

## **Justification for locating Karapani Irrigation Project in Forest land**

Following alternatives were examined during the project formulation stage of the proposal for placing a Dam keeping in view of all aspects to get optimum benefits. The sites evaluated were...

### **Fist alternatives:**

A proposed Dam site has been selected at the downstream of the confluence point of two three Major nallahs near village Jal Kolsani (Latitude 21° 42' 26.76'' longitude 85° 04' 34.04''). The river bank is not confined and no visible rock out crop is found. And a sharp meandering in the river at downstream of the proposed site and high submergence in Lunga Reserve Forest (about 200ha) along with habitations. Hence the site is rejected.

### **Second alternative:**

The second proposed barrage site has been selected at 2.3km downstream of the 1<sup>st</sup> alternative near village Sulabhadihi (Latitude 21° 43' 15'' longitude 85° 03' 31''). There is existing forest growth at both bank of the proposed site and no visible rock out crop at bed of the river. This alternative has been abandoned again due to the high submergence of villages like Angul, Ranja, Sulabhadihi including submergence of Lunga RF (about 150ha) and involvement of more village area and less ayacut coverage.

### **Third alternative:**

The present proposed barrage site has been selected at 2.5km downstream of the 2<sup>nd</sup> alternative near village Barghat (Latitude 21° 44' 15'' longitude 85° 3' 31''). The proposed site has confined bank with visible rock out crop at river bed. Hence the third alternative is finalized for further survey and investigation due to the following points

1. The submergence area in the basin is much less than the 2nd proposed axis which shall involve acquisition of less land, less forest area, less rehabilitation problem and less evaporation losses in the reservoir after construction.
2. Considerable quantity of ayacut is not available below the 2nd axis and up to 1st axis. This shall involve idle run of main canal including construction of good nos. of C.D. structures for 1.8 Kms. of length of either side.
3. Land acquisition for 1.8 Km of length in both left and right main canal can be avoided.
4. The basin at U/S site is flatter and more cultivable land will be submerged. To provide irrigation benefits to these areas can be done by pump sets after reservoir is built up.
5. About 12 Sq. Km of extra catchment area will be available at lower site.

  
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