

Name of Work: Diversion of 26.9255 ha forest land for construction of diversion weir, Jackwell cum pump house, electrical substation, pipe line and power line in Kanakumbi, Chorle, Parvada and other villages of Khanapur Taluk in Belgaum District under Kalasa Nala Diversion Scheme.

:- NOTE ON JUSTIFICATION ON USE OF FOREST LAND :-

Kalasa Nala Diversion Scheme envisages the Diversion of 26.9255 Ha. of forest land for construction of diversion weir, Jackwell cum pump house, electrical substation, pipe line and power line in Kanakumbi, Chorle and Parvada villages of Khanapur Taluk in Belgaum District for diverting 1.72 TMC of water to Malaprabha River for supply of drinking water to Hubli - Dharwad twin cities, Kundgol town and en route villages.

Government of Karnataka constructed a storage dam across Malaprabha River at Naviluteertha in Saudatti Taluk of Belgaum district. To cater to the needs of irrigation and drinking water in the identified area along the course of the river. The construction of Dam was completed in the year 1972 and water is being supplied for irrigation and Drinking water purpose. But it is observed that the reservoir is not getting contemplated water and becoming a deficit reservoir.

On account of this, villages on the banks of Malaprabha River are facing acute shortage of water for drinking. For this purpose the Karnataka Govt. is planning to divert the flows into the Malaprabha river by proposing Kalasa Nala Diversion Scheme to divert 1.72 TMC of water. Under Kalasa Nala diversion scheme, the waters of west flowing Kalasa nala, Surla and Haltara Nala in Khanapur Taluk is proposed to be utilized for diverting the required quantum of water to the Malaprabha River to fulfil the drinking water needs of Hubli, Dharwad, Kundgol town and en route villages.

As per National Water policy, 2012 providing safe drinking water to the water deficit area is the primary concern of the government. Hence, the project is very much necessary to the region considering the growth of the population.

The total water demand for Hubli - Dharwad twin cities, Kundgol Town, en route villages etc works out to 7.56 TMC and 8.69 TMC respectively for the years 2044 and 2051. The projected Water Demand up to 2044 will be 7.56 TMC. Subsequently, Hon'ble Mahadayi Water Disputes Tribunal has allocated 3.90 TMC of water as against 7.56 TMC for Drinking water (1.72 TMC of water from Kalasa Nala Diversion Scheme and 2.18 TMC from Bhandura Nala Diversion Scheme).

Many Multi Village Drinking Water Supply Schemes has been implemented by Rural Development and Panchayath Raj Department, GoK and Karnataka Urban Water Supply and Drainage Board (KUWSDB), GoK from the foreshore of Malaprabha Reservoir. Multi Village Drinking Water Supply Schemes are part of Jal Jeevan Mission of Government of India. Augmentation of 1.72 TMC of water from Kalasa Nala and 2.18 TMC of water from Bhandura Nala (Total 3.90) will meet the water demand during summer season.

The original proposal of the project as planned in 2002 involved construction of diversion dam across Kalasa nala and Haltara nala with the submergence of 341 ha of land. Out of which, 258 ha belongs to forest land. Based on the application made by KNNL, Forest Advisory Committee (FAC) of MOEFCC had deliberated the proposal in its meeting held on 28.08.2003 and further recommended for issue of Stage-I Forest Clearance (Proceedings of the FAC are uploaded in Additional details).

In pursuant to the above, MOEFCC, GoI convened a meeting on 22.12.2003 and kept the recommendation of FAC in abeyance until resolution of Interstate water disputes. Minutes of the meeting is uploaded in Additional details.

As the Mahadayi is an interstate river, the allocations for the riparian States have been adjudicated by Hon'ble Mahadayi Water Dispute Tribunal (MWDT). The proposed project envisages diversion of three tributaries of Mahadayi river which constitute Kalasa Nala Diversion Scheme.

Hon'ble MWDT in its award dated 14.08.2018 allocated 3.90 TMC of Water for diversion from both Kalasa (1.72 TMC) and Bhandura (2.18 TMC) nalas. Accordingly, the award was gazetted by the Government of India on 27.02.2020 for utilization of 3.90 TMC of water. Copy of the notification is uploaded in Additional details.

On account of Gazette Notification by Government of India, the state of Karnataka vide letters Dt: 20.05.2020 and 03.07.2020 approached the MOEFCC requesting to accord the pending Stage-I Forest Clearance since the inter-state matters has been sorted out.

In response to the above, the State of Karnataka was directed vide MOEFCC letters Dt: 03.07.2020 and 09.10.2020 to submit the de novo (fresh online proposal) due to lapse of time period nearing two decades and on changes of forest crop composition. Copy of the letters is uploaded in Additional details. The State of Karnataka in consonance with the directives of MOEFCC has no plan to pursue the earlier forest clearance proposal.

The State of Karnataka has revised the project planning in accordance with Hon'ble MWDT (Volume-12, Page-2699, Clause VIII Para A iii). Further, this modification will reduce requirement of forest land from 258 ha to 26.9255 ha and ecological impact when compared with the earlier gravity proposal.

The present Lift scheme will minimize the extent of submergence by reducing the storage, height of the Ogee Diversion Dam which will in turn reduce the submergence in forest area. Accordingly, the total forest land requirement will be reduced by 90% when compared with Original proposal of 2002. The current proposal involves 26.9255 Ha of forest land. Table showing Comparison of earlier gravity proposal and current lift proposal is as follows;

Sl. No	Details of Components	Old Gravity project details	New Lift details
1	Concept	Diversion of water was planned by building a tall dam to rise the water so that water spills automatically from west flowing Kalasa nala, Haltara nala and surla nala into the Malaprabha river through interconnecting canal.	Diversion of water was planned by lifting water (by pumps by Constructing Jackwell and rising main) from these same nalas Kalasa nala, Haltara nala and surla nala by Constructing low height diversion dams
2	Quantity of water to be diverted	1.72 TMC	1.72 TMC
3	Dam Height	Kalasa Dam = 21.5 m Haltara Dam = 14.0 m	Kalasa Diversion weir = 10.5 m Haltara Diversion weir = 11.3 m Surla Check Dams = 8 nos of varying heights
4	Area of forest land required Submergence	Kalasa Dam 149.10 Ha Haltara Dam 35.50 Ha	Kalasa Diversion weir = 11.1102 Ha Haltara Diversion weir = 3.3421 Ha Surla Check Dams = 2.3041 Ha
5	Area of forest land required for conveyance system	Kalasa Dam 1.12 Ha Haltara Dam 72.02 Ha	Kalasa Diversion weir = 1.9023 Ha Haltara Diversion weir = 5.1901 Ha Surla Check Dams = 1.8989 Ha Electrical Line UG = 0.5929 Ha Approach road = 0.5827 Ha Receiving Chamber = 0.0022 Ha
6	Total area of forest required	258 Ha	26.9255 Ha
7	Cost of Project at 2021-22 price rate	1177.22 Crores	995.30 Crores

The proposed lift scheme will now address the;

- Concerns of the downstream riparian states regarding diversion of additional water over and above the allocation by having regulating arrangements at the lift point as well as at delivery point.
- Minimizing the time required for execution of the project from 5 years to 2 Years (Since the working period is 6 months).
- The proposed corridor of Rising main considered in the present proposal will be 10 mtrs in width which is aligned adjacent to the existing National Highway - 748 AA. Further, the Rising Main is a MS Pipe shall be buried 1 m below the natural ground and accordingly no provision for inspection path is made in this proposal. In anticipation of regeneration of forest growth which will take place within a span of 2-3 years. Hence, no fragmentation of habitat is predicted.
- The Rising main is planned all along the existing National Highway - 748AA so as to reduce the creation of new fragmentation of habitat and removal of trees.
- The dead storage of water across diversion weir of Haltara Nala, Surla Nala and Kalasa Nala will be helpful to provide drinking water to Wild animals during summer season.
- The downstream e-flows through the proposed diversion dams shall be regulated through River Sluices.
- To minimize the extent of Forest Diversion for Electrical cables, it is planned to adopt underground cables with a RoW of 1.2 m within the prominent forest reaches.

Considering the various alternatives, forest area required for the proposed alignment is barest minimum and free from Rehabilitation and Resettlement issues, inter-state aspects, creation of new habitat fragmentation, involvement of Protected area/ ESZ and availability of water.

It is to be noted that, Hon'ble Mahadayi Water Dispute Tribunal (MWDT) had assessed the quantum of water to be diverted at the proposed diversion weir location and based on which the State of Karnataka had been allocated 1.72 TMC of water under Kalasa Nala Diversion Scheme. Further, the Detailed Project Report approved by the Central Water Commission, Govt. of India is in line with the MWDT award with respect to quantum of water diversion and location of diversion weir. Thus, the proposed project location is site specific and considered for implementation.

In view of the above, the forest land requirement for the project is barest minimum and un-avoidable.


Executive Engineer
KNNL, Kalasa Project Division
Khanapur-591302