

## **TECHNICAL UPDATES**

### **Technical Details of the Bio floc (7-tanks)**

<b>Sr.No.</b>	<b>Component</b>	<b>Details</b>
1	Area for 7 tanks	210 Square meter
2	Bio-floc tank size	4 metre diameter and 1.5 meter height
3	Water holding capacity of each tank	15000 Litres capacity
4	Water quality parameters	Dissolved oxygen-5mg/l, PH- 7.5 to 9, TDS-600 ppm, Floc density-25-40 mg/l, Ammonia-0.5 ppm, Nitrite-0.3 ppm. Nitrate-150 ppm, Alkalinity-120-280 ppm
5	Tanks made up of	Tarpaulin/Fibre
6	Name of Fish species	Tilapia, common Carp, Singhi, Pabda, milk fish, pangasius and Vannamei
7	Bio-floc content	Raw salt, Dolomite, molassis, probiotics
8	Survival	80%
9	Types of feed to be used	Floating Feed (28-32% protein content)
10	Percentage of Feed to be given to Fish	2-3 % of average body weight
11	Feeding frequency	4 times early stage, later 2 times per day.
12	FCR	1:1.2
13	Duration of Culture	6 months
14	Size /Weight of the species (gm)	600gm average weight
15	No. of crops per year	02
16	Capital cost	6.00 lakh
17	Input cost	1.5 lakh per crop
18	Total project reports	7.5 lakh

### **Technical Details of the Bio floc (25-tanks)**

<b>Sr.No.</b>	<b>Component</b>	<b>Details</b>
1	No. of tanks	25 tanks
2	Bio-floc tank size	4 metre diameter and 1.5 meter height
3	Water quality parameters	Dissolved oxygen-5mg/l, PH- 7.5 to 9, TDS-600 ppm, Floc density-25-40 mg/l, Ammonia-0.5 ppm, Nitrite-0.3 ppm. Nitrate-150 ppm, Alkalinity-120-280 ppm
4	Tanks made up of	Tarpaulin/Fibre
5	Name of Fish species	Tilapia, common Carp, Singhi, Pabda, milk fish, pangasius and Vannamei
6	Bio-floc content	Raw salt, Dolomite, molassis, probiotics
7	Survival	80%
8	Types of feed to be used	Floating Feed (28-32% protein content)
9	Percentage of Feed to be given to Fish	2-3 % of average body weight
10	Feeding frequency	4 times early stage, later 2 times per day.
11	FCR	1:1.2

12	Duration of Culture	6 months
13	Size /Weight of the species (gm)	600gm average weight
14	No. of crops per year	02
15	Capital cost	17.75 lakh
16	Input cost	7.25lakh per crop
17	Total project reports	25 lakh

### Technical Details of the Bio floc (50-tanks)

Sr.No.	Component	Details
1	No. of tanks	50 tanks
2	Bio-floc tank size	4 metre diameter and 1.5 meter height
3	Water quality parameters	Dissolved oxygen-5mg/l, PH- 7.5 to 9, TDS-600 ppm, Floc density-25-40 mg/l, Ammonia-0.5 ppm, Nitrite-0.3 ppm. Nitrate-150 ppm, Alkalinity-120-280 ppm
4	Tanks made up of	Tarpaulin/Fibre
5	Name of Fish species	Tilapia, common Carp, Singhi, Pabda, milk fish, pangasius and Vannamei
6	Bio-floc content	Raw salt, Dolomite, molasis, probiotics
7	Survival	80%
8	Types of feed to be used	Floating Feed (28-32% protein content)
9	Percentage of Feed to be given to Fish	2-3 % of average body weight
10	Feeding frequency	4 times early stage, later 2 times per day.
11	FCR	1:1.2
12	Duration of Culture	6 months
13	Size /Weight of the species (gm)	600gm average weight
14	No. of crops per year	02
15	Capital cost	36.50 lakh
16	Input cost	13.50lakh per crop
17	Total project reports	50. lakh

### Technical Details Recirculatory Aquaculture System

Sr.No.	Component	Details
1	Size of each tank	7.65m x 7.65m x 1.5m
2	Capacity of each culture tank	81.93 cum
3	Total no. of tanks	8
4	Total capacity of all tank	655.544 cum
5	Tanks made up of	Tarpaulin/Fibre/Cement tank
6	Name of Fish species	Tilapia, common Carp, Singhi, Pabda, milk fish, pangasius

7	Types of feed to be used	Floating Feed (28-32% protein content)
8	Percentage of Feed to be given to Fish	2-3 % of average body weight
9	Feeding frequency	4 times early stage, later 2 times per day.
10	FCR	1:1.2
11	Duration of Culture	7 months
12	No. of crops per year	01
13	Capital cost	36.00 lakh
14	Input cost	14.00 lakh per crop
15	Total project Cost	50.00 lakh
16	Average Fish production in tanks 4000 kg x 8 tank	= 32000 kg or 320 qt or 32 ton
17	Fish production in one tank	4000 kg
18	Fish seed value of 8000 nos. seed for one tank @ Rs. 4.00/nos.	32000.00
19	Fish Feed value of 4850 kg @ 35.00/kg	169750.00
20	Other expenses (electricity, labour, equipment etc)	38000.00
21	Total for one tank	239750.00
22	<b>Total Fish Production cost : Rs. 239750 x 8</b>	<b>1918000.00</b>
23	Fish sale Production from 1 tank:	380000.00
24	<b>Total sale production from 8 tank (384600 x 8)</b>	<b>3040000.00</b>
25	<b>Total profit</b>	<b>1122000.00</b>

### Project Cost of Fish feed mill plant

Sr.No.	Capacity of Fish feed mill plant	Project Cost (Rs. in lakh)
1	20 tonne/day	200.00
2	8 tonne/day	100.00
3	2 tonne/day	30.00

### Estimate of the fish culture in the new grow out pond in 1.00 hect.

#### Capital cost:

Sr. No.	Item	Amount (Rs.)
1	Pond excavation	410000.00
2	Feed store 15'x12'	138000.00
3	Aerator 2 No.	80000.00

4	Inlet/Outlet/ Sluice gate valve	40000.00
5	Water supply channel	32000.00
	<b>Total</b>	<b>700000.00</b>

Expenditure on unit Inputs	Operational Cost			
	Items	Quantity	Rates(Rs)	Amount Rs.
	Lime(kg)	500	10	5000.00
	Cow Dung (kg)	15000	LS	5000.00
	Urea (kg)	500	8	4000.00
	Super phosphate(kg)	500	10	5000.00
	Fish Seed (No.)	20000	Rs.2.5/piece	50000.00
	Feed			
	A. Rice bran(kg)	2500	10	25000.00
	B. Oil cake(kg)	2500	25	62500.00
	C. Pellated Fish feed (kg)	6000	35/ kg	210000.00
	Medicines L/S	-	-	5000.00
	Labour ExpensesL/S	-	-	20000.00
	Miscellaneous expenditure L/S	-	-	8500.00
	<b>Total opreational cost</b>	-	-	<b>400000</b>

## Economics Detail

Sr.No.	Component	Details
1	Area of pond	1.00hect.
2	Stocking density	20000/hect.
3	Survival	80%
5	Name of Fish species	IMC, common carp, pangasius etc.
6	Types of feed to be used	Floating Feed (28-32% protein content), rice bran, oil cake
7	Duration of Culture	7-8 months
8	No. of crops per year	01
9	Size /Weight of the species (gm)	600
10	Production(kg)	9600
11	Farm gate price(Rs.)	100/kg
12	Capital cost	7.00 lakh
13	Input cost	4.00lakh per crop
14	Total project reports	11.00 lakh

### Fixed cost

Sr. no.	Particulars	Amount (Rs.)
1	Depreciation	70000
2	Operation Cost	400000
	<b>Total</b>	<b>470000</b>

**Gross Income=Sale of 9600 kg fish @ Rs.100/kg=Rs. 960000**

**Net Profit= Rs. 960000-Rs. 470000=Rs. 490000/hect**