SARKULA LIFT IRRIGATION SCHEME

Tehsil - Pohari

Distt. - Shivpuri

| C N | D. W. I | | Proposed Site | A11. |
|-------|------------------------------------|--------------|--------------------|---------------|
| S.No. | Particulars | Alternate-1 | | Alternate-2 |
| 1 | GENERAL | | | |
| | Name of project | Sarkula Dam | Sarkula Dam | Sarkula Dam |
| | Type of Project | Irrigation | Irrigation | Irrigation |
| | Location | Near Pohari | Near Pohari | Near Pohari |
| | | Chambal | | Chambal |
| | River Basin | Basin | Chambal Basin | Basin |
| | | Sarkula | | |
| | Located on River | River | Sarkula River | Sarkula River |
| | Tehsil | Pohari | Pohari | Pohari |
| | District | Shivpuri | Shivpuri | Shivpuri |
| | State | M.P. | M.P. | M.P. |
| 2 | HYDROLOGY | | | |
| | Catchment Area (Sq.km.) | 131.79 | 131.25 | 132.338 |
| | Intercepted catchment area | | | 2 |
| | (Sqkm.) | - | _ | - |
| | Net Catchment Area (Sqkm.) | 131.22 | 131.25 | 131.68 |
| | Available Annual Yield at Dam site | 0.215 | 0.215 | 0.215 |
| | Liver Storage Capacity (MCM) | 28.21 | 28.295 | 28.31 |
| 3 | DESIGN IRRIGATION (Ha) | 6500 | 6500 | 6500 |
| 4 | SUBMERGRNCE DETAILS | | | |
| | Total submergence (ha) | 332.88 | 311.082 | 354.182 |
| | Private Land (ha) | 69.492 | 69.492 | 69.492 |
| | Govt. Land (ha) | 124.35 | 124.35 | 124.35 |
| | Forest Area ha. | | | |
| | (Submergance + area required for | ET . | | |
| | various component of Project) | 148.30 | 117.24+9.26=126.50 | 169.60 |
| | Habitation | Yes | Yes | Yes |
| | Properties | 27 | 27 | 27 |
| | Submergence Ratio | 5.12 | 4.79 | 5.45 |
| | Total Cost (Crore) | 229.89 | 226.62 | 233.085 |
| | Cost per Ha. (Rs. In Lakhs) | 3.54 | 3.48 | 3.60 |
| | Techno Economis feasibility | Not feasible | 1 | Not feasible |
| | | due to | | due to |
| | | uneconomic | Economical & | uneconomica |
| | | al & more | Feasible | & more |
| | | forest land | | Forest Area |
| | | | | |

Sub Divisional officer
Water Resources Sub Division No.2

Shivpuri (M.P.)

Executive Engineer
Water Resources Division
Shivpuri (M.P.)

COMMENTS ON ALTERNATIVE ALIGNMENT FOR DAM SITE

ALTERNATE DAM LINE NO. 1

Alternate Dam line No. 1 is located 350m below in D/S the finally selected site. Forest land 148.30 ha. affected from this proposal which is 21.80 ha. more than the finally selected site. Hence the proposal is not feasible in technical/financial point of view.

PROPOSED SITE

If we considered Dam Line-1 as a proposed site, the catchment area will occur sufficient to have that capacity which serves the potential of 6500 ha. of irrigation. The whole body of dam structure and component is in forest land. The proposal involved minimum forest land in submergence. Hence proposal is economical /feasible as per departmental norms.

ALTERNATE DAM LINE NO. 3

Alternate Dam line No. 1 is located 350m below in D/S the finally selected site. Forest land 169.60 ha. affected from this proposal which is 43.10 ha.more than the finally selected site. Hence the proposal is not feasible in technical/financial point of view.

As per above proposed site is best suitable ,economical / feasible as per department norms.

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Executive Engineer Water Resources Division Shivpuri (M.P.)

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JUSTIFICATION NOTE

A note containing justification for location of the project named Sarkula Medium Lift Irrigation Project. The latitude and longitude of the proposal site is 77°21'10"E and 25°31'17"N respectively. There is no alternate alignment above the proposed site because of reduction in live capacity, which lead to reduction in command area .Two nos. of alternate site namely alternate 1 & alternate 3 will consider which is 350m and 728m in D/S of proposed Dam respectively, are not feasible in view of increase in forest land with respect to live capacity. There fore present proposal is most economical / feasible site with minimum submergence. It consist of earthen dam near Tehsil H.Q. Pohari on Sarkula river which has total catchment area 131.25 Sq.km. and irrigation served as 6500 ha. A DGPS survey has been carried out to achieve minimum submergence area and optimum project cost. For this purpose a detailed study of proposed dam line site has been done and finally decided. If we shift dam line that either decrease in capacity or unavailability of banks or higher the submergence area will occur. Therefore present proposal is best suitable site with minimum submergence area.

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