Detail Note On Kala Barrage Project

1 Introduction

The Kala Barrage project, in the present proposal is planned for construction of Barrage across river Kala, the left tributary of Brahmani Basin merges with the Rengali reservoir. The catchment area of the project is185 Sq. Km. The project has planned to irrigate 4050 ha of C.C.A. with 89% irrigation intensity during khariff.

The ayacut of existing D.P. Canal (Presently under the administrative Control of M.I. wing) shall be stabilized by modification & extension of the existing canal system to provide irrigation to the command area. The project, on completion would improve the economic condition of the people of Barkote Block as they fully depend on agriculture to earn their livelihood.

2 Location and Access

Kala Barrage Project is located near village Kaliapal under Kaliapal Gram Panchayat of Barkote Block under Deogarh district.The Barrage Site is located at Latitude 21°34'48"N and Longitude 85° 4'00" E. The site is approachable from Deogarh by NH 49 road for a length of 35 km and panchayat road for 1-2 km from Kaliapal village.The nearest railway station is Bimlagarh.

3 River and Basin

"Kala" nallah originates from Deogarh pahar in Deogarh District and merges with the Rengali reservoir i.e River Brahmani. It flows towards west direction for a length of about 11.5km at the beginning, and then flows towards South direction for a length of about 6.25km. And then it flows in South-West directions for a length of 8.00km. up to proposed project site and runs through an additional length of 13.25km. before merging with the river Brahmani. The Kala Nallah is a left tributary of river Brahmani in Brahmani basin.

4 Climate

The climate is tropically characterized with hot, summer and cold. Rainfall occurs between June to October. However, the distribution in rainfall is not uniform and is erratic. The principal crop is paddy and it is not assured due to irregular and uneven rainfall pattern in the ayacut area.

4.1 Temperature

The area belongs to tropical climate zone. The variation of the temperature in Summer is 40^0 to 48^0 C. and in Winter is 8^0 to 20^0 C.

4.2 Rainfall

Rainfall in the basin is mainly due to Southwest monsoon, which occurs during the period from June to October. About 90% of the total rainfall occurs during this period. The average annual rainfall in the catchment is 1554.78mm.

4.3 Relative Humidity

Relative humidity is minimum in the month of January- February and maximum in the month of August.

4.4 Cloud Cover

The maximum cloud cover is observed during the month July & August and minimum is observed during the month January-February.

5 Command Area

The command area is moderately populated covering 40 Nos. of villages. The population mainly consists of S.T, S.C and other Backward Classes and above all, all are the displaced persons of the Rengali Major Irrigation Project. The GC.A. of the project is 4800 Ha. It is proposed to provide irrigation to a C.C.A. of 4050 Ha. It is proposed to provide irrigation to an area of 3600 Ha in Khariff.

6 Type of Scheme

The scope of the project is to construct a barrage near village Kaliapal on Kala nallah to irrigate an ayacut of 4050 Ha. The pond level of the barrage is kept 150.00m. The barrage is designed for a maximum flood discharge of 1194Cumecs. The site has already been inspected by the Geologist of GS.I and drilling of 20 Nos. of holes in and around the project site has been completed and report received. The present site is found to be technically most feasible from all point of views.

7 Socio Economic Aspects

The Social-economic condition of the people in the area is extremely poor. The inhabitants of the area belong mostly of S.T, S.C and other weaker sections of society. The present land use practice & the method of traditional farming in the command area are continuing since generation together. The modern methods of

cultivation using Eco-techniques and machinery, manures and fertilizers are yet to be practiced by the farmers. The potentiality of the project when developed shall no doubt change the old and primitive method of cultivation. In absence of irrigation facility the crop yield solely depends on the natural rainfall. Failure of crop is a common phenomenon in this area due to unevenly distributed rainfall. The only remedial measure to come out of this hazard is to provide assured irrigation. As such, there is necessity for construction of an irrigation project. The output of cultivation is badly affected due to uneven and erratic rainfall although the average rainfall is higher than that of the state.

On completion of the project the local people will immediately enjoy the facilities of assured irrigation and will be able to generate resources for development of the area.

Executive Engineer
Ib Investigation Division
SUNDARGARH

Divisional Forest Officer
Deogarh, Division