

# RANJORE IRRIGATION PROJECT

## SALIENT FEATURES

- 1. General.**
  - i) State : Odisha
  - ii) District : Bargarh
  - iii) Sub-Division : Padampur
  - iv) Village : Sarandapali
  - v) River : Ranjore
  - vi) Location : Lat.21<sup>0</sup>-14'-29" N, Long.83<sup>0</sup>-29'-07" E
  - vii) Topo sheet Reference : 64-0/7, 0/8, 0/12
  - viii) Blocks to be benefitted : Bijepur, Barpalli
- 2. Hydrology.**
  - (a) Catchment area : 123.00 Sq. Km.
  - (b) Rain fall
    1. Maximum Monsoon Rainfall : 1475.80 mm
    2. Minimum Monsoon Rainfall : 704.60 mm
    3. 75% dependable yield : 1981.25 Ham
- 3. Flood**
  1. Design flood at Dam site : 1124 Cumecs.
- 4. Reservoir**
  1. Gross Storage Capacity at FRL : 2903 Ham.
  2. Dead storage capacity : 321.00 Ham
  3. Live storage capacity : 2582 Ham
  4. F. R. L : 196.60 m
  - 5 D.S.L : 191.60 m
  6. Top Bank Level : 185.60 m
- 5. Dam:**
  1. Type : Homogenous Rolled Fill Earth Dam
  2. Length of dam : 1920.00m.
  3. Maximum height of Dam : 13.00m
  4. Top Width : 6.00 m
  5. Top Level of Dam : 198.60 m
- 6. Spillway :**
  1. Type of Spillway : Ogee Crested
  2. Effective length : 48.00 m
  3. Crest level : 190.60 m
  4. Spillway Capacity : 1124.00 m<sup>3</sup> / Sec

## 7. Submergence

1. Area Submerged by reservoir at FRL : 828.00 Ha.  
a) Govt. Land-115.00 Ha.  
b) Private land-713.00 Ha.  
**Total = 828.00 Ha.**
2. (a) Village Submerged : Fully =Nil  
Partially=10  
**Total =10**
- (b) Population area affected : Nil
3. Forest area affected : 1. Reservoir forest –Nil  
: 2. Village forest –14.97 Ha.  
: **Total –14.97 Ha.**
4. Length of NH to be Submerged : Nil
5. Length of MDR to be Submerged : 3.30 Km. (Baragarh to Bijepur MDR)

## 8. Command Area:

1. G.C.A : 5500.00 Ha.  
2. C.C.A : 4125.00 Ha.  
3. Percentage of C.C.A to G.C.A : 75%  
3. Area during Khariff : 2200.00 Ha.  
4. Area during Rabi : 350 Ha.

## 9. Canal System:

1. Left Main Canal : Length –7.50 Km.  
: C.C.A-2250.00 Ha.  
: Khariff –1200 Ha. ,Rabi-190 Ha.
2. Right Main Canal : Length –10.00 Km.  
: C.C.A -1875.00Ha.  
Khariff –1000 Ha., Rabi-160 Ha.