

## Justification for locating Kutulisinga Irrigation Project in Forest land

The sub-surface exploration and geo-technical investigation of Kutulisinga Irrigation Project were carried out long back in 1982-83 by Geologist Mr. Bandhopadhyaya and Geological Survey of India during 2004-05 and 2006-07. The geological set up including the geological mapping of the area surrounding the dam axis has been done. Basing on his suggestion, the following alternatives has been evaluated and the location of the dam axis has been selected keeping in view of all aspects to get optimum benefits.

### **First alternatives:**

A proposed Dam site has been selected at the 1.2km upstream of the confluence point of two three Major nallahs near village Taleipathar (Latitude  $20^{\circ} 48' 9.96''$  longitude  $84^{\circ} 41' 4.47''$ ). The riverbank is not confined and no visible rock out crop is found covering of soil surface only. And a sharp meandering in the river at downstream of the proposed site and high submergence in Kutulisinga Reserve Forest (about 300ha) along with revenue village of Taleipathar & Kutulisinga habitations Hence the site is rejected.

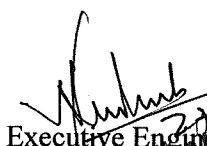
### **Second alternative:**

The second proposed barrage site has been selected at 300m downstream of the 1<sup>st</sup> alternative near village Kutulisinga (Latitude  $20^{\circ} 48' 1.57''$  longitude  $84^{\circ} 41' 11.37''$ ) with 220m length of the Dam axis. 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 Kutulisinga and Kutulisinga RF (about 200ha) and involvement of more village area and less storage and less ayacut coverage.

### **Third alternative:**

The present proposed barrage site has been selected at 900m downstream of the 2<sup>nd</sup> alternative near Kutulisinga Reserve Forest (Latitude  $20^{\circ} 47' 56.01''$  longitude  $84^{\circ} 41' 34.38''$ ). The proposed site has confined bank with visible rock slope in the left bank. 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 1<sup>st</sup> and 2<sup>nd</sup> proposed axis which shall involve less acquisition of land, less forest area, zero rehabilitation & resettlement and less evaporation losses in the reservoir after construction.
2. This site found more suitable for construction of an earth dam. Taking the advantage of the rock slope of the left bank, the spill way from the central zone of the river to the left bank thus reducing the height for the spillway up to its crest.
3. Considerable quantity of ayacut is not available within the 2<sup>nd</sup> axis and up to 1<sup>st</sup> axis. The final alternative shall involve idyllic run of main canal including construction of good nos. of distributaries on either side.
4. Land acquisition for 1.2 Km of length in both left and right main canal can be avoided.
5. No cultivable land will be submerged.
6. About 22 Sq. Km of extra catchment area will be available at lower site.

  
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