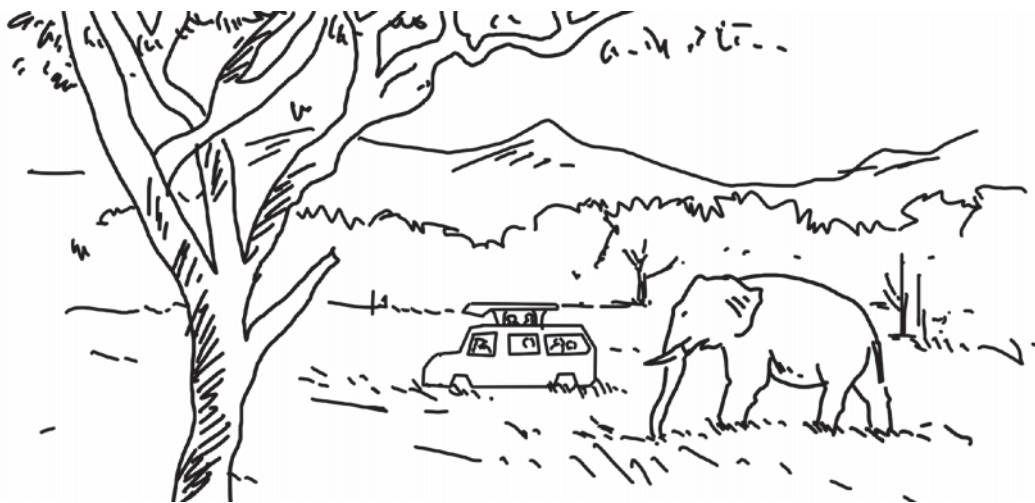


ECO-TOURISM



1.0 INTRODUCTION

Eco-tourism is a concept developed around the idea of travelling to places of natural beauty, moving around and staying with the places of nature for a number of days. It has the twin objectives of conserving environment and improving the welfare of the local people. Countries like Kenya, Costa Rica and South Africa have already successfully promoted eco-tourism. Kerala presents a unique success story of eco-tourism in our country. On this similar line, North East States has immense scope for eco-tourism, as its natural beauty with diverse flora and fauna is vastly unexplored. The green forests, blue hills and enchanting rivers are the basis on which eco-friendly tourism can be developed. For that a host of matters to be properly addressed, include: (a) development of a motorable road to the spots of tourist attraction, (b) creation of infra-structural facilities like good quality food and accommodation, (c) river cruising and water sports, bird watching towers, etc. These facilities are likely to attract eco-tourists.

3.0 COST OF THE PROJECT

The estimated project cost is given below.

(Rs. in lacs)	
Particulars	Amount (Rs)
Land & Site Development	6.60
Building & Civil Works	27.01
Equipment	3.06
Misc. Fixed Assets	6.03
Preliminary & Pre-operative Expenses	1.36
Contingencies & Escalation @ 3%	1.28
Working Capital Margin	1.81
TOTAL	47.17

This project profile on Eco-tourism is for development of a river eco camp based around facilities of river rafting and angling. The unit will be set up with 7 nos of boats and 5 Nos of cottages. Each cottage will be double bedded, thus having accommodation capacity of 10 persons per day.

2.0 MARKET POTENTIAL

Adventure sports activities like rock-climbing, trekking, para-sailing, water sports, river rafting and angling are being promoted by different state governments of the North East Region. In Assam, there is an annual angling competition, which attracts not only the local enthusiasts but also participation from Indian and foreign tourists. With rising incomes, adventure and recreational activities like angling are being taken up by more and more people in the North East. As such, the target customer for the present project is not dependent on the tourists alone.

3.1 Land & Site Development: No cost has been considered for land. Expenses on site development are estimated as below.

Particulars	Area (rm)	Rate (Rs)	Amount (Rs)
Motorable approach road	1000	400	400000
Gravel pathway	800	200	160000
Site levelling, etc	LS	LS	100000
TOTAL			660000
Say (Rs. in lacs)			6.60

3.2 Building & Civil Works: Details of building & civil works are given below.

Particulars	Area (Sqm)	Rate (Rs)	Amount (Rs)
5 Nos. of Cottages (Brick wall, CGI sheet roof, Concrete Floor)	210	6000	1260000
Restaurant (Brick wall, CGI sheet roof, Concrete Floor)	72	6000	432000
Staff Quarters & Store Room (Brick wall, CGI sheet roof, Concrete Floor)	120	6000	720000
Sub total			2412000
Add: Electrification, water supply and sanitation @ 12%			289440
TOTAL			2701440
Say (Rs. in lacs)			27.01

3.3 Equipment: Details of equipment are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Boats (Dare Devils-6 Persons)	2	60000	120000
Boats (River Queen-4 Persons)	4	35000	140000
Life Jacket	15	800	12000
Miscellaneous items	LS	LS	10000
Sub total			282000
Add: Installation, transportation, etc @ 5%			14100
TOTAL			306100
Say (Rs. in lacs)			3.06

3.4 Misc. Fixed Assets: Details of miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
25 KVA DG Set	1	347000	347000
3 HP pump set (water supply system)	1	100000	100000
Ceiling Fans	11	1000	11486
Water Purifiers	5	7500	37500
Cots	31	1500	46500
Tables & Chairs	41	1000	41000
Miscellaneous items	LS	LS	10000
Sub total			593486
Add: Installation, transportation, etc @ 5%			29674
TOTAL			603486
Say (Rs. in lacs)			6.03

3.5 Preliminary & Pre-operative Expenses: Details of preliminary & pre-operative expenses are given below.

		(Rs. In lacs)
Particulars		Amount (Rs)
Travelling expenses		0.20
Professional & other fees		0.20
Interest during implementation		0.86
Miscellaneous expenses		0.10
TOTAL		1.36

3.6 Contingencies & Escalation: Contingencies & escalation has been assumed at 3% of the cost of land & site development, building & civil works, equipment and miscellaneous fixed assets.

3.7 Working Capital: Details of working capital are given below.

		(Rs. in lacs)		
Particulars	Period (Days)	Amount		
		Year 1	Year 2	Year 3
Food & Provisions	30	0.25	0.32	0.39
Power & Fuel	30	0.23	0.30	0.37
Salary	30	1.33	1.33	1.34
Total		1.81	1.95	2.09
Working Capital Margin in Year 1 (100%)	1.81			

4.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

		(Rs. in lacs)	
Particulars	Percent	Amount (Rs)	
<u>EQUITY</u>			
A. Equity from Promoters	40%	18.87	
B. Subsidy from Central/State Govt.	-		
<u>DEBT</u>			
Term Loan from Banks/FIs	60%	28.30	
TOTAL	100%	47.17	

5.0 PROFITABILITY STATEMENT

(Rs. in lacs)							
Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
<u>A. INCOME</u>							
Income at installed capacity (Rs)	72.74	72.74	72.74	72.74	72.74	72.74	72.74
Capacity utilisation	35%	45%	55%	55%	55%	55%	55%
Income from sales/annum (Rs)	25.46	32.73	40.01	40.01	40.01	40.01	40.01
<u>B. OPERATING EXPENSES</u>							
Food & Provisions	3.02	3.89	4.75	4.75	4.75	4.75	4.75
Power & Fuel	2.83	3.64	4.45	4.45	4.45	4.45	4.45
Salary	16.20	16.23	16.26	16.30	16.33	16.36	16.40
Repair & Maintenance	0.42	0.46	0.51	0.56	0.62	0.68	0.75
Selling Expenses	0.25	0.33	0.40	0.40	0.40	0.40	0.40

Miscellaneous Expenses	0.13	0.16	0.20	0.20	0.20	0.20	0.20
Total Operating Expenses	22.86	24.72	26.58	26.66	26.75	26.84	26.94
Less: working expenses capitalised	1.81	0.00	0.00	0.00	0.00	0.00	0.00
Operating profit	4.41	8.02	13.43	13.35	13.26	13.16	13.06
C. FINANCIAL EXPENSES							
Depreciation	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Interest on Term Loan	2.26	2.09	1.71	1.34	0.96	0.58	0.20
Net Profit	0.70	4.48	10.27	10.57	10.85	11.14	11.41
Net cash accruals	2.15	5.93	11.72	12.01	12.30	12.58	12.86
Principal Repayment	0.00	4.72	4.72	4.72	4.72	4.72	4.72

5.1 Income from sales: Income from sales at installed capacity is estimated as below.

Income from Accommodation

No. of cottages	5
No. of beds/cottage	2
No. of days/annum	360
Total rooms/annum	3600
Rate (Rs/day)	1200
Income from rooms at installed capacity (Rs)	4320000

Income from Boats

No. of small boats	4
No. of large boats	2
Rate per Trip (full day) for Small Boat	550
Rate per Trip full day) for Large Boat	1100
No. of days/annum	360
Income from boats at installed capacity (Rs)	794200

Income from Restaurant

No. of guests/annum at installed capacity	3600
Cost of food/day	500
Other items like tea, snacks, etc per day	100
Income from restaurant at installed capacity (Rs)	2160000
Total income at installed capacity (Rs)	7274200

5.2 Food & Provisions: Expenses on food & provisions has been assumed @ 40% of income from restaurant.

5.3 Power & Fuel: Expenses on power & fuel at installed capacity is estimated as below.

A. Expenses on power

Particulars	Quantity	Power (Kw)	Total (Kw)	hrs/day	kwh/day
3 HP water pump	1	2.24	2.24	3	6.71
Ceiling Fans	11	0.50	5.74	10	57.43
General Lighting	20	0.10	2.01	8	16.08
Miscellaneous			1.00	8	8.00
Total power requirement/day (Kw)					88.22

Average load	70%
Proportion running on power	80%
Days/annum	360
Rate per unit (Rs)	5.00
Expenses on power per annum (Rs)	88928
B: Estimate of Diesel required for Generator	
Hrs/day	2
Diesel consumption (litres/hr)	20
Days/annum	360
Diesel Price per litre (Rs)	50
Expenses on diesel (Rs)	720000
Expenses on power & fuel per annum at installed capacity (Rs)	808928

5.4 Salary: Expenses on salary in the 1st year is estimated as given below. It is assumed that salary expenses will increase @ 0.2% every subsequent year.

Particulars of Employees	Numbers	Salary/Month (Rs)	Cost/annum (Rs)
Manager	1	15000	180000
Technicians/skilled workers	10	8000	960000
Waiters/attendants	5	5000	300000
Unskilled workers/helpers	5	3000	180000
Expenses on salary in the 1st year (Rs)			1620000

5.5 Repair & Maintenance: Expenses on repair & maintenance in the 1st year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 10% every subsequent year.

(Rs. in lacs)			
Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & Civil Works	27.01	1%	0.27
Equipment	3.06	2%	0.06
Misc. Fixed Assets	6.03	2%	0.09
Expenses on repair & maintenance in year 1			0.42

5.6 Selling Expenses: Selling expenses have been assumed at 1% of sales.

5.7 Miscellaneous Expenses: Miscellaneous expenses have been assumed at 0.5% of sales.

5.8 Depreciation: Depreciation has been calculated by straight line method. The details of calculation are given below.

(Rs in lacs)			
Description	Cost (Rs)	Rate	Amount/annum (Rs)
Building & Civil Works	27.01	3.34%	0.90
Equipment	3.06	5.28%	0.16
Misc. Fixed Assets	6.03	6.33%	0.38
TOTAL			1.45

5.9 Interest on Term Loan & Principal Repayment: Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 7 years including moratorium period of 1 year with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)

	Year	1	2	3	4	5	6	7
Month 1	Opening balance	28.30	28.30	23.58	18.87	14.15	9.43	4.72
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest (8%)	0.19	0.19	0.16	0.13	0.09	0.06	0.03
	Closing balance	28.30	27.91	23.19	18.47	13.76	9.04	4.32
Month 2	Opening balance	28.30	27.91	23.19	18.47	13.76	9.04	4.32
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.19	0.15	0.12	0.09	0.06	0.03
	Closing balance	28.30	27.51	22.80	18.08	13.36	8.65	3.93
Month 3	Opening balance	28.30	27.51	22.80	18.08	13.36	8.65	3.93
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.18	0.15	0.12	0.09	0.06	0.03
	Closing balance	28.30	27.12	22.40	17.69	12.97	8.25	3.54
Month 4	Opening balance	28.30	27.12	22.40	17.69	12.97	8.25	3.54
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.18	0.15	0.12	0.09	0.06	0.02
	Closing balance	28.30	26.73	22.01	17.30	12.58	7.86	3.14
Month 5	Opening balance	28.30	26.73	22.01	17.30	12.58	7.86	3.14
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.18	0.15	0.12	0.08	0.05	0.02
	Closing balance	28.30	26.34	21.62	16.90	12.19	7.47	2.75
Month 6	Opening balance	28.30	26.34	21.62	16.90	12.19	7.47	2.75
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.18	0.14	0.11	0.08	0.05	0.02
	Closing balance	28.30	25.94	21.23	16.51	11.79	7.08	2.36
Month 7	Opening balance	28.30	25.94	21.23	16.51	11.79	7.08	2.36
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.17	0.14	0.11	0.08	0.05	0.02
	Closing balance	28.30	25.55	20.83	16.12	11.40	6.68	1.97
Month 8	Opening balance	28.30	25.55	20.83	16.12	11.40	6.68	1.97
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.17	0.14	0.11	0.08	0.04	0.01
	Closing balance	28.30	25.16	20.44	15.72	11.01	6.29	1.57
Month 9	Opening balance	28.30	25.16	20.44	15.72	11.01	6.29	1.57
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.17	0.14	0.10	0.07	0.04	0.01
	Closing balance	28.30	24.76	20.05	15.33	10.61	5.90	1.18
Month 10	Opening balance	28.30	24.76	20.05	15.33	10.61	5.90	1.18
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.17	0.13	0.10	0.07	0.04	0.01
	Closing balance	28.30	24.37	19.65	14.94	10.22	5.50	0.79
Month 11	Opening balance	28.30	24.37	19.65	14.94	10.22	5.50	0.79
	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.16	0.13	0.10	0.07	0.04	0.01
	Closing balance	28.30	23.98	19.26	14.54	9.83	5.11	0.39
Month 12	Opening balance	28.30	23.98	19.26	14.54	9.83	5.11	0.39

	Repayment	0.00	0.39	0.39	0.39	0.39	0.39	0.39
	Interest	0.19	0.16	0.13	0.10	0.07	0.03	0.00
	Closing balance	28.30	23.58	18.87	14.15	9.43	4.72	0.00
	Principal Repayment	0.00	4.72	4.72	4.72	4.72	4.72	4.72
	Interest	2.26	2.09	1.71	1.34	0.96	0.58	0.20

6.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5	6	7	TOTAL
Profit After Tax (Net Profit)	0.70	4.48	10.27	10.57	10.85	11.14	11.41	
Depreciation	1.45	1.45	1.45	1.45	1.45	1.45	1.45	
Interest	2.26	2.09	1.71	1.34	0.96	0.58	0.20	
Total	4.41	8.02	13.43	13.35	13.26	13.16	13.06	78.70
Interest	2.26	2.09	1.71	1.34	0.96	0.58	0.20	
Loan repayment	0.00	4.72	4.72	4.72	4.72	4.72	4.72	
Total	2.26	6.81	6.43	6.05	5.68	5.30	4.92	37.45
DSCR	1.95	1.18	2.09	2.21	2.34	2.48	2.65	

Average DSCR = 2.10

7.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

Year	1	2	3
A. Net sales	25.46	32.73	40.01
B. Variable cost			
Food & Provisions	3.02	3.89	4.75
Power & Fuel	2.83	3.64	4.45
Miscellaneous Expenses	0.13	0.16	0.20
Total variable cost	5.98	7.69	9.40
C. Contribution (A-B)	19.48	25.04	30.61
D. Fixed & Semi-fixed Costs			
Salary	16.20	16.23	16.26
Repair & maintenance	0.42	0.46	0.51
Interest on Term Loan	2.26	2.09	1.71
Depreciation	1.45	1.45	1.45
Total fixed cost	20.33	20.23	19.93
E. BREAK EVEN POINT	104.39%	80.80%	65.13%
F. BEP at operating capacity	36.54%	36.36%	35.82%
G. Cash BEP	33.94%	33.76%	33.22%

8.0 INTERNAL RATE OF RETURN (IRR)

(Rs. in lacs)

Year	0	1	2	3	4	5	6	7
CASH OUTFLOW								
Capital Expenditure	42.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	1.81	0.14	0.14	0.00	0.00	0.00	0.00
Total (A)	42.71	1.81	0.14	0.14	0.00	0.00	0.00	0.00
CASH INFLOW								
Profit After Tax		0.70	4.48	10.27	10.57	10.85	11.14	11.41
Add: Depreciation		1.45	1.45	1.45	1.45	1.45	1.45	1.45
Add: Interest		2.26	2.09	1.71	1.34	0.96	0.58	0.20
Add: Salvage Value (10%)								4.27
Total (B)	0.00	4.41	8.02	13.43	13.35	13.26	13.16	17.34
NET FLOW (B-A)	-42.71	2.60	7.88	13.29	13.35	13.26	13.16	17.34

IRR = 15%

EQUIPMENT SUPPLIERS

- (a) Devdutt Agency
Lachit Nagar, Guwahati - 781007, Assam, India
- (b) Sen Sea Marine Services
No. 36 B, Shakespeare Sarani, Kolkata - 700017, West Bengal, India
- (c) Innovators
No. 9A, Bidhan Sarani, Kolkata - 700 006, West Bengal, India