

GENERAL REPORT

1.01 Godachinamalki Lift Irrigation Scheme is a scheme conceptualized in two lifts to irrigate around 2570Ha. of irrigable land of which the second stage involves forest land

1.01.1 Godachinamalki LIS (2nd stage GLIS) is envisaged to lift water from Markandeya river d/s of its confluence with Bellary Nala. The project beneficiary is Gokak Taluk of Belgaum district.

1.01.2 The contemplated utilization for the project is around 0.285 tmc to irrigate the command area falling in villages within Gokak Taluk and is tabulated in Table - 1

Table 1: Details of command area

SINo	Beneficiary Villages	ICA in Ha	Remarks
1	U-Benchinmardi	259.63	
2	Kanasageri	499.80	
3	Tavag		
4	Gada	139.58	
5	Rajanakatti		
6	Khangaon	320.26	
7	Pudakalkatti	318.64	
	Total	1537.91	

1.01.3 The project is already included in the comprehensive master plan for Krishna Basin prepared by the committee chaired by Sri. D. N Desai and submitted vide covering letter dated 05.01.2013.

1.01.4 The project involves an lift of water from Markandeya river near Sigiholi . The lifting point will employ a short approach canal, intake, pump house and delivery manifold, rising main and delivery chamber. After lifting of water from river i.e. jack well the water will then be led through MS rising mains (RM) to DC's located at different locations as stated below.

First DC near the village Benchinmardi from where open channels will lead water to CA in Benchinmardi and Kanasageri villages. The rising main will run further to a second DC near Rajankatti which will irrigate CA in that village and under Garh village limits by another small DC and field channels. Part of the flows in Rajankatti DC will be led to a third DC near the village Khangaon through gravity mains from there open channels will feed command area in Khangaon and Pudakalkatti villages.

1.01.5 The area in general is in close proximity to the command areas of Ghataprabha and Markandeya Canal systems and the area not covered under these schemes will be irrigated in the proposed project.

1.01.6 3 pumps are needed to pump the peak crop water requirement and the additional pump would be used as Standby.

1.01.7 Mechanical Works

The rising main for GLIS is MS with Epoxy in lining with gunitting with ID of 860mm for a length of about 2020m where a branch line feeds the DC at Benchinamardi. The thickness of the RM in this reach is 7.3mm from internal pressure considerations. The ID of the rising main is 610.00 mm from then on for about a length of about 10,220m where the shell thickness is 5.00mm.

The first rising main branch to DC-1 designated as RM-1 is proposed to be of MS as total internal pressure at the initial reaches exceeds 15kg/cm². The ID is 610.00 mm with thickness of 5.00mm.


The works also includes gravity mains of HDPE and MS pipes. The ID of HDPE pipe is 250mm of grade PE-80, PN-4. The ID of MS pipe (to feed DC-2) is 560mm with total internal pressure of around 10 kg/cm². Control, Isolation and protection valves will be provided at suitable locations for safe operation of the project.

1.01.8 Justification for locating the project in forest land:


The project involves scattered network of pipe line alignment with lifting of water at source point i.e Markandeya River @ MDDL-646.5m it is then pumped to the higher level at Rajanakatti village @ DC2 to RL 779m, from there it is led to DC3 at Khangaon village and DC4 at Gada village. Many alternatives have been studied due to terrain and location of delivery to be established at higher elevation for giving water for Domestic and Irrigation purpose for most backward and deprived pockets from irrigation facilities.

The command areas are located as isolated patches around Villages where Irrigation facilities are most necessary. These isolated patches need to be connected to the lifting point through pipelines which has to be taken through forest land. The network has been optimized so that minimum extent of forest land is now required. If the need for forest land has to be totally removed it would lead to substantial increase in the distribution network length and the entailing cost increase. The present network is techno economically most optimum and needs minimum forest land

The project has no impact on the environment of the surrounding areas and is ecofriendly. The scheme is thus recommended for implementation.



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