

MODEL PROJECT REPORT

ON

COMMERCIAL FISH FARMING

(2 ACRES WATER AREA)

PISCICULTURE

Since time immemorial, Fish as Protein is an essential ingredient of human food. It is also particularly essential for growing children both for their physical and mental growth. Protein deficiency leads to several diseases in human beings particularly children. Among sources of protein, fish is the cheapest and most easily digestible animal protein and was obtained from natural sources from time immemorial for consumption by human beings. Fish grows naturally in rivers and ponds but can also be produced under artificial conditions. However, due to over exploitation and pollution, the availability of fish in natural waters have declined considerably forcing scientists to adopt various methods to increase its production. Fish farming in controlled or under artificial conditions has become the easier way of increasing the fish production and its availability for consumption. Small entrepreneurs/farmers can easily take up fish culture in village ponds, tanks or any new water body and can improve their financial position substantially. It also creates gainful employment for skilled and unskilled youths.

The area under tanks and ponds available for warm fresh water aquaculture is estimated to be 2.41 million ha. This shows the tremendous scope for fish culture in the country. Only 15 % of the potential area of tanks and ponds available is developed so far, showing immense possibilities for fish culture. Malkangiri district also has a tremendous potential for development of fisheries activities including expansion of water area and commercial fish production due to its conducive climate and water availability.

Composite Pisciculture is adopted for getting maximum fish production from a pond or a tank through utilization of available food organisms supplemented by artificial feeding. Normally, the major species selected for composite fish culture are Catla, Rohu, Mrigal, other exotic varieties including minor carps and freshwater prawn.

A model economics for fish farming with 2 Acre water area is given below. This is indicative and applicable input and output costs and the parameters observed at the field level may be incorporated. An entrepreneur willing to establish a broiler farm may refer this project report and customize the same as per the local condition, since the Techno-Economic parameters may differ on a case by case basis.

TECHNO-ECONOMIC NORMS			
Sl. No.	Parameters	UoM	Value
1	CAPITAL INVESTMENT		
I	Land	Acre	2
a	Cost of fencing / acre	Rs.	50000
II	Civil Construction		
a	Cost of office cum store room construction / sq.ft.	Rs.	250
b	Office-cum- store room	Sq.ft.	100
III	Water Supply system		
a	Borewell / Tubewell	Rs.	0
b	Pump 5 HP	Rs.	0
c	Tank	Rs.	240000
IV	Electrification		
a	Cost of electrification (as % of civil cost)	%	10
V	Equipments		
a	Fishing Nets in LS	Rs.	20000
b	Inlet & Outlets in LS	Rs.	20000
2	Water Area	Acre	2
3	Horticulture Crop in the dike	LS	20000
4	Culture period	Months	11
5	Depth of the Tank (Mts)	Meter	1.5
6	Length of the Tank (Mts)	Meter	80
7	Breadth of the tank proposed (Mts)	Meter	50
8	Total Cubic meter / Acre	Cum	6000
9	Cost of Excaving of Pond / Cum	Rs.	40
10	Fertilizers		
i	Lime	Kgs	400

ii	Single super phosphate	Kgs	120
iii	Urea	Kgs	100
iv	Litter/ Raw Cow Dung (RCD)	Tones	4
v	Cost of Lime/ Kg	Rs.	5
vi	Cost of Single super phosphate/kg	Rs.	10
vii	Cost of Urea/ kg	Rs.	10
viii	Cost of Litter/ Raw Cow dungs (RCD)/ton	Rs.	1000
11	Seed		
i	Fingerlings (80 mm above)	nos	2200
ii	Hatchery FW prawn seed	nos	2000
iii	Minor / exotic carp intercropping	nos	1000
iv	Cost of Fingerlings (80 mm above)	Rs	5
v	Cost of Hatchery FW prawn seed	Rs	2
vi	Cost of Minor / exotic carp intercropping	Rs	2
12	Feed		
i	Pellet feed	kgs	3000
ii	Prawn feed	kgs	225
iii	Cost of pellet feed	Rs	22
iv	Cost of prawn feed	Rs	30
13	Miscellaneous		
i	Medicines & Chemicals/Acre	LS	4000
ii	Harvesting expenses/Acre	LS	4000
iii	Miscellaneous expenses/Acre	LS	4000
14	Cost of horticulture crop plantation	LS	20000
15	Annual Yield of Fish	Kg/ Acre	2000
16	Annual yield of Minor / exotic carps	(Kg/ Acre)	400
17	Annual yield of FW prawn	(Kg/ Acre)	100
18	Sale price of fish	Rs./Kg.	110
19	Sale price of Minor / Exotic carps	Rs./Kg.	120
20	Sale price of FW prawn	Rs./Kg.	200
21	Sale of Horticulture Crop	Rs. In Lump Sum	30000

PROJECT COST						
A	CAPITAL INVESTMENT					
	Particulars	Specifications		Units	Unit Cost Rs	Total cost Rs
1	Land	2	Acre		Available	0
b	Fencing	2	Acre		50000	100,000
					Sub Total	100,000
2	Civil Construction					
b	Office-cum-Store Room	100	sq. ft		250	25,000
					Sub Total	25,000
3	Water Supply system					
A	Pond excavation	6000	cum	2	40	480,000
					Sub Total	480,000
4	Electrification					
a	Installation & Fitting	10%	of civil cost			2,500
					Sub Total	2,500
5	Equipments					
a	Fishing Nets		LS		20000	20,000
b	Inlet & Outlets		LS		20000	20,000
					Sub Total	40,000
	Total Capital Cost					647,500
B	RECURRING EXPENDITURE					
a	Fertiliser cost					16,400
b	Seed cost					34,000
c	Feed cost					145,500
d	Misc. cost					24,000
C	Cost of plantation of horticulture crop					20,000
	Total Recurring Expenditure					239,900
D	TOTAL PROJECT COST					887,400

PROFITABILITY STATEMENT									
Sl. No	Particulars	1st yr.	2nd yr.	3rd yr.	4th yr.	5th yr.	6th yr.	7th yr.	TOTAL
I	COSTS								
A	Recurring costs								
A	Fertiliser cost	16,400	16,400	16,400	16,400	16,400	16,400	16,400	114,800
B	Seed cost	34,000	34,000	34,000	34,000	34,000	34,000	34,000	238,000
C	Feed cost	145,500	145,500	145,500	145,500	145,500	145,500	145,500	1,018,500
D	Misc. cost	24,000	24,000	24,000	24,000	24,000	24,000	24,000	168,000
E	Cost of horticulture plantation	20,000	20,000	20,000	20,000	20,000	20,000	20,000	140,000
		239,900	239,900	239,900	239,900	239,900	239,900	239,900	1,679,300
II	BENEFITS								
A	Sale price of fish	440,000	440,000	440,000	440,000	440,000	440,000	440,000	3,080,000
B	Sale price of Minor / Exotic carps	96,000	96,000	96,000	96,000	96,000	96,000	96,000	672,000
C	Sale price of FW prawn	40,000	40,000	40,000	40,000	40,000	40,000	40,000	280,000
D	Sale of Horticulture Crop	30,000	30,000	30,000	30,000	30,000	30,000	30,000	210,000
	TOTAL BENEFIT	606,000	606,000	606,000	606,000	606,000	606,000	606,000	4,242,000
