

SONE KANHAR UGPL PROJECT, GARHWA

FORM - A

PART-I

1. PROJECT DETAILS:

(i) Short narrative of proposals & project for which forest land is required

Garhwa district is one of the most water scarce district in the state of Jharkhand and faces acute shortage of water for drinking and irrigation and other activities. Though it is located in tropical area with seasonal rainfall, the district faces acute drinking water scarcity due to its peculiar topographic conditions and erratic rainfall pattern. The present coverage of irrigation facilities is 17% of the cultivable area. In spite of the fact that irrigation infrastructure like dams, canal network and other structures are in place, they are not utilized fully, due to insufficient yields in the reservoirs. If such reservoirs are filled with lift irrigation project (based on the rivers having significant flow during monsoon), they can be utilized to boost the agricultural activities, ensuring drinking water to the nearby villages and also to mitigate droughts. The arrangement of assured water supply is must to overcome the uncertainty of success, lesser yield, drying up in the summer and unsatisfactory quality of ground water in tube wells/dug wells. The objective of this project is to Reinforce and Supplement the Water Supply to the Existing Reservoirs with Lift Irrigation Project (based on the rivers Kanhar & Sone having significant flow during monsoon) and laying of underground pipeline with proposed alignment to cover maximum enroute reservoirs and water bodies for improving the yields and utilisation thereon to boost the agricultural activities, ensuring drinking water to the nearby villages and also to mitigate droughts.

No major land acquisition is involved except for the Intake/Pump House, Sumps and Staff Quarters.

Sone Kanhar UGPL project is one of the most significant project of Water Resources Department, Govt. of Jharkhand which is located in Garhwa District of Jharkhand. The prime objective of the project is to provide drinking water and irrigation water as per the requirements in various reservoirs/water bodies through pipeline after lifting from three locations.

1. Pipeline - I: Lifting from Sone river in Daridah village of Kandi block
2. Pipeline - II: Lifting from Kanhar river in Bhunari village of Ranka block
3. Pipeline - III: Lifting from Kanhar river in Urga village of Bhandaria block
4. The detailed description related to these three proposed pipeline plans are as follows:-

Sl. No.	Pipeline	Lifting Location	Village Name	Quantity of water to be lifted (MCM)
1	Pipeline - I	Lat.- 20°30'3.26" Long.-83°44'36.56"	Daridah (Block-Kandi)	37.57
2	Pipeline - II	Lat.-23°49'34.32" Long.-83°41'46.56"	Bhunari (Block- Ranka)	27.55
3	Pipeline - III	Lat.-23°37'31.23" Long.-83°45'55.44"	Ugra (Block- Bhandaria)	8.69

The details of the reservoirs which will be filled by the pipeline are as follows:-

Sl. No.	Pipeline	Name of reservoir	Beneficiary Block
1	Pipeline - I	1 Saraswatia	Garhwa, Nagar Untari, Majhiaon, Bhawnathpur, Kandi, Ketar, Kharaundhi, Ramna, Sagma Bishunpura & Meral.
		2 Kawaldag	
		3 Bhawanikhhand	
		4 Uttmahi Irrigation Scheme	
		5 Pandarwa	
		6 Left Banki Reservoir	
		7 Left Banki Irrigation Scheme	
		8 Sail Steel Dam	
		9 Other small and big water bodies falling in the route of pipeline.	
2	Pipeline - II	1 Chirka Reservoir	Dhurki, Ranka, Ramkanda, Ramna Chinia & Dandai.
		2 Aanraj Reservoir	
		3 Other small and big water bodies falling in the path of pipeline	
3	Pipeline - III	1 Other small and big water bodies falling in the path of pipeline	Bhandaria

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The requirement of drinking water and irrigation water will be lifted from Kanhar and Sone rivers as follows.

Purpose	Drawal from Kanhar River (MCM)	Drawal from Sone River (MCM)	Total MCM
Drinking Water	3.62	9.27	12.89
Irrigation	32.62	28.30	60.92
Total	36.24	31.57	73.81

Direct Benefits

- Availability of additional water for different uses like drinking and agriculture
- Reduction in the area facing water scarcity
- Improved dairy activities
- Generation of additional employment
- Qualitative and Quantitative improvement in ground water
- Reduced power consumption due to lesser use of ground water, thereby reducing power consumption
- Increase in irrigation and higher farm income
- Better quality of life.

Indirect Benefits

- Drinking Water Supply benefits
- Drinking Water Supply benefits are quantified, considering that water supply through tankers can be avoided to the possible extent. Expenditure for water supply through tankers do not create any permanent assets. On an average, two out of every five years require water supply through tankers.
- Generation of employment due to intensified agricultural activities.
- Saving in expenditure on scarcity relief.
- On an average, drought conditions prevail in 2 out of 5 years and significant amount is spent on relief activities. It has been assumed that this expenditure will be minimized
- The indirect benefits also include industrial growth and ground water recharge. Agro-based industries, dairy farms, poultry farms, marketing facilities for the agricultural inputs like pesticides and fertilizers etc. are likely to come up in the region.
- Ground water availability in the command area would be enhanced due to increased water supply for irrigation and regeneration.

SL. No	NAME OF FOREST DIVISION	LENGTH (KM)	AREA (Ha)	NOTIFIED FOREST (Ha)	JUNGLE JHARI (Ha)	GM LAND (Ha)	RAITY (Ha)
1	Garhwa North	409.6	64.691	17.19	7.123	4.426	23.983
2	Garhwa South	379.4	55.617	20.505	5.741	3.507	18.172

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(ii) Maps showing the required forest land boundary of adjoining forest land on a 1:50000 scale map	(a) Topo sheet map in scale of 1: 50000 is annexed as Annexure- IX, The Final Route alignment has been shown in BLACK colour on the maps, the alternative route R2 is marked in RED and R3 in BLUE. (b) The cadastral maps of the concerned Notified Forest and Jungle Jhari land has been annexed as Annexure -X showing Forest land in GREEN and Jungle Jhari land in ORANGE colour
(iii) Cost of Project	The estimated cost of the project is Rs.1272.53 Cr
(iv) Justification of locating the project in forest area	All possible alternatives have been explored to reduce the requirement of forest land. While finalizing the route of the line, best attempts have been made to avoid Reserved Forests and Protected Forests coming on the way keeping in view the techno-economical requirements. The proposed pipeline is passing through 4.016 Ha., of Notified Forest land and 4.104 Hectare of Jungle Jhari land under Garhwa North and 37.216 Ha of Notified Forest land and 9.071 Hectare of Jungle Jhari land under Garhwa South Forest Division. The said forest cannot be avoided because of dense habitation and villages on either side of the proposed route. The above forest land is minimum requirement for the construction of the proposed line.
(v) Cost Benefit Analysis	Enclosed as Annexure:-IV
(vi) Employment likely to generated	For construction of the pipeline there will be huge employment potential. Around 500 people will be engaged continuously for 36 months during construction of the line. Also employment opportunities will be opened on the beneficiary Agricultural and sector: In course of construction local contractor will be benefited to a large extent. (Total Mandays 500*36*26=468000)

2. Purpose wise breakup of the Total land required:-

S. No.	Name of Forest Division	Total Length	Total Area	Total Forest Area			Total Non - Forest Area	Total Forest Length
				PF (Demarcated)	PF (Notified)	JJ		
1	Garhwa North	409.600	64.691	11.969	17.190	7.123	28.409	175.667
2	Garhwa South	379.400	55.617	7.692	20.505	5.741	21.679	188.660
Total		789.000	120.308	19.661	37.695	12.864	50.088	364.327

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3. Details of Displacement of people due to this project, if any
No

4. Number of family

(i) Number of Scheduled Caste/ Scheduled Tribe family	Nil
(ii) Rehabilitation Plan (to be enclosed)	N/A
(iii) Whether clearance under Environment (Protection) Act, 1986 required	Not required.

5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and / or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zones etc. as per the scheme prepared by the State Government. (Undertaking to be enclosed)

Undertaking furnished by the competent authority enclosed as Annexure - II

6. Details of certificates / documents enclosed as required under the instructions:

(i)	Schedule of land annexed as Annex:- 1
(ii)	Undertaking regarding compensatory afforestation scheme by the competent authority annexed as Annexure-II
(iii)	Undertaking regarding payment of NPV as Annexure- III
(iv)	Cost benefit analysis annexed as Annexure - IV
(v)	MOU (In between Jharkhand State Govt. and JUSNL) annexed as Annexure-V
(vi)	GOI Notification regarding Environment clearance annexed as Annexure - VI
(vii)	Lay out elevation & plan annexed as Annexure - VII
(viii)	Jungle Jhari plots certification concerned Circle Office as Annexure - VIII
(ix)	NOC from DC for JJ land as Annexure-IX
(x)	FRA certificate with gram sabha as Annexure-X
(xi)	Enumeration list of Forest Trees as Annexure - XI
(xii)	The Geo-reference (cadastral) maps of the concerned Notified Forest and Jungle Jhari land has been annexed as Annexure- XII, (showing forest land and Jungle Jhari land.)
(xiii)	1. 50,000 scale SOI maps No.-63P/07,08,11,12 and 16 ,64M/9,12,13, and 14 showing the route Alignment with alternatives of proposed power line annexed as Annexure - XIII.
(xiv)	Route alignment on Mouza Map (Forest and JJ Land) annexed as Annexure - XIV.

Signature:

Name in Block Letters: NAVEEN MAHALI

Designation: Executive Engineer

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