BENEFIT COST RATIO

VARAHI IRRIGATION PROJECT ZONE

ESTIMATED VALUE OF PRODUCE BEFORE CANAL IRRIGATION

Sl.No.	Crop	Area in acres	Produce / Acre (Quintals)	Toatal Produce (Quintals)	Rate (Per Quitals)	value of Total Produce(Rs. Lakhs)	Fodder Produce / Acre (Quintals)	Total Fodder Produce	Rate per Quintal	Value of fodder produced (Rs. Lakhs)	Expense/ Acre	Toatal Expenses (Rs.lakhs)
A	**Command Area**											
1	Sugarcane	15000	11	165000	580	957	64	960000	85	816.00	7500	1125
2	Paddy-I Crop											
3	Paddy-II Crop 50% of wet-I	7500	13	97500	560	546.00	64	480000	85	408.00	7500	562.50
4	Semi dry -II crop (Pulsesetc. 50% wet-I)	7500	2.5	18750	600	112.50	3	22500	25	5.63	1500	112.50
B	**Submersion Area**											
1	Garden	29.70			4000	1.19						
2	Paddy-I Crop	222.40	11.00	2446.40	550	13.46	64	14233.60	85	12.10	7500	16.68
3	Paddy-II Crop	127.30	13.00	1654.90	550	9.10	64	8147.20	85	6.93	7500	9.55
4	Semi-dry -II crop	127.30	2.50	318.25	750	2.39	3	381.90	25	0.10	1500	1.91
5	Reserved Forest	61.80			2000	1.24						
C	**For canal alignment**											
1	Garden	49.4			4000	1.98						
2	Paddy-I Crop	575.8	11	6333.8	550	34.84	64	36851.2	85	31.32	7500	43.185
3	Paddy-II Crop	522.6	13	6793.8	550	37.37	64	33446.4	85	28.43	7500	39.20
4	Semi dry-II Crop	522.6	2.5	1306.5	750	9.80	3	1567.8	25	0.39	1500	7.84
5	Reserved Forest	68			2000	1.36						
				Total		**1728.21**				**1308.89**		**1918.36**

VARAHI IRRIGATION PROJECT ZONE

ESTIMATED VALUE AFTERE CANAL IRRIGATION

No.	Crop	Area in acres	Produce / Acre (Quintals)	Toatal Produce (Quintals)	Rate (Per Quitals)	value of Total Produce (Rs.Lakhs)	Fodder Produce / Acre (Quintals)	Total Fodder Produce	Rate per Quintal	Value of fodder produced(Rs Lakhs)	Expense/ Acre	Toatal Expenses (Rs.lakhs)
1	Sugarcane	19400	50	970000	750	7275.00					10000	1940
2	Paddy crop-I	19400	20	388000	580	2250.40	75	1455000	85	1236.75	7500	1455
3	Paddy crop-II	19400	20	388000	560	2172.80	75	1455000	85	1236.75	7500	1455
4	Paddy crop -III	19400	25	485000	540	2619.00	75	1455000	85	1236.75	7500	1455
				Total		14317.20				3710.25		6305.00

VARAHI HRIGATION PROJECT ZONE			
NET VALUE OF PRODUCE			
Sl.no.	Particulars	Before Irrigation (Rs.In Lakhs)	After Irrigation (Rs.In Lakhs)
I	Gross Reciepts		
	1. Gross value of farm produce	1728.21	14317.2
	2. Value of fodder	1308.89	3710.25
	Total	**3037.10**	**18027.45**
II	Expenses		
	1. Expenditure on inputs & labours etc.,complete	1918.36	6305
	Net value of produce	**1118.74**	**11722.45**

VARAHI IRRIGATION PROJECT ZONE
BENEFIT COST RATIO

Sl.No.	Particulars	Amount (Rs.in Lakhs)
I	1. Value of total agricultral produce before irrigation including forest produce	3037.10
	2. Cost of cultivation	1918.36
	3. Net production before irrigation	1118.74
II	1. Value of total agricultral produce After irrigation including forest produce	18027.45
	2. Cost of cultivation	6305.00
	3. Net production ~~before~~ after irrigation	11722.45
III	**Net Benefit (II-I)**	**10603.71**
	Total cost of the project	56953.00
IV	**Annual cost**	
	1. Interest on capital cost @ 10%	5695.30
	2. Depriciation @2% on capital cost excluding capital cost of irrigation pumps & Rising mains	1139.06
	3. Administrative & working expenses @ Rs.300 per Ha. of irrigable area	47.10
	4. Expenses on lift irrigation scheme (including Depriciation of pumps @8.33% & rising main @4%)	37.32
	Total - Annual cost	**6918.78**
	B.C.RATIO	**1.53**

B.C RATIO = Net benefit / Annual cost = 10603.71/6918.78 = 1.53

SUPERINTENDING ENGINEER
Karnataka Neeravari Nigama Ltd.,
VARAHI PROJECT CIRCLE
SIDDAPURA - 576 229, Udupi Dt.

Chief Engineer
Karnataka Neeravari Nigam Ltd.,
VARAHI PROJECT ZONE
SIDDAPURA-576229, Udupi District

Attested

Executive Engineer
Karnataka Neeravari Nigam (L)
No.1, Varahi Reservoir Project Division
SIDDAPURA - 576229, Udupi District