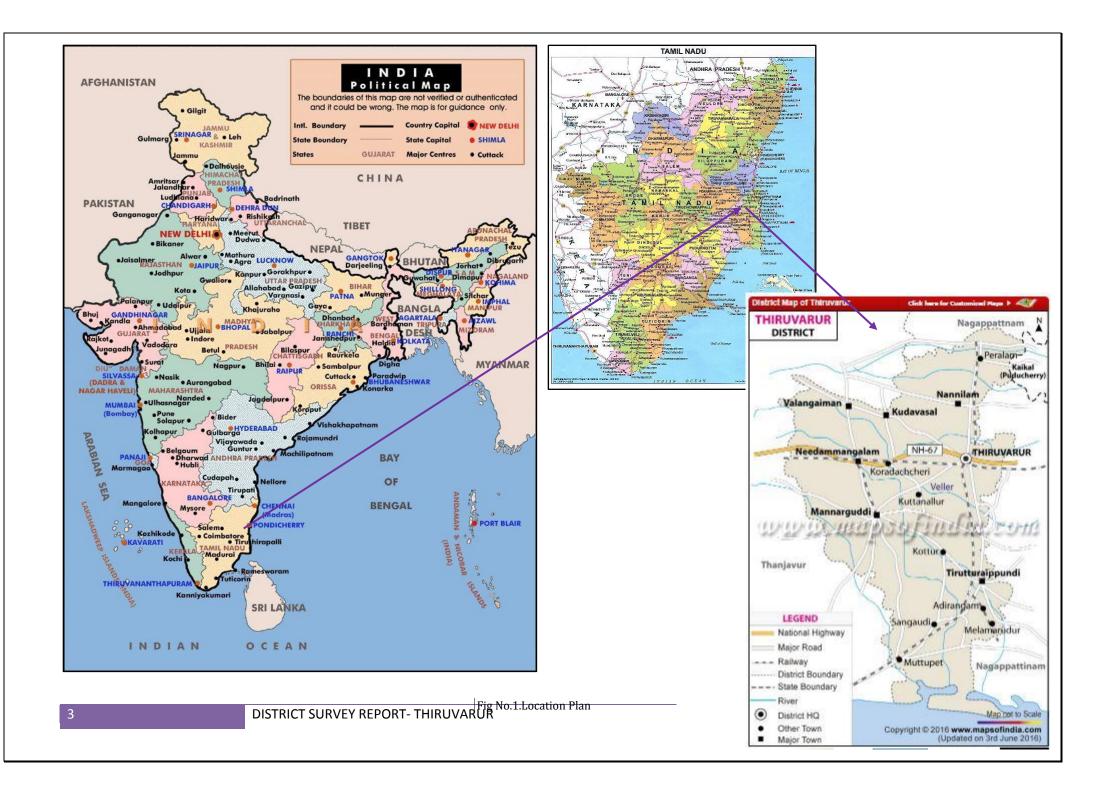
1.1 INTRODUCTION:

Tiruvarur District, which was once part of the erstwhile Thanjavur District, the "Rice Bowl of Tamil Nadu." The District was formed on 01.01.1997. It is called, the granary of the south, with the Cauvery brimming with flowing water and the enchanting green fields. Tiruvarur is an ancient town with a historical background. According to the myths, the main Thiyagaraja temple was installed by Muchukanda Chola. Tiruvarur is also associated with another legendary king Manu Neethi Chola, who gave death punishment to his own son, for the death of a calf by his careless driving of his chariot. Tiruvarur has been mentioned in the Thevaram and Thiruvasagam sung by revered Nayanmars. The granite structure of the temple

was first constructed by Aditya Chola in the 9th Century and remodelled by Rajaraja Chola. Rajendra Chola, however has given the present structure to the temple. The Kamalalayam is the biggest tank in this district and the annual floating festival is still an attraction. The royal patronage continued and the town flourished as a cultural centre during the rule of the Nayaks, Vijayanagar Kings and the Marathas.

1.2 LOCATION AND ACCESSIBILITY:

Thiruvarur district is bounded on the north by Nagapattinam district, on the south by Palk strait, on the east by Pondicherry (Karaikkal part) and Nagapattinam district and on the west and north-west by Thanjavur district. Geographically, the Thiruvarur District of Tamil Nadu State is bounded on the north by Nagapattinam District, on south by Palk Strait, on the east by Puducherry (Karaikal part) and Nagapattinam District(Fig No.1) and on the west and north-west by Tanjavur Disrict with the Coordinates 10020'00" N to 11007'00" N latitude and 79015'00" E to 79045'00" E longitude and the Mean Sea Level is varying from 10 m at Southern side and 30 m at western part of the district. The area of Thiruvarur District is 2,374 Sq. Km. The area falls under the toposheets 58 M/12, 58 N/05, 58 N/06, 58 N/07, 58 N/09/ 58 N/10 and 58 N/11 of Survey of India.



2.0 OVERVIEW OF MINING ACTIVITY:

Thiruvarur District of Tamil Nadu State has less importance in concern with the mineral wealth. The important minerals are Alluvial sand and clay and Crude Oil and Natural Gas in the Cauvery Basin. The alluvial sand and clay is being used as earth filling material. The exploration and exploitation of Crude Oil and Natural Gas is carried out by the ONGC and the alluvial sand and clay mine lease is being granted by the Department of State Geology and Mines. The alluvial sand and clay mining falls under the category 'B' and sub category 'B2' and S1. No. 1 (a) in the schedule under the Ministry of Environment and Forest notification EIA-2006 and notification EIA-2009 and should follow the Minor Mineral Conservation and Development Rules, 2010.

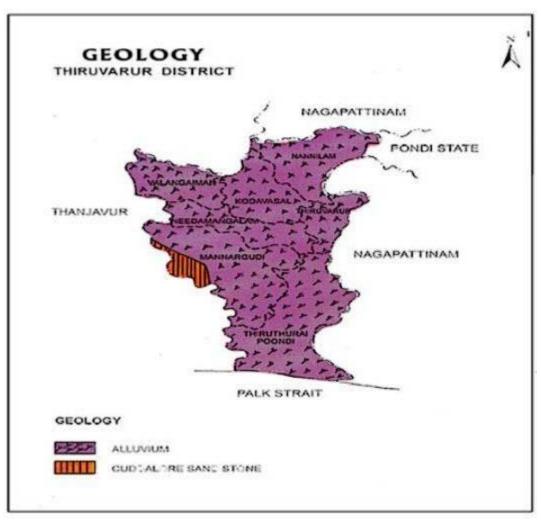


Fig No2.Geology

3. List of Mining Leases in the District with location, area and period of validity; <u>LEASE GRANTED ON MAJOR MINERALS (ONGC)-Tab No..1</u>

DISTRICT: THIRUVARUR

SL NO	Name of Mineral	Name and Complete address of lessee	Village and Taluk	SF Nos. and extent (in hects.)	G.O./Proceedings/ Period of lease	Classification of land.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Crude Oil and Natural Gas	ONGC	Addiyakamangalam Tiruvarur	17.8 Sq.Km	3D,No.26 dt.12.2.2004 20 Years from 27- 05-1999 to 26-05-2019	Patta Land
2.	Crude Oil and Natural Gas	ONGC	Nannilam-I Nannillam	4.70 Sq.Kms	G.O.(3D) No13 MM A2 dt 28.1.2004 20 Years from 26-04-1993 to 25-04-2013	Patta Land
3.	Crude Oil and Natural Gas	ONGC	Nannilam-II Nannillam	1.0 Sq.Km	G.O.(3D) No19 MM A2 dt 06-02-2004 20 Years from 27-05-1999 to 26-05-2019	Patta Land

4.	Crude Oil and Natural Gas	ONGC	Kamalapuram-I Thiruvarur	23.5 Sq.Kms	G.O (3D)No.23 dt.12.2.2004 20 Years from 27- 05-1999 to 26-05-2019	Patta Land
5.	Crude Oil and Natural Gas	ONGC	Kamalapuram-II Thiruvarur	3.5 Sq.Kms	G.O (3D)No.15 dt.28.08.2004 20 Years from 04.05.1994 to 03.05.2014	Patta Land
6.	Crude Oil and Natural Gas	ONGC	Greater Kamalapuram Block	22-00 Sq.Kms	(3D) No.23 Ind.Dep, dt.09-05-2008 20 Years from 26- 12-2004 to 25-12-2024	Patta Land
7.	Crude Oil and Natural Gas	ONGC	Koothanallur	6-25 Sq.Kms	(3D) No.30 Ind.Dep, dt.04-06-2008 20 Years from	Patta Land

					26-02-2004 to 25-02-2024	
8.	Crude Oil and Natural Gas	ONGC	Greater Kovil Kalappal	33-61 Sq.Kms	(3D) No.54 Ind. .Dep, dt.30-07-2008 20 Years from 15-05-2007 to 14-05-2027	Patta Land
9.	Crude Oil and Natural Gas	ONGC	Vijayapuram # 13 area Thiruvarur	2-00 Sq.Kms	(3D) No.56 Ind.Dept, dt.06-08-2008 20 Years from 26-02-2004 to 25-02-2024	Patta Land
10	Crude Oil and Natural Gas	ONGC	Adhichapuram Thiruvarur	165 Sq.Kms	(3D) No.22 Ind.Dept, dt.06-08-2009 20 Years from	Patta Land

					13-04-2007 to 12-04-2027	
11	Crude Oil and Natural Gas	ONGC	Mattur Needamangalam	3.0 Sq.Kms	3D No.20 Ind.Dep, dt.6.2.2004 20 Years from 04- 05-1994 to 03-05- 2014	Patta Land
			Total extent	282.36 Sq.Kms		

Tab No.2LEASES GRANTED ON MINOR MINERALS (SAVUDU) DURING THE YEAR 2015 – 2016

Sl. No.	Name of the Mineral	Name and Complete address of lessee	Village and Taluk	R.S.Nos and extent (inHectare)	Collector's Proceedings No. / Period of lease	Classification of land
1	Savudu	Thiru R. Chandrasekaran, S/o. Ramanathan Pillai, No.5/73, Main Road, Poonthottam Post, Nannilam Taluk, Thiruvarur District	58, Anaikkuppam Village, Nannilam Taluk	R.S. Nos. 285/2C2, 285/2C3, 285/4, 286/6, 286/7, 286/8, 288/3, 288/4, 288/5, 288/6, 288/7 and 288/8 2-84-0 hectares	R.C.No.625 / (G&M) / 2014 Dated 15-04- 2015 From 22-04- 2015 to 21-04- 2018 3 Years	Patta
2	Savudu	Thiru R. Mahesh, S/o. Rajendran, 20, Pillai Street, Thiruvarur	Thillaivilagam, Thiruthuraipoondi Taluk	R.S.Nos.138/1B1 & 138/2A 4-21-5 hectares	R.C.No. 82 / (G&M) / 2015 Dated: 21-12-2015 From 31-12- 2015 to 30-12- 2018 3 Years	Patta
3	Savudu	Thiru V. Rajendran, S/o. Venkatachalam, 92/B1, Agraharam Street, Chithiraiyur Post, Needamangalam Taluk, Thiruvarur District	49, Chithiraiyur village, Needamangalam Taluk	R.S. Nos. 63/1, 63/2A, 76/4B, 295/1 and 295/2 1-08-0 hectares	R.C.No. 376 / (G&M) / 2014 Dated 21-12- 2015 From 31-12- 2015 to 30-12- 2017 2 Years	Patta

4	Savudu	Tmt R. Chitra, W/o. K. Suresh, 663, Savadi Street, Nedungulam, Nannilam Taluk, Thiruvarur District	5, Kaliyakudi Village, Nannilam Taluk	R.S. Nos. 51/13B, 51/15, 51/16, 52/2, 52/3, 52/5A, 52/6, 52/7, 52/13, 52/14 and 52/16 2-44-0 hectares	R.C.No. 785 / (G&M) / 2014 Dated: 08-01- 2016 From 08-01-2016 to 07-01-2019 3 Years	Patta
5	Savudu	Tmt. C. Mangaikarasi, W/o. Chandrasekaran, No.5/73, Main Road, Poonthottam, Nannilam Taluk, Thiruvarur District	Anaikuppam village and Kuvalaikkal village Nannilam Taluk	R.S.Nos.219/6 and 289/1B – 1-59-0 hectares of Anaikuppam village and R.S. Nos.41/2, 41/3, 41/4, 41/5, 41/6, 41/7 and 41/8 – 0-55-5 hectare of Kuvalaikkal village	R.C.No. 663 / (G&M) / 2015 Dated : 26 -02-2016 From 26-02- 2016 to 25-02-2019 3 Years	Patta
6	Savudu	Thiru G. Subramaniyan, S/o. Govindarajan, No.1/77, Kudiyana Street, Mananthakudi Post, Ayyampettai, Nannilam Taluk, Thiruvarur District	Annathanapuram village Nannilam Taluk	R.S. Nos. 206/2, 64/6 and 64/8 2-25-0 hectares	R.C.No. 664 / (G&M) / 2015 Dated: 26-02-2016 From 26-02- 2016 to 25-02- 2019 3 Years	Patta
7	Savudu	Thiru B. Kumaran, S/o. Balasubramanian, No.51, Periyar Street,	Alivalam village, Thiruvarur Taluk	R.S. Nos. Nos.189/2, 189/3, 189/4, 189/5 and 189/6	R.C.No. 662 / (G&M) / 2015 Dated: 02-03-	Patta

		Mettupalayam, Thiruvarur District		1-83-0 hectares	2016 From 02- 03-2016 to 01- 03-2019 3 Years	
8	Savudu	Thiru D. Packirisamy, S/o. Duraisamy, No.11, Chinna Alathur, Peralam Post, Kodavasal Taluk, Thiruvarur District	Annathanapuram village, Nannilam Taluk	R.S. Nos.113/1B, 113/7C, 113/8, 113/11, 113/12, 113/15, 115/3, 115/4 and 115/14 1-65-0 hectares	R.C.No.311 / G&M / 2015 dated 02-03- 2016 From 02-03- 2016 to 01-03- 2019 3 Years	Patta
9	Savudu	Thiru A. Jayakumar, S/o. Ayyadurai, No.30, South Sozhiyar Street, Kodavasal Taluk, Thiruvarur District	71. Neikuppai village, Kodavasal Taluk	R.S.Nos.22/3, 22/4, 22/5, 22/6, 22/7, 22/8, 22/9, 22/10, 22/12, 22/13, 22/20, 22/21 and 22/22, 23/5, 23/6, 23/7, 23/8, 23/12, 23/13, 23/14, 23/15, 23/16, 23/18, 23/19, 23/20, 23/21 and 23/23 1-85-0 hectares	R.C.No. 592 / (G&M) / 2013 Dated: 02-03- 2016 From 02-03- 2016 to 01-03- 2019 3 Years	Patta
10	Savudu	Thiru N. Udayakumar, S/o. Nagarajan, No.44, Chithanallur, Semangalam Post, Thiruvarur Taluk, Thiruvarur District	70, Karayapalaiyur village, Kodavasal Taluk	R.S. Nos. 125/1C, 125/2A, 142/9 and 144/15B 0-92-5 hectare	R.C.No. 397 / (G&M) / 2014 Dated: 03-03- 2016 From 03- 03-2016 to 02- 03-2018 2 Years	Patta

|--|

Tab.No.3 LEASE GRANTED ON MINOR MINERAL (SAVUDU) 2016-2017

				`	1	
Sl. No.	Name of the Mineral	Name and Complete address of lessee	Village and Taluk	R.S.Nos and extent (in Hectare)	Proceedings No. / Period of lease	Classification of land
1			4	3	0	/
1	Savudu	Thiru Sundarapandiyan, S/o. Singaravelu, 47/A, Perumal Kovil Keezha Veedhi, Pulivalam, Thiruvarur Taluk	Thappalampuliyur village, Thiruvarur Taluk	R.S. Nos. 23/1, 33/1 and 35/3 2-60-0 hectares	R.C.No. 623 / (G&M) / 2011 Dated: 10-06-2016 From 15-06-2016 to 29- 03-2018 2 Years	Patta
2	Savudu	Tmt. C. Amutha, W/o. Chandrasekaran, 73/2, Pillai Street, Koradachery, Kodavasal Taluk, Thiruvarur District	82, Viswanatha puram village, Kodavasal Taluk	R.S. No. 87/1B, 87/2B1 and 88/1A 1-33-5 hectares	R.C.No.147/G&M/2014 dated 07-07-2016. From 15-07-2016 to 14- 07-2018 2 Years	Patta
3	Savudu	Thiru. R. Selvam S/o. Rethinam No.3/10/6 Meppalam, Kulikarai post, Kodavasal Taluk Thiruvarur-613 704	Kiliyanur Needamangalam	RS.No. 28/5 and 28/6 0-62-0 hectares	RC.No.70/G&M/2016 dated 17-07-2017. From 31-07-2017 to 30.07.2019 2 Years	Patta
4	Savudu	Thiru	Engan	RS.No. 30/9A,	RC.No.70/G&M/2016	Patta

		C.Murugandham	Kodavasal	30/10A,	dated 17-07-2017.	
		S/o. Singaravel		30/11A, 30/12,	From 31-07-2017 to	
		2/99 Pillaiyar Kovil		30/13	30.07.2019	
		Theru,			2 Years	
		Perunattanthoppu,		0-72-5 Hec		
		Thirukannapuram				
		Nagapattinam				
5	Savudu	Thiru R.	Anaikuppam	215/3B, 216/1B	RC.No.319/G&M/	
		Manisekaran,	Nannilam	217/1	2016	
		S/o. Ramanathan,			dated 14.11.2017.	Patta
		347, Railadi Theru,		1-99-0 Hec	From 11-12-2017 to 10-	Falla
		Poonthottam,			02-2020	
		Nannilam Taluk,			2 Years	
		Thiruvarur.			Z i ears	

LEASE GRANTED ON 2017 – 2018

LEASE GRANTED ON MINOR MINERAL (SAVUDU) 2017 - 2018

DISTRICT: THIRUVARUR

-- NIL --

DETAILS OF ROYALTY / REVENUE RECEIVED IN LAST THREE YEARS:

The Royalty / Revenue (Seigniorage Fee) is depending up on the volume of the allowing quantity of mining / quarrying of the Alluvial sand / clay by SEIAA. The volume of the minable sand / clay depends up on the total extent of the lease area and other environmental parameters. The total volume of alluvial sand / clay has been given for mining/ quarrying is about 5,49,148 m3 with a tonnage of 7,13,892 metric tons (Consider the density of the clay is 1.3 kg/m3). The Seigniorage fee per 1 m3 is Rs. 20/- [As per the Order G.O. (Ms) No. 6 Dated 11.01.2011 by Industries (MMB.1) Department in the Tamil Nadu Government Gazette Extra-ordinary]. Basing on these statistics, the O/o DGM, Thiruvarur Disrtict, Tamil Nadu is supposed to be received the Revenue in last three years is about Rs. 1,09,82,960/-. But, the mining / quarrying details and seigniorage fee paid by the mine lease owners is yet to be received from the DGM Office, Thiruvarur because of all the leased mines / quarries have been abandoned due to expiry of the lease period or local issues. The market value of the clay of one cubic meter is Rs. 500/- (Source: from local people of Thiruvarur).

Tab.No.4 MINERAL WISE / LEVY WISE / MONTH WISE MINERAL REVENUE COLLECTION FOR THE YEAR 2015 – 2016

			Major M	inerals						Minor Mi	nerals						
SI.	Month &	Roy	alty			il) Revenue	Seignior age fee	Br	ick	Applicati on Fee	Area Asses sment	Dea d Ren t	Pen	alty	nount (int.)	neral) Revenue	ed Figure) Revenue
No.	Year	Crude Oil	Natural Gas	A.F/S.R.	etc,	Total (Major Mineral) Revenue	Redsoil / Savudu	Registration Fee	Annual Brick Mineral Fee	(Savudu)	Savudu	Savudu	Sand	Others (Savudu)	Any Other Amount (int.)	Total (Minor Mineral) Revenue	Grand Total (Reconciled Figure) Revenue
1	April 2015	56405063	15841573	0	0	72246636	375000	0	0	3000	1800	0	213919	0	0	593719	72840355
2	May 2015	52595545	10398704	0	0	62994249	50000	0	0	1500	0	0	86734	76220	0	214454	63208703
3	June 2015	62067408	15579633	0	0	77647041	185000	100	6000	3000	0	0	190920	76155	0	461175	78108216
4	July 2015	53417082	14834221	0	0	68251303	85000	700	12000	10500	0	0	62510	0	0	170710	68422013

5	August 2015	48868039	15626158	0	0	64494197	320000	0	0	1500	0	0	31928	100770	0	454198	64948395
6	Septemb er 2015	43740410	23622599	4315	0	67367324	100000	0	0	6000	0	0	25586	101540	0	233126	67600450
7	October 2015	42473444	23466295	0	0	65939739	60000	0	0	4500	0	0	15482	0	0	79982	66019721
8	Novemb er 2015	42661826	20131351	0	0	62793177	0	0	0	0	0	0	0	0	0	0	62793177
9	Decemb er 2015	37431783	18893107	0	0	56324890	192240	0	0	0	800	0	51164	50770	0	294974	56619864
10	January 2016	34237085	17283357	0	0	51520442	151000	0	0	1500	1800	0	61734	25385	0	241419	51761861
11	Februar y 2016	28265783	18877682	0	0	47143465	280000	0	0	1500	3600	0	0	0	0	285100	47428565
12	March 2016	29942094	18135280	0	0	48077374	1764160	0	0	1500	5800	0	0	25385	0	1796845	49874219
	Total	532105562	212689960	4315	0	744799837	3562400	800	18000	34500	13800	0	739977	456225	0	4825702	749625539
Deduct apportionment amount adjusted on 07-03-2016												485000					
							Net Ro	eceipt									749140539

Tab.No.5 MINERAL WISE / LEVY WISE / MONTH WISE MINERAL REVENUE COLLECTION FOR THE YEAR 2016 – 2017

			Major	Minerals	3					M	inor Miner	als						
Sl.	Month & Year	Roya	llty	.R.	L etc.,	eral) Revenue	Seignior age fee	В	rick	Applica tion Fee	Area Assess ment	Dea d Ren t		Per	nalty		Total (Minor Mineral) Revenue	Grand Total (Reconciled Figure) Revenue
		Crude Oil	Natural Gas	A.F/S.R.	Annual Compensation PEL etc.,	Total (Major Mineral) Revenue	Redsoil / Savudu	Registration Fee	Annual Brick Mineral Fee	(Savudu)	Savudu	Savudu	Sand		Others (Savudu)	Gravel	Total (Minor I	Grand Total (Recor
1	April 2016	34842024	1913850 0	0	0	53980524	0	300	18000	4500	0	0	53126	0	0	75	926	54056450
2	May 2016	34948945	1465647 6	0	0	49605421	75582	0	0	0	0	0	76155	0	0	15	1737	49757158
3	June 2016	38798926	1464101 4	0	0	53439940	100000	200	12000	4500	1800	0	27885	50770	0	19'	7155	53637095
4	July	37364137	1413182	0	0	51495961	220000	100	6000	3000	800	0	25466	0	0	484	4564	51980525

	2016		4										4				
5	August 2016	34661082	1416194 7	4415	0	48827444	0	0	0	0	0	0	47892	20308	0	250972	49078416
6	Septem ber 2016	35785722	1414182	0	0	49927543	20000	500	35000	1500	0	0	23794 6	0	0	294946	50222489
7	Octobe r 2016	34084351	1198056 8	0	0	46064919	40000	0	0	1500	0	0	10976	25582	0	176845	46241764
8	Novem ber 2016	37271508	9769859	0	0	47041367	25000	0	0	0	0	0	51550	25385	0	101935	47143302
9	Decem ber 2016	35377122	1066886 8	0	0	46045990	25000	0	0	1500	0	0	0	12689	0	153395	46199385
10	Januar y 2017	46984485	1067364 0	0	0	57658125	40000	0	0	0	0	0	13531 8	25450	26155	226923	57885048
11	Februa ry 2017	0	0	0	0	0	165760	0	0	0	0	0	81790	78465	0	326015	326015
12	March 2017	48155927 46139776	1098599 5 1019345	0	0	174075151	572100	3000	105000	6000	0	0	0	13240	0	818509	174893660

	58600000	3														
Total	523014005	1551439 65	4415	0	678162385	128344	4100	176000	22500	2600	0	10760 89	66803	26155	3258922	681421307

Tab.No.6 MINERAL WISE / LEVY WISE / MONTH WISE MINERAL REVENUE COLLECTION FOR THE YEAR 2017 – 2018

			M	lajor Minerals						Min	or Minei	rals					
		Roy	yalty		' Interest tion PEL	eral)	Seignior age fee	Br	ick	Applicat ion Fee	Area Asse ssme nt	Dea d Ren t		Penalty		al) Revenue	iled Figure
Sl. No.	Month & Year	Crude Oil	Natural Gas	A.F/S.R.	GravelD.R./Penalty / Interest / Annual Compensation PEL etc.,	Total (Major Mineral) Revenue	Gravel / Earth / Clay / Redsoil / Savudu	Registration Fee	Annual Brick Mineral Fee	Earth (Savudu)	Savudu	Savudu	Sand	Others (Savudu)	Gravel / Pebbles / Silica	Total (Minor Mineral) Revenue	Grand Total (Reconciled Figure) Revenue
1	Apr 2017	1778711	0	0	0	1778711	230000	100	6000	3000	1550	0	160102	226065	0	626817	2405
2	May 2017	4323333 6	11489777	14972986	0	69696099	120000	0	0	3000	0	0	274332	329760	0	727092	7042
3	Jun 2017	4217464 2	9937075	0	0	52111717	220000	300	1200	7500	0	0	71155	821865	0	1132820	5324

																	6026
4	Jul 2017	4331356 0	11800688	17361	0	55131609	445410 0	0	0	6000	1200	0	369434	280330	18450	5129514	
5	Aug 2017	4630776 8	12162855	320000	0	58790623	50000	0	0	0	200	0	364819	75990	0	491009	5928
6	Sep 2017	4807760 0	11939168	0	0	60016768	20000	0	0	0	0	0	688460	233280	0	941740	6095
7	Oct 2017	4993446 9	11390522	0	0	61324991	62000	0	0	0	0	0	126841 5	334407	52310	1717132	6304
8	Nov 2017	5361792 8	13117824	0	0	66735752	0	0	7000	9000	1000	0	361613	0	0	441613	6717
9	Dec 2017	5239674 4	14014024	0	0	66410768	0	0	0	3000	0	0	106988 1	0	0	1072881	6748
10	Jan 2018	5732337 3	14187091	0	0	71510464	60000	0	0	0	0	0	290207	410019	0	760226	7227

11	Feb 2018	6618399	13723486	0	0	79907485	275000	300	1200	1500	0	0	236060	152220	0	677080	8058
12	Mar 2018	5917094 7	11368491	0		70539438	243000	1500	6000	12000	0	0	144417 1	0	0	1760671	7230
	Total	5635130 77	13513100 1	15310347	0	713954425	573410 0	2200	1600	45000	3950	0	659864 9	286393	70760	1547859 5	7294

6.0 GENERAL PROFILE OF THE DISTRICT

The old integrated Thanjavur district was trifurcated into three districts, namely, Thanjavur, Thiruvarur and Nagapattinam districts. There are 2 revenue divisions, 7 taluks, 10 community development blocks, 3 municipalties, 7 town panchayats and 573 villages in Thiruvarur district. Source: Tab. No. 6 District Glance

SL.NO	DETAILS	THIRUVARUR DISTRICT
1	GEOGRAPHICAL POSITION	
	East Longitude Between	Between 79 15'and 79 45'
	North Latitude Between	Between 10 20'and 11 07'
	Sea Level	10 meters
2	AREA AND POPULATION	2011 CENSUS
	a) Area in Square Km.,	2374
	b) Population	12,64,277
	Male	6,26,693
	Female	6,37,584
	Rural	10,06,482
	Urban	2,57,795
	c) Density / Sq.km.,	556
	d) Literates	9,46,471
	Literacy	82.86%
	Rate MAIN WORKERS	2011 CENSUS
	a) Total Workers	540168
	b) Male Workers	369853
	c) Female Workers	170315
	d) Rural Workers	451099
	e) Urban Workers	89069
	f) Cultivators	60508
	g) Agricultural Labors	200126
	h) Household Industry	7264
	i) Other Workers	144527
	j) Marginal Workers	127743
	k) Non Workers	724109
	l) Languages Spoken	Tamil,Telugu,Malayalam,Urud
		Kannada, and Sowrashtra
3.	VITAL STATISTICS	
	a) Births	17048
	b) Deaths	6417
	c) Infant Deaths	168
	BIRTH RATE (PER 1000 POPULATION)	
	a) Rural	13
	b) Urban	13

c) Combined	13
DEATH RATE (PER 1000 POPULATION)	
a) Rural	5.6
b) Urban	3.3
c) Combined	5.4

SL.NO	DETAILS	THIRUVARUR 2015-2016							
	INFANT MORTALITY RATE(PER 1000								
	LIVE BIRTHS)	10.4							
	a) Rural	12.2							
	b) Urban	0.6							
	c) Combined	11.1							
	EXPECTATION OF LIFE AT BIRTH								
	a) Male	61.7							
	b) Female	63.5							
4	TEMPERATURE (IN CELSIUS)	THIRUVARUR 2015-2016							
	PLAINS								
	i) Maximum	35.19							
	ii) Minimum	26.39							
	HILL STATION								
	i) Maximum	NIL							
	ii) Minimum	NIL							
5	RAINFALL (in m.m.,)	THIRUVARUR 2015-2016							
	a) Normal								
	i) North East	719.1							
	ii) South Monsoon	296.4							
	West								
	b) Actual								
		1022.2							
	i) North East ii) South Monsoon	218.4							
	West	210.4							
	Monsoon								
6	AGRICULTURE (IN HECT)	THIRUVARUR 2015-2016							
	a) Total Cultivated Area	328869							
	b) Net Area sown	154740							
	c) Area sown more than once	174128							
	Area & Production of Principal crops	Area							
	1. Paddy	194743							
	2. Millets and other cereals								
	3. Pulses	120579							
	4. Sugarcane	375							
	5. Ground nut	2122							
	6. Gingelly	241							

7. Cotton (lint)	4799
Agricultural Land Holdings (2010-11)	
a) Holdings (Nos)	152127
b) Area (in Hec)	140613
c) Average size of holdings (in hec)	0.924
d) Name of the Important Food Crops	Rice, Black Gram, Green gram
e) Important Non food crops	Cotton, Groundnut, Coconut,
, 1	Gingelly, Palmolin, Flowers

SL.NO	DETAILS	THIRUVARUR 2015-2016						
7	IRRIGATION							
	a) NET AREA IRRIGATED BY (IN HEC)							
	i) Government Canals ii) Private Canals	149546 Nil Nil						
	iii) Tanks	Nil Nil						
	iv) Tube wells	Nil						
	v) Open wells	149546						
	vi) Other Sources							
	Total Net area Irrigated							
	b) GROSS AREA IRRIGATED	218793						
	Name of the river	Vennar, Vettar, Koraiyar Odampokki, Mudikondan Kattar, Nandalar, Mulliyar, Thirumalairajanar, Valavaikal, Adapparpandavaiyar, Paminiyar uHarichandranathi, Ayyanar, Vellaiyar, Marakka Koraiyar, Vaduvur Extn (CMP)						
	Name of the Lake	Vaduvur Lake, Thirumeni Lake, Moovanallur Lake, Udayamarthandapuram Lake						
8	ANIMAL HUSBANDRY	THIRUVARUR 2015-2016						
	I. VETERINARY INSTITUTIONS							
	a) Veterinary Hospitals	7						
	b) Dispensary	66						
	c) Clinicians Centre	1						
	d) Sub Centre	33						
	II. POULTRY DEVELOPMENT	THIRUVARUR 2015-2016						
	a) Chicks Produced in hatcheriesb) Birds sold for breeding (Rupees)c) Birds sold for food (lakhs)	Nil Nil Nil						

	III. LIVESTOCK CENSUS(2004 CENSUS)	
	a) Cattle	195743
	b) Buffaloes	2070
	c) Sheep	4591
	d) Goat	225143
	e) Poultry	-
9	DAIRY DEVELOPMENT	THIRUVARUR 2015-2016
	a) Dairies	NIL NIL
	b) Milk Chilling Plants	145
	c) No.of Milk Co-op Societies	14599385
	d) Milk production liters	
	Flush season (Lakh liters)	
	Lean Season	

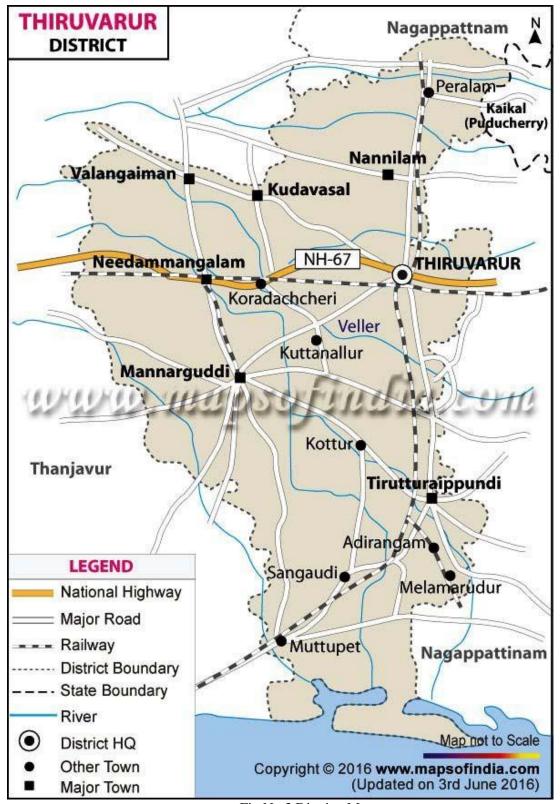


Fig No 3.District Map



Fig No.4 . Taluk District Map

7.0 BASIN AND SUB-BASIN

The district falls in Cauvery sub-basin. The tributaries of the river Cauvery are; Vennar, Vettar and Bamini rivers.

8.0 DRAINAGE

The Vennar and Vettar rivers play an important role in draining the district. There are 13 irrigation canals branching from these rivers. There are 34 irrigation tanks, which serve as major source of irrigation the district. Out of 34 tanks in the district Mannargudi taluk accounts for 22, followed by Thiruthuraipoondii. Surface water canals are the major sources of irrigation water accounting for about 89 percentage of the area irrigated in the district, whereas dug wells and tube wells accounts for 11 percentages.

9.0 IRRIGATION

The nine-fold land use classification (2005-06) for the district is given below(Tab.No.8 Irrigation)

S. No.	Classification	Area (Ha)
1	Forest	2452
2	Barren and uncultivable land	113
3	Non-agriculture uses	37059
4	Cultivable waste	1896
5	Pastures and grassing land	768
6	Miscellaneous trees and grasses	2132
7	Current Fallows	5709
8	Other Fallow lands	6353
9	Net area sown	153227
	Total	209709

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

10.0 SOILS

The district has mainly alluvial soil consisting of sand, silt and clay.

11.0PHYSIOGRAPHY OF THE DISTRICT

Thiruvarur is a plain terrain with a gentle slope towards east in the northern and central parts and slopping towards south in the southern part. The district area falls under three river basins as Cauvery sub basin, Vennar sub basin and new delta area. The important rivers flowing in the district are Vennar, Vettar, Koraiyar, Odampokki, Mudikondan Kattar, Nandalar, Mulliyar, Thirumalairajanar, Valavaikal, Adapparpandavaiyar, Paminiyar, Harichandranathi, Ayyanar, Vellaiyar, Marakka Koraiyar and Vaduvur Extn (CMP). The Lakes present in the District are Vaduvur Lake, Thurumeni Lake, Moovanallur Lake and Udayamarthandapuram Lake. The

prominent geomorphic units identified in the district through interpretation of Satellite imagery are:

1. Deltaic plain, 2. Pediment and buried pediment 3. Natural levee—swale, 4. Lagoon/Backwater Coastal plain and 5. Beach and Beach ridges. Major part of the district including Valangaiman, Nannilam, Thiruvarur and part of Thiruthuraipoondi Taluk is occupied by delta plain. Sedimentary high land having pediment and buried pediment landforms are observed in Mannargudi and Needamangalam Taluks. Sedimentary plain consists of various landforms like natural levee, swale and marshy area, lagoon / back water coastal plain and beach ridges are seen in the southern part of the district (V.Dhinagaran; November 2008). The plains support the agricultural deltaic plain under fluvio-marine influence and coastal plain of marine influence. Classical example of Cheniers are seen at Muttupet area which are extended up to Vedarannyam of Nagapattinam District. The Cheniers are represented by narrow sand mounds with intervening tidal flats and mud flats.

12.0CLIMATE AND RAIN FALL

The Maximum temperature is 35.190C and Minimum of 26.390C. The average rainfall during North East Monsoon is 719.1 mm and 296.4 mm of rainfall during South West Monsoon. The total cultivated area is 3,28,869 hectares and main agriculture is Paddy (1,94,713 ha), Pulses (1,20,579 ha), Sugarcane (375 ha), Groundnut (2,122 ha), Gingellay (241 ha) and Cotton (4,799 ha). The coastal length is 47.2 Km with average marine fish production is about 10,169 Tonnes. The total Reserve Forest is 12,057.732 ha and Reserved Land is 10.58 ha. The important Mineral resources in this district are Crude Oil, Natural Gas and Savudu (Clay). Two nos. of bird sanctuaries are present as one is at Vaduvur Bird Sanctuary and second one is Udayamarthandapuram Bird Sanctuary.

YEAR	JAN		FEB		MAR		APR		MAY		JUN		Л	JUL		AUG		SEPT		OCT		NOV		DEC	
	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEP	R/F	%DEF	
2013	14.3	-65	24.8	29	75.2	337	7.8	-77	49.3	5	37.7	13	20.5	-68	162.4	73	138.0	31	68.3	-66	169.4	-44	150.7	-30	
2014	6.3	-85	13.2	-31	0.0	-100	0.3	-99	180.7	286	2.0	-94	119.8	87	94.8	1	30.7	-71	333.2	66	251.8	-17	167.6	-22	
2016	0.0	-100	0.0	-100	0.0	-100	0.0	-100	187.4	301	33.5	0	38.9	-39	78.9	-16	56.7	-46	68.6	-66	89.5	-71	91.9	-57	
2017	123.1	201	2.0	-90	11.2	-35	0.0	-100	19.3	-59	61.0	8.3	60.0	-6	149.6	59	120.0	14	128.6	-36	363.9	20	209.3	-3	

Source: http://hydro.imd.gov.in

District: THIRUVARUR

Note :(1) The District Rainfall in millimeters (R/F) shown below are the arithmatic averages of Rainfall of Stations under the District.

- (2) % Dep. are the Departures of rainfall from the long period averages of rainfall for the District.
- (3) Blank Spaces show non-availability of Data

Table No9 .Rain fall data



DISTRICT RAINFALL MAP: TAMIL NADU

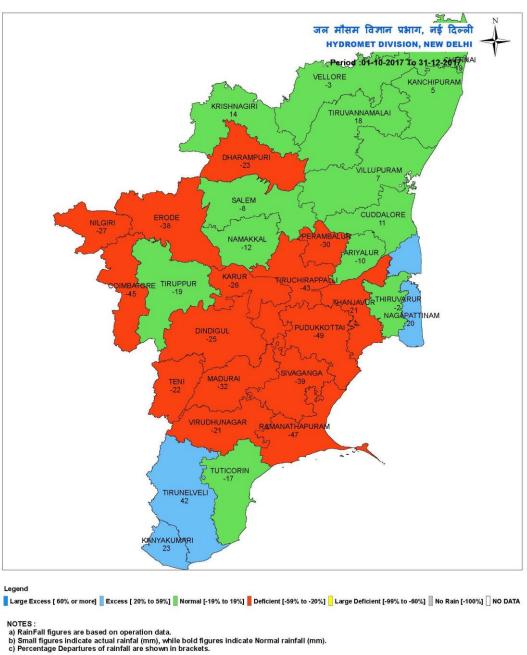


Fig No.5 Rainfall data of Tamilnadu

13.0 FOREST RESOURCES

The forests in the Thanjavur Forest Division which comprise Thiruvarur can be divided into three regions from the topography, and flora point of view. They are the alluvial regions or riverine land areas; The areas on the banks of rivers and canal in the form of narrow strips. Teak plantations mostly cover these areas and wherever the soil is unsuitable for Camellia sinensis, Dalbergia sisso, Terminalia arjuna and Eucalyptus have been planted. The lateritic region: This region contains mostly throny scrub jungles, tropical thorn forests and tropical dry evergreen forests. The coastal regions: This zone contains causurina plantations, mangrove scrub, mangrove forest and southern thorn scrub jungle. The entire stretch of coastal mangroves with lagoons and back waters lying along the coast fall in this category.

14.0 FLORA AND FAUNA:

The Flora and Fauna of Thiruvarur District is as almost as the tropical and sub tropical life. The important flora are: Acacia Arabica (Natta Tuma), Washingtonia rodusta (Palm), Azadirachta indica (Neem), Carica papaya (Papaya), Cocos nucifera (Coconut), Bambusa vulgaris (Bamboo), Morinda citrifolia (Nuna), Ficus benghalensis (Banyan), Ficus religiosa (Raavi) and Moringa oleifera (Drum Stick tree) etc. and the important fauna are: Pavo cristatus (Peacock), Anastomus oscitans (Asian Openbill), Halcyon coromanda (Rudy Kingfisher), Egretta garzetta (Little egret), Pelecanus philippensis (Pelican), Sterna aurantica (River Tern), Ardeola grayil (Indian Pond heron or paddybird), Canis lupus familiaris (Dog), Rattus (Rats), Mus (Mice) and Serpentes (Snakes) etc.

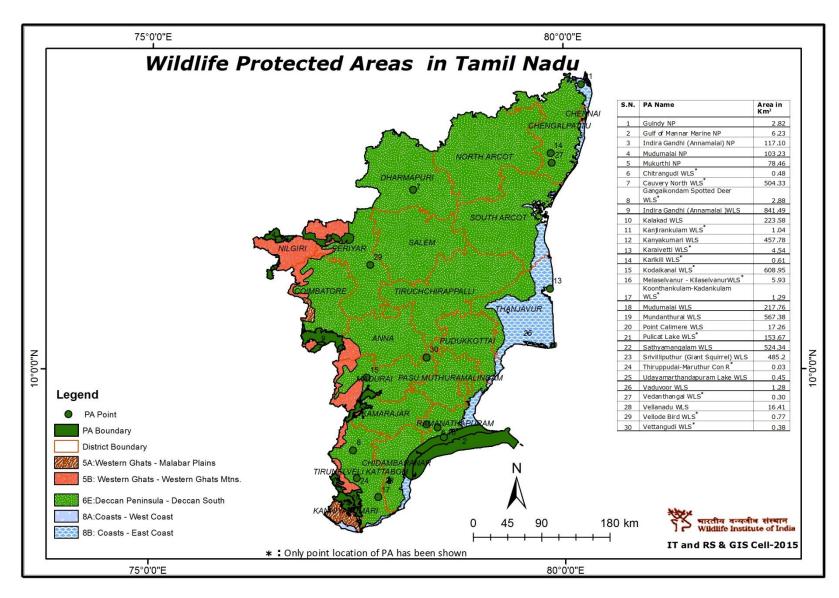


Fig No.6 Wild life Protected areas in Tamilnadu

16.0 OVER VIEW OF GEOLOGY OF TAMILNADU

Crystalline rocks of Archaean to late Proterozoic age occupy over 80% of the area of the state of Tamilnadu(fig No.8), while the rest is covered by Phanerozoic sedimentary rocks mainly along the coastal belt and in a few inland River valleys. The hard rock terrain comprises predominantly of Charnockite and Khondalite groups and their migmatitic derivatives,

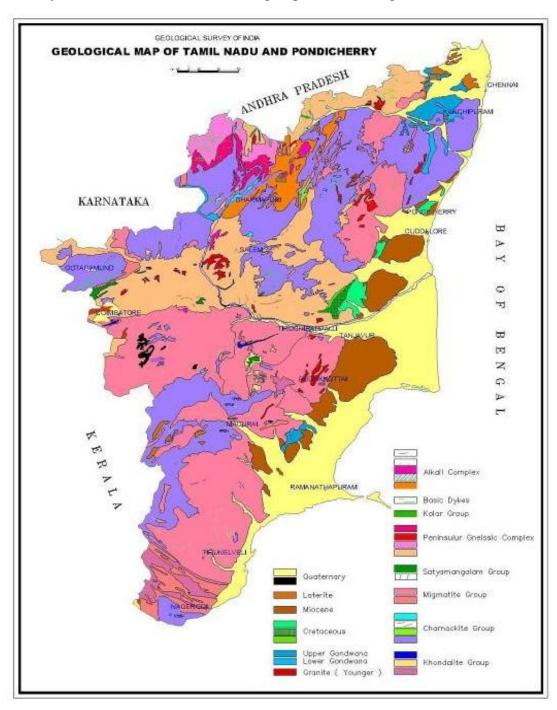


Fig.No.7 Geological Map Of Tamilnadu And Pondicherry (Source: Miscellaneous Publication, GSI, SU: TN&P, Chennai)

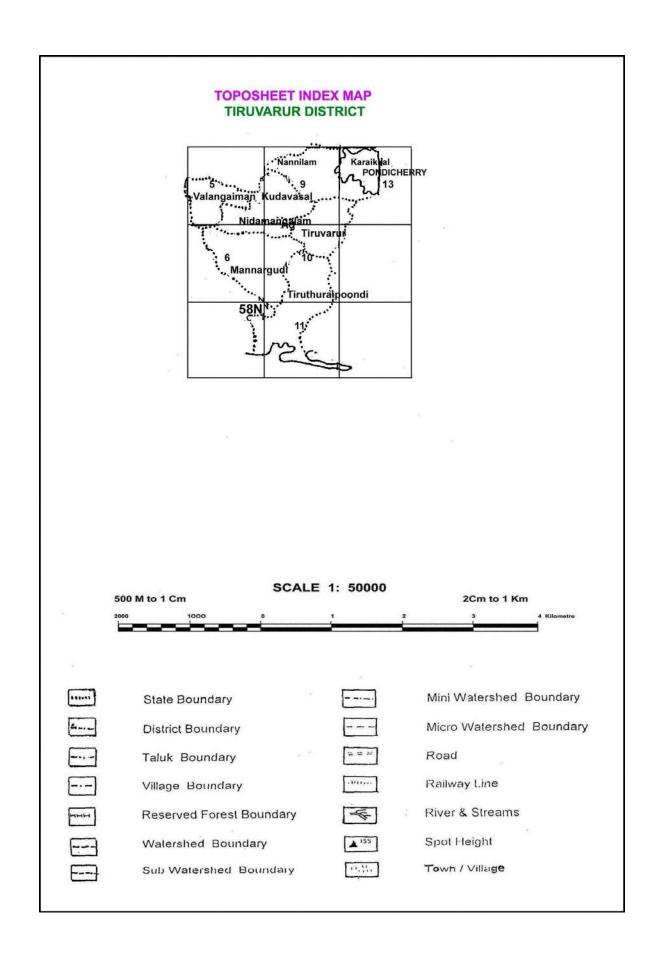


Fig No.8 Toposheet Index Map of Thiruvarur District, Tamil Nadu

16.1 GEOLOGY AND MINERAL WEALTH

Thiruvarur District comprises of Tertiary and Alluvial Deposits. The Cuddalore Sand stones of Tertiary Age are well developed as seen near Mannargudi. These sand stones are covered by laterites and lateritic soil over the Cuddalore Formations of Miopliocene age. The rest of the area is represented by the Quaternary deposits. The alluvial deposits of River Cauvery and its tributaries lie over the Tertiary sandstone. The fluvial deposits comprise flood plain, flood basin, point bar, channel bar and palaeo channels with admixtures of sand, silt, clay and gravel. The deltaic plain includes palaeo tidal flats with clays and sands and ridges of grey brown sand. The marine coastal plains include beach, tidal flats, salt marsh, mangrove swamps, deposits of sand and clay. The thickness of these Formations ranges from 30 m to 400 m (Fig: 3). Reserve forest of Muttupet on either side of the Mullipalam Creek represent marshy area. Mullipallam Creek represents estuaries in the area, connected to sea by narrow tidal creeks and rivers such as Koraiyar and Pamaniyar. A NW- SE trending deep seated fault is located to the east of Tiruttaraipundi (District Resource Map, Nagapattinam-Thiruvarur Districts, Tamil Nadu, Geological Survey of India, 1990).

The mining leases have been granted for Alluvial Sand and Clay [Savudu] (Minor Minerals) deposits for earth filling and land flattening activities and the Crude Oil and natural Gas (Major Minerals). The details of Lease holders', Location and extension of the land of Leased Mine and details of proceedings and period and validity of the mine lease have been attached in the Appendix–I (for Minor Minerals) and Appendix–III (for Major Minerals).

ALLUVIAL SAND AND CLAY (SAVUDU):

A total of 19 nos. of Mining lease have been granted for Alluvial sand and clay quarrying in different parts of Mannargudi Taluk, Nannilam Taluk, Thiruthuraipoondi Taluk, Needamangalam Taluk, Thiruvarur Taluk and Kodavasal Taluk since the year 2014. All the quarries present in the Appendix–I have been inspected and photographs have been taken (Plate-I).

DETAILS OF ROYALTY / REVENUE RECEIVED IN LAST THREE YEARS:

The Royalty / Revenue (Seigniorage Fee) is depending up on the volume of the allowing quantity of mining / quarrying of the Alluvial sand / clay by SEIAA. The volume

of the minable sand / clay depends up on the total extent of the lease area and other environmental parameters. The total volume of alluvial sand / clay has been given for mining/ quarrying is about 5,49,148 m3 with a tonnage of 7,13,892 metric tons (Consider the density of the clay is 1.3 kg/m3). The Seigniorage fee per 1 m3 is Rs. 20/- [As per the Order G.O. (Ms) No. 6 Dated 11.01.2011 by Industries (MMB.1) Department in the Tamil Nadu Government Gazette Extra-ordinary]. Basing on these statistics, the O/o DGM, Thiruvarur Disrtict, Tamil Nadu is supposed to be received the Revenue in last three years is about Rs. 1,09,82,960/-. But, the mining / quarrying details and seigniorage fee paid by the mine lease owners is yet to be received from the DGM Office, Thiruvarur because of all the leased mines / quarries have been abandoned due to expiry of the lease period or local issues. The market value of the clay of one cubic meter is Rs. 500/- (Source: from local people of Thiruvarur).

CRUDE OIL AND NATURAL GAS:

ONGC, Cauvery Asset, Karaikal, Puducherry is the Mine lease owner of the Crude Oil & Natural gas (Major mineral) of Cauvery Basin. Mining lease has been granted for a total of 11 nos. of crude oil and natural gas blocks which are located in different parts of Thiruvarur Taluk, Nannilam Taluk, Kamalapuram Block area, Koothanallur area, Greater Kovil Kalappal area and Needamangalam areas since the year 1999. After getting prior permission from the Deputy General Manager (G), SSM, Cauvery Asset, Karaikal, Puducherry (Annexure–III); various Early Production Units (EPS) like Kamalapuram EPS and Kuthanallur EPS, Group Gathering Stations (GGS) like Adiyakamangalam GGS and various crude oil and natural gas well sites and a rig site at Pallivaramaiylem near Kamalapuram have been visited and all possible environmental parameters have been recorded. All the crude oil and natural gas wells are being maintained by ONGC and there is no environmental impact like spillage and leakage of crude oil and natural gas. The entire crude oil and natural gas wells have been dug in the agricultural lands. The well site is leased from the land owner.

The source rock for crude oil and natural gas is sand stone. Two types of crude oil wells like flowing wells and mechanized oil wells operated by using sucking rod pump motors are present in the survey area. Some of the oil wells have been abandoned due to no production or no average production of crude oil or natural gas. The depth of the oil wells is varying from 1,350 m to 2,500 m. The production of the crude oil with natural gas

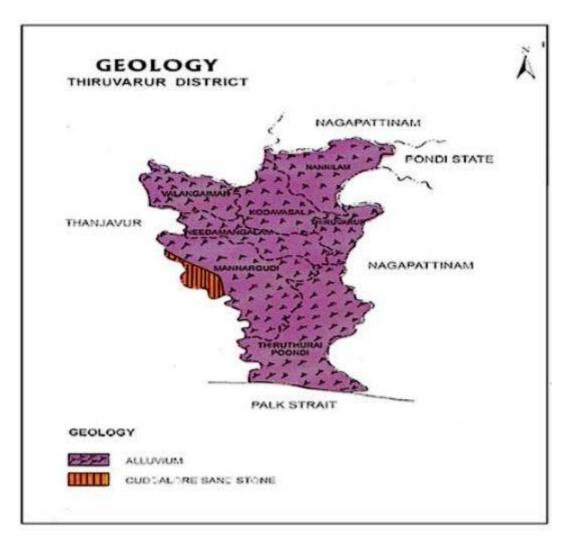


fig No. Geological Map of Thiruvarur District, Tamil Nadu

is about 110 Kilo liters per day. The liquid contains about 75 Kilo liters of crude oil and about 2,50,000 standard cubic meter (SCM) of gas per day. The production may vary from day to day recovery depending up on the availability of the crude oil and natural gas in the oil well. The production details of the Crude Oil and Natural gas are confidential and the details of the production are not disclosed by the ONGC.

INSPECTION DETAILS OF ONGC SITES:

As part of DEIAA inspection survey; all the ONGC crude oil and natural gas units in Thiruvarur District, Tamil Nadu since the year 1999 have been visited and the details of all the mines / quarries .

LEASE GRANTED ON MINOR MINERAL (SAVUDU) AS ON 30.06.2017

DISTRICT: THIRUVARUR

S1. No.	Name of the Minera 1	Name and Complete address of lessee	Village and Taluk	R.S. Nos. and extent (in Hectare)	SEIAA allowe d Quanti ty	Proceedings No. / Period of lease
1	Savud u	Thiru. Sethu, No. 244, Kamaraj Salai, R.P. Sivam Nagar, Mannargudi, Thiruvarur District.	Thirumakkotta i–I village, Mannargudi Taluk	R.S. No. 218 4-80-0 hectares (out of the total extent of 310-95-5 hectares)	48,400 m ³	R.C. No. 737 / (G&M) / 2012, Dated: 24-05-2014. From 30-05-2014 to 29-05-2017 3 Years Total amount: Rs. 9,60,000/-
2	Savud u	Thiru E. Subbarayan, S/o. Ehambaram Pillai, 1/67A, Kudiyana Street, Mananthakudi, Ayyampettai village, Nannilam Taluk, Thiruvarur District	4, Annadhanapuram village, Nannilam Taluk	R.S. Nos. 112/2A, 112/3, 112/4A, 112/4B, 112/5, 112/6, 112/7, 112/8, 112/9, 112/10, 112/11, 112/12 & 112/13 1-25-5 hectares	17,163 m ³	R.C.No.527 / (G&M) / 2013, Dated 24-05- 2014. From 30-05-2014 to 29- 05-2017 3 Years Total amount

						Rs.3,43,200/-
3	Savud u	Thiru. R. Guhan, S/o. Rajendran, Manakkodu, Nallur, Valangaiman Taluk, Thiruvarur District.	Kooppachikkot tai Village, Nannilam Taluk	R.S. No. 798 4-25-0 hectares (out of the total extent of 16-32- 5 hectares)	42,500 m ³	R.C. No. 53 / (G&M) / 2013, Dated: 26- 05-2014 From 26- 05-2014 to 25- 05- 2017 3 Years

S1. No.	Name of the Miner al	Name and Complete address of lessee	Village and Taluk	R.S. Nos. and extent (in Hectare)	SEIAA allowe d Quanti ty	Proceedings No. / Period of lease
4	Savud u	Thiru K.M. Haja Moinudeen, S/o. Kadar Kandu, Maracar, 35/50, Peerodum Street, Nagore, Nagapattinam Taluk.	Ubayavedhanthap uram Village, Nannilam Taluk	R.S.Nos. 4/4F, 11/3C and 11/3D 1-56-0 hectares	12,700 m ³	R.C.No.406 / (G&M) / 2011, Dated 26-05- 2014 From 30-05-2014 to 29- 05-2017 3 Years Total amount Rs.2,54,04 0/-
5	Savud u	Thiru J. Balaji, S/o. T. Jayaraman, East Street, Boothangudi, Muttam Post, Nagapattinam District	Kaliyakudi village and Pavattakudi village, Nannilam Taluk	R.S. Nos. 5/2, 5/3, 5/5, 5/6A, 5/7, 5/8, 5/9, 5/10 and 6/2 of Kaliyakudi village and in an extent of 0-91-5 hectare in R.S. Nos. 6/3D and 6/4 in Pavattakudi village (total extent 2-14-5 hectares) 1-23-0 hectares	21,332 m ³	R.C. No. 52 / (G&M) / 2013, Dated 12- 02-2015 From 15- 04-2015 to 13- 08- 2017, 2 Years

6	Savud u	Thiru R. Chandrasekaran, S/o. Ramanathan Pillai, No.5/73, Main Road, Poonthottam Post, Nannilam Taluk, Thiruvarur District.	58, Anaikkuppam Village, Nannilam Taluk	R.S. Nos. 285/2C2, 285/2C3, 285/4, 286/6, 286/7, 286/8, 288/3, 288/4, 288/5, 288/6, 288/7 and 288/8 2-84- 0 hectares	44,558 m ³	R.C.No.625 / (G&M) / 2014, Dated 15- 04-2015 From 22-04-2015 to 21- 04-2018 3 Years
7	Savud u	Thiru R. Mahesh, S/o. Rajendran, 20, Pillai Street, Thiruvarur	Thillaivilagam, Thiruthuraipo ondi Taluk	R.S.Nos.138/1B1 & 138/2A 4-21-5 hectares	38,718 m ³	R.C. No. 82 / (G&M) / 2015, Dated : 21- 12-2015 From 31- 12-2015 to 30- 12- 2018 3 Years

S1. No.	Name of the Miner al	Name and Complete address of lessee	Village and Taluk	evient iin		Proceedings No. / Period of lease
8	Savud u	Thiru V. Rajendran, S/o. Venkatachalam, 92/B1, Agraharam Street, Chithiraiyur Post, Needamangalam Taluk, Thiruvarur District.	49, Chithiraiyur village, Needamangal am Taluk	R.S. Nos. 63/1, 63/2A, 76/4B, 295/1 and 295/2 1-08-0 hectares	9,610 m ³	R.C. No. 376 / (G&M) / 2014, Dated 21-12-2015 From 31-12-2015 to 30- 12-2017 2 Years
9	Savud u	Tmt R. Chitra, W/o. K. Suresh, 663, Savadi Street, Nedungulam, Nannilam Taluk, Thiruvarur District.	5, Kaliyakudi Village, Nannilam Taluk	R.S. Nos. 51/13B, 51/15, 51/16, 52/2, 52/3, 52/5A, 52/6, 52/7, 52/13, 52/14 and 52/16 2-44-0 hectares	37,696 m ³	R.C. No. 785 / (G&M) / 2014 Dated : 08-01-2016 From 08-01-2016 to 07- 01-2019 3 Years
10	Savud u	Tmt. C. Mangaikarasi, W/o. Chandrasekaran, No.5/73, Main Road, Poonthottam, Nannilam Taluk,	Anaikuppam village and Kuvalaikkal village, Nannilam Taluk	R.S.Nos.219/6 and 289/1B - 1-59-0 hectares of Anaikuppam village and R.S. Nos.41/2, 41/3, 41/4, 41/5, 41/6, 41/7 and 41/8 – 0-55-5 hectare of	29,072 m ³	R.C. No. 663 / (G&M) / 2015, Dated: 26 -02-2016 From 26-02-2016 to 25-02-2019 3 Years

		Thiruvarur District.		Kuvalaikkal village		
11	Savud u	Thiru G. Subramaniyan, S/o. Govindarajan, No.1/77, Kudiyana Street, Mananthakudi Post, Ayyampettai, Nannilam Taluk, Thiruvarur	Annathanapu ram village Nannilam Taluk	R.S. Nos. 206/2, 64/6 and 64/8 2-25-0 hectares	56,576 m ³	R.C. No. 664 / (G&M) / 2015 Dated: 26-02-2016 From 26-02-2016 to 25- 02-2019 3 Years
		District.				

S1. No.	Name of the Miner al	Name and Complete address of lessee	Village and Taluk	R.S. Nos. and extent (in Hectare)	SEIAA allowe d Quanti ty	Proceedings No. / Period of lease
12	Savud u	Thiru B. Kumaran, S/o. Balasubramanian, No.51, Periyar Street, Mettupalayam, Thiruvarur District.	Alivalam village, Thiruvarur Taluk	R.S. Nos. 189/2, 189/3, 189/4, 189/5 and 189/6 1-83- 0 hectares	28,800 m ³	R.C. No. 662 / (G&M) / 2015 Dated : 02-03-2016 From 02-03-2016 to 01- 03-2019 3 Years
13	Savud u	Thiru D. Packirisamy, S/o. Duraisamy, No.11, Chinna Alathur, Peralam Post, Kodavasal Taluk, Thiruvarur District.	Annathanapu ram village, Nannilam Taluk	R.S. Nos. 113/1B, 113/7C, 113/8, 113/11, 113/12, 113/15, 115/3, 115/4 and 115/14 1-65-0 hectares	19,576 m ³	R.C. No. 311 / G&M / 2015 Dated 02-03-2016 From 02-03-2016 to 01- 03-2019 3 Years
14	Savud u	Thiru A. Jayakumar, S/o. Ayyadurai, No.30, South Sozhiyar Street, Kodavasal Taluk, Thiruvarur District.	71. Neikuppai village, Kodavasal Taluk	R.S. Nos. 22/3, 22/4, 22/5, 22/6, 22/7, 22/8, 22/9, 22/10, 22/12, 22/13, 22/20, 22/21 and 22/22, 23/5, 23/6, 23/7, 23/8, 23/12, 23/13, 23/14, 23/15, 23/16,	20,064 m ³	R.C. No. 592 / (G&M) / 2013 Dated: 02-03-2016 From 02-03-2016 to 01- 03-2019 3 Years Total amount

				23/18, 23/19, 23/20, 23/21 and 23/23 1-85-0 hectares		
15	Savud u	Thiru N. Udayakumar, S/o. Nagarajan, No.44, Chithanallur, Semangalam Post, Thiruvarur Taluk, Thiruvarur District	70, Karayapalaiyur village, Kodavasal Taluk	R.S. Nos. 125/1C, 125/2A, 142/9 and 144/15B 0-92-5 hectare	10,794 m ³	R.C. No. 397 / (G&M) / 2014 Dated : 03-03-2016 From 03-03-2016 to 02- 03-2018 2 Years

S1. No.	Name of the Miner al	Name and Complete address of lessee	Village and Taluk	R.S. Nos. and extent (in Hectare)	SEIAA allowe d Quanti ty	Proceedings No. / Period of lease
16	Savud u	Thiru Gnanasekar, S/o. Subramanian, No.2/72, North Street, Vaippur Post, Thiruvarur Taluk and District.	3, Vaippur village, Thiruvarur Taluk	R.S. Nos. 241/6, 242/5, 247/10B, 248/2 and 286/5A 2-08-0 hectares	16,803 m ³	R.C. No. 179 / (G&M) / 2015 Dated : 07-03-2016 From 07-03-2016 to 06- 03-2019 3 Years
17	Savud u	Thiru Sundarapandiyan, S/o. Singaravelu, 47/A, Perumal Kovil, Keezha Veedhi, Pulivalam, Thiruvarur Taluk.	Thappalampuli yur village, Thiruvarur Taluk	R.S. Nos. 23/1, 33/1 and 35/3 2-60-0 hectares	34,354 m ³	R.C. No. 623 / (G&M) / 2011 Dated: 10-06-2016 From 15-06-2016 to 29-03-2018 2 Years
18	Savud u	Tmt. C. Amutha, W/o. Chandrasekaran, 73/2, Pillai Street, Koradachery, Kodavasal Taluk, Thiruvarur District.	82, Viswanatha puram village, Kodavasal Taluk	R.S. No. 87/1B, 87/2B1 and 88/1A 1-33-5 hectares	8,038 m ³	R.C. No. 147/G&M/2014 Dated 07-07-2016. From 15-07-2016 to 14- 07-2018 2 Years

19	Savud u	Thiru N. Renganathan, S/o. Nagappan, 2/57, Nalladai Road, Parasalur, Semmanarkovil, Tharangambadi Taluk	Thirukottaram village, Nannilam Taluk	R.S. Nos.134/2A, 136/2B, 137/2A – 3-88-5 hectares	52,394 m ³	R.C.No.74/G&M/2 013, Dated 23-06- 2014. From 26-06-2014 to 25- 06-2017 3 Years Total amount Rs. 1047840 /-
----	------------	---	---	---	--------------------------	---

LEASE GRANTED ON MAJOR MINERALS (ONGC) AS ON 30-06-2017

DISTRICT: THIRUVARUR

_	or Miner ruvarur	als					District	::
S1. No.	Name of Miner al	Name and Comple te address of lessee	Village and Taluk	SF Nos. and extent (in hects.)	G.O./Proceedi ngs/ Period of lease	Classificati on of land.	Operati ve / Non operativ e.	Details of Litigatio n, if any, pending
1.	Crude Oil and Natur al Gas	ONG C	Addiyakamanga lam Tiruvarur	17.8 Sq. Km	3D, No.26 dt.12.2.20 04 20 Years from 27- 05-1999 to 26-05-2019	Patta Land	Operativ e	Nil
2.	Crude Oil and Natur al Gas	ONG C	Nannila m-I Nannilla m	4.70 Sq. Km	G.O.(3D) No13 MM A2 dt 28.1.2004 20 Years from 26-04-1993 to 25-04-2013	Patta Land	Operativ e	Nil

3.	Crude Oil and Natur al Gas	ONG C	Nannilam -II Nannilla m	1.0 Sq. Km	G.O.(3D) No19 MM A2 dt 06-02- 2004 20 Years from 27-05- 1999 to 26-05-2019	Patta Land	Operativ e	Nil	
----	--	----------	----------------------------------	------------------	---	------------	---------------	-----	--

	or Miner ruvarur	als					District	::
S1. No.	Name of Miner al	Name and Comple te address of lessee	Village and Taluk	and and ngs/ Period Taluk extent of lease (in hects.)		Classificati on of land.	Operati ve / Non operativ e.	Details of Litigatio n, if any, pending
4.	Crude Oil and Natur al Gas	ONG C	Kamalapura m-I Thiruvarur	23.5 Sq. Km	G.O (3D)No.23 dt.12.2.2004 20 Years from 27-05-1999 to 26-05-2019	Patta Land	Operativ e	Nil
5.	Crude Oil and Natur al Gas	ONG C	Kamalapura m-II Thiruvarur	3.5 Sq. Km	G.O (3D)No.15 dt.28.08.200 4 20 Years from 04.05.1994 to 03.05.2014	Patta Land	Operativ e	Nil
6.	Crude Oil and Natur al Gas	ONG C	Greater Kamalapura m Block	22.00 Sq. Km	(3D) No.23 Ind.Dep, dt.09-05- 2008 20 Years from 26-12-2004 to 25-12-2024	Patta Land	Operativ e	Nil

7.	Crude Oil and Natur al Gas	ONG C	Koothanallur	6.25 Sq. Km	(3D) No.30 Ind.Dep, dt.04-06- 2008 20 Years from 26-02-2004 to 25-02-2024	Patta Land	Operativ e	Nil
----	--	----------	--------------	-------------------	---	------------	---------------	-----

Maj	or Miner	als					District	Thiruvarur
S1. No.	Name of Miner al	Name and Comple te address of lessee	Village and Taluk	SF Nos. and extent (in hects.)	G.O./Proceedi ngs/ Period of lease	Classificati on of land.	Operati ve / Non operativ e.	Details of Litigation, if any, pending
8.	Crude Oil and Natur al Gas	ONGC	Greater Kovil Kalappal	33.61 Sq. Km	(3D) No.54 Ind.Dep, dt.30- 07-2008 20 Years from 15-05-2007 to 14-05-2027	Patta Land	Operative	Nil
9.	Crude Oil and Natur al Gas	ONGC	Vijayapuram # 13 area Thiruvarur	2.00 Sq.Km s	(3D) No.56 Ind.Dept, dt.06-08- 2008 20 Years from 26-02-2004 to 25-02-2024	Patta Land	Operative	Nil
10.	Crude Oil and Natur al Gas	ONGC	Adhichapura m Thiruvarur	165.00 Sq. Km	(3D) No.22 Ind.Dept, dt.06-08- 2009 20 Years from 13-04-2007 to 12-04-2027	Patta Land	Operative	Nil

11.	Crude Oil and Natur al Gas	ONGC	Mattur Needamangala m	3.0 Sq. Km	3D No.20 Ind.Dep, dt.6.2.2004 20 Years from 04- 05-1994 to 03-05- 2014	Patta Land	Operative	Nil
			Total extent	282.36 Sq. Km				

Inventory of District Mineral Resources (Non - Metallic Minerals) Commodity: Sand / Clay

				Commo	dity: S	and / Clay					
S. No	Village / Taluk / District	Lat / Long	T.S No	Name of the block	Area sq. km	Type of deposit	Strike lengt h / width	Depth of resourc e estimat ed	Resource in MT and stage of explorati on	Grade / assay value	Status of land (lease hold/ free hold)
						vein type / massive / banded / placer			Inferre d / indicat ed G1/ G2/ G3/ G4	in INR	
1	Thirumakkottai-I / Mannargudi / Thiruvarur	10°33'34.25 "N 79°26'55.97 "E	-	Thirumakkottai - I Village Block	0.048	Massive	-	2 m	-	96800 0	Patta Land (Lease Hold)
2	Annadhanapura m / Nannilam / Thiruvarur	11°00'21.42 "N 79°42'20.97 "E	-	4, Annadhanapur am Village Block	0.012 6	Massive	-	2 m	-	34326 0	Patta Land (Lease Hold)
3	Koopachikkottai / Mannargudi / Thiruvarur	10°35'39.28 "N 79°25'44.41 "E	-	Koopachikkottai vVillage Block	0.042 5	Massive	-	2 m	-	85000 0	Patta Land (Lease Hold)
4	Ubayavedanthapur am / Nannilam / Thiruvarur	10°56'40.86 "N 79°43'16.00 "E	_	Ubayavedanthapu ram Vilalge Block	0.015 6	Massive	-	2 m	-	25400 0	Patta Land (Lease Hold)
5	Kaliyakudi & Pavattakudi / Nannilam /	10°59'44.55 "N 79°41'35.41	-	Kaliyakudi & Pavattakudi Village	0.021 5	Massive	-	2 m	-	42664 0	Patta Land (Lease

	Thiruvarur	"E		Block							Hold)
6	Anaikuppam / Nannilam / Thiruvarur	10°50'45.09 "N 79°37'00.57 "E	-	58, Anaikuppa m Village Block	0.028 4	Massive	-	2 m	-	89116 0	Patta Land (Lease Hold)
7	Thillaivilagam / Thiruthuraipoo ndi / Thiruvarur	10°24'14.19 "N 79°32'43.42 "E	_	Thillaivilagam Village Block	0.042 2	Massive	-	2 m	-	77436 0	Patta Land (Lease Hold)

Inventory of District Mineral Resources (Non - Metallic Minerals) Commodity: Sand / Clay

		T		Commo	aity: S	and / Clay		1	<u> </u>	1	
S. No ·	Village / Taluk / District	Lat / Long	T.S No	Name of the block	Area sq. km	Type of deposit	Strike lengt h / width	Depth of resourc e estimat ed	Resource in MT and stage of explorati on	Grade / assay value	Status of land (lease hold/ free hold)
						vein type / massive / banded / placer			Inferre d / indicat ed G1/ G2/ G3/ G4	in INR	
8	Chithiraiyur / Needamangalam / Thiruvarur	10°41'15.84 "N 79°37'55.66 "E	_	49, Chithiraiyur Village Block	0.010 8	Massive	-	2 m	-	19220 0	Patta Land (Lease Hold)
9	Kaliyakudi / Nannilam / Thiruvarur	10°59'19.11 "N 79°42'54.39 "E	-	5, Kaliyakudi Village Block	0.024 4	Massive	-	2 m	-	75392 0	Patta Land (Lease Hold)
10	Anaikuppam & Kuvalaikkal / Nannilam / Thiruvarur	10°50'49.08 "N 79°37'03.21 "E	-	Anaikuppam & Kuvalaikkal Village Block	0.021 5	Massive	-	2 m	-	58144 0	Patta Land (Lease Hold)
11	Annathanapura m / Nannilam / Thiruvarur	11°00'21.66 "N 79°42'19.49 "E	-	Annathanapura m Village Block	0.022 5	Massive	-	2 m	-	11315 20	Patta Land (Lease Hold)
12	Alivalam / Thiruvarur / Thiruvarur	10°44'45.61 "N 79°39'26.22	-	Alivalam Village Block	0.018	Massive	-	2 m	-	57600 0	Patta Land (Lease

		"E									Hold)
13	Annathanapura m / Nannilam / Thiruvarur	11°00'21.41 "N 79°42'20.10 "E	-	Annathanapura m Village Block	0.016 5	Massive	-	2 m	-	39152 0	Patta Land (Lease Hold)
14	Neikuppai / Kodavasal / Thiruvarur	10°49'19.34 "N 79°31'09.06 "E	ı	71, Neikuppai Village Block	0.018 5	Massive	-	2 m	-	40128 0	Patta Land (Lease Hold)

Inventory of District Mineral Resources (Non - Metallic Minerals) Commodity: Sand / Clay

				Commo	dity: S	and / Clay					
S. No	Village / Taluk / District	Lat / Long	T.S No	Name of the block	Area sq. km	Type of deposit	Strike lengt h / width	Depth of resourc e estimat ed	Resource in MT and stage of explorati on	Grade / assay value	Status of land (lease hold/ free hold)
						vein type / massive / banded / placer			Inferre d / indicat ed G1/ G2/ G3/ G4	in INR	
15	Karayapalaiyur / Kodavasal / Thiruvarur	10°48'50.20 "N 79°31'39.53 "E	-	70, Karayapalaiyu r Village Block	0.009	Massive	-	2 m	-	21588 0	Patta Land (Lease Hold)
16	Vaippur / Thiruvarur / Thiruvarur	10°48'29.25 "N 79°40'53.11 "E	-	3, Vaippur Village Block	0.020	Massive	-	2 m	-	33606 0	Patta Land (Lease Hold)
17	Thappalampuliyu r / Thriuvarur / Thiruvarur	10°44'08.63 "N 79°40'58.73 "E	_	Thappalampuliy ur Village Block	0.026 0	Massive	-	2 m	-	68708 0	Patta Land (Lease Hold)
18	Viswanathapura m / Kodavasal / Thiruvarur	10°46'10.31 "N 79°28'36.84 "E	-	82, Viswanathapu ram Village Block	0.013	Massive	-	2 m	-	16076 0	Patta Land (Lease Hold)
19	Thirukottaram / Nannilam / Thiruvarur	10°58'16.34 "N 79°45'15.24	-	Thirukottaram Village Block	0.038	Massive	-	2 m	-	104788 0	Patta Land (Lease

	"E					Hold)

Inventory of District Mineral Resources (Energy Minerals) Commodity: Crude Oil and Natural Gas

				Commodity: C	rude O	il and Natural Gas	S				
S. No	Village / Taluk / District	Lat / Long	T.S No	Name of the block	Area sq. km	Type of deposit	Strike lengt h / width	Depth of resourc e estimat ed	Resource in MT and stage of explorati on	Grade / assay value	Status of land (lease hold/ free hold)
						vein type / massive / banded / placer			Inferre d / indicat ed G1/ G2/ G3/ G4	in INR	
1	Addiyakamangala m / Thiruvarur / Thiruvarur	10°45'27.50 "N 79°40'09.09 "E	-	Addiyakamangala m	17.80	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)
2	Nannilam-I / Nannilam / Thiruvarur	10°46'48.78 "N 79°31'49.16 "E	-	Nannilam-I	4.70	Lensoidal	-	2500 m	G 1	-	Patta Land (Lease Hold)
3	Nannilam-II / Nannilam / Thiruvarur	10°46'56.48 "N 79°31'42.19 "E	-	Nannilam-II	1.00	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)
4	Kamalapuram-I / Thiruvarur / Thiruvarur	10°45'09.87 "N 79°36'20.77 "E	-	Kamalapuram-I	23.50	Lensoidal	-	2000 m	G 1	-	Patta Land (Lease Hold)
5	Kamalapuram-II / Thiruvarur / Thiruvarur	10°44'18.46 "N 79°33'39.67	-	Kamalapuram-II	3.50	Lensoidal	-	2036 m	G 1	-	Patta Land (Lease

		"E									Hold)
6	Greater Kamalapuram / Thiruvarur / Thiruvarur	10°45'06.98 "N 79°35'54.52 "E	_	Greater Kamalapuram	22.00	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)
7	Koothanall ur / Thiruvaru r	10°44'08.67 "N 79°29'44.71 "E	-	Koothanallur	6.25	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)

Inventory of District Mineral Resources (Energy Minerals) Commodity: Crude Oil and Natural Gas

				Commodity: Ci	ude O	il and Natural Gas	<u> </u>				
S. No	Village / Taluk / District	Lat / Long	T.S No	Name of the block	Area sq. km	Type of deposit	Strike lengt h / width	Depth of resourc e estimat ed	Resource in MT and stage of explorati on	Grade / assay value	Status of land (lease hold/ free hold)
						vein type / massive / banded / placer			Inferre d / indicat ed G1/ G2/ G3/ G4	in INR	
8	Greater Kovil Kalappal / Thiruvarur	10°34'03.21 "N 79°31'50.18 "E	-	Greater Kovil Kalappal	33.61	Lensoidal	-	1900 m	G 1	-	Patta Land (Lease Hold)
9	Vijayapuram # 13 area / Thiruvarur / Thiruvarur	10°45'43.32 "N 79°38'30.32 "E	-	Vijayapuram # 13 area	2.00	Lensoidal	-	2500 m	G 1	-	Patta Land (Lease Hold)
10	Adhichapuram / Thiruvarur / Thiruvarur	10°35'50.96 "N 79°32'05.83 "E	-	Adhichapuram	165.0 0	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)
11	Mattur / Needamangalam / Thiruvarur	10°50'40.70 "N 79°26'28.14 "E	-	Mattur	3.00	Lensoidal	-	-	G 1	-	Patta Land (Lease Hold)

17.0 Field Photographs

Plate-1: Field Photographs of Mining / Quarrying. Commodity: Sand / Clay



Abandoned Sand Quarry within Tirumeni River near Thirumakkottai-I village, Mannargudi Taluk (Location: 10°33'34.25"N 79°26'55.97"E)



Abandoned sand quarry near Annadhanapuram Village, nannilam Taluk (Location: 11°00'21.42"N 79°42'20.97"E)



Abandoned quarry near Kooppachikkottai Village, Mannargudi Taluk (10°35'39.28"N 79°25'44.41"E)



Abandoned quarry near Ubayavedanthapuram Village, Nannilam Taluk (10°56'40.86"N 79°43'16.00"E)



Abandoned quarry near Kaliyakudi village and pavattakudi village, Nannilam Taluk (Location: 10°59'44.55"N 79°41'35.41"E)



Abandoned quarry near 58, Anaikkuppam village, Nannilam Taluk (Location: 10°50'45.09"N 79°37'00.57"E)



Mine Lease area near Thillaivilagam Village, Thiruthuraipoondi Taluk (Location: 10°24'14.19"N 79°32'43.42"E)



Abandoned quarry near 49, CHithiraiyur Village, Needamangalam Taluk (Location: 10°41'15.84"N 79°37'55.66"E)

Plate-1 Continued... Page 02/03



Abandoned quarry near 5, kaliyakudi Village, Nannilam Taluk (Location: 10°59'19.11"N 79°42'54.39"E)



Abandoned quarry near Anaikuppam Village and Kuvalaikkal Village, Nannilam Taluk (Location: 10°50'49.08"N 79°37'03.21"E)



Abandoned Quarry near Annathanapuram Village, Nannilam Taluk (Location: 11°00'21.66"N 79°42'19.49"E)



Abandoned Quarry near Alivalam Vilalge, Thiruvarur Taluk (Location: 10°44'45.61"N 79°39'26.22"E)



Abandoned sand quarry near Annathanapuram,
Nannilam Taluk (Location: 11°00'21.41"N
79°42'20.10"E)



Abandoned sand quarry near 71, Neikuppai Village, Kodavasal Taluk (Location: 10°49'19.34"N 79°31'09.06"E)





Abandoned sand quarry near 70, Karayapalaiyur village, Kodavasal Taluk (Location: 10°48'50.20"N 79°31'39.53"E)

Abandoned clay quarry near 3, Vaippur village, Thiruvarur Taluk (Location: 10°48'29.25"N 79°40'53.11"E)

Plate-1 Continued... Page... 03/03



Abandoned sand quarry near Thappalampuliyur village, Thiruvarur Taluk (Location: 10°44'08.63"N 79°40'58.73"E)



Abandoned clay quarry near 82, Viswanathapuram village, Kodavasal Taluk (Location: 10°46′10.31″N 79°28′36.84″E)



Abandoned sand quarry near Thirukottaram village, Nannilam Taluk (Location: $10^{\circ}58'16.34"N~79^{\circ}45'15.24"E)$

Plate-2: Field Photographs of Mining. Commodity: Crude Oil and Natural Gas



Automatic flow Oil Well near Addiyakamangalam, Tiurvarur (Location: 10°45'27.50"N 79°40'09.09"E)



Automatic flow Oil well near Nannilam, Thiruvarur (Location: 10°46'48.78"N 79°31'49.16"E)



Automatic flow Oil well near Nannilam, Thiruvarur (Location: 10°46'56.48"N 79°31'42.19"E)



Sucken Rod Pump Mechanized Oil well near Kamalapuram (Location: 10°45'09.87"N 79°36'20.77"E)



Sucken Rod Pump Mechanized Oil well near Kamalapuram (Location: 10°44'18.46"N 79°33'39.67"E)



Sucken Rod Pump Mechanized Oil well near Kamalapuram (Location: 10°45'06.98"N 79°35'54.52"E)



Sucken Rod Pump mechanized oil well near Koothanallur, Thiruvarur (Location: 10°44'08.67"N 79°29'44.71"E)



Sucken Rod Pump mechanized oil well near Greater Kovil Kalappal, Thiruvarur District (Location: 10°34'03.21"N 79°31'50.18"E)

Plate-2 Continued... Page 02/02



Sucken Rod Pump mechanized flow well near Vijayapuram # 13 area, Thiruvarur (Location: 10°45'43.32"N 79°38'30.32"E)



Abandoned oil well near Adhichapuram, Thiruvarur District (Location: 10°35'50.96"N 79°32'05.83"E)



Abandoned oil well near Mattur, Needamangalam, Thiruvarur (Location: 10°50'40.70"N 79°26'28.14"E)



Oil well Rig site near Pallivaramangalam, Kamalapuram, Thiruvarur (Location: 10°48'29.20"N 79°40'37.98:E)

CONCLUSION:

- ➤ This District Survey Report has been prepared by doing field work in a short span of ten working days. The details related to the occurrence of mineral resources and other data of the district are subject to updation of district mineral inventory from time to time. It may be periodically done every five (05) years with the help of GSI and other govt/non-govt geoscience exploration organisations.
- ➤ Thiruvarur District of Tamil Nadu State has less importance in concern with the mineral wealth.
- ➤ The important minerals are Alluvial sand and clay and Crude Oil and Natural Gas in the Cauvery Basin..
- ➤ The exploration and exploitation of Crude Oil and Natural Gas is carried out by the ONGC and the alluvial sand and clay mine lease is being granted by the Department of State Geology and Mines.
- The alluvial sand and clay is being used as earth filling material
- ➤ Alluvial sand and clay quarrying in different parts of Mannargudi Taluk, Nannilam Taluk, Thiruthuraipoondi Taluk, Needamangalam Taluk, Thiruvarur Taluk and Kodavasal Taluk.
- ➤ ONGC, Cauvery Asset, Karaikal, Puducherry is the Mine lease owner of the Crude Oil & Natural gas (Major mineral) of Cauvery Basin.
- ➤ The district falls in Cauvery sub-basin. The tributaries of the river Cauvery are; Vennar, Vettar and Bamini rivers.
- > The Vennar and Vettar rivers play an important role in draining the district.
- > GPS/Auto Tags installed tracking of mined out mineral vehicles will fetch more revenue to the state exchequer and over exploitation.
- ➤ The introduction of e-permit system and implementation of Mineral Dealers Rule and the dispatch 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.

sues before granting of any quarrying lease is highly commendable and to be continued.		considering all parting of any quarry				
	sues serore gran	iting or any quarry	ing rease is ing	ing commencial	ore and to be con	arraca.