



## EXECUTIVE SUMMARY

Water Resources Department, Dholpur, Government of Rajasthan wants to develop Kaliteer Lift Scheme aims to provide safe drinking water to targeted population of Dholpur district particularly in Bari, Baseri, Sarmathura, Saipau Tehsil areas by adopting a holistic approach. The proposed scheme not only aims to improve its health and living condition but at the same time ensuring water quality and environmentally sustainable development for the targeted populace. It is with these objectives in mind, some of the structural interventions in the form of Intake structures and water conductor system are proposed for this purpose to augment on the supply side and on the other side making the demand side efficient in order to bridge the deficit.

The Project is located in the Dholpur district of Rajasthan on the Chambal River originating in Madhya Pradesh flowing through Madhya Pradesh and then through Rajasthan eventually meeting the Yamuna River in Uttar Pradesh. The project is located Upstream of the upcoming Dholpur Lift Scheme. The Intake-cum-pump house site is near Kaliteer village and about 50 km upstream from Dholpur town. The Intake-cum-pump house site is proposed on the left bank.

The tentative land to be acquired/ diverted for the project is 50 ha of which 30 ha is forest land and 20 ha is private land. Permanent change in land use will be due to construction of intake cum pumphouse, office and colony etc and temporary change would be at construction/quarry sites & temporary labour colonies, etc.

The proposed project entails construction of various structures necessary for diversion of surplus water from this lift scheme. The major project components will be on shore Intake cum pump house, pump house, conveyance system, office, residential colony, approach roads, and other related structures. Since the project envisages construction of main project components and infrastructure development along with project township, office complex, approach roads etc, there will be significant improvement in road connectivity and other infrastructure amenities, and socio-economic development as well. This may lead to increased housing and overall commercial development of the area.

The implementation of the Kaliteer Lift Scheme will not only create direct employment opportunities due to construction and operational activities, but give a fillip to many other



indirect employment opportunities in the horticulture, agro-forestry, transport and tourism sectors. The operation of the project will provide an impetus to the industrialization and urbanization in the area. Job opportunities will drastically improve in this area. At present most of the population sustains on agriculture and allied activities. There are no major industries or other avenues of occupation in the area. The project will open a large number of jobs to the local population during project operation phase.

The final alignment was selected through meticulous planning. In the first stage broad alignment route were decided and thereafter, micro level examination of the selected alignment in first stage screening were carried out to finally decide the techno-economically best suited configuration of the system which can fulfil the targeted objectives of the project. In this process, the final alignments which were adopted for further survey, investigation, design and drawing in consultation with the department officials, were further analysed at this preliminary stage to make sure that there is minimal variation in the route even after detail survey and investigation. In view of these, the final selected alignments were analysed and preliminary design, drawing and estimates were made, the salient features of which are presented below:

**Table 1: SALIENT FEATURES OF THE PROJECT**

<b>SALIENT FEATURES OF KALITEER LIFT SCHEME</b>	
<b>LOCATION</b>	
State	Rajasthan
District	Dholpur
River	Chambal
Nearest Town	Dholpur (50 km)
Rail Head	Bari (30 km)
Airport	Agra (95 km)
Location	26°24'38.30"N/77°29'34.51"E
<b>BENEFITTED AREA</b>	Tehsils namely (Bari, Baseri, Sarmathura, Saipau)
<b>ESTIMATED WATER DEMAND</b>	
Drinking Water	43.83 MCM
<b>MONSOON WATER AVAILABILITY</b>	
90% dependability	117.61MCM
75% dependability	222.80 MCM
50% dependability	281.86 MCM
<b>ON SHORE INTAKE CUM PUMP HOUSE</b>	
Highest Flood Level	EL 155.0 m
Lowest Flood Level	EL 138.0 m
Pump Floor Level	EL 157.0 m
Pump Sump Floor Bottom	EL 133.4 m
Design Discharge	20 Cumecs



<b>SALIENT FEATURES OF KALITEER LIFT SCHEME</b>	
Total Lift	112.6 m
Pump Capacity	7.5 MW (4W+2S)
Pumping Main Diameter	2.5 m
Pumping Main Length	7.2 Km
<b>PUMP HOUSE-I TO PARBATI DAM</b>	
Design Discharge	16.37 Cumecs
Total Lift	94.74 m
Pump Capacity	5.0 MW (4W+2S)
Pumping Main Diameter	2.5 m
Pumping Main Length	2.53 Km
Natural Drain	17 Km
<b>PUMP HOUSE-I TO RAMSAGAR DAM</b>	
Design Discharge	3.63 Cumecs
Total Lift	94.74 m
Pump Capacity	4.0 MW (1W+1S)
Pumping Main Diameter	1.6 m
Pumping Main Length	1.27 Km
Natural Drain	15.7 Km
<b>LAND ACQUISITION</b>	
Private/Govt. Land	30 Ha
Forest Land	20 Ha
<b>ESTIMATED COST (AT OCTOBER, 2020 PRICE LEVEL)</b>	
Total Capital Cost	768.89 crore
Cost of Operation and Maintenance	15.38 crore
SCADA	7.69 crore
Financial Charges	7.69 crore
<b>Total Cost</b>	<b>799.65 crore</b>
<b>ANNUAL ENERGY REQUIREMENTS</b>	
Annual Energy Cost (Rs.in Crores)	60.17
<b>Construction Period</b>	
Total construction period	3 years

  
 (विजय कुमार शर्मा)  
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 धौलपुर