Executive summary

I. Introduction

The major objective of PMKSY is to achieve convergence of investments in irrigation at the field level, expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water, enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop), enhance recharge of aquifers and introduce sustainable water conservation practices by exploring the feasibility of reusing treated municipal waste water for peri-urban agriculture and attract greater private investment in precision irrigation system.

PMKSY has been conceived amalgamating ongoing schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR,RD&GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and the On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

The scheme will be implemented by Ministry of Agriculture, Water Resources and Rural Development. Ministry of Rural Development is to mainly undertake rain water conservation, construction of farm pond, water harvesting structures, small check dams and contour bunding etc. MoWR, RD &GR, is to undertake

various measures for creation of assured irrigation source, construction of diversion canals, field channels, water diversion/lift irrigation, including development of water distribution systems. Ministry of Agriculture will promote efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain-guns in the farm "(Jal Sinchan)", construction of micro-irrigation structures to supplement source creation activities, extension activities for promotion of scientific moisture conservation and agronomic measures

Programme architecture of PMKSY will be to adopt a 'decentralized State level planning and projectised execution' structure that will allow States to draw up their own irrigation development plans based on District Irrigation Plan (DIP) and State Irrigation Plan (SIP). It will be operative as convergence platform for all water sector activities including drinking water & sanitation, MGNREGA, application of science & technology etc. Through comprehensive plan. State Level Sanctioning Committee (SLSC) chaired by the Chief Secretary of the State with the authority to oversee its implementation and sanction of projects.

The programme will be supervised and monitored by an Inter-Ministerial National Steering Committee (NSC) will be constituted under the Chairmanship of Prime Minister with Union Ministers from concerned Ministries. A National Executive Committee (NEC) constituted under the Chairmanship of Vice Chairman,

NITI Aayog to oversee programme implementation, allocation of resources, inter-ministerial coordination, monitoring &performance assessment, addressing administrative issues etc

Components and responsible Ministries/ Departments

- 1. AIBP by MoWR, RD &GR: To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.
- 2. PMKSY (HarKhetkoPani) by MoWR,RD & GR: Creation of new water sources through Minor Irrigation (both surface and ground water). Repair, restoration and renovation of water bodies; strengthening carrying capacity of traditional water sources, construction rain water harvesting structures (Jal Sanchay); Command area development, strengthening and creation of distribution network from source to the farm. Improvement in water management and distribution system for water bodies to take advantage of available source, which is not utilised to its fullest capacity (deriving benefits from low hanging fruits).
- **3.** PMKSY (Watershed) by Dept. of Land Resources, MoRD Water harvesting structures such as check dams, nala bund, farm ponds, tanks etc. Capacity building, entry point activities, ridge area treatment, drainage line treatment, soil and moisture conservation, nursery raising, afforestation, horticulture, fodder development, livelihood activities for the asset-less persons and production system & microenterprises for small and

marginal farmers etc. Effective rainfall management like field bunding, contour bunding /trenching ,staggered trenching, land levelling, mulching etc.

4. PMKSY (Per drop more crop) by Dept. of Agriculture & Cooperation, MoA Programme management, preparation of State/District Irrigation Plan, approval of annual action plan, Monitoring etc. Promoting efficient water conveyance and precision water application devices like drip, sprinklers, pivots, rain-guns in the farm (Jal Sinchan)Topping up of input cost particularly under civil construction beyond permissible limit(40%), under MGNREGS for activities like lining inlet, outlet, silt traps distribution system etc.

Construction of micro irrigation structures to supplement source creation activities including tube wells and dug wells (in areas where ground water is available and not under semi critical /critical /over exploited category of development) which are not supported under PMKSY (WR), PMKSY (Watershed) and MGNREGS.

Secondary storage structures at tail end of canal system to store water when available in abundance (rainy season) or from perennial sources like streams for use during dry periods through effective on-farm water management Water lifting devices like diesel/ electric/ solar pump sets including water carriage pipes.

Extension activities for promotion of scientific moisture conservation and agronomic measures including cropping alignment to maximise use of available water including rainfall land minimise irrigation requirement (Jal sarankchan)

Capacity building, training for encouraging potential use water source through technological, agronomic and management practices including community irrigation. Awareness campaign on water saving technologies, practices, programmes etc. organisation of workshops, conferences, publication of booklets, pamphlets, success stories, documentary, advertisements etc. Improved/innovative distribution system like pipe and box outlet system with controlled outlet and other activities of enhancing water use efficiency.

District Irrigation Plans (DIPs)

District Irrigation Plan (DIP) shall be the cornerstone for planning and implementation of PMKSY. DIP will identify the gaps in irrigation infrastructure after taking into consideration the District Agriculture Plans (DAPs) already prepared for Rashtriya Krishi Vikas Yojana (RKVY) vis-à-vis irrigation infrastructure currently available and resources that would be added during XII Plan from other ongoing schemes (both State and Central), like Mahatma Gandhi National Rural Employment Guarantee Scheme(MGNREGS), Rashtriya KrishiVikash Yojana (RKVY), Rural Infrastructure Development Fund (RIDF), Member of Parliament, Local Area Development (MPLAD) Scheme, Member of Legislative Assembly Local Area

Development (MLALAD) Scheme, Local body funds etc. The gaps indentified under Strategic Research & Extension Plan (SREGP) are be used in preparation of DIP.DIPs will present holistic irrigation development perspective of the district outlining medium to long term development plans integrating three components viz. water sources, distribution network and water use applications incorporating all usage of water like drinking& domestic use, irrigation and industry. Preparation of DIP will be taken up as joint exercise of all participating departments. DIP will form the compendium of all existing and proposed water resource network system in the district.

The DIPs may be prepared at two levels, the block and the district. Keeping in view the convenience of map preparation and data collection, the work would be primarily done at block level. Block wise irrigation plan is to be prepared depending on the available and potential water resources and water requirement for agriculture sector prioritising the activities based on socio-economic and location specific requirement. In case of planning is made based on basin/sub basin level, the comprehensive irrigation plan may cover more than one district. The activities identified in the basin/sub-basin plan can be further segregated into district/block level action plans. Use of satellite imagery, topo sheets and available data base may be appropriately utilised for developing irrigation plans at least on pilot basis to begin with and subsequently extended to all projects.

i. Background

Hon'ble President in his address to the joint Session of the Parliament of 16th Lok Sabha indicated that "Each drop of water is precious. Government is committed to giving high priority to water security. It will complete the long pending irrigation projects on priority and launch the 'Pradhan Mantri Krishi Sinchayee Yojana' with the motto of 'HarKhetKoPaani'.

There is a need for seriously considering all options including linking of rivers, where feasible; for ensuring optimal use of our water resources to prevent the recurrence of floods and drought. By harnessing rain water through 'Jal Sanchay' and 'Jal Sinchan', we will nurture water conservation and ground water recharge. Micro irrigation will be to ensure 'Per drop-More

crop'. Out of about 141 m. Ha of net area sown in the country, about 65 million hectare (or 45%) is presently covered under irrigation. Substantial dependency on rainfall makes cultivation in un irrigated areas a high risk, less productive profession. Empirical evidences suggest that assured or protective irrigation encourages farmers to invest more in farming technology and inputs leading to productivity enhancement and increased farm income. The overreaching vision of Pradhan MantriKrishi Sinchayee Yojana (PMKSY) will be to ensure access to some means of protective irrigation to all agricultural farms in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.

ii. Vision

To utilize the available water resources in the district to the maximum extent in an efficient way to meet the basic needs of every living being and enhancing the livelihoods of rural population to the maximum extent thus alleviating poverty in a sustainable way without compromising the interests of future generations.

iii. Objective

Following are the objectives:

- A. Enhance the physical access of water on the farm and expand cultivable area under assured irrigation (HarKhetkopani).
- B. Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices.
- C. Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent.
- D. Enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).

☐ Enhance the physical access of water on the farm and expand cultivable area under assured irrigation
(HarKhetkopani).
☐ Integration of water source, distribution and its efficient use, to make best use of water through
appropriate technologies and practices.
☐ Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and
extent.
☐ Enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).
☐ Enhance recharge of aquifers and introduce sustainable water conservation practices.
☐ Ensure the integrated development of rain fed areas using the watershed approach towards soil and
water conservation, regeneration of ground water and arresting runoff.
☐ Promote extension activities relating to water harvesting, water management and crop alignment for
farmers and grass root level field functionaries.
☐ Explore the feasibility of reusing treated municipal wastewater for peri-urban agriculture.

iv.Strategy /approach

Creation of new water sources; repair, restoration and renovation of defunct water sources; construction
of water harvesting structures, secondary & micro storage, ground water development
Developing/augmenting distribution network where irrigation sources (both assured and protective) are
available or created;
Promotion of scientific moisture conservation and run off control measures to improve ground water
recharge so as to create opportunities for farmer to access recharged water through shallow tube/dug
wells;
Promoting efficient water conveyance and field application devices within the farm viz, underground
piping system, Drip & Sprinklers
Encouraging community irrigation through registered user groups.
Farmer oriented activities like capacity building, training and exposure visits, demonstrations, farm
schools, skill development in efficient water and crop management practices (crop alignment) including
large scale awareness on more crop per drop of water through mass media campaign, exhibitions, field
days, and extension activities through short animation films etc.

v. Rationale/ Justification Statement: In reference to the status and need of irrigation

Haveri district receives rainfall on an average of 792.7 mm per annum and major part of it is received in six to seven months ie. May, June, July, August, September ,October and November only. Dharma, Kumadwati, Varada and Tunga- Bhadra are the four rivers flowing in the district and water will get reduced in these rivers during summer. So the district depends for water mainly on some tanks and underground water during summer.

Among cereal crops maize is the major agriculture crop of the district accounting for 45 % of the total cultivated area. Followed by commercial crop ie cotton accounting for 30 % of total cultivated area. At present soyabean is gaining popularity. Haveri district belongs to Northern Transitional zone comprising of six talukas (zone- 8) and Hilly zone (zone-9) comprising of one taluka. Out of the total geographical area of 4.85 lakh ha, an extent of 3.62 lakh ha (74.0%) is cultivated. Net area irrigated at present is 1.37337 lakh ha mainly through bore wells, tanks and canals.

The horticultural crops viz., mango, coconut, Sapota, banana and some vegetables are important crops grown in this area. All these crops have high water requirement. As the major area of agriculture in the district is monsoon dependent, there is a high need to bring more area under irrigation by way of creating new sources of water and efficient use of water resources.

Chapter 1: General Information of the District

1.1 District Profile:

Haveri district comprises of seven talukas viz. Byadgi, Haveri, Hangal, Hirekerur, Ranebennur, Savanur and Shiggaon. Geographically the district is situated between north latitude 14⁰ 28 to14⁰ 49' and east longitude 75⁰ 07' to 75⁰ 38' (Table No.1.1). Haveri is one of the districts formed 18 yeras ago, on 15th August 1997. The district is located in northern semi rainfed and semi transitional zone. The district is bounded, on the north by Dharwad and Gadag district, on the east by Bellary district, on the west by Uttar Kannada district and on the South by Davangere and Shimoga districts. Dharma, Kumadwati, Varada and Tungabhadra are the four rivers flowing in the district.

Table 1.1: District Profile

Sl.No.	Name of the District	District Code	Latitude	Longitude
1	HAVERI	8375	14° 48'	75° 24'

Haveri district has historical importance. The birth place of Sarvagna is Abalur village which is located in Hirekerur Taluka of Haveri district. The district is also proud to be associated with many holy and tourism places like Kaginele, Abalur, Mailara, Kadarmandalgi and Shishuvinal.

National Highway No 4 linking Pune and Bangalore passes through the center of the district providing one of the essential infrastructure for industrial development. Like wise Haveri is well connected through rail network connecting major places like Bangalore, Bombay, New Delhi etc. Haveri, popularly known for Byadgi Chilli variety and its market in South East Asia, is almost in the center of Karnataka. Location map of Haveri district and Haveri district map is given in Fig1a and 1b



Fig. 1a: Location map of Haveri District; Fig.1b: Haveri District map

1.2 Demography

Total population of the district is 15,97,668, which constitutes 2.8 % of the total population of the state (Table 1.2). Seventy nine percent of the population lives in rural areas as against the state average of 69 %. The density of the population per square kilometer is 298, which is more than the state average of 276. The male to female ratio is 950. The SC population is 13.77 % and ST population is 8.85 % of the total population, while OBC and General is 77.38% of the total population. Literacy percentage of the district is 77.4 %. Total female population of the district is 7,78,540 where as the male population is 8,19,128. Total SC and ST population of the district is 2,19,976 and 1,41,380 respectively.

Table 1.2: Demography

			POPULATION										
Block	Block Male Female CH* TOTAL SC												
Shiggaon	96735	91175	24556	187910	25860	11168							
Savanur	83150	78371	21623	161521	25455	12490							
Hangal	133171	127284	32877	260455	38612	20983							
Haveri	143600	136762	34807	280362	36802	24952							
Byadagi	72143	68881	16793	141024	16912	19145							
Hirekerur	118319	112796	25827	231115	30650	24744							
Ranebennur	172010	163271	38834	335281	45685	27898							
TOTAL	819128	778540	195317	1597668	219976	141380							

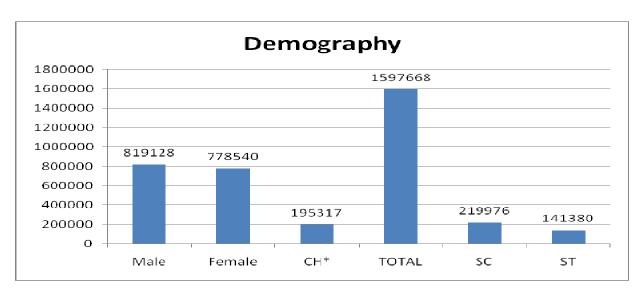


Fig.1c: Demography of Haveri District

1.3 Biomass and Live stocks

In Haveri District Dairy development is the major activity. As per 2012 live stock census small animal Population is 12,74,150, large animal population 3,76,755. Milk production is 130000 tones /year and Egg production is 1424 Lakhs /year. Sheep and Goat rearing is one of the important allied activity providing supplementary income to the economically weaker section. This activity is popular in view of

early returns and shorter gestation period. Sheep rearing activity is popular in Ranebennur, Haveri and Savanur talukas. In other talukas, the activity is under taken on a low profile.

Table 1.3: Biomass and Live stocks

	Sm	all Anin	nals			Large Animals								
Blocks	Poultry (No)	Ducks (No)	Pigs (No)	Goats (No)	Sheeps (No)	Indigenous cow (Nos)	Hybrid cow (Nos)	In descriptive Buffalo (Nos)	Hybrid Buffalo (No)	Any other Milch or Meat Animal (No.)	Draft Animal(Buffalo/y ak/bulls/any other (No)			
Shiggaon	38848	0	705	10716	17267	11041	5117	0	9483	87	20659			
Savanur	82762	0	787	14254	28811	8400	3719	0	10512	70	15254			
Hangal	80309	0	1227	20976	36734	17458	5218	0	13658	343	32533			
Haveri	69833	0	2574	25011	51140	9555	5258	0	14789	65	21677			
Byadagi	51352	0	134	10264	14456	6633	7551	0	8850	4	16252			
Hirekerur	110586	0	233	16402	17059	10386	18409	0	15157	12	25019			
Ranebennur	451542	0	793	30134	89241	9003	7939	0	26319	91	20906			
TOTAL	885232	0	6453	127757	254708	72476	53211	0	98768	672	152300			

The Disctrict has 254708 Sheep and 127757 Goats. There is a Sheep breading farm at Guttal, which supply quality rams to the needy farmers. The sheep and wool development corporation in Ranebennur extends necessary support and guidance to sheep rearing and wool weaving. There is a Khilari cattle breeding form at Bankapur, which rears Khilari cattle breeds and supplies male bulls for semen production and to the needy farmers.

There are 146 Veterinary Institutions in the District looking after the health, breeding and scientific husbandry aspects of livestock and also implementation of various socio-economic programme under different Govt sponsored schemes. Total water requirement of livestock per year is around 0.01946 BCM.

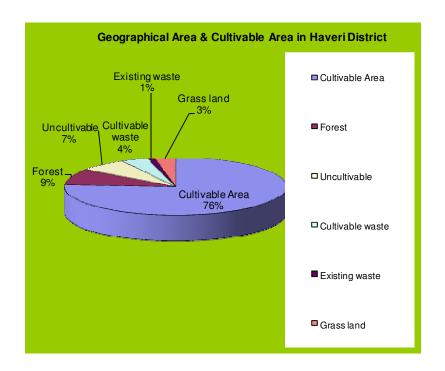
1.4 Agro-Ecology, Climate, Hydrology and Topography:

The district has the total geographical area of 4,85,156 ha, with cultivable area of 3,62,046 ha which makes 74 % of total area. The area under forest is about 9 % (47,454 ha), area not available for cultivation is 8 % (39,100 ha), while fallow land is 4.0 % (19068 ha).

Average rainfall of the district is 792.7 mm and an average of 60 rainy days. The agro climatic zone-8 (Northern Transitional zone) comprises of around 65 % of red soil area with normal annual rainfall of 747.6 mm, covering 6 talukas namely Haveri, Byadgi, Hirekerur, Ranebennur, Savanur and Shiggaon. The Hangal taluka comes under zone-9 (Hilly zone) with annual rainfall of 1063 mm. The rainfall pattern of the district is bimodal (July/August & Sept/Oct) which facilitates to take up crops in kharif and Rabi seasons. Around 37.02 % of area is under irrigation.

Table 1.4: Agro-Ecology, Climate, Hydrology and Topography

S. N	вьоск	Agro Ecologic al Zone	Type of Terr	Block Area(h	Norma l Annua l	Aver age Monthl y Rain	No of Rain y	Maximu m Rainfall Intensity (mm)	Potential	Evapo-T	ranspirati	ion (PET)		Elevatio	n
0		Type	ain	a)	Rainfa Il	fall	Days	Up to 15		Period	1	Cumulat			
					(mm)	(mm)	(No)	Min	Summer	Winte r	Rainy Season	ive Total	Min.	Max.	Mean
1	Shiggaon	Northern Transitio nal zone	Plain	58920	837	67.23	65	86	497.749	367.19	712.85	1577.8	449	653	551
2	Savanur	Northern Transitio nal zone	Plain	53901	706	58.86	54	88	478.2	348.3	664.9	1491.4	431	595	513
3	Hangal	Hilly zone	Plain and Hilly	77525	1063	84.36	74	83	466.1	396.4	672.3	1534.8	436	606	521
4	Haveri	Northern Transitio nal zone	Plain	79985	781	62.24	59	83	486	367.4	688.8	1542.2	411	584	497.5
5	Byadagi	Northern Transitio nal zone	Plain	43656	692	58.34	58	76	487.2	354.3	688.5	1530	466	672	569
6	Hirekerur	Northern Transitio nal zone	Plain	80694	856	69.94	65	79	463.071	346.21	626.53	1435.8	442	793	617.5
7	Ranebennur	Northern Transitio nal zone	Plain	90475	614	52.00	45	82	465.747	349.71	638.54	1454	421	623	522
	TOTAL			485156	792.7	64.7	60	82	478	361	670	1509	437	647	542



Cultivable Area (ha) Rainfed Area (ha)

Fig.1d: Geomorphology of Haveri District

Fig.1e: Present status of Irrigation

Irrigated Area(ha)

1.5 Soil Profile

Soil is natural body consisting of mineral matter, decaying organic matters and micro organisms, one of the important natural resources which provide bread and butter to human beings for survival. It is a living body and reacts in different manners depending on different climatic factors. There is a relationship between soil and vegetation, between soil and parent rock, between soil and slope, and even climate and slope but all these factors play important role in the formation of the actual soil.

No life without soil and no soil without life they have evolved together, so millions of people, animal and plants live and depends on the soil. It is one of the important factors for the study of its varieties, properties and characteristics to know the variation in its distribution and its contribution to the development of the region. The study area possesses soils derived from a variety of potential materials, such as schists, traps, sandstones, limestones, shales, granite and laterites. The mixed brown and lateritic soil occurs mostly in the western high rainfall tract of Hanagal, Byadagi and Hirekerur of the district. They are medium deep, granular to vesicular in structure, bright red to mottled yellow and red in colour.

In the district around 88 % of land ie 4,30,176 ha area is between 0-3 % slope, 6.4 % of the land ie 31,026 ha area is between 3-5 % slope and 23953 ha is between 5-35 % slope.

Table 1.5: Soil Profile

		Soil Type				Lan	d Slope			
SL.NO	BLOCK	Major Soil Classes	Area (ha)	0-1% (ha)	1-3% (ha)	3-5% (ha)	5-10% (ha)	10-15% (ha)	15-35% (ha)	>35% (ha)
1	Shiggaon	Black,Red,Sandy loams,Sandy soils	58920			31026.8	10431.4			
2	Savanur	Black,Red,Sandy loams,Sandy soils	53901							
3	Hangal	Black,Red,Sandy loams soils	77525		208822.30			6917.4	5051.2	1553
4	Haveri	Black,Red,Sandy loams soils	79985	221354						
5	Byadagi	Black,Red,Sandy loams soils	43656							
6	Hirekerur	Black,Red,Sandy loams,Sandy soils	80694							
7	Ranebennur	Black,Red,Sandy loams,Sandy soils	90475							
	TOTAL		485156	221354	208822.30	31026.8	10431.4	6917.4	5051.2	1553

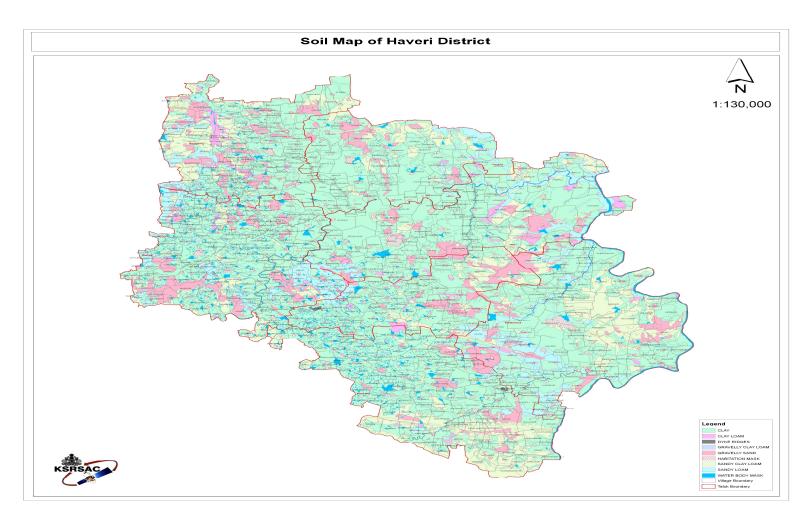


Fig. 1f: Soil Map of Haveri District

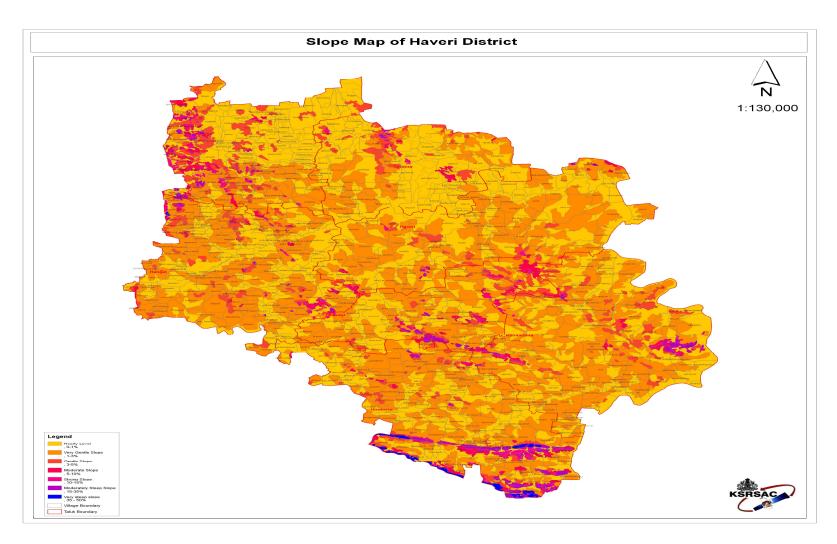


Fig.1g: Slope map of Haveri District

1.6. Soil Erosion and Run Off status

Soil erosion is one form of soil degradation. Soil erosion is a naturally occurring process on all types of lands. The agents of soil erosion are water and wind, each contributing a significant amount of soil loss each year. Soil erosion may be a slow process that is continuous and relatively unnoticed. It may occur at an alarming rate causing serious loss of top soil. The loss of soil from farmland may be reflected in reduced crop production potential, lower surface water quality and damaged drainage networks.

While erosion is a natural process but human activities have increased it by 10-40 times the rate at which erosion is occurring globally. Intensive agriculture, deforestation, roads, anthropogenic, climate change and urban sprawl are among the most significant human activities in regard to their effect on stimulating erosion. However, there are many prevention and remediation practices that can curtail or limit erosion of vulnerable soils.

Surface runoff (also known as overland flow) is the flow of water that occurs when excess storm water, melt water or other sources flows over the earth's surface. This might occur because soil is saturated to full capacity, because rain arrives more quickly than soil can absorb it or because impervious areas (roofs and pavement) send their runoff to surrounding soil that cannot absorb all of it. Surface run off is a major component of the water cycle. It is the primary agent in soil erosion by water.

1.7 Land Use Pattern

The district has the total geographical area of 4,85,156 ha, with cultivable area during kharif season which ranges from 3,60,000 to 3,80,000 ha which makes 74-78 % of total area. During Rabi season, area sown ranges from 50,000 ha to 60,000 ha and during summer area sown ranges from 12,000 ha to 20,000 ha. The area under forest is about 9 % (47,454 ha) (Table 1.7).

Table 1.7: Land Use Pattern

	Total	Area	under Agric	culture (Area i	n Ha)	Area	Area under Wasteland	Area under Other Uses(Permane
Blocks	Geographic al Area (Ha)	Gross Cropped Area (1)	Net Sown Area (2)	Area sown more than Once (1-2)	Cropping Intensity (%)	under Forest	(Barren+Cu ltivable Waste)	nt pasture+Trees
Shiggaon	58920	47546	42202	5344	113	9951	1106	1599
Savanur	53901	52769	48485	4284	109	801	624	903
Hangal	77525	65309	50497	14812	129	8474	2619	3596
Haveri	79985	72267	63889	8378	113	3849	1644	1756
Byadagi	43656	40291	33235	7056	121	4889	691	1129
Hirekerur	80694	71587	59409	12178	120	8876	712	2999
Ranebennur	90475	78985	64329	14656	123	10614	1386	2517
TOTAL	485156	428754	362046	66708	118	47454	8782	14499

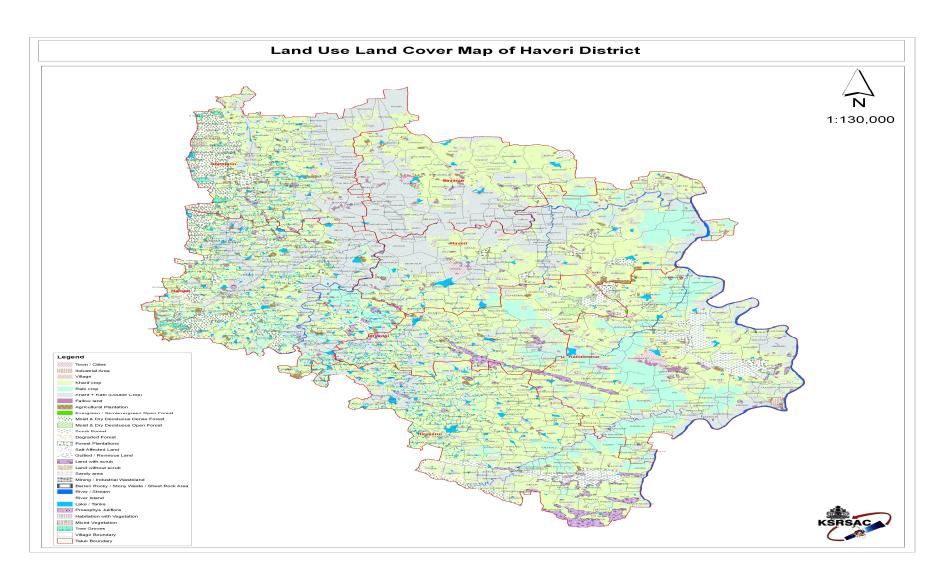


Fig. 1h: Land use Land Cover Map of Haveri District

Chapter 2: District Water Profile

2.1 Area Wise, Crop Wise Irrigation Status:

Irrigation is perhaps the most important input in the agriculture production process and plays a key role. The other key inputs namely, seed and fertilizer cease to realize their full benefit unless combined with irrigation. Also in an economy where the supply of land is highly inelastic and the net sown area growth has leveled off, the future growth of agriculture is heavily dependent on intensive cultivation of the existing land. Irrigation greatly facilitates this by enabling farmers to grow multiple crops on the same plot of land across different agricultural seasons.

As four rivers Varada, Dharma, Kumudwati and Tungabhadra flow in the district, comprehensive projects can be taken up to tap the irrigation potential.

One major irrigation project ie Upper Tunga Project (UTP) is coming up in the district which will help to bring an additional of 73239 ha area under irrigation distributed in Ranebennur (30,530ha), Haveri (27908ha), Hangal (2158 ha) and Hirekerur (9468 ha) and Byadagi (3175 ha.), So far 22724 ha area in Ranebennur taluka and 9468 ha in Hirekerur taluka has been brought under irrigation. Under Dharma

project an area of 5426 ha has been brought under canal irrigation in Hangal taluka. Malaprabha right canal bank project is being implemented in Savanur and Shiggaon talukas which will cover an additional area 19600 ha under irrigation.

During kharif, area sown varies from 3,60,000 ha to 3,80,000 ha, during Rabi season 50,000 ha to 60,000 ha and during Summer 12000 ha to 20,000 ha depending on the arrival of monsoon and availability of water.

In the district major area under irrigation is Cereals ie around 65500 ha followed by horticultural crops ie 33755 ha ,fibre crops (17521 ha) ,Oilseeds (6400 ha) and Pulses (3400 ha)

Table 2.1: Area Wise, Crop Wise Irrigation Status

Crop	Khari	if (Area in	ha)	A	Rabi Area in ha			Crop (Area	a in ha)	Tota	al (Area in	ha		ılture & Pla ps (Area in	
Type	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total	Irrigated	Rainfed	Total
A) Cereals	65500	118720	184220	6367	31749	38116	6019	0	6019	77886	150469	228355	0	0	0
B) Coarse Cereals	0	1420	1420	0	0	0	0	0	0	0	1420	1420	0	0	0
C) Pulses	3400	3413	6813	861	8628	9489	1783	0	1783	6044	12041	18085	0	0	0
D) Oil Seeds	6400	23040	29440	1327	1061	2388	4106	0	4106	11833	24101	35934	0	0	0
E) Fibre	17521	84520	102041	0	581	581	0	0	0	17521	85101	102622	0	0	0
F) Any other crops	10761	0	10761	190	0	190	1240	0	1240	12191	0	12191	33755	27705	61460
Total	103582	231113	334695	8745	42019	50764	13148	0	13148	125475	273132	398607	33755	27705	61460

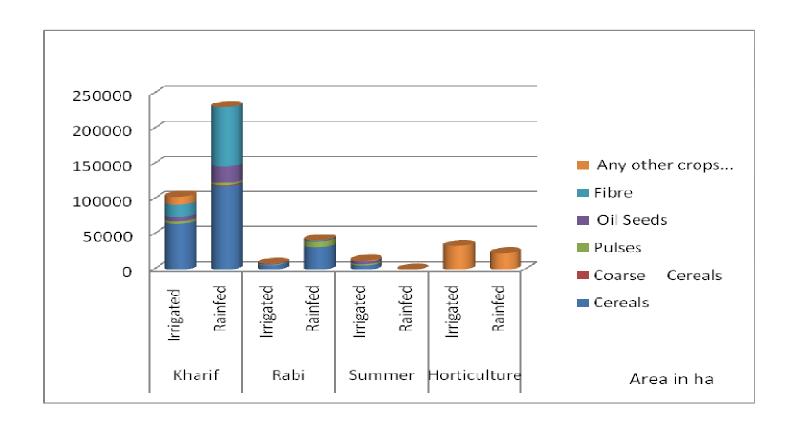


Fig.2a: Area (in ha) under different crops cultivation in Kharif, Rabi and Summer seasons

2.2 Production and Productivity of Major Crops

Haveri district has got a total estimated production of 8.61 lakh tonnes with normal sown area of 3.32 lakh hectares. Haveri has an estimated production of 3.87 lakh tonnes of cereals, 0.19 lakh tonnes of pulses with total estimated food production of 3.87 lakh tonnes. Oilseeds contribute 0.26 lakh tonnes to total production. Commercial crops contribute an estimated 4.45 lakh tonnes (3.96 lakh bales) and sugarcane with 4.38 lakh tonnes.

In kharif season, under rainfed condition, cereal crops are sown in an area of 118720 ha and in rabi and summer it is sown in an area of 31749 ha and under irrigated condition cereal crops are sown in an area of 65500 ha and in rabi and summer it is sown in an area of 12386 ha. During rabi and summer seasons, pulses and oil seeds are sown in an area of 11272 ha and 6494 ha respectively. In kharif season, cereals are grown under rainfed condition and the production of cereals in kharif season in the district was 3.39 lakh tones and the productivity was 28.55Q/ha. In rabi and summer, under rainfed condition the total production and productivity were 24342.2 tones and 24.23 Q/ha respectively. In rabi and summer seasons, under irrigated condition, crops are sown in an area of 21893 ha in the district. The total production and

productivity during these seasons were 54012 ton and 43 Q/ha respectively. The cost of cultivation of agricultural crops in Kharif and Rabi /summer and seasons are Rs 23400,17500 and 12500 Rs respectively.

In the district major vegetables grown are Green chilli, onion, tomato and cabbbage etc and major fruits crops are Mango, Banana, Sapota, Guava etc, plantation crops like coconut, beetle vine and Arecanut. In the district total horticulture crops grown in an area of 61460 ha, production of 7446657 Q and productivity is 18429 Q/ha.

Table 2.2: Production and Productivity of Major Crops

			C	C				D - 2	f. J		<u> </u>	T!	41			T-4-1	
		I	Crop	Sown	I		Rainfed					Irrış	gated 	1		Total	Cost of
Season	Cereals	Coarse Cereals	Pulses	Oil Seeds	Fibre Crops	Any other crops	Area (ha)	Production (qtn/yr)	Productiv ity or Yield (Kgs/ha)	Cost of Cultivati on (Rs./ha)	Area (ha)	Production (qtn/yr)	Productiv ity or Yield (Kgs/ha)	Cost of Cultivati on (Rs./ha)	Producti on (qtn/yr)	Productivity (Kgs/ha)	Cultivati on (Rs./ha)
A. Kharif																	
Shiggaon	20214	110	3000	7114	12264	1500	39585	904906	7040	23400	4617	439955	26540	27000	1344861	33580	50400
Savanur	11776		650	11630	13277	250	31537	1574281	7140	23400	6046	1144791	26440	27000	2719072	33580	50400
Hangal	37300	730	400	900	14000	2911	16207	410359	6940	23400	40034	1365327	26640	27000	1775686	33580	50400
Haveri	24883	120	1500	6178	21005	1900	43519	934816	6840	23400	12067	398525	25640	27000	1333341	32480	50400
Byadagi	20545		442	900	11523	2100	23373	1169638	7340	23400	12137	444005	24540	27000	1613643	31880	50400
Hirekerur	37372	210	221	1268	9456	1200	39739	1379430	6940	23400	9988	539145	26740	27000	1918575	33680	50400
Ranebennur	32130	250	600	1450	20516	900	37153	1796027	7040	23400	18693	525948	26540	27000	2321975	33580	50400
Total	184220	1420	6813	29440	102041	10761	231113	8169457	49280	163800	103582	4857696	183080	189000	13027153	232360	352800
B. Rabi																	
Shiggaon	5990		1299		50		6989	37694.5	6798	17500	350	39176	19700	19000	76870.5	26498	36500
Savanur	4051		855	289	68		5013	32890	6498	17500	250	15588	20600	19000	48478	27098	36500
Hangal	3000		1405	95	85		3085	29731.5	7498	17500	1500	17141.5	19600	19000	46873	27098	36500
Haveri	6415		905	745	56	190	6521	64882.5	6498	17500	1790	30626	20100	19000	95508.5	26598	36500
Byadagi	5045		640	220	70		5220	53951	6698	17500	755	30850.5	19600	19000	84801.5	26298	36500
Hirekerur	4660		3634	700	120		6814	32062.5	7498	17500	2300	21960	19900	19000	54022.5	27398	36500
Ranebennur	8955		751	339	132		8377	50776.5	7698	17500	1800	23502	19600	19000	74278.5	27298	36500
Total	38116	0	9489	2388	581	190	42019	301988.5	49186	122500	8745	178844	139100	133000	480832.5	188286	255500

			Crop	Sown				Rai	nfed			Irrig	gated		Total		
Season	Cereals	Coarse Cereals	Pulses	Oil Seeds	Fibre Crops	Any other crops	Area (ha)	Production (qtn/yr)	Productiv ity or Yield (Kgs/ha)	Cost of Cultivati on (Rs./ha)	Area (ha)	Production (qtn/yr)	Productiv ity or Yield (Kgs/ha)	Cost of Cultivati on (Rs./ha)	Producti on (qtn/yr)	Productivity (Kgs/ha)	Cost of Cultivati on (Rs./ha)
B. Summer																	
Shiggaon										12500	920	203470	19110	11500	203469.5	19110	24000
Savanur										12500	1440	18620	19210	11500	18620	19210	24000
Hangal										12500	1962	20020	20110	11500	20020	20110	24000
Haveri										12500	2890	32216	18610	11500	32215.5	18610	24000
Byadagi										12500	550	34794	18810	11500	34793.5	18810	24000
Hirekerur										12500	970	24245	19110	11500	24244.5	19110	24000
Ranebennur										12500	4416	27922	20110	11500	27921.5	20110	24000
Total							0	0	0	87500	13148	361284.5	135070	80500	361284.5	135070	168000
B. Horticultural & Plantation																	
Shiggaon						5502	2529	89723	88400	315000	2973	699851	181500	300000	789574	269900	615000
Savanur		_				15493	9617	341082	88400	315000	5876	972620	181500	300000	1313702	269900	615000

2.3 Irrigation based classification

In the district gross irrigated area is 159715 ha and the net irrigated area is 137337 ha. The total rainfed area in the district is around 163145 ha. Ranebennur taluka having 31 % area under irrigation stands first where as very minimum area ie 3.3 % is in Savanur taluka. Around 61564 ha is under protective irrigation covered by borewells.

If Major irrigation Projects are completed, additional area of 78140 ha. will be brought under irrigation and through implementation of Minor Irrigation projects, additional area of 28682 ha. will be brought under irrigation which increases percentage of area under irrigation from 38.15 to 67.80.

Table 2.3: Irrigation based classification

	Irrigated	(Area in ha)		Rainfed (A	area in ha)
S.No.	Blocks	Gross Irrigated Area	Net Irrigated Area	Partially Irrigated/Protective Irrigation	Un-Irrigated or Totally Rainfed
1	Shiggaon	8264	6900.21	3665	31637
2	Savanur	5731	4534.25	2007	41944
3	Hangal	34921	29664.99	10141	10691
4	Haveri	19330	15324.69	12313	36251
5	Byadagi	14028	13219.02	7786	12230
6	Hirekerur	29627	25061.46	10244	24103
7	Ranebennur	47814	42632.78	15408	6289
	Total	159715	137337.4	61564	163145

Chapter 3:Water Availability

3.1. Status of Water Availability

In the district, the major irrigation sources as of now are bore wells, Canals, tanks, barrages and lift irrigation. Nearly 61564 ha area through bore wells, 32192 ha area through canals, 20481.78 ha area through tanks, 6291.342 ha area through barrages and 11360.54 ha area is covered through lift irrigation.

Table 3.1: Status of Water Availability

					BCM per Ha
S.No.	Sources	Kharif	Rabi	Summer	Total
I	Surface Irrigation				
(i)	Canal (Major & Medium Irrigation)				
	Upper Tunga Project	0	0	0	0
	Shiggaon	0	0	0	0
	Savanur	0	0	0	0
	Hangal	.000005007744	0	0	.000005007744
	Haveri	0	0	0	0
	Byadagi	0	0	0	0
	Hirekerur	.000005007744	0	0	.000005007744
	Ranebennur	.000005007744	0	0	.000005007744

	Lift Irrigation (By Major Irrigation Department)				
	Hangal (Basapur Lift Irrigation Scheme)	.000005007744	0	0	.000005007744
	Haveri (Itagi Sasalwada Lift Irrigation Scheme)	.000005007744	0	0	.000005007744
	Byadagi (Guddada Mallapura Lift Irrigation Scheme)	.000005007744	0	0	.000005007744
	Hirekeur (Madug Masur Lift Irrigation Scheme)	0.003580537	0	0	0.003580537
II	Minor Irrigation tanks				
	Shiggaon	0.0000012			0.0000012
	Savanur	0.0000013			0.0000013
	Hangal	0.0000051			0.0000051
	Haveri	0.0000089			0.0000089
	Byadagi	0.0000059			0.0000059
	Hirekerur	0.0000023			0.0000023
	Ranebennur	0.0000039			0.0000039
III	Lift Irrigation (By Minor Irrigation Dept.)				
	Shiggaon	0	0		0
	Savanur	0.0000030	0		0.0000030
	Hangal	0.0000020			0.0000020
	Haveri	0.0000032	0		0.0000032

	Ranebennur	0.0000001	0		0.0000001
IV	Various Water Bodies including Rain Water Harvesting structures (Barrages)				
	Shiggaon	0.000002			0.000002
	Savanur	0.000008			0.000008
	Hangal	0.000005			0.000005
	Haveri	0.000004			0.000004
	Byadagi	0.000006			0.000006
	Hirekerur	0.000015			0.000015
	Ranebennur	0.000005			0.000005
V	Treated Effluent Received from STP	0	0	0	0
VI	Untreated Effluent	0	0	0	0
VII	Perennial sources of water	0	0	0	0

3.2 Status of Ground Water Availability

As per the report of Central Ground Water Board, Status of ground water availability status is safe in all talukas except Byadagi and Ranebennur. In both talukas ground water availability status is semi critical. Total draft of the district is 0.338939 BCM where as total recharge of the district is 0.5315398 BCM

Table 3.2 Status of Ground Water Availability

Block as pe	er Central G Notifica	round Water Bo	ard	Gı	ound Water (BC	M)
Block	Critical	Semi-Critical	Safe	Draft	Recharge	Gap
Shiggaon			Safe	0.0114	0.0355	0.0240
Savanur			Safe	0.0129	0.0328	0.0199
Hangal			Safe	0.0952	0.1938	0.0986
Haveri			Safe	0.0545	0.0792	0.0247
Byadagi		Semi critical		0.058	0.0632	0.0046
Hirekerur			Safe	0.0617	0.0787	0.0169
Ranebennur		Semi critical		0.0444	0.04805	0.0035
Total				0.3389	0.5315	0.1926

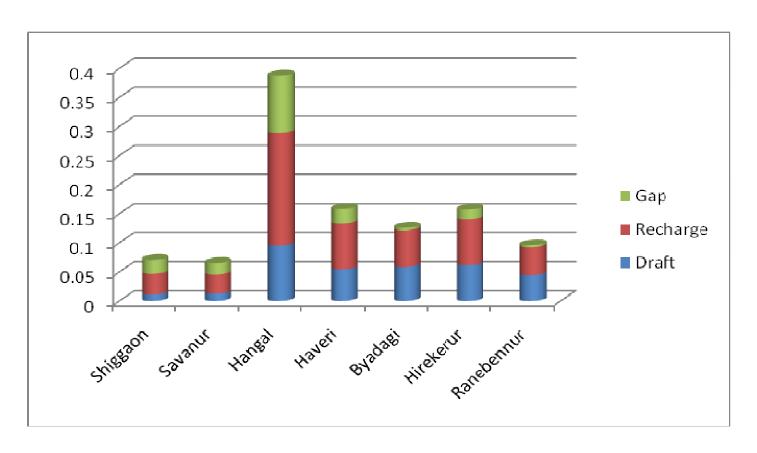


Fig.3a: Status of Ground Water Availability

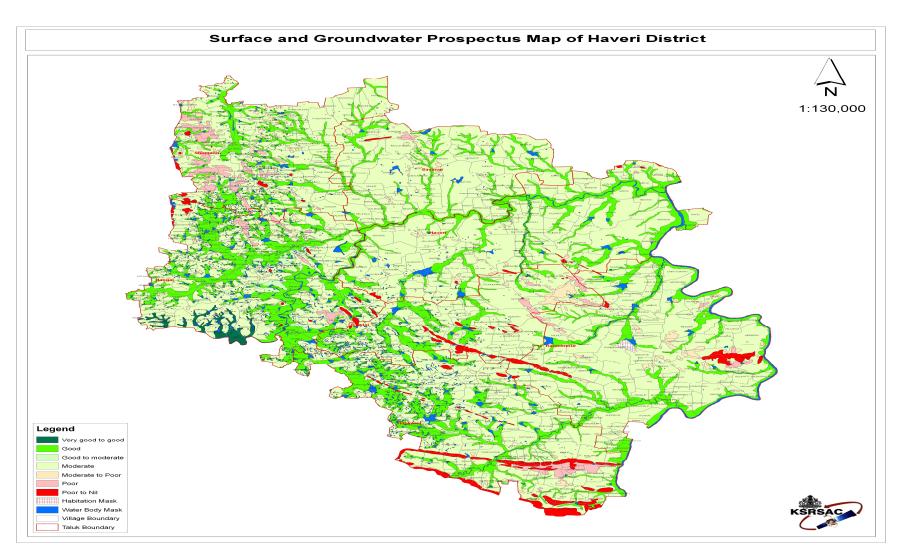


Fig.3b: Surface and Ground water Prospectus Map of Haveri District

3.3: Status of Command Area

Total area of canal command under Upper Tuna Project is 73239 ha. Out of this, 32192 ha is developed canal command area, 41047 ha is undeveloped command area. Under Dharma project total canal command area of 5432 ha has been developed ie in Hanagal taluka.

Table 3.3: Status of Command Area

									Area in Ha
		Informati	on of Canal (he other mand	Total Area				
Block	Name of the Villages	Total Area	Developed Area	Undevelope d Area	Total Area	Develope d Area	Undevelo ped Area	Developed Command	Undevelope d Command
Shiggaon	-	0	0	0	0	0	0	0	0
Savanur	-	0	0	0	0	0	0	0	0
Hangal	Byagavadi, Chikkaullala, Heruru, Hirevullala, Arelakumapura, Tumarikoppa, Uppunasi, vas ana, Basapura, Kusanuru = Total 10 villages	7584	5426	2158	0	0	0	0	2158

Haveri	Basapura,Negluru,Basavanakatte,Kanavalli, Nellogal,Thotadayallapura,Agasanamatti,Ra mapura,Karjagi,Jangamakoppa,Koluru,Nag anura,Venkatapura,Sanguru,Bommanakatte, Havanuru,Haralahalli,Kancharagatti,Marola,Galagnath,Belavagi,Akkur,Kodabala,Hosar itti,Haleritti,Yelagachha,Shiramapura,Mann uru,Chinnuru,Agadi,Sirmapura,Machapura, Kesarahalli,Konanatambige,Mallapura,Vira pura,Kallihal,Siddavipura,Kadamanahalli,S omanakatte,Kanavalli,Devihosuru,Sanchiha lli,Shivalihalli,Devigiri,Yallapura,Ganajuru, Sanguru,Didaguru,Kulenuru,Thimmapura,B idaragadde = Total 53 villages	27908	0	27908	0	0	0	0	27908
Byadagi	Koonabevu, Guddada anveri, Devargudda, Honnatti, Y.T. Honnatti, Gudi Honnatti, Yattinahalli, Keremallapura. = Total 08 Villages	3175	0	3175	0	0	0	0	3175
Hirekerur	Shankarahalli,Kamalapura,Maydoor,Anaji, Hallur,Hirekabbar,Purdakere,Chikkakabbar, Chattanahalli,Kirigeri,Bullapura,Kusagatti, Kudupali,Kadur,Hiremadapura,Sannagubbi, Malig,Chapparadahalli,Hiremarabo,Siragam bi,Rattihalli,Makhari,Dodagubbi,Yadagodu, Mavinatop,Dandagihalli,Hiresangapura = Total 27 Villages	9,468.00	9,468.00	0	0	0	0	9468	0

Ranebennu r	Menacinal,Malanayakanahalli,Timmenahall i,Tumminakatte,Badabasapura,Kuppellur,Hi remaganur,Sannasangapura,Kotihal,Nitupall i,Lingadahalli,Holehanveri,Kooli,Bevinahal li,Nesvi,Billahalli,Harogoppa,Nittur,Konana tale,Aladakatte,Kusugur,Antaravalli,Elabad agi,Nandihalli,Halagere,Teradahalli,Chalag eri,Hanumanahalli,Krishnanpura,Nagenahal li,Mudenur,Yanihosalli,Makanur,Vaderayan ahalli,Kavalettu,Karoor,Hulikatti,Khandera yanahalli,Irani, Guddada Anveri,Gangapura, Gudda Guddapura, Godihal,Itagi,Malakanahalli,Nadiharalahalli ,Y.T.Honnatti,Keri Mallapura,Hanumapura,Gudi Honnatti,Yattinahalli,Nukapura,Madapura, Narasipura,Kunabevu,Hullatti,Maidur,Kudr ihal,Harnagiri,Chikkakuravatti,Channapura, Medleri,Ankasapura,Udagatti,Heeladahalli, Beluru,Chikkaharalli,Chowdaiahdanapura,C hadapur= Total 75 villages	30,530.00	22724	7806	0	0	0	22724	7806
	Total	78665	37618	41,047	0.0	0.00	0.00	32,192	41,047.00
	Lift Irrigation (By Major Irrigation Dept.)								
Shiggaon		0	0	0	3000	0	3,000	0	3000
Savanur		0	0	0	5000	0	5,000	0	5000
Hangal	Tiluvalli,Inamlakamapur,Yettanahalli = Total 03 Villages	0	0	0	4,000.	0	4,000	0	4000

	Vasana ,Taveragoppa,Hirehullyal,kalageri Herur ,Bygavyadi,Somasagar,Uppunasi,Hirebasu r,Dommanal,Guddadmattalli,Timmapur,K abbur,Najilakamapur, Didagur Total 11 Villages	0	0	0	2,000.	890.00	1,110	890	1110
Haveri	ತೆರದಹಳಿ = Total 1 Village	0	0	0	4,000.	65.27	3,935	65.27	3934.73
Byadagi	Tumarikoppa,Chikkaanaji,Kagolkoppa,Mattur,B adamalli,Nellikoppa,Kunnur,Kaginelli,Kasambi, Kasanakoppa,Hireanaji,Hirehalli,Chikkabasur,C hikahalli,Siddapur,Sudambi,Timmapur,Attikatti ,Dummihal,Ghalpuji,Guddadamallapur,Biranak oppa Total 22 Villages	0	0	0	5,000.	3800	1,200	3800	1200
Hirekerur		0	0	0	3000	715	2,285	715	2285
Ranebenn ur		0	0	0	0	0	0	0	0
Total		0	0		26000	5470.27	20529.73	5470.27	20529.73
			MINOR IRRI	GATION					
	By Tanks								
Shiggaon		0	0	0	5500	3163	2,337	3163.21	2336.79
Savanur		0	0	0	3500	1267	2,233	1267.08	2232.92
Hangal	Kusnur,Arelakmapur,Honkan,Bingapur,S hivapur,Shirmapur Kahakhal,Hangal,Mantagi,Kuntanhosalli ,Kadashetty Halli,Haravi,Shashagiri,Adur,Naganur,Sa ngur,Araleshwra,Kamanahalli,Lakshmipu r,Makaravalli		0	0	9500	8427	1,073	8426.53	1073.47
Haveri		0	0	0	4000	567	3,433	566.552	3433.448
Byadagi		0	0	0	3500	1165	2,335	1164.528	2335.472

Hirekerur		0	0	0	5000	4383	617	4383.33	616.67
Ranebennur		0	0	0	4000	1511	2,489	1510.554	2489.446
	Total	0	0		35000	20481.78	14518.22	20481.78 4	14518.22
	By Barrages								
Shiggaon		0	0	0	3500	50	3,450	50	3450
Savanur		0	0	0	4500	701	3,799	701.17	3798.83
Hangal		0	0	0	6000	2954	3,046	2954.06	3045.94
Haveri		0	0	0	2000	956	1,044	956.106	1043.894
Byadagi		0	0	0	2000	468	1,532	468.49	1531.51
Hirekerur		0	0	0	1200	251	949	251.13	948.87
Ranebennur		0	0	0	1000	910	90	910.386	89.614
	Total	0	0		20200	6291.342	13908.66	6291.342	13908.66
	By Lift Irrigation	0	0	0					
Shiggaon		0	0	0	4000	0	4,000	0	4000
Savanur		0	0	0	16000	559	15,441	559	15441
Hangal		0	0	0	3000	1827	1,173	1827.4	1172.6
Haveri		0	0	0	3000	1424	1,576	1424.028	1575.972
Byadagi		0	0	0	0		0	0	0
Hirekerur		0	0	0	0		0	0	0
Ranebennur		0	0	0	3500	2080	1,420	2079.84	1420.16
	Total	0	0		29500	5890.268	23609.73	5890.268	23609.73

3.4 Existing type of Irrigation

In the district, surface irrigation, ground water, traditional water harvesting structures and lift irrigation are the important sources of irrigation covering an area of 137337.37 ha.

The sources of surface irrigation are Government reservoirs (20481.784 ha) and Canal (37618 ha). Bore wells are the major source of ground water (61564 ha) and followed by open wells (22 ha). Barrages being the major contributing sources for traditional water harvesting structures cover an area of 6291.342 ha where as 11360.27 ha is covered by lift irrigation.

Table 3.4: Existing type of Irrigation

Source of		Surface Irri	gation (1	1)		(Ground Water	(2)					Water ext	raction d Lift	evices /	Total	
Irrigation		Tanks / P	onds / Re	eservoirs	Tub	e wells	Open wel	ls	Bo	ore ell	Other Sources Including	Treated effluent					Water
Name of Block	Canal	Community Ponds Including Small	Indivi dual / Pvt. Ponds	Govt. Reservoir /Dams	Govt	Pvt.	Communit y/Govt.	Pvt.	Govt.	Pvt.	Traditional WHS (3)	discharged from STP	Elect ricity pump (4)	Diesel pump (5)	Others (6)	Irrigation sources (1+2+3)	extracting units (4+5+6)
Shiggaon				3163.21		3665		22			50		0	0	0	6900.21	0
Savanur				1267.08		2007		0			701.17		559	0	0	3975.25	559
Hangal	5426			8426.53		10141		0			2954.06		2717.4	0	0	26947.59	2717.4
Haveri				566.552		12313		0			956.106		1489.028	0	0	13835.66	1489.028
Byadagi				1164.528		7786		0			468.49		3800	0	0	9419.018	3800
Hirekerur	9468			4383.33		10244		0			251.13		715	0	0	24346.46	715
Ranebennur	22724			1510.554		15408		0			910.386		2079.84	0	0	40552.94	2079.84
Command																0	0
Area (ha)																•	
Total	37618	0	0	20481.784	0	61564	0	22	0	0	6291.342	0	11360.27	0	0	125977.1	11360.27

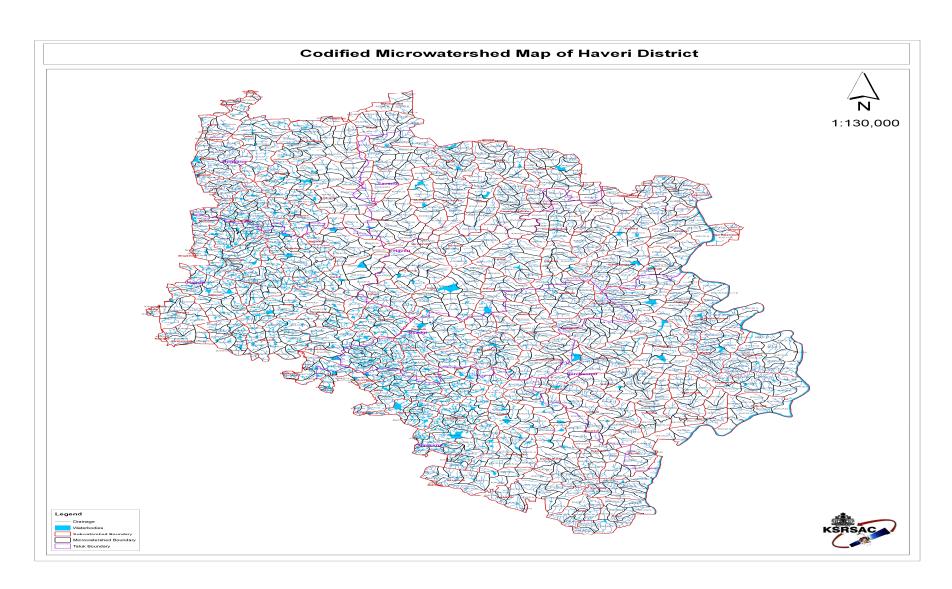


Fig.3c : Codified Microwatershed Map of Haveri District

Chapter 4: Water requirement/Demand

4.1 Domestic Water Demand

Groundwater is the major source of drinking water in the rural areas of the district. Total population of the district during the year 2015 is 15,98,058 and projected population by 2020 is 1755845 and gross water demand of the district is 0.06387 BCM. Water is supplied to cities ie Ranebennur, Byadgi and Haveri by Tungabhadra and Varada rivers.

Table 4.1: Domestic Water Demand

Blocks	Population in 2015	Projected population in 2020	Gross Water Demand(BCM)	
Shiggaon	196331	206857	0.00752	
Savanur	168648	177690	0.00646	
Hangal	270580	285087	0.01037	
Haveri	292617	308305	0.01121	
Byadagi	147050	154934	0.00564	
Hirekerur	239886	252747	0.00919	
Ranebennur	351385	370224	0.01347	
TOTAL	1666497	1755845	0.06387	

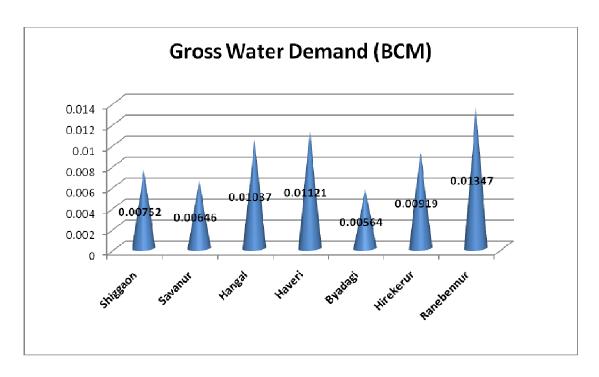


Fig.4a: Gross water demand

4.2 Crop Water Demand

Haveri district covers seven talukas. On the basis of crops grown in the district, the crop water demand has been calucalated. To bring entire area under irrigation, the water demand for agriculture crops is 2.51 BCM where as for horticultute crops water demand is 0.427 BCM.

Considering total kharif area that varies from 3,60,000 ha to 3,80,000 ha, the total water required for the crops is 2.938 BCM. At present existing water availability considering both surface and ground water is 0.8511 BCM. In order to bring all cropped area under irrigation, 2.088 BCM water potential is to be created.

4.2 Crop Water Requirement								
Block	Crops	Area sown (ha)	Irrigate d area (ha)	Crop water demand (mm)	Water potentia 1 require d (BCM)	Existing Water potential (BCM)	Water potentia 1 to be created (BCM)	
Shiggaon	Maize,Paddy,Cotton,Rabi Jowar,Ground nut	46205	1642	450- 1000	0.416	0.040	0.377	
Savanur	Cotton,Maize,Rabi Jowar,Ground nut	51444	3548	400-750	0.373	0.044	0.329	
Hangal	Paddy,Maize,Cotton,Soya bean,Pulses	56371	24427	450- 1100	0.526	0.262	0.264	
Haveri	Maize,Cotton,Rabi Jowar,Ground nut,Soyabean	66952	13051	400-750	0.429	0.102	0.327	
Byadagi	Maize,Cotton,Rabi Jowar,Paddy	35329	4230	400- 1000	0.220	0.092	0.128	
Hirekerur	Maize,Cotton,Pulses,Rabi Jowar.	66137	7621	400-750	0.447	0.141	0.307	
Ranebennur	Maize,Cotton,Rabi Jowar,Paddy,Pulses,Groun d nut	61642	16360	400- 1000	0.526	0.170	0.355	
TOTAL		384080	70879	400-750	2.939	0.851	2.088	

4.3 Live stock water demand

Total number of livestock present in the district is 16,12,422. At present water demand is 0.01946 BCM and by 2020 this demand increases to 0.021406 BCM.

Table 4.3 Livestock Water demand

Block	Total number of live stock	Present water demand (BCM)	Water demand in 2020 (BCM)	Existing Water potential (BCM)	Water potential to be created (BCM)
Shiggaon	114439	0.0023	0.0025	0.0016	0.0009
Savanur	165491	0.0020	0.0022	0.0002	0.0020
Hangal	208624	0.0033	0.0036	0.0003	0.0033
Haveri	199214	0.0027	0.0030	0.0002	0.0027
Byadagi	116483	0.0018	0.0020	0.0001	0.0018
Hirekerur	215473	0.0040	0.0044	0.0004	0.0040
Ranebennur	637119	0.0031	0.0034	0.0003	0.0031
TOTAL	1656843	0.0194	0.0214	0.0033	0.0180

4.4. Industrial Water Demand

Haveri is of growing importance with potential growth. The district comprises of world famous chilly market at Byadagi and is a major export hub for Byadagi chilly. A 120 acre Spice Park is proposed to further spice up the affairs in the district. There is a need to boost industrial development in Haveri district. Karnataka Chamber of Commerce and Industry explained, "Lack of basic infrastructure such as potable water and electricity supply has discouraged investments in the region." 1 Mega and 9 Large and medium industries with aggregated investment INR 9.45 billion and 11428 small-scale industries with aggregated investment INR 3.2873 billion form the industrial landscape that is well supported by 6 Industrial Estates in the district.

The spice advantage of the region is well harnessed as the State Government strategically proposed a 120 acre Spice Park to further enhance the scope of spice cultivation in the district. An agro-food sector project with an investment of INR 1 billion is also approved; this apart from an Agri-Investment region which will comprise of Agriculture SEZ, Agri-Engineering, Agri-Research units, Primary Processing Centers etc. are to add an impetus for potent growth opportunity in the sector. The presence of large players like Grasim Industries Ltd, Kumarpattanam, Ranebennur and Harihar Polyfibres are well

complimented by other services Farmers' Co-operative Spinning Mill Ltd involved in cotton yarn adds momentum to the textiles sector in the region.

At present water demand is 0.00595 BCM and by 2020 this demand increases to 0.0119 BCM. Water potential to be created is 0.0143 BCM

Table 4.4: Industrial Water Demand

Block	Name of the industry	Water demand (BCM)	Water demand in 2020 (BCM)	Existing Water potential (BCM)	Water potential to be created (BCM)
Shiggaon	MSME	0.00091	0.0018	0.0011	0.0022
Savanur	MSME	0.00018	0.0004	0.0002	0.0004
Hangal	MSME	0.00018	0.0004	0.0000	0.0004
Haveri	MSME	0.00110	0.0022	0.0011	0.0026
Byadagi	MSME	0.00018	0.0004	0.0002	0.0004
Hirekerur	MSME	0.00011	0.0002	0.0001	0.0003
Ranebennur	MSME	0.00329	0.0066	0.0039	0.0079
	TOTAL	0.00595	0.0119	0.0068	0.0143

4.6 Total water demand of the district for various sectors:

Over all, the district water demand for various purposes is 3.01 BCM. Demand for the domestic purpose is 0.0512 BCM, total water demand for crop purpose is 2.9386 BCM, total water demand for livestock purpose is 0.0195 and total water demand for industrial purpose is 0.0059 BCM.

Table: 4.6. Total Water Demand of the District for Various Sectors

S. No.	Block	Components					
		Domestic	Crop	Livestock	Industrial	Power generation	Total, BCM
1	Shiggaon	0.0063	0.4164	0.0023	0.0009	0	0.4259
2	Savanur	0.0053	0.3731	0.0020	0.0002	0	0.3806
3	Hangal	0.0075	0.5262	0.0033	0.0002	0	0.5372
4	Haveri	0.0091	0.4292	0.0027	0.0011	0	0.4422
5	Byadagi	0.0045	0.2204	0.0019	0.0002	0	0.2269
6	Hirekerur	0.0065	0.4474	0.0040	0.0001	0	0.4580
7	Ranebennur	0.0121	0.5258	0.0032	0.0033	0	0.5443
	TOTAL	0.0512	2.9386	0.0195	0.0059	0	3.0152

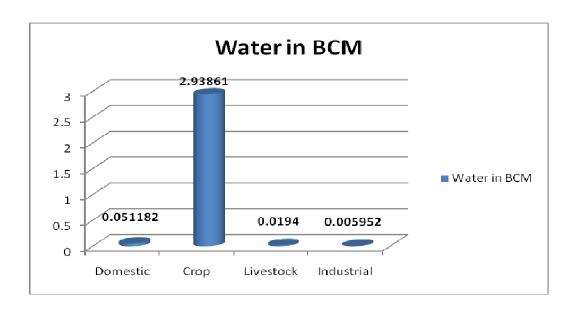


Fig.4b: Total Water Demand of the District for Various Sectors

4.7. Water budget

A water budget reflects the relationship between input and output of water through a region. Thus we have a direct comparison of supply of water and the natural demand for water. The following data provides current water gap and projected water gap for the year 2020.

Total existing water availability of the district for surface water is 0.337 BCM and for ground water is 0.532. Total existing water availability of the district is 0.869 BCM.

Water requirement of the whole district has been calculated considering the sources of water. Water demand of the district is 3.015 BCM and this water demand increases to 3.039 by 2020. At present, water gap of the district is 2.146 BCM and projected water gap of the year 2020 is 2.170 BCM. In the district 265 tanks of area more than 40 ha exist and the actual holding capacity of these tanks is 0.0825 BCM. But due to silting of tanks water holding capacity has been reduced to 80% of the actual capacity. To collect run off water during rainy season efficiently, there is a need increase the holding capacity of the tanks

With the implementation of District Irrigation Plan, additional 0.4481 BCM. capacity will be created and 90788 ha additional area will be brought under irrigation.

Table 4.7: Water budget

Water Budget								
Name of Blocks	Existing water availability (BCM)			Water Demand (BCM)		Water Gap (in BCM)		
	Surface water	Ground water	Total (BCM)	Present	Projected (2020)	Present	Projected (2020)	
Shiggaon	0.00	0.04	0.04	0.43	0.43	-0.382	-0.38	
Savanur	0.01	0.03	0.04	0.38	0.38	-0.342	-0.34	
Hangal	0.10	0.19	0.29	0.54	0.54	-0.249	-0.25	
Haveri	0.01	0.08	0.09	0.44	0.45	-0.348	-0.35	
Byadagi	0.03	0.06	0.09	0.23	0.23	-0.138	-0.14	
Hirekerur	0.06	0.08	0.14	0.46	0.46	-0.317	-0.32	
Ranebennur	0.12	0.05	0.17	0.54	0.55	-0.370	-0.38	
TOTAL	0.340	0.530	0.870	3.015	3.039	-2.146	-2.170	

Chapter 5: Strategic Action Plan

Water is a blessing for human kind. It is the life blood of farming. Nations, cities and civilizations have grown near rivers. Our scriptures have praised the life giving quality of water. There is a re-emerging consensus that water resources development and management are essential to generate wealth, mitigate risk, and alleviate poverty; that poverty demands that many developing countries will need to make large investments in water infrastructure at all levels; and that this development must be undertaken building on the lessons of experience, with much greater attention to institutional development, to the environment and to more equitable sharing of benefits and costs. The challenge of "Responsible Growth" is to grow while at the same time embracing both environmental sustainability and social development. A responsible path is particularly important in water development because, given the longevity of water infrastructure, many of these decisions will have long-term consequences. Furthermore, many decisions – both decisions to act and not to act may have irreversible consequences.

Water resources constitute mainly surface and groundwater, with rainfall being the basic source. The main issues of concern are conservation of existing water resources and prevention of further degradation and depletion. The associated issues include rejuvenation of degraded traditional surface water bodies,

enhancing the availability of water through water harvesting measures, and recharge of ground water resources. More important is the judicious and economic use of both ground and surface water for agricultural, industrial and domestic purpose.

Considering the prsent status of water availability, huge water gap (2.147 BCM) is found in the district. To reduce this gap, there is a need to exploit surface water through flowing rivers of the district and to

Strategic action plan involving Major Irrigation, Minor Irrigation, Agriculture and Horticulture departments for irrigation in district under PMKSY has been prepared.

Upper Tunga Project: The project started during 2000-01 and total length of canal is 270 km. It provides an annual irrigation of 73239 ha of land by utilizing 12.24 TMC of water from Tunga Dam near Gajanur village in Shimoga district. The Dam is situated at Latitude: 13°-50'30" Longitude: 75°-31'-0". Totally 220 villages will be benefited from this project. UTP main canal runs to a length of 270 Km & finally the main canal lead off to Devagiri tank in Haveri taluk.

So far Rs.1307.40 Crores expenditure has been incurred. This project aims to cover 73239.00 ha of area in the Haveri district. This project covers 30530 ha in Ranebennur, 27908 ha in Haveri, 9468 ha in

UTP Main Canal 164 km



Hirekerur, 3175 ha in Byadgi and 2158 ha in Hangal taluka. Up to March-2016, 22724 ha irrigation potential created in Ranebennur taluka and 9468 ha irrigation potential in Hirekerur taluk. Action plan of Rs. **550.47 Crores** has been submitted by the Major Irrigation Department to cover remaining area of 41047 ha.Out of which 8570 ha area is further covered by micro irrigation system and for this action plan of Rs.450 crores has been submitted.

TILUVALLI LIFT IRRIGATION SCHEME:

The Tiluvalli Lift Irrigation Scheme is proposed to irrigate 2,500 Acres (1012 Ha) using 0.76 TMC of water from Varadha river. The Scheme is comprised of creating Irrigation potential in two stages. The Ist Phase is Lift irrigation works & 2nd Phase is Canal & Tank Rejuvenation work. The project is situated at Latitude: 17^o 12['] 45["] and Longitude: 14° 38′ 50". Totally 03 villages of Hangal Taluk in Haveri District will be benefited from this project. So far Rs. 19.16 Crores expenditure has been incurred. To bring an area of 1012 ha under irrigation, action plan of **Rs. 55.56 crores** has been submitted.Water allocation is 0.76 0.76 TMC (.26 TMC from Krishna basin and .50 TMC from Godavari basin).

ITAGI SASALWAD LIFT IRRIGATION SCHEME:

The Itagi-sasalwada lift irrigation scheme envisages lifting of 1.5 cumecs of water from left bank of Tungabhadra River near Itagi village to irrigate 1983.00 ha of lands coming in 11 villages of Shirahatti and Mundargi taluk in Gadag district and one village in Haveri taluk in Haveri district. The Jackwell cum Pump house is situated at Latitude: 14°57'8"N Longitude: 75°43'27"E". The project covers 65.27 ha of area in Teredahalli village of haveri district and the project has been completed.

GUDDADA MALLAPUR LIFT IRRIGATION SCHEME:

The Guddada Mallapur Lift Irrigation Scheme is proposed to irrigate 13,000 Acres (5261 Ha) using 1.00 TMC of water from Varadha river. The Scheme is comprised of creating Irrigation potential in two stages. The Jackwell cum Pump house of I st Stage is situated at Latitude: 14°39′22′′N Longitude: 75°13′01′′E″. Totally 22 villages of Byadagi Taluk in Haveri District will be benefited from this project. So far 3800 ha area has been brought under irrigation. To cover the remaining area of 1461 ha action plan of **Rs.8.11** crores has been submitted. A total of 1 TMC has been allocated for this project.

BASAPUR LIFT IRRIGATION SCHEME:

The Basapur Lift Irrigation Scheme is proposed to irrigate 4,940 Acres (2000 Ha) using 0.60 TMC of water from Varadha river. The Scheme is comprised of creating Irrigation potential in two stages. The Jackwell cum Pump house of I st Stage is situated at Latitude: 14°43′42′′N

Longitude: 75°13′47"E". Totally 17 villages (13 villages of Hangal Taluka and 4 villages of Haveri Taluka) will be benefited from this project. 06 villages under I st Stage and 11villages under II nd Stage. Up to March-2016, Rs 24.44 Crores expenditure has been incurred and 890 ha irrigation potential has been created. To cover the remaining area of 1110 ha action plan of Rs.32.14 crores has been submitted. A total of 0.6 TMC has been allocated for this project.

Modernisation of DHARMA PROJECT

Dharma reservoir is located across Dharma River near Yamgalli village about 27 KM from Mundgod town in Uttara Kannada District, and 20 KM from Hangal of Haveri Dist Karnataka state. Originally paddy was grown over 366 Ha from Shringeri pickup. Subsequently a supplementary storage dam on the upstream of Shringeri pickup was constructed in the year 1964 at Yamgalli village in Mundagod Taluk, Uttara Kannada District.

Dharma dam at Yamgalli village was completed in the year 1964. It comprises an earthen dam with gross storage capacity of 23.04 Mcum. Dharma stream is tributary to the Varada river in Krishna basin and rises in the chain of low hills of western ghats near Islur village in Sirsi taluk of Karnataka state, passes through Uttara Kannada and Dharwad distrcts. It has a catchment area of 97.70 Sq .KM. The reservoir has a live storage capacity of 22.24 Mcum or serves CCA 7692 Ha. There is one high level canal taking off from reservoir and another outlet directly leading to Dharma river course and picked up at Shringeri pickup situated 8km downstream of Dharma dam. There are two canals, one left bank canal which takes off at 50 M upstream Shringeri pickup and another right bank canal at the Shringeri pickup. The Project was designed for full Khariff paddy crop. Besides paddy, a small percentage of sugarcane, garden, Ragi and pulses are being grown. The total length of the Modernisation of Dharma canal is 62.00 Km and estimated cost is Rs 4370.00 Lakhs

KAGINELE LIFT IRRIGATION PROJECT

Kaginele is in Haveri District Byadagi Taluk is birth place of Kanakadas saint. In 14th century Vijayanagar empire was built Kaginele tank. The tank is situated survey No:62 of Kaginele village. Total area of the tank is 225 Acres. Kaginele is declared as a tourist place by the Government of Karnataka. This

area farmers are forcing to supply water to all 21 surrounding tanks around the Kaginele tank, this project is so essential to fulfill.

Badagi Taluk, Bidaragadi village construct diversion weir across the Varada river, to fulfill the water to all 22 tanks is the main project which is to be discussed in that 6 tanks i.e. Kaginele tank, Kerimattihalli tank, Hirelingadahalli tank, Koulakatti tank, Tubi tank, Didagur tanks comes under Minor Irrigation Deportment. 16 tanks which comes under Graminabhirvuddi and Panchayat Raj Deportment, i.e Kengeri, Vadeneli, Bolagatti, Karchikatti, Lakmapur tank, Muddinakatti, Banakatti, Charakatti, Harogatti, Madargatti, Kamaragatti, Goudanakatti, Halehonda, Benakanahalli tank, Kanchikatti, Hunisinakatti tanks, by using gravitational force water will flow. For this action plan of Rs. 4917 lakhs has been submitted.

MADAGA MASUR TANK PROJECT

Madaga-Masur tank is a very big tank, and also a very old one, located in Masur village of Hirekerur Tq, Haveri Dist Karnataka state. This tank is stored with the water flow of Kumdvati river. After filling the tank over flow of water is again diverted towards the Kumdvati river through the Kodi. The longitude of this tank is 14^o 21' 02" and latitude is 75^o25'00". Kumdvati river is sub river of Tungabhada river. The basin of this river is Krishna. This tank comes under the scheme-A. This tank provides 2.71 TMC of water, out of this 0.72 TMC water is presently utilized. This tank is situated 2.50 km away from the main

Road i.e Masur-Shikaripur Road. This tank is built at the time of Vijayanagar Empire. 1.10 m x 2.30m = 252.97 m size of Arched type rectangular tunnel road is diverted as Left bank canal and Right bank canal. The length of the Left bank canal is 10.8 km and the out let capacity is 0.48 MCum, and it covers the area of 243 Ha. The length of the Right bank canal is 13.75 km and the out let capacity is 0.96 MCum, and it covers the area of 472 Ha. Total area of LBC & RBC is 715 Ha. For this action plan of Rs.1500 lakhs has been submitted.

Acchikere tank filling

Source of water lifting from Dharma river near Kallakala barrage, Raising main length 825m of HDPE PN 8.0 of 260mm dia, type of Pump – Submercible pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Acchikere tank filling tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.315 lakhs has been submitted.

Karur tank

Filling of Karur tank coming in Ranebennur Taluk Haveri District by lifting water from Natural Nala crossing @ 36 Km of Dy-2 canal of UTP under UTP-SCP programme for the year – 2015-16. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Karur tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this project Rs.89.20 Lakhs has been estimated.

Gangapura village Doddakere tank

Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Gangapur village Doddakere tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this project Rs.154.0 Lakhs has been estimated.

Filling of Kanavalli tank

Source of water from Budagatti Halla, Tank capacity – 6.95Mcft, Raising main 3300m of HDPE 100 PN 12.5 of 160mm dia, type of Pump – Submercible pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Kanavalli tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.197 lakhs has been submitted.

Filling of Somanakatti village Mallammana tank

Source of water from Budagatti Halla, Tank capacity – 2.48Mcft, Raising main 2695m of HDPE 100 PN 12.5 of 160mm dia, type of Pump – Submercible pump.Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes.In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala..The proposal of filling Somanakatti village Mallammana kere tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.160 lakhs has been submitted

Khanderayanahalli tank filling

Source of water lifting from Airani tank, Raising main length 756m of HDPE 80 PN 8.0 of 125mm diameter.

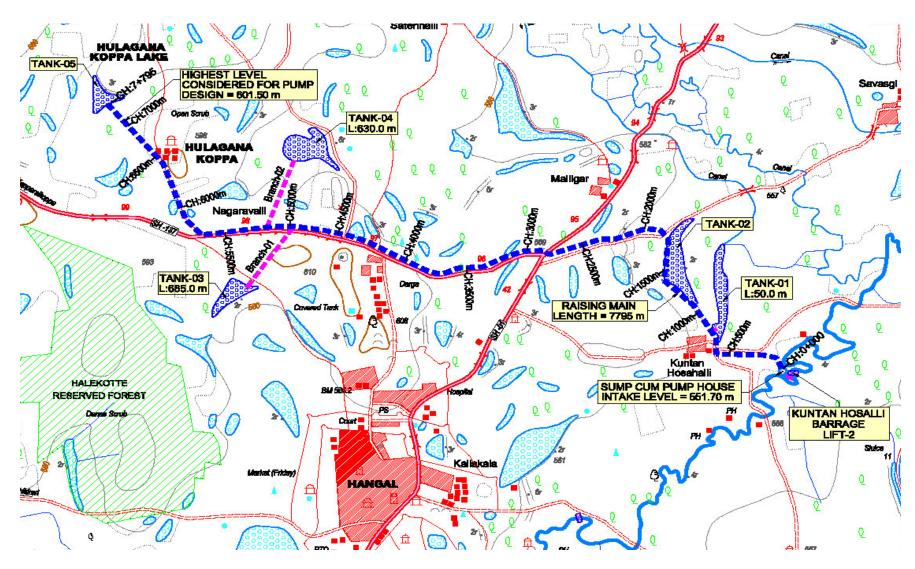
Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling

Khanderayanahalli tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.90.0 lakhs has been submitted

Huliginakoppa tank 1,2&3, Kuntanahosahalli 1&2 tanks filling

Source of water lifting from Dharma river near U/s of Kuntan Hosalli barrage, Raising main length 7795m of HDPE PN 8.0 of 315mm dia, type of Pump – Submercible pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Huliginakoppa tank 1,2&3, Kuntanahosahalli tanks will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.690.0 lakhs has been submitted

Huliginakoppa tank 1,2&3, Kuntanahosahalli 1&2 tanks filling



Doddakere-Maayapindanakatte tank filling

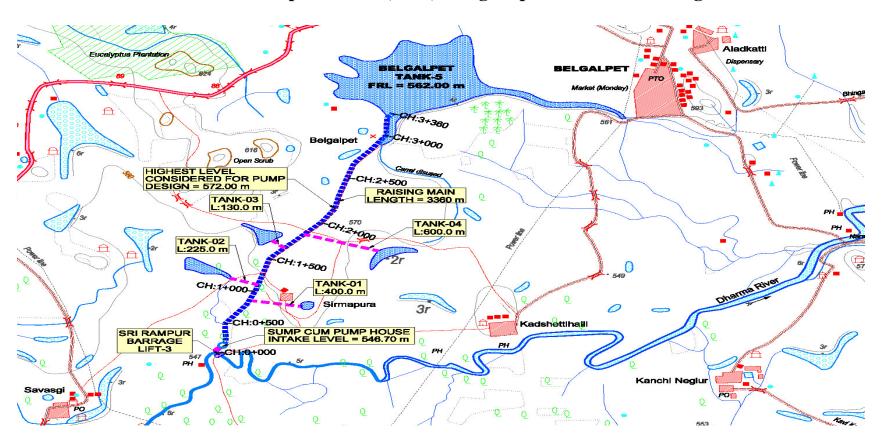
Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Doddakere-Maayapindanakatte tank filling will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.374.0 lakhs has been submitted

Shiramapura tank 1,2&3, Belagala pete 1& 2tanks filling

Source of water lifting from Dharma river near Shiramapura barrage, Raising main length 3360m of HDPE 80 PN 8.0 of 355mm dia, type of Pump – Submercible pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Shiramapura tank 1,2&3, Belagala pete 1& 2tanks

filling will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.439.0 lakhs has been submitted

Shiramapura tank 1,2&3, Belagala pete 1& 2tanks filling



Construction of Ranebennur Lift Irrigation Scheme including Feeding of Ranebennur Doddakere Tank in Ranebennur Taluk

The project area is situated in the northern parts of Karnataka State in Haveri District. This proposed project covers Ranebennur Taluk. The site proposed for the scheme is situated in Ranebennur in Haveri Taluk.

The majority of the area is rainfed and the yields obtained are generally not satisfactory. The rain generally fail at the time of sowing. To improve the socio-economic conditions of the farmers of these villages. Lift irrigation scheme with intake from Tunga Bhadra river near Muddenur village is proposed. The Lift irrigation scheme project is proposed across Tungabhadra River, near Muddenur village in Haveri Taluk. The command area of the project is 2428 Ha which is apart from the Upper tunga project atchcut. For this action plan of Rs.16000 lakhs has been submitted

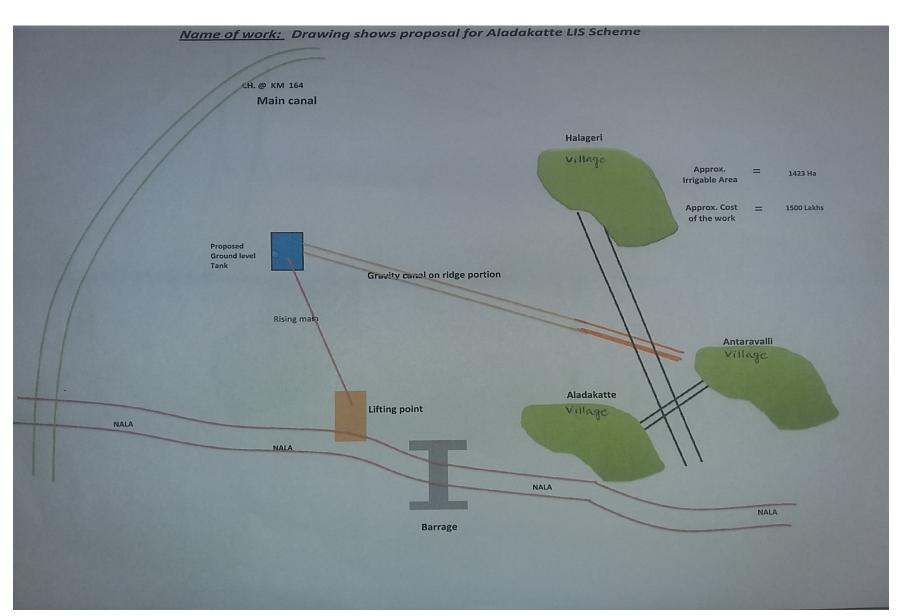
Filling up of ASUNDI Tank and other surrrounding 17 MI/ZP Tanks in Ranebennur, Byadgi and Hirekerur Talukas

Asundi MI Tank is one of the tank having storage capacity of 161.00Mcft located in boundary of Ranebennur and Byadgi. The MI tank and other 17 tanks located in Ranebennur, Hirekerur and Byadgi talukas of Haveri District are not receiving sufficient inflow and are not filling from past 10 years as reported by MI

authorities. The water lift is proposed to filling up of 18 number of MI/ZP tank is from the upstream of Barrage constructed across Kumudvati River near Godihal Village. The total water allocation of water for Minor irrigation under K-8 sub basin is 37.51 TMC. For this action plan of Rs.9236 lakhs has been submitted

Aladakatte Lift Irrigation Scheme

Due to scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these atchkats are not receiving the desired quantum of water. The villagers are demand there fields to be irrigated. In view of above requirements it is proposed to take-up the scheme of lifting water from Aladakatte halla. The proposed irrigation land is on higher level so, lifting of water is essential. For this action plan of Rs.1500 lakhs has been submitted and 576 ha will be brought under irrigation.



Rejuvanation of 98 tanks coming under Dharma project

Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling 98 tanks coming under Dharma project tank will be benefit the area by ground water recharge and will become part of watershed development plan. Atchkat of tanks is 2250 hectares apart from command area of Right and left bank canals of Dharma project. All 93 tanks come under Dharma Right bank canal and one tank under left bank canal. Three tanks come under Naragal feeder system and one Shingapur tank connected with tail end. For this action plan of Rs.11412 lakhs has been submitted.

Timmapura Lift Irrigation Scheme

The project area is situated in the northern parts of Karnataka State in Haveri District. This proposed project covers part of Haveri Taluk. The site proposed for the scheme is situated in Survey no. 75-76 of Narasipura village in Haveri Taluk. The majority of the area is rainfed and the yields obtained are generally not satisfactory. The rain generally fail at the time of sowing. To improve the socio-economic conditions of the

farmers of these villages. Lift irrigation scheme with intake from Tunga Bhadra river near (Narsipur) Timmapur village is proposed. The Lift irrigation scheme project is proposed across Tungabhadra River, near Timmapur village in Haveri Taluk. The command area of the project is served by gravity canal. The Tunga Bhadra river is a non-perennial and the water is suitable for irrigation. Hence, only protective type of irrigation is proposed during Khariff period only (July to October). For this action plan of Rs.3300 lakhs has been submitted and 1691 ha will be brought under irrigation.

Handiganur Lift irrigation scheme

Benefitted villages: Handiganur, Halemelmuri, Hosamelmuri, Icchangi, Yallapura, Siddapura, Bairapura, Chikkamaralihalli, Hiremaralihalli, Source of water lifting from Varada river near Handiganur, Area 6916 acres or 2800 Ha, type of Pump – Vertical turbine pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Handiganur Lift irrigation scheme tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.7000 lakhs has been submitted and 2800 ha will be brought under irrigation.

Kerekoppa Lift irrigation scheme

Benefitted villages: Kerikoppa, Gudur, Gudusalukoppa, Halageri, Maradur, Hosakittur, Halekittur, Bailamadapura, Niralagi, Guyalgundi, Mevundi, Teredahalli, Source of water lifting from Varada river near Kerikoppa, Area 6916 acres or 2800 Ha, type of Pump – Vertical turbine pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Kerekoppa Lift irrigation scheme tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.6900 lakhs has been submitted and 2700 ha will be brought under irrigation.

Kalakote Lift irrigation scheme

Benefitted villages: Mantagani, Ichalayallapura, Kadakola, Hattimattur, K.B. Timmapura, Heremugadur, Chikkamugadur, Kalakoti, Kalasur, Source of water lifting from Varada river near Mantigere, Area 6422 acres or 2600 Ha, type of Pump – Vertical turbine pump. Due to Scanty rainfall in the catchment area in the past years and also due to development activities in the upstream catchment these tanks are not receiving the

desired quantum of water for filling these tanks. The villagers mainly dependent on these tanks for drinking water and other purposes. In view of above requirements it is proposed to take up the scheme of lifting water from Natural nala. The proposal of filling Kalakote Lift irrigation scheme tank will be benefit the area by ground water recharge and will become part of watershed development plan. For this action plan of Rs.6700 lakhs has been submitted and 2600 ha will be brought under irrigation.

Devaragudda Tank & Surrounding Tanks filling

This Project area is situated in the norrthern part of Karnataka State in Haveri District. This Proposed project covers part of Ranebenuur Taluk. The majority of the area is rainfed and the yields obtained are generally not satisfactory. The rain generally fails at the time of the sowing. To improve the Ground water level & Supplying of Drinking water this scheme is proposed. The Lift irrigation scheme project is proposed across natural nala, near Guddada Anwari village in Ranebennur Taluk, Haveri District. For this action plan of Rs.475 lakhs has been submitted.

Honnatti village Budapanahalli tank filling

This Project area is situated in the norrthern part of Karnataka State in Haveri District. This Proposed project covers part Byadagi Taluk .The majority of the area is rainfed and the yields obtained are generally not

satisfactory. The rain generally fails at the time of the sowing. To improve the Ground water level & Supplying of Drinking water this scheme is proposed. The Lift irrigation scheme project is proposed across natural nala, near Hanumapura tank in Ranebennur Taluk, Haveri District. For this action plan of Rs. 800 lakhs has been submitted.

Naregal tank-1&2, Kodiyallapur tank, Adur tank, Shankrikoppa tank, Shigehalli tank, Singapura tank, Balambeeda tank, Kaluveyallapura tank, Kanchinegalur tank, Channapura tanks filling

This Project area is situated in the norrthern part of Karnataka State in Haveri District. This Proposed project covers part of Akki Alur Hobli in Hangal Taluk. The majority of the area is rainfed and the yields obtained are generally not satisfactory. The rain generally fails at the time of the sowing. To improve the Ground water level & Supplying of Drinking water this scheme is proposed. The Lift irrigation scheme project is proposed across Varada river, near Balembeed village in Hangal Taluk, Haveri District. For this action plan of Rs. 900 lakhs has been submitted.

Hulagaddi, Kalaguddi, Guddadakatti, Musarikatti, Bendagatti, Hallibail, Kiruvadi tank 1,2&3, Sarakari keri katti, Aadimani katti, Gourikatti, Kharabukerikatti tanks filling

This Project area is situated in the norrthern part of Karnataka State in Haveri District. This Proposed project covers part of Hangal Taluk .The majority of the area is rainfed and the yields obtained are generally not satisfactory. The rain generally fails at the time of the sowing. To improve the Ground water level & Supplying of Drinking water this scheme is proposed. The Lift irrigation scheme project is proposed across Varada river, near Moodi village in Hangal Taluk, Haveri District. For this action plan of Rs.375 lakhs has been submitted.

Shidenur lift irrigation scheme and Sheshagiri barrage lift irrigation.

Under this scheme action plan has been prepared for Rs.6000 lakhs and 10 tanks will be filled. Under Sheshagiri barrage lift irrigation project it is proposed to irrigate 900 ha area and for this action plan of Rs.2500 lakhs has been proposed.

Malaprabha Right Bank Canal project (MRBC)

Malaprabha Right Bank Canal project is being implemented in Savanur and Shiggaon talukas. The works like Providing, Laying, Jointing and pumping for MI Tanks in Shiggaon Taluk and Providing Water Supply to MI Tanks in Savanur taluka have been taken up(15 Nos. of Tanks). Action plan of Rs. 120400 lakhs has been submitted to cover an area of 19100 ha. Construction of Bandar across Bennihalla in shiggaon taluk and also lift irrigation projects in Savanur and Shiggaon talukas will be taken up.

Works by Minor Irrigation Department:

Minor Irrigation Department is involved in Constructing and maintaining water bodies such as tanks, barrages and pickup bhandaras, check dams, feeder channels and lift irrigation schemes. These water bodies are esigned to feed water to farmers land and to increase the ground water table. Potentiality of water bodies is mainly depending upon the rain fall and flow in the rivers and local nalas. Minor irrigation department constructing and maintaining the water structures with irrigation command of minimum 40.00 hectares and maximum of 2000.00 hectares.

Minor irrigation structures are constructed to flowing rivers and tributary nalas. The main sub basin rivers in the district are Tung bhadra ,Dharma, Kumadwati and Varada river which in turn join to Krishna basin.

There are 263 Minor irrigation tanks existing in the Haveri district. These are constructed to small nalas and valley areas, where there is good catchment to store maximum water during rainy season and mainly Minor irrigation tanks have been constructed long back in the valley portion with very minimum land acquisition and near by habilitation. These are designed to feed water to khariff crops through field canals to formers land by gravity flow.

There are 113 barrages, Anicuts & pickups constructed across rivers and local nalas to store water. When flow in the river recedes, the gates of these structures will be closed and the water will be utilized by the bank side formers by self pumping to semidry and rabi crops. The storage of water in the structures will also helps in increasing the ground water in the surrounding area.

Lift irrigation projects are constructed on the bank of river and water will be pumped directly to canals through delivery chambers during flow in the river. Formers will utilize water through field channels by gravity flow. The lift irrigation schemes are designed mainly for khariff crops and sometimes for semidry crops. There are 16 such schemes are working in the Haveri district. So far a total of command area covered by Minor Irrigation Schemes in the district is 32663 hectares.

Haveri District irrigation plan for the minor irrigation works has been prepared for a period of five years, with intension of mainly conservation of ground water and harvesting of available natural water sources.

Minor irrigation works are categorically classified as

- ❖ Tank filling from natural rivers
- ❖ Construction of new Tanks, Improvements to existing water bodies
- ❖ Construction of new lift irrigation schemes and restoration of existing schemes
- ❖ Construction of New barrages across rivers and nalas
- ❖ Improvements to feeder channels and catchments

These schemes are planned to irrigate 28682.00 hectares of land in five years with the cost of 77565.00 lakhs The detailed scheme wise planning is narriated below.

Works by Agriculture Department

Scope for Sprinkler / Drip Irrigation

To promote efficient water conveyance and precision water application devices like drips and sprinklers will be supplied to the farming community. In a span of 5 years 197285 ha. area will be covered under sprinkler irrigation. To achieve this, action plan of Rs.34801 lakhs. ha.s been submitted

Haveri District is having suitable climatic and soil condition to grow various horticulture corps and nearly 19% of cultivable area (61460 ha.) covered under horticulture crops like mango, Sapota, Banana, Guava etc., vegetable crops like Chilli, Tomato, Brinjal, Onion, Garlic, Cabbage, Cauliflower etc. Plantation crops like Coconut, Betelvine, Arecanut etc., and Flowers crops like Jasmine, Tuberose, Chrysanthemum and etc., Ranebennur, Byadgi and Hirekerur talukas are known for vegetable seed production.

Drip irrigation scheme is being implemented since 2006-07 from the Department of Horticulture. Up to 2015-16 an area of 21609.31 ha. area has been brought under drip irrigation. In a span of 5 years additional area of 10188 ha.. will be covered by drip irrigation system and to achieve this, action plan of Rs.6500.16 lakhs has been submitted.

Sericulture

Haveri District is having suitable climatic and soil conditions to grow mulberry crop and nearly 1015 ha cultivable area covered under sericulture with the cocoon production of 680.902 tonnes. Drip irrigation scheme is being implemented since 2013-14. Up to 2015-16 an area of 141 ha. area has been brought under drip irrigation. To promote sericulture activity there is a need to provide drip irrigation facility to mulberry crop In a span of 5 years an area of 1403 ha.. will be covered by drip irrigation facility and to achieve this, action plan of Rs.1597 lakhs has been submitted.

Water harvesting structures

Over the past three decades, growing populations and increase in irrigation has led to excess withdrawal of ground water without commensurate recharging, resulting in a rapid fall in the water table. The reason for this is that large part water comes as rainfall is lost to the sea in the form of run-off and rest is evaporated. So future irrigation needs would have to be met by tapping ground water and utilizing it more efficiently.

Action plan of Rs.12645 lakhs submitted for construction of 9755 water harvesting structures such as check dams, percolation tank, farm ponds, etc.

The major structures include Farm ponds (7770), Check Dam (1004), Percolation Tanks (566) and Other structures (415). With the construction of these structures, nearly 14000 tcm water holding capacity will be created.

Renovation of Water harvesting structures

Renovation of old water harvesting structures is also very essential to make use of them efficiently. Rejuvenation of traditional water storage structures like Check Dams also has been taken up. A total of 235 Check Dams will be renovated and under this action plan of Rs.705 lakhs has been submitted.

Field bund

The technology is simple to implement at the local level. Bunds slow down water sheet flow on the ground surface and encourage infiltration (groundwater recharge) and help to reduce soil erosion. The major advantage of field bund is that higher crop returns can be expected in dryer years which allows farmers to diversify income sources in normal years. A total of 1,88,800 ha. will be treated and under this action plan of Rs.12220 lakhs has been submitted.

Agro forestry

Agroforestry provides a different land use option, compared with traditional arable and forestry systems. It makes use of the complementarity between trees and crops, so that the available resources can be more effectively exploited. The agroforestry plot remains productive for the farmer and generates continuous revenue, which is not the case when arable land is exclusively reforested. Agroforestry allows for the diversification of farm activity and makes better use of environmental resources. A total of 67,000 ha. will be brought under tree—species like Teak, Hebbevu, Sandal, Tamarind, Silver oak, Neem etc—and under this action plan of Rs.4020 lakhs has been submitted.

Dry land Horticulture

There is a wild scope in the district to go for dry land horticulture. Growing of fruit crops is one of the many ways of crop diversification in dry lands. Dry land horticulture not only provides higher income to the farmers, but also more stable returns, besides utilizing the off-season precipitation. Several farmers are showing keen interest in cultivating fruit crops un der dry lands. A total of 56,000 ha. will be brought under fruit crops like sapota, mango, guava etc and under this action plan of Rs.6720 lakhs has been submitted.

Works by Water Board

Works like construction of Vented Barrages for water supply and sewage treatment have been proposed by the Water board.

Hirekerur Town (TP)

Hirekerur town is situated at a distance of about 55 Kms from the District Head Quarters. The population of the town as per 2011 census is 19191 and the present population is about 20000. The water supply to the town is from Tungabhadra River as source near Koosagatti (Tumminakatti) village. The Water supply scheme is designed to supply 5.45 MLD and commissioned during 2012. During summer season between January to June, water flow stops. Due to this it is not possible to draw water from the river to meet out acute shortage of water. The temporary sand barrage has been constructed by local body to store water.

Hence, it is essential to construct RCC Vented Barrage across Tungabhadra River. The Barrage is proposed near Koosagatti village the Vented Barrage length is 375.00 metre with 4.00 metre height including 1.00 meter free Board. The proposed Barrage is of RCC structure having components of Body wall, Pier, Abutment, Wingwall, Operating slab, Approach slab and Service gates (Manually operated). Total water of

0.039 TMC is required considering future 50 years.. Accordingly, Pre Feasibility Report / Line estimate is prepared for Rs. 5145.00 lakhs

Haveri (CMC) & Guttal Town (TP)

The population of the town as per 2011 census is 67102 and the present population is about 73147. The water supply to the town is from Tungabhadra River as source near Kanchargatti village. The Water supply scheme is designed to supply 9.08 MLD and commissioned during 2003. The temporary sand barrage has been constructed by local body to store water.

Guttal town is in Haveri taluk, situated at a distance of about 37 Kms from the District Head Quarters.

The population of the town as per 2011 census is 17525 and the present population is about 19700. The water supply to the town is from Tungabhadra River as source near Havanur village. The Water supply scheme is designed to supply 1.84 MLD and commissioned. The temporary sand barrage has been constructed by local body to store water.

Hence, it is essential to construct RCC Vented Barrage across Tungabhadra River. The Barrage is proposed near Kanchargatti village. For both Haveri city & Guttal town the Vented Barrage length is 305.00 meter with 4.00 meter height including 1.00 meter free Board. The proposed Barrage is of RCC structure

having components of Body wall, Pier, Abutment, Wingwall, Operating slab, Approach slab and Service gates (Manually operated). Total water of 0.178 TMC is required considering future 50 years. Accordingly, Pre Feasibility Report / Line estimate has been prepared for Rs. 4390.00 lakhs.

Ranebennur (CMC) & Byadagi Town (TMC)

Ranebennur city is Taluka Head Quarters in Haveri district, situated at a distance of about 35 Kms from the District Head Quarters. The population of the town as per 2011 census is 106406 and the present population is about 110000. The water supply to the town is from Thunga Badra River as source near Mudenur village. The Water supply scheme is designed to supply 15.89 MLD and commissioned during 2002. During summer period out acute shortage of water is found as there is no permanent water storage structure. The temporary sand barrage has been constructed by local body to store water.

Byadagi situated at a distance of about 18 Kms from the District Head Quarters. The population of the town as per 2011 census is 30014 and the present population is about 31000. The water supply to the town is from Thunga Badra River as source near Mudenur village. The Water supply scheme is designed to supply 8.20 MLD and commissioned during 2016 During summer period out acute shortage of water is found as

there is no permanent water storage structure. The temporary sand barrage has been constructed by local body to store water.

Hence, it is essential to construct RCC Vented Barrage across Tungabhadra River. The Barrage is proposed near Mudenur village for both Ranebennur city & Byadagi town. The Vented Barrage length is 305.00 meter with 4.00 meter height including 1.00 meter free Board. The proposed Barrage is of RCC structure having components of Body wall, Pier, Abutment, Wingwall, Operating slab, Approach slab and Service gates (Manually operated). Total water of 0.255 TMC is required considering future 50 years. Accordingly, Pre Feasibility Report / Line estimate is prepared for Rs. 6500.00 lakhs.

Sewage Treatment

Savanur Town (TMC)

Savanur town is Taluka Head Quarters in Haveri district, situated at a distance of about 35 Kms from the District Head Quarters. The population of the town as per 2011 census is 40567 and the present population is about 42000. The water supply to the town is from Varada River as source near Mellagatti village. The Water supply scheme is designed to supply 13.20 MLD and commissioned during 2012.

At present, there is no Under Ground Drainage system in the town. The sewage and sullage is being allowed to the open drains, the different and indiscriminate mode of disposing the reflux, faecal matter, kitchen waste etc., and the bad odour is emerging as a result of the same has lead to permanent source of causing health hazards in the town thus causing unhygienic condition. Considering the above need for providing proper underground drainage system with proper disposal facility and recycling effluent is required.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 8440.41 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Hanagal Town (TMC)

Hanagal is situated at a distance of about 35 Kms from the District Head Quarters. The population of the town as per 2011 census is 28169 and the present population is about 30000. The water supply to the town is from Dharma River as source near Hanagal town. The Water supply scheme is designed to supply 5.45 MLD and commissioned during 2005. Accordingly, Pre Feasibility Report / Line estimate of Rs. 7342.63 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Shiggaon Town (TMC)

Shiggaon is situated at a distance of about 39 Kms from the District Head Quarters. The population of the town as per 2011 census is 28207 and the present population is about 30700. The water supply to the town is from Naganur tank /Varada River as source near Shiggaon/ Hale halasur. The Water supply scheme is designed to supply 9.08 MLD and commissioned during 2006/2013 respectively.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 7342.63 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Bankapur Town (TMC)

Bankapur town is in Shiggaon taluka in Haveri district, situated at a distance of about 30 Kms from the District Head Quarters. The town is having Government Offices, Schools, Colleges, Health units, etc.,

The population of the town as per 2011 census is 22529 and the present population is about 24500. The water supply to the town is from Varada River as source near Hale halasur. The Water supply scheme is designed to supply 8.20 MLD and commissioned during 2015.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 4851.23 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Hirekerur Town (TP)

Hirekerur town is Taluka Head Quarters in Haveri district, situated at a distance of about 55 Kms from the District Head Quarters. The population of the town as per 2011 census is 19191 and the present population is about 20000. The water supply to the town is from Tungabhadra River as source near Koosagatti (Tumminakatti) village. The Water supply scheme is designed to supply 5.45 MLD and commissioned during 2012.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 1600.00 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Guttal Town (TP)

Guttal town is in Haveri taluk, situated at a distance of about 37 Kms from the District Head Quarters. The population of the town as per 2011 census is 17525 and the present population is about 19700. The water supply to the town is from Tungabhadra River as source near Havanur village. The Water supply scheme is designed to supply 1.84 MLD and commissioned.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 4600.00 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks

Haveri (CMC)

Haveri city is district head quarter situated at a distance of about 330 Kms from Capital city of Karnataka. The town is having Government Offices, Schools, Colleges, Health units, etc.,

The population of the town as per 2011 census is 67102 and the present population is about 73147. The water supply to the town is from Tungabhadra River as source near Kanchargatti village. The Water supply scheme is designed to supply 9.08 MLD and commissioned during 2003.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 300.00 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks

Ranebennur (CMC)

Ranebennur city is Taluka Head Quarters in Haveri district, situated at a distance of about 35 Kms from the District Head Quarters. The population of the town as per 2011 census is 106406 and the present

population is about 110000. The water supply to the town is from Tungabhadra river as source near Mudenur village. The Water supply scheme is designed to supply 15.89 MLD and commissioned during 2002.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 750.00 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks

Byadgi (TMC)

Byadagi town is in Taluka Head Quarters in Haveri district, situated at a distance of about 18 Kms from the District Head Quarters. The population of the town as per 2011 census is 30014 and the present population is about 31000. The water supply to the town is from Tungabhadra River as source near Mudenur village. The Water supply scheme is designed to supply 8.20 MLD and commissioned during 2016.

Accordingly, Pre Feasibility Report / Line estimate of Rs. 300.00 lakhs has been prepared to install underground drainage system with proper disposal facility and recycling effluent to nearby existing tanks.

Works proposed by Regular Forestry

Near forest area where cultivable lands are present, theres is a need to take up water harvesting structures. This not only helps recharging of borewells and but also helps as a good source of drinking water for forest

animals. Works like desilting of tanks, Check dams, Gully checks/ boulder bund, Digging contour / staggered trenches and fencing have been proposed and for this action plan of Rs.775.0 lakhs has been submitted.

Total irrigation potential at present is 137337.37 ha and with implementation of DIP, irrigation area increases to 244159 ha.

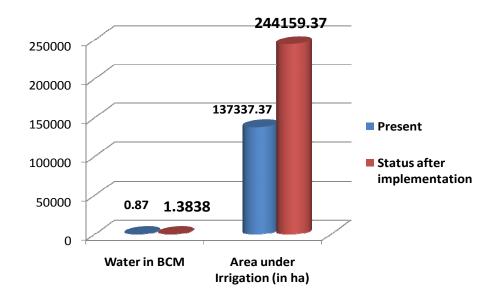


Fig.5a . Present and Status of Irrigated area after 5 years

There has also been appreciable development in the areas of drinking water supply and other uses. However, growing population, urbanization and industrialization has led to considerable increase in demand of water for various purposes e.g., irrigation, domestic needs, industrial requirements etc.In this context, it can be explained that there is a strong linkage between water supply with all other developmental activities. In perspective of dynamic development scenario, it must be remembered that the key priorities and identified strategies cannot be considered as static and firm. These need to be reviewed and improved upon from time to time. In this regard, a comprehensive "Strategic Plan for District Irrigation" has been prepared for Rs. 5253.37 crores.

With implementation of District Irrigation Plan, following impacts are expected.

- Present Irrigation Area (ha)-137337
- Irrigation potential created in 5 years (ha)-106822
- Total Area under Irrigation after 5 years(ha) 244159
- Present BCM -0.87, After 5 years BCM-1.3838
- Present Drip Irrigation area (Horti)-21609 ha.
- After 5 years Drip Irrigation area (Horti)-31797 ha.
- Present Sprinkler Irrigation area (Agri)-29110 ha.

- After 5 years Sprinkler Irrigation area (Agri)-226395 ha.
- Increase in ground water table and overall increase in total crop production.

Table 5.1: Strategic Action plan for Irrigation in District under PMKSY

Requirement by Departments under DIP		
SI.NO	Departments	Action Plan Amount (Rs.in lakhs)
1	Major Irrigation	196021
2	MRBC	120400
3	Minor Irrigation	77565
4	Watershed (Newly created)	12645
5	Watershed (Renovated)	705
6	Watershed (Field Bund)	12220
7	Agro forestry	4020
8	Dry Land Horticulture Plantation	6720
9	Sprinkler	34801
10	Drip irrigation (Horticulture)	6500
11	Drip irrigation (Sericulture)	1403
12	Water Supply and Sewage Treatment	51562
13	Regular Forestry	775
	Total	525337

DETAILS OF WORKS PROPOSED BY MAJOR IRRIGATION

			Strate	egic Action plan for Irrigation in District under PMKS	SY			
S. No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total ber/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of nplementatio n^/ 7 yrs)	Estimate d cost(in laks)
				Major Irrigation				
1				Upper Tunga Project				
A	Haveri,Byadagi, Hangal,Ranebennur			For Contour Canal Works		1 32477	5	55047
В	Haveri,Byadagi, Hangal,Ranebennur	MoWR	AIBP	For Micro Irrigation System		1 8570	5	45000
2	Byadgi			Guddada Mallapur Lift Irrigation Scheme		1 1461	5	811

3	Hangal			Tilluvalli Lift Irrigation Scheme (16 Tanks)	1	1012	5	5556
4	Hangal			Basapur Lift Irrigation Scheme	1	1110	5	3214
5	Hangal			Modernisation Dharma Project	1	-	5	4370
6	Byadgi			Filling up of Kaginele tank and other surrounding 21 tanks	21	-	5	4917
7	Hirekerur			Modernization of Madag Masur Tank Project	1	715	5	1500
8	Hangal			Acchikere tank filling	1	-	5	315
9	Ranebennur			Karur tank filling	1	-	5	89
10	Ranebennur			Gangapur village Doddakere tank filling	1	_	5	154
11	Haveri			Kanavalli tank filling	1	-	5	197
12	Haveri			Somanakatti village Mallamma tank filling	1	-	5	160
13	Ranebennur	MoWR	AIBP	Khanderayanahalli tank filling	1	_	5	90

14	Hangal	Huliginakoppa tank 1,2&3, Kuntanahosahalli tanks filling (5 Tanks)	5	-	5	690
15	Hangal	Doddakere-Maayapindanakatte tank filling 1	1	-	5	374
16	Hangal	Shiramapura tank 1, 2 & 3, Belagala pete tanks filling (5 Tanks)	5	-	5	439
17	Ranebennur	Ranebennur LIS & Doddakere tank filling (3 Tanks) 3	3	2428	5	16000
18	Byadgi	Asundi and surrounding 17 tanks filling 17	17	-	5	9236
19	Ranebennur	Aladakatti Lift irrigation scheme 1	1	576	5	1500
20	Hangal	Rejuvanation of 98 tanks Coming under Dharma project 98	98	-	5	11412
21	Haveri	Timmapur M.G. Lift irrigation scheme 1	1	1691	5	3300
22	Haveri	Handiganur Lift irrigation scheme 1	1	2800	5	7000
23	Haveri	Kerekoppa Lift irrigation scheme 1	1	2700	5	6900
24	Haveri	Kalakote Lift irrigation scheme 1	1	2600	5	6700

25	Ranebennur			Devaragudda tank filling (3 Tanks)	3	-	5	475
26	Ranebennur, Byadgi			Honnatti village Budapanahalli tank filling (5 Tanks)	5	-	5	800
27	Hangal			Naregal tank-1 & 2, Kodiyallapur tank, Adur tank, Shankrikoppa tank, Shigehalli tank, Singapura tank, Balambeeda nk, Kaluveyallapura tank, Kanchinegalur tank, Channapura tanks filling (11 Tanks)	11	-	5	900
28	Haveri			Hulagaddi, Kalaguddi, Guddadakatti, Musarikatti, Bendagatti, fallibail, Kiruvadi tank 1,2&3, Sarakari keri katti, Aadimani katti, Gourikatti, Kharabukerikatti tanks filling (13 Tanks)	13	-	5	375
29	Byadgi			Shidenur Lift irrigation scheme (10 Tanks)	10	-	5	6000
30	Hangal			Sheshagiri Barrage Lift irrigation scheme	1	900		2500
	TOTAL Major Irrigation		ajor Irrigation			59040		196021

			Works	under Malaprabha Right Canal Bank Proje	ct			
S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Numbe r/Capa city(cu m)	Command Area/Irrigation Potential(Ha)	Period of Implementati on^/ 7 yrs)	Estimate d cost (in laks
1	Shiggaon			Providing, Laying, Jointing and pumping for filling Hosur-Yatnahalli, Shilavant Somapur, Dundasi, Aratala, Shyadambi, Honnapur, Adavisomapur, Konnur and Tadas MI Tanks in Shiggaon Taluk of Haveri District(15 Nos. of Tanks) (From Shiggaon LIS)	9		3	2800
2	Savanur			Providing Water Supply to MI Tanks of Enroute Villages of Mantrodi, Karadagi, Madapur, Choudal, Shishuvinahal, Attigeri, Hulagur of Shiggaon Taluk Tanks from Proposed Tank Filling of Works under Savanur LIS(7 Tanks)	7		3	2300

			Construction of Bandar across Bennihalla :				
3	Shiigaon		Muttalli to Jigalur Road Cross Bhandar Cum Bridge Including Drip Irrigation Scheme	1		3	1400
4	Shiigaon		Tadas to Belligatti Road Cross Bhandar Cum Bridge Including Drip Irrigation Scheme	1		3	1400
5	Shiigaon		Shiggaon Lift Irrigation Scheme	1	3600	3	21500
6	Savanur		Savanur Lift Irrigation Scheme		15500	3	69000
7	Hangal		Hanagal Lift Irrigation (Filling of 35 No's MI Tanks from Varada River near Balmbid)	35		3	14000
8	Shiggaon		Drip Irrigation project &Construction of Bhandara's for Bennihalla in Shiggaon Taluka	1		3	8000
		TOTAL			19100		120400

Name of the Blocks/Sub Districts	Ministry/	Component	Activity	Number/Capacity(c	Area/Irrigation	Implementat	Estimate d cost (in laks)					
Shiggaon				19	1488	5	5600					
Savanur				32	2152	5	4410					
Hangal		Har khet ko		54	14404	5	28720					
Haveri	MoWR	pani	Surface Minor Irrigation	40	3684	5	13340					
Byadagi				33	1438	5	8420					
Hirekerur				20	2318	5	7650					
Ranebennur				34	3198	5	9425					
	TOTAL			232	28682		77565					

Details of Works by Minor Irrigation

S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimated cost (in laks)
1	Ranebennur	MoWR	Har khet ko pani	Construction of Barrage cum Bridge across Hirehalla near Halageri village in Ranebennur Tq Haveri Dt	1	70	5	150.00
2	Ranebennur	MoWR	Har khet ko pani	Construction of Bandhara across halla near Itagi village in Ranebennur Tq Haveri Dt	1	30	5	80.00
3	Ranebennur	MoWR	Har khet ko pani	Construction of Banhara across halla near Benakankonda village in Ranebennur Tq Haveri Dt	1	22	5	80.00
4	Ranebennur	MoWR	Har khet ko pani	Construction of Banhara across Kusagur nala Site n0-1 near Harogoppa village in Ranebennur Tq Haveri Dt	1	38	5	80.00
5	Ranebennur	MoWR	Har khet ko pani	Construction of Banhara across Kusagur nala Site nO-2 near Harogoppa village in Ranebennur Tq Haveri Dt	1	36	5	100.00
6	Ranebennur	MoWR	Har khet ko pani	Construction of Barrage cum Bridge across halla near Yalabadagi village in Ranebennur Tq Haveri Dt	1	95	5	250.00

7	Ranebennur	MoWR	Har khet ko pani	Construction of Barrage cum Bridge across Santedari halla near Billahalli village in Ranebennur Tq Haveri Dt	1	56	5	150.00
8	Ranebennur	MoWR	Har khet ko pani	Construction of Bandhara across halla near Billahalli village in Ranebennur Tq Haveri Dt	1	40	5	85.00
9	Ranebennur	MoWR	Har khet ko pani	Improvements to existing Sunkalbedari M I tank in Ranebennur Tq Haveri Dt (Desilting of tank, Improvements to Canal, Tank Bunds, weist wier and Feedar canals)	1	158	5	500.00
10	Ranebennur	MoWR	Har khet ko pani	Improvements to Honnatti Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	62	5	500.00
11	Ranebennur	MoWR	Har khet ko pani	Improvements to Benakanakonda Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	19	5	400.00
12	Ranebennur	MoWR	Har khet ko pani	Improvements to Nukapura Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal, tank Bund ,weist wier and Feedar canals)	1	51	5	400.00

13	Ranebennur	MoWR	Har khet ko pani	Improvements to Hanmapura Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	62	5	250.00
14	Ranebennur	MoWR	Har khet ko pani	Improvements to Melderi Tank in Ranebennur Tq Haveri Dt (Desilting of tank, Improvements to Canal, TankBund, weist wier and Feedar canals)	1	131	5	500.00
15	Ranebennur	MoWR	Har khet ko pani	Improvements to Chalageri Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal , Tank Bund ,weist wier and Feedar canals)	1	43	5	250.00
16	Ranebennur	MoWR	Har khet ko pani	Improvements to Karur Tank in Ranebennur Tq Haveri Dt (Desilting of tank, Improvements to Canal, Tank Bund, weist wier and Feedar canals)	1	31	5	250.00
17	Ranebennur	MoWR	Har khet ko pani	Improvements to Aremallapura Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal , Tank Bund ,weist wier and Feedar canals)	1	54	5	450.00
18	Ranebennur	MoWR	Har khet ko pani	Improvements exsiting ZP tank and filling to Khandarayanhalli tank in Ranebennur Taluk Haveri Dist	1	40	5	300.00

19	Ranebennur	MoWR	Har khet ko pani	Improvements to Kudarihal Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal , Tank Bund ,weist wier and Feedar canals)	1	110	5	300.00
20	Ranebennur	MoWR	Har khet ko pani	Improvements to Gangapura Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal , Tank Bund ,weist wier and Feedar canals)	1	51	5	250.00
21	Ranebennur	MoWR	Har khet ko pani	Improvements to KamdodTank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	26	5	250.00
22	Ranebennur	MoWR	Har khet ko pani	Improvements to Gudagur Tank in Ranebennur Tq Haveri Dt (Desilting of tank , Improvements to Canal , Tank Bund ,weist wier and Feedar canals)	1	540	5	400.00
23	Ranebennur	MoWR	Har khet ko pani	Improvements to Doddakere Tank in Ranebennur Town Haveri Dt (Desilting of tank,Improvements of tank Bund weist wier ,Improvements to Ground water and Beautification)	1	157	5	1500.00
24	Ranebennur	MoWR	Har khet ko pani	Rejuvination of Lift irrigation Scheme of Ekalaspura in Ranebennur Tq Haveri Dist	1	556	5	300.00

25	Ranebennur	MoWR	Har khet ko pani	Rejuvination of Lift irrigation Scheme of Medleri in Ranebennur Tq Haveri Dist	1	72	5	200.00
26	Ranebennur	MoWR	Har khet ko pani	Improvements to Hiremagnur Barrage in Ranebennur Taluk Haveri Dist (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	107	5	100.00
27	Ranebennur	MoWR	Har khet ko pani	Improvements to Kudapali Barrage in Ranebennur Taluk Haveri Dist(Desilting of tank Bed ,Improvements to approach roads and protection works)	1	90	5	100.00
28	Ranebennur	MoWR	Har khet ko pani	Improvements to Nittur Barrage in Ranebennur Taluk Haveri Dist (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	54	5	150.00
29	Ranebennur	MoWR	Har khet ko pani	Improvements to Kuppeluru Barrage in Ranebennur Taluk Haveri Dist (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	125	5	150.00
30	Ranebennur	MoWR	Har khet ko pani	Improvements to existing nala(Feedar Canal) from Asundi tank to Gudagur tank upto River in Ranebennur Taluk Haveri Dist	1	50	5	300.00
31	Ranebennur	MoWR	Har khet ko pani	Improvements to Aladakatti/Nittur Feedar Canal upto Kumadvati River in Ranebennur Taluk Haveri Dist	1	50	5	250.00
32	Ranebennur	MoWR	Har khet ko pani	Improvements to Honnattai Nala Tank in Ranebennur Taluk Haveri Dist	1	103	5	100.00

33	Ranebennur	MoWR	Har khet ko pani	Improvements to Sunakalbidari Nala (Feeder canal) in Ranebennur Taluk Haveri Dist	1	0	5	100.00
34	Ranebennur	MoWR	Har khet ko pani	Construction of Barrage cum Bridge across Asundi nala near Hullatti Tanda in Ranebennur Tq Haveri Dt	1	70	5	200.00
		TOTAL			34	3198		9425
1	Haveri	MoWR	Har khet ko pani	Construction of Checkdam near Karjagi Site No-3 village in Haveri Tq Haveri Dt	1	22	5	50.00
2	Haveri	MoWR	Har khet ko pani	Construction of Checkdam near Karjagi Site No-4 village in Haveri Tq Haveri Dt	1	22	5	50.00
3	Haveri	MoWR	Har khet ko pani	Construction of Checkdam near Bukodihalli village in Haveri Tq Haveri Dt	1	22	5	50.00
4	Haveri	MoWR	Har khet ko pani	Construction of New Bridge cum Barrage across Varada river near Halagi village in Haveri Tq Haveri Dt	1	210	5	700.00
5	Haveri	MoWR	Har khet ko pani	Construction of Bandhara across halla near Thimmanahalli village in Haveri Tq Haveri Dt	1	30	5	100.00
6	Haveri	MoWR	Har khet ko pani	Construction of Bandhara across halla near Gudur village in Haveri Tq Haveri Dt	1	25	5	60.00
7	Haveri	MoWR	Har khet ko pani	Construction of Bandhara across halla near Bommanakatti village in Haveri Tq Haveri Dt(Hosaritti-Bommanakatti road side)	1	32	5	100.00

8	Haveri	MoWR	Har khet ko pani	Construction of Bandhara across halla near Devihosur (Site No.2) village in Haveri Tq Haveri Dt.	1	32	5	60.00
9	Haveri	MoWR	Har khet ko pani	Improvements to Negaluru (site-1) tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	52	5	500.00
10	Haveri	MoWR	Har khet ko pani	Improvements to Negaluru (site-2) tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Tank Bund ,weist wier and Feedar canals)	1	67	5	400.00
11	Haveri	MoWR	Har khet ko pani	Improvements to Guttal tank in Haveri Tq Haveri Dt (Desilting of tank, Improvements to Canal Tank Bund, weist wier and Feedar canals)	1	93	5	500.00
12	Haveri	MoWR	Har khet ko pani	Improvements to Kerekoppa tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	59	5	300.00
13	Haveri	MoWR	Har khet ko pani	Improvements to Kanavalli tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	42	5	400.00
14	Haveri	MoWR	Har khet ko pani	Improvements to Agadi tank in Haveri Tq Haveri Dt (Desilting of tank, Improvements to Canal Bund, weist wier and Feedar canals)	1	119	5	300.00

15	Haveri	MoWR	Har khet ko pani	Improvements to Hommaradi tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	28	5	300.00
16	Haveri	MoWR	Har khet ko pani	Improvements to Hirelingadhalli tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	42	5	400.00
17	Haveri	MoWR	Har khet ko pani	Improvements to Kabbur tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	51	5	300.00
18	Haveri	MoWR	Har khet ko pani	Improvements to Kerimattihalli tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	25	5	400.00
19	Haveri	MoWR	Har khet ko pani	Improvements to Devihosur tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	44	5	300.00
20	Haveri	MoWR	Har khet ko pani	Improvements to Kulenur tank in Haveri Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	25	5	250.00
21	Haveri	MoWR	Har khet ko pani	Improvements to Heggeri tank in Haveri Tq Haveri Dt (Desilting of tank,Improvements of Bund, weist wier , Improvements Ground water and storage capacity)	1	118	5	4000.00

22	Haveri	MoWR	Har khet ko pani	Improvements to Karjagi Bridge cum Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	114	5	150.00
23	Haveri	MoWR	Har khet ko pani	Improvements to Hiremarlahalli Bridge cum Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	120	5	150.00
24	Haveri	MoWR	Har khet ko pani	Improvements to Hosaratti Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	120	5	150.00
25	Haveri	MoWR	Har khet ko pani	Improvements to Mardur Bridge cum Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	83	5	250.00
26	Haveri	MoWR	Har khet ko pani	Improvements to Neerlagi Bridge cum Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	138	5	200.00
27	Haveri	MoWR	Har khet ko pani	Improvements to Belavigi Bridge cum Barrage in Haveri Tq Haveri Dt (Desilting of tank Bed ,Improvements to approach roads and protection works)	1	110	5	200.00
28	Haveri	MoWR	Har khet ko pani	Rejuvination of Agasanamatti Lift irrigation Scheme in Haveri Tq Haveri Dist	1	423	5	200.00
29	Haveri	MoWR	Har khet ko pani	Rejuvination of Havanur Lift irrigation Scheme in Haveri Tq Haveri Dist	1	758	5	300.00

30	Haveri	MoWR	Har khet ko pani	Rejuvination of Gourapura Lift irrigation Scheme in Haveri Tq Haveri Dist	1	243	5	200.00
31	Haveri	MoWR	Har khet ko pani	Rejuvination of Meundi Lift irrigation Scheme for filling of Kerikoppa Minor irrigation Tank in Kerikoppa village in Haveri Tq Haveri Dist	1	59	5	1000.00
32	Haveri	MoWR	Har khet ko pani	Improvements to Feedar Canal from Hommaradi village to Heggeri tank in Haveri Taluk Haveri Dist	1	59	5	100.00
33	Haveri	MoWR	Har khet ko pani	Improvements to Feedar Canal (Existing nala) near Katenahalli village in Haveri Taluk Haveri Dist	1	59	5	150.00
34	Haveri	MoWR	Har khet ko pani	Improvements to Feedar Canal (Existing nala) near Agadi village in Haveri Taluk Haveri Dist	1	59	5	100.00
35	Haveri	MoWR	Har khet ko pani	Construction of Bandara near Katenahalli (site no 3) village in Haveri Tq Haveri Dt	1	40	5	60.00
36	Haveri	MoWR	Har khet ko pani	Construction of Bandara near Agadi(site no 4) village in Haveri Tq Haveri Dt	1	42	5	60.00
37	Haveri	MoWR	Har khet ko pani	Improvements to Kesarahalli Nala in Haveri Tq Haveri Dt (Desilting of Nala Bed and protection works)	1	20	5	100.00
38	Haveri	MoWR	Har khet ko pani	Improvements to feeder canal for Kanavalli MI tank in Haveri Tq Haveri Dt	1	40	5	150.00

39	Haveri	MoWR	Har khet ko pani	Improvements to Thimmenhalli nala near Kanavlli village in Haveri Tq Haveri Dt	1	38	5	100.00
40	Haveri	MoWR	Har khet ko pani	Improvements to Nala near karjagi(Feeder canal from Haveri) in Haveri Tq Haveri Dt	1	0	5	200.00
		TOTAL			40	3684		13340
1	Byadagi	MoWR	Har khet ko pani	Construction of Bandhara across halla near Timmenhalli Village in Tq Byadagi, Dist Haveri	1	21	5	60.00
2	Byadagi	MoWR	Har khet ko pani	Construction of Bandhara across halla near Bannhattii Village in Tq Byadagi, Dist Haveri	1	25	5	60.00
3	Byadagi	MoWR	Har khet ko pani	Construction of Bandhara across halla near Belakeri(site No 4) Village in Tq Byadagi, Dist Haveri	1	22	5	60.00
4	Byadagi	MoWR	Har khet ko pani	Construction of Checkdam across halla near Kengonda village in Byadagi Tq Haveri Dt	1	24	5	60.00
5	Byadagi	MoWR	Har khet ko pani	Construction of Checkdam across halla near Budapanhalli village in Byadagi Tq Haveri Dt	1	23	5	60.00
6	Byadagi	MoWR	Har khet ko pani	Construction of Checkdam across halla near Kaginelli village in Byadagi Tq Haveri Dt	1	25	5	60.00
7	Byadagi	MoWR	Har khet ko pani	Construction of Checkdam across halla near Nellikoppa village in Byadagi Tq Haveri Dt	1	24	5	60.00
8	Byadagi	MoWR	Har khet ko pani	Improvements to existing M I kengonda tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Tank	1	60	5	600.00

				Bund , filling of Tank weist wier and Feedar canals)				
9	Byadagi	MoWR	Har khet ko pani	Improvements to Kasambi M.I tank in Byadagi Tq Haveri Dt (Desilting of tank, Improvements to Canal Bund, weist wier and Feedar canals)	1	45	5	400.00
10	Byadagi	MoWR	Har khet ko pani	Improvements to Kerudi, SyNo- 15 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	43	5	400.00
11	Byadagi	MoWR	Har khet ko pani	Improvements to Sudambi Sy No-69 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	33	5	350.00
12	Byadagi	MoWR	Har khet ko pani	Improvements to Sudambi Sy No-97 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	32	5	350.00
13	Byadagi	MoWR	Har khet ko pani	Improvements to Sudambi Sy No-163 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund , weist wier and Feedar canals)	1	30	5	350.00
14	Byadagi	MoWR	Har khet ko pani	Improvements to Sidenur,Sy NO-271 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal, Tank Bund ,weist wier and Feedar canals)	1	35	5	350.00

15	Byadagi	MoWR	Har khet ko pani	Improvements to Chikkabasur tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	67	5	150.00
16	Byadagi	MoWR	Har khet ko pani	Improvements to Chikkahalli,Sy NO-84 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	56	5	250.00
17	Byadagi	MoWR	Har khet ko pani	Improvements to Chikkanaji,Sy NO-102 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	48	5	250.00
18	Byadagi	MoWR	Har khet ko pani	Improvements to Hirehalli,Sy NO-176 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	30	5	350.00
19	Byadagi	MoWR	Har khet ko pani	Improvements to Hirehalli,Sy NO-58/67 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	55	5	350.00
20	Byadagi	MoWR	Har khet ko pani	Improvements to Kaginalle ,Sy NO-62 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	84	5	450.00
21	Byadagi	MoWR	Har khet ko pani	Improvements to Kummur ,Sy NO-184 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	79	5	450.00

22	Byadagi	MoWR	Har khet ko pani	Improvements to Mattur ,Sy NO-86 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	27	5	350.00
23	Byadagi	MoWR	Har khet ko pani	Improvements to Bidarakatti, Sy NO-104 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	31	5	350.00
24	Byadagi	MoWR	Har khet ko pani	Improvements to Tadas Sy NO-70 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	32	5	350.00
25	Byadagi	MoWR	Har khet ko pani	Improvements to Tadas Sy NO- 123 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	33	5	250.00
26	Byadagi	MoWR	Har khet ko pani	Improvements to Attikatti Sy NO-65tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	26	5	250.00
27	Byadagi	MoWR	Har khet ko pani	Improvements to Nandihalli tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	157	5	250.00
28	Byadagi	MoWR	Har khet ko pani	Improvements to Anur Sy NO- 59 tank in Byadagi Tq Haveri Dt (Desilting of tank , Improvements to Canal Bund ,weist wier and Feedar canals)	1	25	5	250.00

29	Byadagi	MoWR	Har khet ko pani	Improvements to Feedar Canal (Existing nala) near Alalageri village in Byadagi Taluk Haveri Dist	1	59	5	100.00
30	Byadagi	MoWR	Har khet ko pani	Improvements to Feedar Canal(Existing nala) near from Kaginele to Kerimattihalli village in Byadagi Taluk Haveri Dist	1	59	5	200.00
31	Byadagi	MoWR	Har khet ko pani	Improvements to Feedar Canal of Kasambi tank in Byadagi Taluk Haveri Dist	1	50	5	200.00
32	Byadagi	MoWR	Har khet ko pani	Improvements to Bisalalli nala in Byadagi Taluk Haveri Dist	1	40	5	200.00
33	Byadagi	MoWR	Har khet ko pani	Improvements to Kalledevaru nala in Byadagi Taluk Haveri Dist	1	40	5	200.00
		TOTAL			33	1438		8420
1	Savanur	MoWR	Har khet ko pani	Improvements to Bhajirayanahalla Via Savur, Challala, Baradur village in Savanur Taluk Haveri District.	1	100	5	200.00
1 2	Savanur			Bhajirayanahalla Via Savur, Challala, Baradur village in			5	
		MoWR	ko pani Har khet	Bhajirayanahalla Via Savur, Challala, Baradur village in Savanur Taluk Haveri District. Construction of barrage across gundur Halla near Hosaniralagi village in Savnur taluk Haveri	1	100		200.00
2	Savanur	MoWR MoWR	ko pani Har khet ko pani Har khet	Bhajirayanahalla Via Savur, Challala, Baradur village in Savanur Taluk Haveri District. Construction of barrage across gundur Halla near Hosaniralagi village in Savnur taluk Haveri Dist Construction of Chek Dam near Dombaramattur village in	1	100	5	200.00

6	Savanur	MoWR	Har khet ko pani	Construction of Chek Dam across halla near Yalavagi village in Savanur taluk Haveri Dist.	1	35	5	40.00
7	Savanur	MoWR	Har khet ko pani	Construction of barrage across halla near Mantrodi village in Savanur taluk Haveri Dist	1	50	5	50.00
8	Savanur	MoWR	Har khet ko pani	Construction of Chek Dam near Tallihalli village in Savanur taluk Haveri Dist.	1	35	5	40.00
9	Savanur	MoWR	Har khet ko pani	Construction of Barrage across Bajirayanahalla Near Halemannangi Village in Savanur Taluk Haveri District.	1	50	5	100.00
10	Savanur	MoWR	Har khet ko pani	Construction of BCB across Halla Near Kalivala Village in Savanur Taluk Haveri District.	1	60	5	115.00
11	Savanur	MoWR	Har khet ko pani	Construction of Barrage across Halla Near Tondur Village in Savanur Taluk Haveri District.	1	40	5	45.00
12	Savanur	MoWR	Har khet ko pani	Construction of Barrage across Halla Near Teggihalli Village in Savanur Taluk Haveri District.	1	40	5	50.00
13	Savanur	MoWR	Har khet ko pani	Construction of Chek Dam near Mellagatti village in Savanur taluk Haveri Dist.	1	35	5	35.00
14	Savanur	MoWR	Har khet ko pani	Improvements to Siddapura Tank Sy.No 192 and feeder canal in Savanur Taluk Haveri District	1	55	5	200.00
15	Savanur	MoWR	Har khet ko pani	Improvements to Kadakol Tank and feeder canal in Savanur Taluk Haveri District	1	60	5	150.00

16	Savanur	MoWR	Har khet ko pani	Improvements to Hattimattur Tank Sy. No 273 and feeder canal in Savanur Taluk Haveri District	1	52	5	200.00
17	Savanur	MoWR	Har khet ko pani	Improvements to Yalavagi Tank and feeder canal in Savanur Taluk Haveri District	1	40	5	150.00
18	Savanur	MoWR	Har khet ko pani	Improvements to Shirabadagi Tank and feeder canal in Savanur Taluk Haveri District	1	31	5	120.00
19	Savanur	MoWR	Har khet ko pani	Improvements to Kalivala Tank and feeder canal in Savanur Taluk Haveri District	1	16	5	130.00
20	Savanur	MoWR	Har khet ko pani	Improvements to Motitalab feeder channel in Savnur taluk Haveri Dist	1	200	5	500.00
21	Savanur	MoWR	Har khet ko pani	Providing Sprikler Irrigation to Savnur and Huralikoppi farmers from Motitalab lift Irrigation scheame in Savnur taluk haveri Dist	1	200	5	500.00
22	Savanur	MoWR	Har khet ko pani	Improvements to Madapura Tank & Feeder Canal Sy. No 132 in Savanur Taluk Haveri District	1	18	5	100.00
23	Savanur	MoWR	Har khet ko pani	Improvements to Mantagani Lift Irrigation scheame in Savanur taluk Haveri Dist.	1	110	5	200.00
24	Savanur	MoWR	Har khet ko pani	Improvements to Kunimenahalli Lift Irrigation scheame in Savanur taluk Haveri Dist.	1	100	5	200.00
25	Savanur	MoWR	Har khet ko pani	Providing lift Irrigation Scheme from Nandihalli Barrage To Nandihalli Village in Savanur Taluka, Haveri District.	1	60	5	100.00

26	Savanur	MoWR	Har khet ko pani	Providing lift Irrigation Scheme from Chikkabudihala Barrage To Chikkabudihala Village in Savanur Taluka, Haveri District.	1	70	5	120.00
27	Savanur	MoWR	Har khet ko pani	Providing lift Irrigation Scheme from Fakkiranandihalli Barrage To Fakkiranandihalli Village in Savanur Taluka, Haveri District.	1	65	5	100.00
28	Savanur	MoWR	Har khet ko pani	Providing lift Irrigation Scheme from Challal Barrage To Challal Village in Savanur Taluka, Haveri District.	1	60	5	100.00
29	Savanur	MoWR	Har khet ko pani	Providing lift Irrigation Scheme from Baradur Barrage To Baradur Village in Savanur Taluka, Haveri District.	1	60	5	100.00
30	Savanur	MoWR	Har khet ko pani	Improvements to Halla from Gundur to Fakkiranadihalli village in Savanur taluka, Haveri District.	1	200	5	300.00
31	Savanur	MoWR	Har khet ko pani	Improvements to Halla near Teggihalli village in Savanur taluka, Haveri District.	1	60	5	100.00
32	Savanur	MoWR	Har khet ko pani	Improvements to Halla near Jellapura village in Savanur taluka, Haveri District.	1	80	5	150.00
		TOTAL			32	2152		4410
1	Hirekerur	MoWR	Har khet ko pani	Construction of BCB across Kumadvati river Near Masur Village in Hirekerur Taluk Haveri District.	1	180	5	400.00
2	Hirekerur	MoWR	Har khet ko pani	Construction of BCB across Kumadvati river Near Hiremoraba Village in Hirekerur Taluk Haveri District.	1	160	5	400.00

3	Hirekerur	MoWR	Har khet ko pani	Construction of BCB across Kumadvati river Near Rattihalli Village in Hirekerur Taluk Haveri District.	1	180	5	450.00
4	Hirekerur	MoWR	Har khet ko pani	Construction of BCB across Kumadvati river Near Hiremadapur Village in Hirekerur Taluk Haveri District.	1	140	5	450.00
5	Hirekerur	MoWR	Har khet ko pani	Constuction of Jokanala Bhagavati Tank Waste Weir in Hirekerur Taluk Haveri District	1	80	5	500.00
6	Hirekerur	MoWR	Har khet ko pani	Improvements to Hirekerur Tank Sy.No294 in Hirekerur taluk Haveri District.	1	128	5	400.00
7	Hirekerur	MoWR	Har khet ko pani	Improvements to Javalli Tank Sy.No58 in Hirekerur taluk Haveri District.	1	45	5	100.00
8	Hirekerur	MoWR	Har khet ko pani	Improvements to Madlur Tank Sy.No69 in Hirekerur taluk Haveri District.	1	98	5	200.00
9	Hirekerur	MoWR	Har khet ko pani	Improvements to Satenahalli Tank Sy.No40 in Hirekerur taluk Haveri District.	1	35	5	200.00
10	Hirekerur	MoWR	Har khet ko pani	Improvements to Yallapur Tank Sy.No43 in Hirekerur taluk Haveri District.	1	68	5	150.00
11	Hirekerur	MoWR	Har khet ko pani	Improvements to Dammalli Tank Sy.No 63 in Hirekerur taluk Haveri District.	1	93	5	100.00

12	Hirekerur	MoWR	Har khet ko pani	Improvements to Mavintop Tank in Hirekerur taluk Haveri District.	1	36	5	100.00
13	Hirekerur	MoWR	Har khet ko pani	Improvements to Kod Tank S.Y No 213 in Hirekerur taluk Haveri District.	1	90	5	200.00
14	Hirekerur	MoWR	Har khet ko pani	Improvements to Chikkerur Doddakere Sy.No 192 feeder canal in Hirekerur taluk Haveri District.	1	105	5	300.00
15	Hirekerur	MoWR	Har khet ko pani	Improvements to Hirekerur feeder canal in Hirekerur taluk Haveri District.	1	80	5	200.00
16	Hirekerur	MoWR	Har khet ko pani	Improvements to Makari Tank Sy.No94 in Hirekerur taluk Haveri District.	1	35	5	100.00
17	Hirekerur	MoWR	Har khet ko pani	Improvements to Purkondikoppa Tank Sy.No.147 in Hirekerur taluk Haveri District.	1	65	5	200.00
18	Hirekerur	MoWR	Har khet ko pani	Providing Lift Irrigation Scheme from Kumadvati river To Hirekerur Hirekere and other tanks Near Madagamasur Village in Hirekerur Taluka, Haveri District.	1	400	5	2500.00
19	Hirekerur	MoWR	Har khet ko pani	Construction of Check Dam/pickup across Nagarahalla near Yallapur village in Hirekerur Taluka, Haveri District.	1	150	5	500.00

20	Hirekerur	MoWR	Har khet ko pani	Improvements to Guddadamadapur Tank in Hirekerur taluk Haveri District.	1	150	5	200.00
		TOTAL			20	2318		7650
1	Hangal	MoWR	Har khet ko pani	Construction of BCB across Varada river Near Varadi- Benchalli Village in Haveri Haveri District.	1	245	5	600.00
2	Hangal	MoWR	Har khet ko pani	Construction of barrage cum bridge across varada river near somapur village in Hangal taluk Haveri Dist	1	200	5	800.00
3	Hangal	MoWR	Har khet ko pani	Construction of barrage across nagarahalla near Inamlakamapur village in Hangal taluk Haveri Dist	1	80	5	300.00
4	Hangal	MoWR	Har khet ko pani	Construction of barrage cum bridge across Dharma river near Hombli village in Hangal taluk Haveri Dist	1	80	5	200.00
5	Hangal	MoWR	Har khet ko pani	Construction of barrage cum bridge across Dharma river near Hangal (Chinakondi) in Hangal taluk Haveri Dist	1	50	5	200.00
6	Hangal	MoWR	Har khet ko pani	Construction of Series of Chek Dam to Niralagi Halla and desilting of Nala in Hangal taluk Haveri Dist	1	200	5	800.00
7	Hangal	MoWR	Har khet ko pani	Improvements to Anikere tank sy no.174 and feeder from anikere to achgeri feeder Channel in Hangal taluk Haveri Dist	1	140	5	500.00
8	Hangal	MoWR	Har khet ko pani	Improvements to Bimankere and Battgundi (Perculation tank) near Somapur village in Hangal taluk Haveri Dist	1	20	5	150.00

9	Hangal	MoWR	Har khet ko pani	Improvements to Gadiyankanahalli Mavinakatti Tank Sy.No 75 in Hangal taluk Haveri Dist	1	30	5	120.00
10	Hangal	MoWR	Har khet ko pani	Improvements to series of MI tank in Koppagondanakoppa village in Hangal taluk Haveri Dist.	1	210	5	500.00
11	Hangal	MoWR	Har khet ko pani	Improvements to Herur Heggeri Tank SY.No 01 in Hangal taluk Haveri Dist.	1	60	5	100.00
12	Hangal	MoWR	Har khet ko pani	Improvements to Hiriyar feeder channel from Tilavalli to Tumarikoppa village in Hangal taluk Haveri Dist	1	160	5	500.00
13	Hangal	MoWR	Har khet ko pani	Improvements to Huliginahalli feeder channel in Hangal taluk Haveri Dist	1	50	5	400.00
14	Hangal	MoWR	Har khet ko pani	Improvements to Battigeri - Belagalpete feeder channel in Hangal taluk Haveri Dist	1	61	5	500.00
15	Hangal	MoWR	Har khet ko pani	Improvements to Karigudari feeder channel from Basapura tank in Hangal taluk Haveri Dist	1	150	5	400.00
16	Hangal	MoWR	Har khet ko pani	Improvements to Zadthi feeder channel in Hangal taluk Haveri Dist	1	75	5	200.00
17	Hangal	MoWR	Har khet ko pani	Providing to Sprinkler Irrigation system to Somapur, Vasan and Basapur village farmers from Vasan Lift Irrigation sceame in Hangal taluk Haveri Dist	1	347	5	500.00
18	Hangal	MoWR	Har khet ko pani	Construction of Shirgoda First stage Lift Irrigation scheme to Varada river in Hangal taluk Haveri Dist	1	1800	5	3000.00

19	Hangal	MoWR	Har khet ko pani	Construction of Shirgoda Second stage Lift Irrigation scheme to Varada river in Hangal taluk Haveri Dist	1	1200	5	2000.00
20	Hangal	MoWR	Har khet ko pani	Improvements to Savasagi lower feeder canal and upper feeder canal (Nala trimming) in Hangal Taluka, Haveri District.	1	195	5	600.00
21	Hangal	MoWR	Har khet ko pani	Construction of Kerekyatanahalli (Kusnur) Lift Irrigation scheame to Varada river in Hangal taluk Haveri Dist	1	260	5	650.00
22	Hangal	MoWR	Har khet ko pani	Construction of Laksmipur Lift Irrigation schem to Dharma river in Hangal taluk Haveri Dist	1	160	5	400.00
23	Hangal	MoWR	Har khet ko pani	Improvements to Belagal feeder channel from Bommanahalli tank in Hangal taluk Haveri Dist	1	150	5	200.00
24	Hangal	MoWR	Har khet ko pani	Improvements to Kuntanahosalli feeder canal (Nala trimming) in Hangal Taluka, Haveri District.	1	73	5	400.00
25	Hangal	MoWR	Har khet ko pani	Desilting of Malligar halla in Hangal Taluka, Haveri District.	1	140	5	1000.00
26	Hangal	MoWR	Har khet ko pani	Constrcuction of Sheshagiri second stage Lift irrigation scheame in Hangal tq Haveri dist.	1	160	5	400.00
27	Hangal	MoWR	Har khet ko pani	Improvements to Belavatti Tank and feeder canal to Belagalpet Tank Sy.No 150 (Nala trimming) in Hangal Taluka, Haveri District.	1	130	5	500.00
28	Hangal	MoWR	Har khet ko pani	Improvements To Kalakeri Tank Feeder Canal in Hangal tq Haveri dist.	1	52	5	100.00

29	Hangal	MoWR	Har khet ko pani	Constrcuction of Huligaddi- Kalaguddi Lift irrigation scheame in Hangal tq Haveri dist.	1	1650	5	3000.00
30	Hangal	MoWR	Har khet ko pani	Constrcuction of Barrage Across Halla near Chikkeri Hosalli Village and improvements to feeder Nala in Hangal Taluka, Haveri District.	1	1650	5	200.00
31	Hangal	MoWR	Har khet ko pani	Improvements to Dosager feeder canal in Kalaguddi village in Hangal Taluk, Haveri District.	1	40	5	300.00
32	Hangal	MoWR	Har khet ko pani	Improvements to Hallibail village feeder canal starting from Hurali MI Tank.	1	60	5	150.00
33	Hangal	MoWR	Har khet ko pani	Construction of LIS near Adur village in Hangal Taluka, Haveri District.	1	1200	5	2000.00
34	Hangal	MoWR	Har khet ko pani	Construction Of Bommanahalli Lift irrigation Scheme in Hangal Taluka, Haveri District.	1	1800	5	3000.00
35	Hangal	MoWR	Har khet ko pani	Improvements to Yallur Tank and Nidasangi feeder canal in Hangal Taluka, Haveri District.	1	91	5	500.00
36	Hangal	MoWR	Har khet ko pani	Improvements to Basapur Doddakere tank Sy.No 13 in Hangal Taluka, Haveri District.	1	46	5	100.00
37	Hangal	MoWR	Har khet ko pani	Improvements to Kambalageri Tank and feeder canal in Hangal taluk Haveri Dist	1	32	5	200.00
38	Hangal	MoWR	Har khet ko pani	Construction of Tavaragoppa lift Irrigation Scheme in Hangal Taluka, Haveri District.	1	80	5	800.00
39	Hangal	MoWR	Har khet ko pani	Construction of Yallur lift Irrigation Scheme from Basapur halla in Hangal Taluka, Haveri District.	1	150	5	800.00

40	Hangal	MoWR	Har khet ko pani	Improvements to Hirebasur Battigere,Hirekere Tank in Hangal Taluka, Haveri District.	1	69	5	200.00
41	Hangal	MoWR	Har khet ko pani	Improvements to Guddadamattihalli, Tank in Hangal Taluka, Haveri District.	1	60	5	100.00
42	Hangal	MoWR	Har khet ko pani	Improvements to Uppanasi Hirekere Tank Sy.No 256 in Hangal Taluka, Haveri District.	1	94	5	100.00
43	Hangal	MoWR	Har khet ko pani	Improvements to Uppanasi Bendigeri Tank Sy.No 140 in Hangal Taluka, Haveri District.	1	49	5	100.00
44	Hangal	MoWR	Har khet ko pani	Construction of Chek Dam near Uppanasi village in Savanur taluk Haveri Dist.	1	60	5	20.00
45	Hangal	MoWR	Har khet ko pani	Construction of Chek Dam near Herur village in Savanur taluk Haveri Dist.	1	75	5	20.00
46	Hangal	MoWR	Har khet ko pani	Construction of Chek Dam near Chikkahullal village in Savanur taluk Haveri Dist.	1	84	5	20.00
47	Hangal	MoWR	Har khet ko pani	Construction of Chek Dam near Allapur village in Savanur taluk Haveri Dist.	1	75	5	20.00
48	Hangal	MoWR	Har khet ko pani	Construction of Chek Dam near Marambid village in Savanur taluk Haveri Dist.	1	78	5	20.00

49	Hangal	MoWR	Har khet ko pani	Improvements to Hasanabadi Tanglikere in Hangal Taluka, Haveri District.	1	71	5	120.00
50	Hangal	MoWR	Har khet ko pani	Improvements to Gudgudi Tank Sy.No49 in Hangal Taluka, Haveri District.	1	54	5	80.00
51	Hangal	MoWR	Har khet ko pani	Improvements to Hirebasur Hirekere Sy.No82 in Hangal Taluka, Haveri District.	1	69	5	120.00
52	Hangal	MoWR	Har khet ko pani	Improvements to Somasagar Ramanakatti Tank Sy.No62 in Hangal Taluka, Haveri District.	1	48	5	110.00
53	Hangal	MoWR	Har khet ko pani	Improvements to Byagavadi Aladakatti Tank Sy.No 107 in Hangal Taluka, Haveri District.	1	61	5	120.00
54	Hangal	MoWR	Har khet ko pani	Construction Of Lift Irrigation scheme for filling of Tanks in Herur village Hangal Taluk Haveri District.	1	180	5	500.00
		TOTAL			54	14404		28720
1	Shiggaon	MoWR	Har khet ko pani	Beautification & Improvements to Kalyana Tank in Shiggaon Taluk Haveri District	1	30	5	300.00
2	Shiggaon	MoWR	Har khet ko pani	Improvements to Madli Goudagatti Tank Sy.No 48 in Shiggaon Taluk Haveri District	1	50	5	100.00
3	Shiggaon	MoWR	Har khet ko pani	Improvements to Madli Kavalikatti Tank Sy.No 48 in Shiggaon Taluk Haveri District	1	30	5	100.00
4	Shiggaon	MoWR	Har khet ko pani	Improvements to Shyadambi Doddakere Tank Sy.No 89 in Shiggaon Taluk Haveri District	1	40	5	100.00

5	Shiggaon	MoWR	Har khet ko pani	Beautification & Improvements to Naganur Tank in Shiggaon Taluk Haveri District	1	40	5	200.00
6	Shiggaon	MoWR	Har khet ko pani	Improvements to Feeder Canal from Konanakere Tank To Shyabala Tank in Shiggaon Taluk Haveri District	1	36	5	100.00
7	Shiggaon	MoWR	Har khet ko pani	Improvements to Feeder Canal from Konanakere Tank To Torur Tank in Shiggaon Taluk Haveri District	1	66	5	200.00
8	Shiggaon	MoWR	Har khet ko pani	Improvements to Feeder Canal from yattinahalli Tank To Tadas Tank in Shiggaon Taluk Haveri District	1	28	5	500.00
9	Shiggaon	MoWR	Har khet ko pani	Improvements to Andalagi Tank Sy.No 139 Feeder Canal in Shiggaon Taluk Haveri District.	1	90	5	150.00
10	Shiggaon	MoWR	Har khet ko pani	Construction Of Lift Irrigation scheme from Bennihalla To Hirebendigeri in Shiggaon Taluk Haveri District.	1	350	5	2500.00
11	Shiggaon	MoWR	Har khet ko pani	Improvements to Feeder Canal from Hirebendigeri To Gundur Village in Shiggaon Taluk Haveri District	1	200	5	200.00
12	Shiggaon	MoWR	Har khet ko pani	Providing Lift Irrigation Scheme from Hulikatti Nala To Shidlapur village in Shiggoan Taluk, Haveri District.	1	200	5	400.00
13	Shiggaon	MoWR	Har khet ko pani	Improvements to Hunagunda Tank Sy.No 73 in Shiggoan Taluk, Haveri District.	1	48	5	100.00
14	Shiggaon	MoWR	Har khet ko pani	Improvements to Chandapura Kalasageri Tank Sy.No 100 in Shiggoan Taluk, Haveri District.	1	52	5	100.00

15	Shiggaon	MoWR	Har khet	Improvements to Jekinakatti Urmundinkeri Tank Sy.No 11 in	1	26	5	100.00
			ko pani	Shiggoan Taluk, Haveri District.				
16	Shiggaon	MoWR	Har khet ko pani	Improvements to Shadagaravalli Jalageri Tank Sy.No 17 and tail Channel in Shiggoan Taluk, Haveri District.	1	28	5	150.00
17	Shiggaon	MoWR	Har khet ko pani	Improvements to Mugalikatti Tank Sy.No 13/7 in Shiggoan Taluk, Haveri District.	1	35	5	100.00
18	Shiggaon	MoWR	Har khet ko pani	Improvements to Hosur Gangi Bhavirdar Tank Sy.No 16 in Shiggoan Taluk, Haveri District.	1	29	5	100.00
19	Shiggaon	MoWR	Har khet ko pani	Improvements to Shiggaon Doddakeri Tank Sy.No 697 in Shiggoan Taluk, Haveri District.	1	110	5	100.00
		TOTAL			19	1488		5600

				Sprinkler				
S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cu m)	Command Area/Irrigation Potential(Ha)	Period of Implementation ^/ 7 yrs)	Estimate d cost(in laks
1	Shiggaon	MOA & FW- DAC&FW	Per drop	DPAP Sprinkler	9873		5	1741.7
2	Savanur		more crop (Micro	DPAP Sprinkler	18273		5	3223.3
3	Hangal		Irrigation)	Non DPAP Sprinkler	39820		5	7024.2

4	Haveri			DPAP Sprinkler		46704			5	8238.6
5	Byadagi			DPAP Sprinkler		1	.3275		5	2341.7
6	Hirekerur			DPAP Sprinkler		2	22550		5	3977.8
7	Ranebennur			DPAP Sprinkler		4	16790		5	8253.8
		TOTAL				19	97285			34801.1
Drip Irrigation (Horticulture)										
S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)		Command Area/Irrigation Potential(Ha	on Implemen	Period of Implementation '/ 7 yrs)	
1	Shiggaon	MOA & FW- DAC&FW	Per drop more crop (Micro Irrigation)	DPAP Drip	1620				5	1267.6
2	Savanur			DPAP Drip	922.5				5	
3	Hangal			Non DPAP Drip	1297.5				5	
4	Haveri			DPAP Drip	972				5	
5	Byadagi			DPAP Drip	2077.5				5	1255.3
6	Hirekerur			DPAP Drip	657				5	427.56

7	Ranebennur			DPAP Drip	2641.5		5	1305.8																										
		TOTAL			10188			6500.2																										
		Drip Irrigation (Sericulture)																																
S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks																										
1	Shiggaon			DPAP Drip	65		5	57.095																										
2	Savanur			DPAP Drip	120		5	105.406																										
3	Hangal		Per drop more crop (Micro Irrigation)	Non DPAP Drip	54		5	47.433																										
4	Haveri	MOA & FW- DAC&FW		DPAP Drip	409		5	359.257																										
5	Byadagi			Irrigation)	Irrigation)	Irrigation)	Irrigation)	Irrigation)	Irrigation)	Irrigation)	Irrigation)		Irrigation)			Irrigation)	Irrigation)	Irrigation)	Irrigation)	DPAP Drip	311		5											
6	Hirekerur						DPAP Drip	61		5	53.581																							
7	Ranebennur			DPAP Drip	577		5	506.825																										
		TOTAL			1597			1402.773																										
	Newly created Structures																																	

S.No	Name of the Blocks/Su b Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks.)
				Farm Ponds	1120	2240	5	816
				Check Dams	145	580	5	725
1	Chiggaan		PMKSY	Nallah Bunds	0	0	5	0
1	Sniggaon		Watershed	Percolation Tanks	68	136	5	136
				Other Ground Water Recharge Structure	55	55	5	110
				Fishery ponds/cattle pond	0	0	5	0
		TOTAL			1388	3011		1787.3
1	Savanur	DoLR- MoRD	PMKSY Watershed	Farm Ponds	760	1520	5	554

				Check Dams	95	380	5	475
				Nallah Bunds	0	0	5	0
				Percolation Tanks	69	138	5	138
				Other Ground Water Recharge Structure	45	45	5	90
				Fishery ponds/cattle pond	0	0	5	0
		TOTAL			969	2083		1256.9
				Farm Ponds	1640	3280	5	1195.3
1	Hanagal	DoLR-	PMKSY	Check Dams	210	840	5	1050
	1 Hanagal Mo		Watershed	Nallah Bunds	0	0	5	0
				Percolation Tanks	120	240	5	240

				Other Ground Water Recharge Structure	79	79	5	158
				Fishery ponds/cattle pond	0	0	5	0
		TOTAL			2049	4439		2643.3
				Farm Ponds	1100	2200	5	802
			PMKSY	Check Dams	140	560	5	700
1		DoLR- MoRD		Nallah Bunds	0	0	5	0
1	Haveri		Watershed	Percolation Tanks	85	170	5	170
				Other Ground Water Recharge Structure	65	65	5	130
				Fishery ponds/cattle pond	0	0	5	0
		TOTAL			1390	2995		1801.757
1	Pyodo <i>c</i> i	DoLR-	PMKSY	Farm Ponds	640	1280	5	466.5
1	Byadagi	MoRD	Watershed	Check Dams	85	340	5	425.0

				Nallah Bunds	0	0	5	0.0
				Percolation Tanks	48	96	5	96.0
				Other Ground Water Recharge Structure	32	32	5	64.0
				Fishery ponds/cattle pond	0	0		0.0
		TOTAL			805	1748		1051.5
		DoLR- MoRD		Farm Ponds	1360	2720	5	991
				Check Dams	175	700	5	875
1	Hirekerur		PMKSY Watershed	Nallah Bunds	0	0	5	0
				Percolation Tanks	95	190	5	190
				Other Ground Water Recharge Structure	75	75	5	150
				Fishery ponds/cattle pond	0	0	5	0

		TOTAL			1705	3685		2206.26	
		DoLR- II MoRD		Farm Ponds	1150	2300	5	838	
			DoLR- PMKSY MoRD Watershed	Check Dams	154	616	5	770	
1	Ranebennur				Nallah Bunds	0	0	5	0
		WOKE		Percolation Tanks	81	162	5	162	
				Other Ground Water Recharge Structure	64	64	5	128	
				Fishery ponds/cattle pond	0	0	5	0	
		TOTAL			1449	3142		1898.20	
	Renovated								

S.No	Name of the Blocks	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks.)
1	Shiggaon				30	120	5	90
2	Savanur				30	120	5	90
3	Hangal				35	140	5	105
4	Haveri	DoLR- MoRD	PMKSY Watershed	Check Dams	40	160	5	120
5	Byadagi				30	120	5	90
6	Hirekerur				35	140	5	105
7	Ranebennur				35	140	5	105
		TOTAL			235	940		705
					Soil Conservation			
S.No	Name of the Blocks	Concerned Ministry/ Department	Component	Activity	Total (ha)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks.)
1	Shiggaon	DoLR- MoRD	PMKSY Watershed	Field Bund	26000		5	0

2	Savanur				26000		5	0
3	Hangal				32000		5	0
4	Haveri				26000		5	0
5	Byadagi				22000		5	0
6	Hirekerur				27000		5	0
7	Ranebennur				29000		5	0
		TOTAL			188000			0
					Agro forestry	•		
S.No	Name of the	Concerned Ministry/	G .		Total	Command	Period of	
	Blocks	Department	Component	Activity	(ha)	Area/Irrigation Potential(Ha)	Implementation^/ 7 yrs)	Estimate d cost(in laks.)
1	Blocks Shiggaon		Component	Activity				Estimate d cost(in laks.) 600
1 2			Component	Activity	(ha)		7 yrs)	
	Shiggaon		Component	Activity	(ha) 10000		7 yrs) 5	600
2	Shiggaon Savanur		PMKSY Watershed	Activity Agro forestry	(ha) 10000 7000		7 yrs) 5 5	600 420
3	Shiggaon Savanur Hangal	Department DoLR-	PMKSY		(ha) 10000 7000 10000		7 yrs) 5 5 5	600 420 600
3 4	Shiggaon Savanur Hangal Haveri	Department DoLR-	PMKSY		(ha) 10000 7000 10000 12000		7 yrs) 5 5 5 5	600 420 600 720

		TOTAL			67000			4020
					Dry land Horticulture			
S.No	Name of the Blocks	Concerned Ministry/ Department	Component	Activity	Total (ha)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks.)
1	Shiggaon				9000		5	1080
2	Savanur				6000		5	720
3	Hangal				10000		5	1200
4	Haveri	DoLR- MoRD	PMKSY Watershed	Horticulture plantation	9000		5	1080
5	Byadagi				7000		5	840
6	Hirekerur				9000		5	1080
7	Ranebennur				6000		5	720
		TOTAL			56000			6720

			,	Works Propose	d by Water Boa	ard		
S.No.	Name of the Blocks	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks.)
1	Hirekerur				1		2	4259
2	Haveri	Ministry of urban development		Water Supply	1		2	4259
3	Ranebennur and Byaggi	се (еториненс			1		2	6500
		TOTAL						15018
1	TMC - Savanur				6600 cum		5	8440
2	TMC – Hanagal				4000 cum		5	7343
3	TMC - Shiggoan				4370 cum		5	7343
4	TMC – Bankapur	Ministry of			3910 cum		5	4851
5	TP – Hirekerur For II phase	urban development		Sewage Treatment	1000 cum		5	1600
6	TP – Guttal	•			2000 cum		5	4600
7	CMC -Haveri				4710 cum		5	300
8	CMC - Ranebennur				15000 cum		5	750
9	TMC -Byadagi				5000 cum		5	300
		TOTAL						35527

Works Proposed by Regular Forestry

S.No	Name of the Blocks/Sub Districts	Concerned Ministry/ Department	Component	Activity	Total Number/Capacity(cum)	Command Area/Irrigation Potential(Ha)	Period of Implementation^/ 7 yrs)	Estimate d cost(in laks
				Desilting of tanks	7		2	35.0
1	Haveri,			Gully checks/ boulder bund (no.)	1550		5	155.0
1	Byadg,Hirekeruri,Hirekerur,Hangal	,		Digging contour / staggered trenches	54500		5	245
				Percolation tanks/ pits (no.)	3675		5	110
2	Haveri			Fencing	1		2	230
		TOTAL						775

