



Detailed Project Report

on

Fish Seed Hatchery

(10 million Fry)



Under MKUY



Name of the Entrepreneur/Entity:

Address:



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1. Project Summary

1	Name of the Enterprise (as per the Illustrative List of Enterprises)	Fish Seed Hatchery
2	Sector (as per the Illustrative List of Enterprises)	Fisheries
3	Project Capacity ¹	100,00,000 fry/annum
4	Key components of the project	
5	Project Address (Village/Ward, Gram Panchayat/Municipality, Block, District)	
6	Products/Output from the project	Fry
7	Total Project Cost	Rs. 27,50,500
8	Fixed Capital Cost	Rs. 26,93,500
9	Working/Recurring capital	Rs. 57,000
10	Bank Finance/ Self Finance	Bank Finance
11	Bank Loan Amount	Rs. 24,69,750
12	Promoter Contribution (min 10% of the project cost in case of bank loan)	Rs. 2,80,750
13	Assumed Rate of Interest	11%
14	Subsidy Eligibility (40%, 50%)	
15	Repayment Terms (Tenure, Moratorium, Frequency, Mode of Repayment: equal principal/equal instalment)	Equal Monthly Instalment
16	Key Financial Indicators: 1. Average Annual Net Profit 2. Debt Service Coverage Ratio (DSCR) 3. Internal Rate of Return 4. Break Even Year	Rs. 11,90,847 2.68 35.40% 3 Years
17	Estimated employment to be generated (nos.)	5

Note:

1. Customized DPR is to be prepared as per the information given by the beneficiary
2. The CIS will be calculated as per the cost norm of MKUY guideline
3. All the prices quoted here are indicative in nature
4. The particulars under each component of the capital investment may be changed as per the requirement of the project.

¹ Capacity can be in terms of area or quantity



2. Project Profile

2.1. Entrepreneur/Entity Profile

1	Name of the Entrepreneur/Entity	
2	Legal status (Individual/ Group/ FPO/ FPC/ Proprietorship/ Partnership firm/ Company/ Cooperative/ Federation/ Society/ Trust)	
3	Name of Representative ² in Ease of entity	
4	Gender (Male/ Female/ Third Gender/ Not Applicable)	
5	Date of Birth of Individual/Representative of Entity	
6	Date of Incorporation/Registration of Entity	
7	Category opted for (Women/ ST/ SC/ Differently Abled/ Third gender/ Agri & Allied Graduate)	
8	Educational Qualification of Individual/Representative of Entity	
9	Passport size photograph of the Individual/ Representative of entity	
10	Local Address for Correspondence of the Individual/ Representative of entity	
11	Registered Address of Entity	
12	Main Office/Branch Address of Entity	
13	Phone no. of Individual/Representative of Entity	
14	Email Id of Individual/Representative of Entity	
15	AADHAR No. of Individual/Representative	
16	PAN of Individual/Representative of Entity, if available	
17	Farmer Id of Individual, if available	
18	Details of other Partner/Director/ President/Secretary	
19	Registration No./ CIN of the Entity ³	
20	PAN/TAN of Entity	
21	GSTIN of Entity, if available	
22	Details of experience and exposure relevant to the proposed enterprise/project (family business, work experience, e-learning/certificate courses, trainings undertaken etc.)	

² Representative should be authorized by the board/governing body of the entity.

³ Registration document:

Groups (SHG/PG/): FPO: Proprietorship firm: Registration Certificate under Shops & Establishment Act, Partnership firm: Registration Certificate from IGR of state, Company (Pvt. Ltd., Public Ltd., LLP, OPC, FPC); Certification of Incorporation, Cooperative/ Federation: Certificate of Registration from Registrar of Cooperative Societies, Society/Trust: Darpan Unique Id



2.2. Project Consultant Details

DPR prepared by:

Please provide further details of the consultant:





2.3. Concept and Scope of the Project

A fish seed hatchery is a place where the artificial life cycle of fish takes place. The entire cycle, which includes breeding of fish, fertilization of eggs, incubation, hatching, rearing will occur artificially in fish hatcheries. It is very much influencing in the modern way of aquaculture as it has the capacity to allow the continuous supply of stocking materials of the pond. Through this, there would be a chance to raise the fish which are most popular in more number and reduce the fish which are not much required for mankind. This is purely started for commercial benefits and to stay close to the urban markets. The hatchery can be kept in a fish farm. That is, it can be induced as a part of fish production. It can also be an individual firm dedicated to producing fingerlings.

Requirements for a Fish Hatchery Business

The requirements of fish hatcheries are common in induced fish production firm or an independent fingerling production.

- The water should be available abundantly throughout the year. The water should be under regular observation to check if there are any chemical changes occurring in water. If any of such changes are observed, then there should be an immediate treatment. The water should be aerated with a neutral pH level. It should also be free from pollutants which spoil the atmosphere with water.
- Though the fingerlings generally feed on plankton, there is no guarantee that they would be available all time or you cannot even guarantee that they would be sufficient to meet the required proteins and nutrients. So it is very much important to learn about the supplement food which would meet the minimum requirements of the young fish. The feeds, which would meet these requirements can be bought from the fish feed stores available in your respective localities.
- Fishes should be available for breeding. It is very much important to have matured male and female fishes in order to help with the hatchery. The breeding fishes you choose should have a good history and a quick rate of growth.
- If the hatchery is started treating it as an individual firm and not a part of fish production, then the owner or the farmer should maintain a market to make the people know about his stock.

Market Potential

Fisheries or Aquaculture in India is a very important thing for the production of food. It plays a vital role in providing security in terms of nutrients and also helps in the exports of agriculture. This involves around 10 million people in India for several activities involved in fish farming which in turn helps in the employment. As we have several sources of water across the country involving seas to small lakes, India handles more than 8% of biodiversity in terms of the fishery.

India constitutes about 6.5% of fish production which occurs globally. It contributes 1% of the GDP and 5% of GDP in agriculture. Currently, India produces 11 million metric tonnes of fish. So, this leads to a contribution of around 64.5% of the inland sector. The percentage is the same with the cultured fishes. Fish culture is increasing the health, economy, employment and tourism of the country in a wide range. There are approximately 40 Brack water fish farm development agencies in India. These agencies promote the growth of freshwater aquaculture



in the country in a broader way. The production of carp has been increased to 26 million in recent times and the shrimp has increased up to 13 million.

- There are around 2 lakhs of fishing crafts which operate across the coast.
- There are 6 major fishing harbours across the country and approximately 60 minor fishing harbours.
- There are 4 million fisher folks in the country whose needs are satisfied by 1500 landing centres.
- 55 types of fishes and shellfish are exported out of the country.
- The export is done for approximately 76 countries across the world

3. Techno-commercial Assumptions

Sl. No.	Parameter	Value	Unit
1	Increase in Rate of Product	5	%
2	Increase in Electricity consumption	5	%
3	Collection from Debtors (First Year)	10	Days
4	Collection from Debtors	15	Days
5	Payable to Creditors	20	Days
6	Drawing By Promoter	50	%
7	Increase in Staff Salary	5	%
8	Rate of Interest on TL	11	%
9	Rate of Interest on WC	9	%
10	Loan Repayment (in year)	7	Days
11	Raw Material in Stock (on sales)	5	Days
12	Finished Goods in stock (on sales)	15	Days
13	Promoter's Contribution (Term Loan)	10	%
14	Promoter's Contribution (Working Capital)	20	%
15	Working Capital Requirement	15	Days
17	Working Capital Utilisation	100	%



4. Financial Details

4.1. Project Fixed Capital

Details of Fixed Assets					
Sl. No.	Particulars	Unit	Qty.	Cost per unit	Total
A	Land				
1	Land Development	Sq. ft	55000	0.70	38,500
2	Fencing	ft	1000	60	60,000
	Sub Total				98,500
B	Civil Construction				
	Building & Shed				
1	RCC building for hatchery operation and monitoring	Sq. ft	600	850	5,10,000
2	Office Room	Sq. ft	200	850	1,70,000
3	Hatchery shed	Sq. ft	600	350	2,10,000
4	Store room cum labour Shed	Sq. ft	400	300	1,20,000
5	10000 litres capacity overhead tank with necessary pipe arrangements			LS	2,50,000
	Earth Work				
1	Brooders ponds with inlet & outlet provision (1 No)	acre	0.5	LS	1,60,000
2	Nursery Ponds with inlet & outlet provision (5 Nos)	acre	0.09	LS	1,50,000
	Hatchery Infrastructure				
1	Spawning pools 6 m Dia, 20 cm thick, brick cum RCC- 1.5 m depth	cum	1	LS	1,50,000
2	Hatching Pool (1.84 m dia and 0.77 m height) (4 nos)	cum	4	LS	1,50,000
3	Spawn collection cistern (3.65* 3.3 *1.35) (1 no)	cum	1	LS	70,000
4	Egg Collection Tank (6*2*1.5) (1 no)	cum	1	LS	70,000
	Sub Total				20,10,000
C	Water Supply				
1	Water supply - Borewell/ Shallow tube well/ Pump		1	LS	1,50,000
2	GI Pipes, Valves, Circular frames, monofilament cloth bends & frames		1	LS	50,000
	Sub Total				2,00,000
D	Electrification				
1	Electrical Installation (with transformer and DG Unit as required)		1	LS	1,20,000
	Sub Total				1,20,000
E	Plant & Machinery				
Sl. No.	Particulars	Specification	Qty	Unit Price	Total



Details of Fixed Assets

Sl. No.	Particulars	Unit	Qty.	Cost per unit	Total
1	Sprinkler 10 nos. with pipe		2	5,000	10,000
2	5 HP Electric Pump Set		LS	LS	20,000
3	1 Oxygen fitted cylinder with all fittings		LS	LS	50,000
4	Breeding Kit (Syringe needle, Homogenizer, Hand nets, Petridish, Centrifuge etc)		10	1,500	15,000
5	Refrigerator	160 litres	LS	LS	10,000
6	Nets		LS	LS	5,000
7	Nylon drag net for brooders	60 mx 30 m mesh size 1"	1	15000	15,000
8	Nylon drag net for fingerlings collection	10 mx 7 m mesh size half inch	25	1000	25,000
	Total Plant and Machinery Cost				150,000
F	Livestock				
1	Brood Fish	kg	600	150	90,000
	Total				90,000
G	Miscellaneous Expenditure				
1	Insurance premium of assets				10,000
2	Cost of DPR Preparation				6,491
3	Other Misc. Exp				8,509
	Total				25,000

4.2. Project Variable Expenses

Details of Recurring Expenditure						
A	Details of raw material (per annum @ 100%)					
Sl. No.	Items	Unit	Rate/Unit (Rs)	Qty/day	Qty/annum (kg)	Total Cost (Rs)
1	Brood fish	kg	150.00		600	90,000
2	Feed for brood stock	kg	45.00		1,250	3,50,000
3	Ovaprim	ml	40.00		160	6,400
4	Kerosene	lit	40.00		15	600
5	Micronutrients	kg	250.00		4	1,000
6	Lime	kg	10.00		500	5,000
7	Artificial feed (Oil cake, bran mixture)	kg	25.00		4,500	1,12,500
	Total				7,029	5,65,500

Details of salary and other benefits

Sl. No.	Type of Workers	No. of Worker	Salary Per Month/head (Rs)	Total Salary per Annum (Rs)
1	Supervisor	1	15,000	180000
2	Skilled Worker	2	10,000	240000



Details of salary and other benefits

Sl. No.	Type of Workers	No. of Worker	Salary Per Month/head (Rs)	Total Salary per Annum (Rs)
3	Unskilled Worker	2	8,000	192000
	Grand Total	5		6,12,000

4.3. Details of Sales

Details of sales (Per annum @100% capacity)

Sl. No.	Type of products	Unit	Rate/Unit (Rs)	Quantity Per day	Quantity Per annum	Total (Rs)
1	Fry from 300 lakh spawns @ 30% survival rate	1000 fry @ Rs 350	0.35		1,00,00,000	35,00,000
	Total				1,00,00,000	35,00,000



4.4. Project Balance Sheet

Liabilities	I	II	III	IV	V	VI	VII
Opening Capital	-	359,923	588,554	846,678	1,076,966	1,301,657	1,472,775
Add: Introduced	280,750						
Add: Profit	160,173	817,631	1,106,124	1,308,287	1,527,692	1,645,118	1,770,901
Less: Drawing	81,000	589,000	848,000	1,078,000	1,303,000	1,474,000	1,622,000
Closing Capital	359,923	588,554	846,678	1,076,966	1,301,657	1,472,775	1,621,676
Term Loan from Bank	2,180,686	1,909,049	1,605,979	1,267,837	890,566	469,638	-
Current Liabilities							
Cash Credit from Bank	45,600	45,600	45,600	45,600	45,600	45,600	45,600
Sundry Creditors	14,138	22,300	26,550	29,550	32,800	34,450	36,200
Expenses Payable	68,500	79,500	86,800	92,800	99,200	104,200	109,500
Current Provisions	-	95,033	206,196	292,837	386,868	437,193	491,100
Total Current Liabilities	128,238	242,433	365,146	460,787	564,468	621,443	682,400
Total Liabilities	2,668,847	2,740,035	2,817,803	2,805,590	2,756,691	2,563,856	2,304,076
Assets							
Fixed Assets	2,480,000	2,480,000	2,480,000	2,480,000	2,480,000	2,480,000	2,480,000
Less Depreciation	261,500	494,825	703,096	889,077	1,055,217	1,203,685	1,336,408
Net Fixed Assets	2,218,500	1,985,175	1,776,904	1,590,923	1,424,783	1,276,315	1,143,592
Current Assets							
Sundry Debtors	58,400	91,900	109,400	121,600	134,800	141,600	148,700
Inventories	33,967	36,667	54,850	64,583	71,800	78,900	82,883
Cash and Bank Balance	11,700	18,400	21,900	24,400	27,000	28,400	29,800
Other Current Assets	346,280	607,894	854,749	1,004,084	1,098,307	1,038,641	899,101
Total Current Assets	450,347	754,860	1,040,899	1,214,667	1,331,907	1,287,541	1,160,484
Total Assets	2,668,847	2,740,035	2,817,803	2,805,590	2,756,691	2,563,856	2,304,076
Current Ratio	3.51	3.11	2.85	2.64	2.36	2.07	1.70



4.5. Calculation of Depreciation

Rates of Depreciation		10%	15%	Total depreciation for the year (Rs)
Year	1	221,000.00	40,500	261,500
	2	198,900.00	34,425	233,325
	3	179,010.00	29,261	208,271
	4	161,109.00	24,872	185,981
	5	144,998.10	21,141	166,139
	6	130,498.29	17,970	148,468
	7	117,448.46	15,275	132,723

4.6. Projected P&L

Description	Year ending March 31st						
	I	II	III	IV	V	VI	VII
Capacity Utilisation	50	75	85	90	95	95	95
Revenue							
Sales	1,750,000	2,757,000	3,281,000	3,648,000	4,044,000	4,247,000	4,460,000
Opening Stock of Finished Goods	-	(29,167)	(45,950)	(54,683)	(60,800)	(67,400)	(70,783)
Closing Stock of Finished Goods	29,167	45,950	54,683	60,800	67,400	70,783	74,333
Total Income (A)	1,779,167	2,773,783	3,289,733	3,654,117	4,050,600	4,250,383	4,463,550
Expenditure							
Opening stock of Raw Material	-	4,800	7,500	8,900	9,900	11,000	11,500
Purchase (Net) of Material	282,750	446,000	531,000	591,000	656,000	689,000	724,000
Closing Stock of Raw material	4,800	7,500	8,900	9,900	11,000	11,500	12,100
Raw Material Consumption	277,950	443,300	529,600	590,000	654,900	688,500	723,400
Repair & Maintenance- Machinery [@5% of Cost]	23,815	25,100	26,400	27,800	29,200	30,700	32,300
Electricity expense	140,000	220,600	262,500	291,900	323,600	339,800	357,100
Insurance cost	10,000	10,500	11,100	11,700	12,300	13,000	13,700
Administrative salaries and wages	612,000	642,600	674,800	708,600	744,100	781,400	820,500



Description	Year ending March 31st						
	I	II	III	IV	V	VI	VII
Other Misc Expenses [@2% of sales]	35,000	55,140	65,620	72,960	80,880	84,940	89,271
Total Cost	1,098,765	1,397,240	1,570,020	1,702,960	1,844,980	1,938,340	2,036,271
Profit Before Depreciation, Interest and Tax	680,402	1,376,543	1,719,713	1,951,157	2,205,620	2,312,043	2,427,279
Depreciation	261,500	233,325	208,271	185,981	166,139	148,468	132,723
Profit Before Interest and Tax	418,902	1,143,218	1,511,442	1,765,176	2,039,481	2,163,575	2,294,556
Interest on Term Loan	254,624	226,451	195,018	159,947	120,817	77,160	28,451
Interest on Working Capital Loan	4,104	4,104	4,104	4,104	4,104	4,104	4,104
Total Interest Paid	258,728	230,555	199,122	164,051	124,921	81,264	32,555
Profit Before Tax	160,173	912,663	1,312,320	1,601,125	1,914,559	2,082,311	2,262,001
Income Tax	-	95,033	206,196	292,837	386,868	437,193	491,100
Profit after Tax	160,173	817,631	1,106,124	1,308,287	1,527,692	1,645,118	1,770,901

4.7. Projected Cash Flow

Period Ending:	I	II	III	IV	V	VI	VII
Cash & Bank Balance at Beginning	-	11,700	18,400	21,900	24,400	27,000	28,400
Cash Inflow during the Period	2,930,347	1,165,151	1,437,109	1,589,910	1,797,511	1,910,228	2,104,121
Cash Outflow during the Period	2,918,647	1,158,451	1,433,609	1,587,410	1,794,911	1,908,828	2,102,721
Closing Cash & Bank Balance	11,700	18,400	21,900	24,400	27,000	28,400	29,800



4.8. Projected Loan Repayment

Year	Interest	EMI	Principal
1	254,624.50	498,088.25	243,463.75
2	226,451.16	498,088.25	271,637.10
3	195,017.63	498,088.25	303,070.62
4	159,946.65	498,088.25	338,141.60
5	120,817.29	498,088.25	377,270.96
6	77,159.94	498,088.25	420,928.31
7	28,450.60	498,088.25	469,637.65
Total	1,062,467.76	3,486,617.76	2,424,150.00

4.9. Calculation of DSCR, IRR and BEP

Year	I	II	III	IV	V	VI	VII
Net Sales	1,750,000	2,757,000	3,281,000	3,648,000	4,044,000	4,247,000	4,460,000
Net Profit	160,173	817,631	1,106,124	1,308,287	1,527,692	1,645,118	1,770,901
Interest Paid	258,728	230,555	199,122	164,051	124,921	81,264	32,555
Cash Accruals (a)	418,902	1,048,186	1,305,246	1,472,338	1,652,613	1,726,382	1,803,456
Principal	243,464	271,637	303,071	338,142	377,271	420,928	469,638
Interest	258,728	230,555	199,122	164,051	124,921	81,264	32,555
Total (b)	502,192	502,192	502,192	502,192	502,192	502,192	502,192
DSCR	0.83	2.09	2.60	2.93	3.29	3.44	3.59
Average DSCR			2.68				

Calculation of Break-Even Point (BEP)							
Sales	1,779,167	2,773,783	3,289,733	3,654,117	4,050,600	4,250,383	4,463,550
Variable Cost	312,950	498,440	595,220	662,960	735,780	773,440	812,671
Contribution	1,466,217	2,275,343	2,694,513	2,991,157	3,314,820	3,476,943	3,650,879
Fixed Cost	1,306,043	1,362,680	1,382,193	1,390,032	1,400,261	1,394,632	1,388,878
BEP Sales	1,584,806	1,661,191	1,687,520	1,698,118	1,711,072	1,704,866	1,698,036
Average BEP sales				1,677,944			



Calculation of Internal Rate of Return (IRR)

Sl. No.	Year	PAT	Depreciation	Cash Accrual
	Cash outflow at beginning			-2,750,500
1	31/03/2023	160,173	261,500	421,673
2	31/03/2024	817,631	233,325	1,050,956
3	31/03/2025	1,106,124	208,271	1,314,396
4	31/03/2026	1,308,287	185,981	1,494,269
5	31/03/2027	1,527,692	166,139	1,693,831
6	31/03/2028	1,645,118	148,468	1,793,586
7	31/03/2029	1,770,901	132,723	1,903,624
IRR		35.40%		
Payback Period		2 Years 12 Months		

4.10. Summary of Project Cost

Sl. No.	Name of Assets	Amount (Rs)
1	Land Development	98,500
2	Civil Construction	2,010,000
3	Irrigation/Water Supply	200,000
4	Electrification	120,000
5	Plant & Machinery	150,000
6	Livestock	90,000
7	Insurance	10,000
8	DPR Cost	6,491
9	Other Misc. Exp	8,509
Total Fixed Cost		26,93,500
Recurring		57,000
Cost of Project		27,50,500