SALIENT FEATURES OF OMKARESHWAR PROJECT

LOCATION

State : Madhya Pradesh

District : Dam-khandwa

Command khandwa,khargone&Dhar.

Latitude : 22°-15′-30″ N)Toposheet No.

Longitude : $76^{\circ}-9'-30''$ N) 55 B/13. 53/B 14

River : Narmda

Location : 11.2 km away from omkareshwar

Road Railway Station (W.R)

48 km D/S of Narmada Sagar Dam Site.

HYDROLOGY

Catchment area

Upto dam site : 64880 km²

Maximum annual

Rainfall 1944(Mortakka) : 11851 mm

Minimum annlual

Rainfall 1899 (Mortakka): 604 mm

Average annual rainfall

(1891-1967)(Mortakka) : 1,282.7 mm

Design flood (peak) : 80,816 m³/sec

Actual observed

Maximum flood at

Mortakka : 59,350 m³/sec

Available run off At omkareshwar Dam site(1891-1977) from computed Series at 75%

dependability : 27,877 mm³

RESERVIOR DATA

Maximum water level : 202.69 m

Full Reservoir level : 201.16 m

Dead storage level : 193.54 m

Water spread at FRL : 14154.78 ha

Gross Storage at FRL : 1.50 mm³

Dead storage : 0.69 mm³

Live storage : 0.81 mm³

<u>Dam</u>

(a) Overflow dam

Top of dam : 205.74 m Length of spillway : 351.13 m No. and size of crest : 16 Nos.

Gates 18.29 m x 17.07 m

Crest level : 184.10 m

No. and size of under

Sluices : 10 No. of 3.05 m x 4.57 m

Top width of the dam : 7.62 m

(b) Non overflow dam

Length of Non overflow

Dam : 306.02 m

Maximum ht above

Foundation : 48.77 m

(c) POWER DAM

No. and size of units : 6 Nos. of MW each

6 Blocks of j16.26 M : 97.60 m

Type of turbine : Francis

Power development at

100 percent load factor

Final phase : 80 MW
Total length of Masonry : 754.75 m

Dam

(a) + (b) + (c)

Canal system (Irrigation)

Gross commanded area : 1.715 lakh ha
Area to be irrigated : 1.325 lakh ha

(CCA)

Length of canals

Length of leftbank : 72 km

Main canal

Length of right bank

Flow canal : 160 km Length of right bank : 160 km

Lift canal

392 km

Estimates of cost

Cost of unit I (Dam and

Appurtenant work) : 63.90

Cost of unit II (Main canal

and Branches) : 101.08

Cost of unit-III (Hydro-

Electric works) : <u>137.73</u>

Total : <u>322.71</u>

Apportionment of cost : <u>Rscrores</u>

Chargeable to irrigation : 122.38

Chargeable to power : 200.33

Cost per ha of C.C.A : 10460

Benefits

Annual additional yield food and

Other crops : 6.31 Lakh tonnes

Annual Value of additional produce

Food and other crops : Rs 33.65 crores.