केंद्रीय भूमि जल बोर्ड

जल संसाधन, नदी विकास और गंगा संरक्षण

विभाग, जल शक्ति मंत्रालय

भारत सरकार

Central Ground Water Board

Department of Water Resources, River Development and Ganga Rejuvenation,

Ministry of Jal Shakti

Government of India

AQUIFER MAPPING AND MANAGEMENT OF GROUND WATER RESOURCES

HARUR FIRKA, DHARMAPURI DISTRICT, TAMIL NADU

दक्षिण पूर्वी तटीय क्षेत्र, चेन्नई

South Eastern Coastal Region, Chennai

REPORT ON AQUIFER DISPOSITION & MANAGEMENT PLAN
HARUR FIRKA,
DHARMAPURI DISTRICT, TAMIL NADU STATE

SALIENT FEATURES

1	Name of the Firka/ Area (Sq.Km.)		:	HARUR	184.35 Sq.km
	Revenue Division			Harur	
	Location	Lat	:		
		Long	:		
2	Number of Revenue Villages		:	53	
3	District	State	:	DHARMAPURI	TAMIL NADU
4	Population (2011 Census)		:	51034	
5	**Normal Rainfall (mm)**		:		**820.60**
				Monsoon	673.05
				Non-monsoon	147.55
6	**Agriculture (2012-13) (Ha)**			1. Gross Irrigated Area	5965.99
			:	2. Paddy	1268.21
				3. Sugar cane	1579.42
				4. Banana	36.42
				5. Other Crops	2884.04
				6. Groundwater	4573
				7. Surface Water	340.53
7	Existing and future water demands (ham)		:	Domestic & Industrial	
				Existing	92.44
				Future (Year 2025)	105.06
8	Water Level Behviour (mbgl)		:	Pre-monsoon	
				Post-monsoon	

AQUIFER DISPOSITION

9	Number of Aqifers	:	
10	3D Aquifer disposition and basic characteristics of each Aquifer	:	Geology- Charnockite and Hornblende biotite gniess
			Aquifer I (Weathered Zone)
			Thickness varies from 8 – 23 m

			Transmissivity (T):	7.82 – 87 m^2/day
			Specific Yield (Sy): 0.10 to 1.5%	
			Aquifer II (Fractured Zone)	
			Depth of fracturing varies from 23 – 27 m	
			Transmissivity (T): 21- 89 m^2/day	
			Specific Storage (S): 0.00001-0.02	
			Cumulative Yield (Aqifer I & II):0.5 2 lps	
11	Groundwater Issues	:	Geogenic contamination by Fluoride. Sustainability of wells (1-3 hrs).	
12	Groundwater Resource Availability and Extraction (2012-13)	:	Net Groundwater availability:	22.0220 MCM
			Gross Groundwater draft for irrigation:	20.9785 MCM
			Gross Groundwater draft for domestic & industrial supply:	0.9244 MCM
			Gross Groundwater draft:	21.9029 MCM
			Stage of Groundwater development:	99 %
			Category:	CRITICAL
13	Groundwater Extraction	:	Groundwater extraction structures (Numbers)	4670
			Bore wells:	67
			Dug wells:	4603
14	Chemical Quality of Groundwater, Contamination and its suitability	:		Min Max
			EC (µS/cm)	704 to 2550
			No3 (mg/l)	2 to 86
			F (mg/l)	0.91 to 3.16
15	**Groundwater Recharge Scenario**			
	Recharge from Rainfall (Monsoon)			7.9409 MCM
	Recharge from Other Sources (Monsoon)			11.7009 MCM

Recharge from Rainfall (Non-monsoon)	2.1761 MCM
Recharge from Other Sources (Non-monsoon)	2.6510 MCM
Total Annual Groundwater Recharge	24.4689 MCM
Natural Discharge	2.4469 MCM

Fig -

CENTRAL GROUND WATER BOARD, SECR, CHENNAI

NATIONAL AQUIFER MAPPING

UPPER PONNAIYAR AQUIFER SYSTEM, TAMIL NADU

HARUR FIRKA

LOCATION MAP

NOT TO SCALE

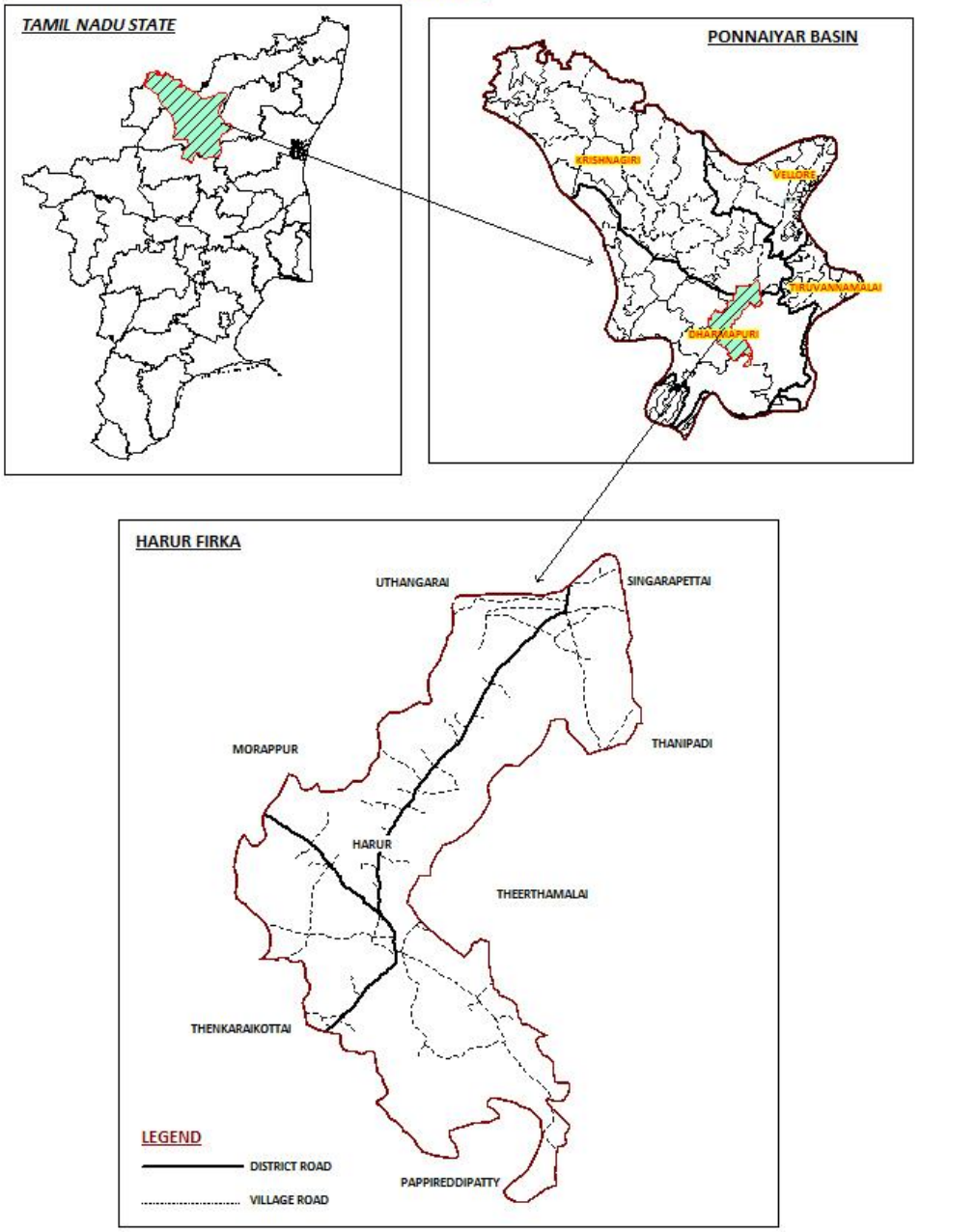

Fig-2: 3 D map and 2D - Sections.