

ROPAR HEAD WORKS DIVN. ROPAR
PROJECT ESTIMATE FOR NARD-MISEWAL-CHIKNA LIFT IRRIGATION
SCHEME IN CHANGER AREA, PUNJAB

Salient Features

S.No.	Description	Ropar
		NARD, MISEWAI , CHIKNA
1	Project Estimated Cost	1193.90 Lakhs
2	Source of Supply	ASHC
3	CCA	1015.12 Acres
4	Water Allowance	3.05%
5	Discharge	4.71Cs
6	No of Pumps	Five
7	Benefit Cost Ratio	3.11:1 with govt subsidy 1.67:1 without govt subsidy
8	Length of Rising Main	7.48 Kms.
9	Village Benifited	NARD, MISEWAI , CHIKNA

Sub Divisional Officer,
Doraha Sub Divn.
Doraha

EXECUTIVE ENGINEER
ROPAR HEADWORKS DIV.
ROPAR

[Handwritten signature]
2.5

ROPAR HEAD WORKS DIVN. ROPAR

Name of work: - Project Estimate for providing Lift Irrigation Facilities to the area
of villages Thapal, Jhinjri, Muhewal etc. located in the Sub Mountainous area of
Distt. Ropar (Anandpur Sahib Constituency)

CALCULATION OF BC RATIO

		Rs. In Lacs	
		Before Project	After Project
A- Gross Receipt:-			
Gross value of farm products		5.29	416.05
B- Expenses :-			
Total Expenditure		4.11	222.41
C- Net value of products:-			
Net Value of Produce		1.18	193.64
D- Annual Agriculture Benefits:-			
Net Value after Irrigation			193.64
Net Value before Irrigation			1.18
Net Annual Benefits			192.46
E- Other Net Annual Benefits:-			
Due to aqua- culture including pisciculture drinking & industrial water supply, hydro - power generation , animal husbandry, catchment area treatment chargeable to project, canal bank plantation, reservoir periphery afforestation etc.			0.00
F- Total annual Benefits (D-3 +E)			192.46
G- Annual Costs:-			
1 Interest on capital @ 10% (Estimated total cost of project including cost of land development @ Rs.3000/ hect. =		3000	x 411
1232939 + 1233000 = 24.66 lacs			2.47
2 Depreciation of the project @1% of the cost of project 100 years life of project & @ 2% of 50 years i.e.on Rs		12.33	0.12
3 Annual operation & maintenance charges @ Rs 9827.062 / hect of CCA i.e. on 411 hect.			40.39
4 Maintenance of the Head Works @ 1% of its cost			0
5 Depreciation of the pumping system@ 8.33% of the estimated			

cost of the pumping system assuming life of the system as 12 yrs.
(Applicable to lift irrigation) i.e. on Rs. 1082184

0.90

- 6 Depreciation of the Raising Main @ 3.33% of the estimated
cost of the Rising Main assuming life of the system as 30 yrs.
(Applicable to lift irrigation) i.e. on Rs. 54028266

17.99

- 7(i) Power charges for lift irrigation 0 / hect.
(Applicable to lift irrigation) with Govt. Subsidy

0.00

- 7(ii) Power charges for lift irrigation 12997.05 / hect.
(Applicable to lift irrigation) without Govt. Subsidy

53.42

- 8 Total (G) Annual Cost (1-7)

(i) With Subsidy

61.87

(i) Without Subsidy

115.28

BC Ratio = $\frac{F}{G-8} = \frac{\text{Annual Benefits}}{\text{Annual Cost}}$

- 1 With Govt. Subsidy =
0 Rs/unit

192.46 =
61.87

3.11 : 1

- 2 Without Govt. Subsidy =
5.06 Rs/unit

192.46 =
115.28

1.67 : 1

Sub Divisional Officer,
Doraha Sub Divn.
Ropar.

Bin

Executive Engineer,
Ropar Headworks Division
Ropar.