

Power Generation Benefits

From the table 7.5, it is observed that 15459.22 thousand KW are power generation is possible without heading up of the canal. The present rate of power purchase is Rs. 4.0/- per KWH. So the total benefits due to power generation is as under:-

$$= 4 \times 15459.22 \times 1000 = \text{Rs. } 61836880/-$$

$$= \text{Rs. } 6.18 \text{ crores}$$

Total Annual Benefits due to Irrigation and Power Generation

= Benefits of additional irrigation + Benefits of Power generation

$$= 50.19 + 6.18 = \text{Rs. } 56.37 \text{ crore.}$$

BENEFIT COST RATIO

Benefit Cost Ratio with Power Generation

Total Project Cost:	=	409.00 Cr.
A. Annual Benefits	=	68.915 Cr.
B. Annual Cost:		
Total Cost of the Scheme	=	409.00 Cr.
(i) Interest on Capital Cost @ 5.25% of the estimated cost (Rs. 409.00 Cr.)	=	21.47 Cr.
(ii) Depreciation @ 1% cost (Assuming life of project as 100 years)	=	4.09 Cr.
(iii) Annual operation and maintenance charges @ Rs.1175/- per hectare for 71472 ha benefitted area	=	8.40 Cr.
Total Annual Cost	=	33.96 Cr.
Benefit Cost Ratio: 68.915/33.96	=	2.02:1

Benefit Cost Ratio without Power Generation: x

A. Annual Benefits	=	62.735 Cr.
B. Annual Cost:		
Total Cost of the Scheme	=	409.00 Cr.
(i) Interest on Capital Cost @ 5.25% of the estimated cost (Rs. 409.00 Cr.)	=	21.47 Cr.

(ii)	Depreciation @ 1% cost (Assuming life of project as 100 years)	=	4.09 Cr.
(iii)	Annual operation and maintenance charges @ Rs.1175/- per hectare for 71472 ha benefitted area	=	8.40 Cr.
	Total Annual Cost	=	33.96 Cr.
	Benefit Cost Ratio : 62.735/33.96	=	1.84:1