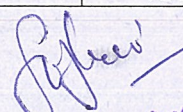


Benefit cost ratio

THE CALCULATION OF BENEFIT COST RATIO (BCR) OF

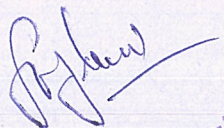
Rs. in Lakh

A.	GROSS RECEIPT	Before Irrigation (Without Project)	After Irrigation (With Project)
1	Gross value of farm produce	23321.11	75582.5
2	Dung receipts (at 30% of the fodder expenditure)	0	0
3	Total (A): Gross Receipts (1+2)	23321.1125	75582.5
B.	EXPENSES :		
1	Expenditure on seeds		
2	Expenditure on manure etc.	4670.89	7909.91
3	Expenditure on hired labour (human and bullock)		
4	Fodder expenses (as percentage of gross value of produce)		
5	Depreciation on implements (2.7% of Item A.1)	} 2262.15	} 7331.50
6	Share and Cash Rent (5% of Item A.1)		
7	Land Revenue (2% of Item A.1)		
8	Total (B): Expenses (1 to 7)	6933.04	15241.42
C.	NET VALUE OF PRODUCE		
1	Total Gross receipts (Total A.3)	23321.1125	75582.5
2	Minus Total expenses (Total B.8)	6933.04	15241.42
3	Net Value of Produce (C): (1-2)	16388.07	60341.09
D.	ANNUAL AGRICULTURAL BENEFITS		
1	Net value after irrigation (C.3)	60341.09	
2	Minus Net value before irrigation (C.3)	16388.07	
3	Net Annual Benefits (C): (1-2)	43953.01	


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 Distt. Dhar (M.P.)

D	ANNUAL COSTS:	83335	Lakh	Lakh
1	Interest on capital @ 10% (Estimated total cost of the project including cost of land development.	8333.5	Lakh	Lakh
2	Depreciation of the project @ 1% of the cost of project for 100 years life of the project and @ 2% for 50 years life of the project	1666.7	Lakh	Lakh
3	Annual operation and maintenance charges @ Rs. 180 per ha. of CCA10000 Ha....	63	Lakh	Lakh
4	Maintenance of the head works @ 1% of its cost	451.32	Lakh(head work45132 lakh)	Lakh(head work6472 lakh)
5	Depreciation of the pumping system@ 8.33% of the estimated cost of the pumping system assuming life of the system as 12 years (Applicable to lift irrigation)	1543.5	Lakh(pumps 18530 lakh)	Lakh(pumps 1466 lakh)
6	Depreciation of the raising mains @ 3.33% of the estimated cost of the raising mains assuming life of the system as 30 years (Applicable of lift irrigation)	758.27	Lakh(R M 22771Lakh)	Lakh(R M 3796 Lakh)
7	Power charges for			
	(a) Lift irrigation @ Rs 800 per ha. (Applicable to lift irrigation) for 10000 Ha. @ 80 Lacs per month for 4 months.	280	Lakh	Lakh
	Electrical charges at the Rs 5 per unit for 4 MU	1946		
8	Total (G) Annual Cost (1 to 7)	15042.34	Lakh	Lakh

$$\begin{aligned}
 \text{BENEFIT COST RATIO} &= \frac{\text{Annual Benefits}}{\text{Annual cost (G)}} \\
 &= \frac{43953.01}{15042.34} \\
 &= 2.92
 \end{aligned}$$


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