Detailed Project Report

on

Fish Seed Hatchery

(10 million Fry)

Under MKUY

Name of the Entrepreneur/Entity:

Address:

Contents

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 (for 15 days)	Rs. 57,000
10	Bank Finance/ Self Finance	Self-Finance
11	Bank Loan Amount	
12	Promoter Contribution (min 10% of the project cost in case of bank loan)	
13	Assumed Rate of Interest	
14	Subsidy Eligibility (40%, 50%)	
15	Repayment Terms (Tenure, Moratorium, Frequency, Mode of Repayment: equal principal/equal 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. 13,11,096 40.92% 2 Years 7 Months
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.

2. Project Profile

2.1. Entrepreneur/Entity Profile

1	Name of the Entrepreneur/Entity	

[1] Capacity can be in terms of area or quantity

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.)	

2.2. Project Consultant Details

DPR prepared by:

Please provide further details of the consultant:

[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

2.3. 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	**-**	**29,54,957**	**19,70,709**	**16,07,219**	**15,14,342**	**15,64,478**	**16,32,481**
Add: Introduced	27,50,500						
Add: Profit	4,10,457	9,87,753	12,45,509	14,23,123	16,15,136	17,02,002	17,93,689
Less: Drawing	2,06,000	19,72,000	16,09,000	15,16,000	15,65,000	16,34,000	17,14,000
Closing Capital	**29,54,957**	**19,70,709**	**16,07,219**	**15,14,342**	**15,64,478**	**16,32,481**	**17,12,170**
Term Loan from Bank	-	-	-	-	-	-	-
Current Liabilities							
Cash Credit from Bank	-	-	-	-	-	-	-
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	1,04,200	1,09,500
Current Provisions	8,445	1,55,466	2,65,933	3,42,053	4,24,344	4,61,572	5,00,867
Total Current Liabilities	**91,083**	**2,57,266**	**3,79,283**	**4,64,403**	**5,56,344**	**6,00,222**	**6,46,567**
Total Liabilities	**30,46,039**	**22,27,975**	**19,86,502**	**19,78,744**	**21,20,822**	**22,32,703**	**23,58,737**
Assets							
Fixed Assets	24,80,000	24,80,000	24,80,000	24,80,000	24,80,000	24,80,000	24,80,000
Less Depreciation	2,61,500	4,94,825	7,03,096	8,89,077	10,55,217	12,03,685	13,36,408
Net Fixed Assets	**22,18,500**	**19,85,175**	**17,76,904**	**15,90,923**	**14,24,783**	**12,76,315**	**11,43,592**
Current Assets							
Sundry Debtors	58,400	91,900	1,09,400	1,21,600	1,34,800	1,41,600	1,48,700
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	7,23,473	95,833	23,448	1,77,238	4,62,439	7,07,488	9,53,761
Total Current Assets	**8,27,539**	**2,42,800**	**2,09,598**	**3,87,822**	**6,96,039**	**9,56,388**	**12,15,145**
Total Assets	**30,46,039**	**22,27,975**	**19,86,502**	**19,78,744**	**21,20,822**	**22,32,703**	**23,58,737**
Current Ratio	**9.09**	**0.94**	**0.55**	**0.84**	**1.25**	**1.59**	**1.88**

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	17,50,000	27,57,000	32,81,000	36,48,000	40,44,000	42,47,000	44,60,000
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)	**17,79,167**	**27,73,783**	**32,89,733**	**36,54,117**	**40,50,600**	**42,50,383**	**44,63,550**
Expenditure							
Opening stock of Raw Material	**-**	**4,800**	**7,500**	**8,900**	**9,900**	**11,000**	**11,500**
Purchase (Net) of Material	2,82,750	4,46,000	5,31,000	5,91,000	6,56,000	6,89,000	7,24,000
Closing Stock of Raw material	**4,800**	**7,500**	**8,900**	**9,900**	**11,000**	**11,500**	**12,100**
Raw Material Consumption	**2,77,950**	**4,43,300**	**5,29,600**	**5,90,000**	**6,54,900**	**6,88,500**	**7,23,400**
Repair & Maintenance-Machinery [@5% of Cost]	23,815	25,100	26,400	27,800	29,200	30,700	32,300
Electricity expense	1,40,000	2,20,600	2,62,500	2,91,900	3,23,600	3,39,800	3,57,100
Insurance cost	10,000	10,500	11,100	11,700	12,300	13,000	13,700
Administrative salaries and wages	6,12,000	6,42,600	6,74,800	7,08,600	7,44,100	7,81,400	8,20,500

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	**10,98,765**	**13,97,240**	**15,70,020**	**17,02,960**	**18,44,980**	**19,38,340**	**20,36,271**
Profit Before Depreciation, Interest and Tax	**6,80,402**	**13,76,543**	**17,19,713**	**19,51,157**	**22,05,620**	**23,12,043**	**24,27,279**
Depreciation	2,61,500	2,33,325	2,08,271	1,85,981	1,66,139	1,48,468	1,32,723
Profit Before Interest and Tax	**4,18,902**	**11,43,218**	**15,11,442**	**17,65,176**	**20,39,481**	**21,63,575**	**22,94,556**
Interest on Term Loan	-	-	-	-	-	-	-
Interest on Working Capital Loan	-	-	-	-	-	-	-
Total Interest Paid	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Profit Before Tax	**4,18,902**	**11,43,218**	**15,11,442**	**17,65,176**	**20,39,481**	**21,63,575**	**22,94,556**
Income Tax	8,445	1,55,466	2,65,933	3,42,053	4,24,344	4,61,572	5,00,867
Profit after Tax	**4,10,457**	**9,87,753**	**12,45,509**	**14,23,123**	**16,15,136**	**17,02,002**	**17,93,689**

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. Calculation of BEP and IRR

Calculation of Break-Even Point (BEP)							
Sales	**17,79,167**	**27,73,783**	**32,89,733**	**36,54,117**	**40,50,600**	**42,50,383**	**44,63,550**
Variable Cost	3,12,950	4,98,440	5,95,220	6,62,960	7,35,780	7,73,440	8,12,671
Contribution	**14,66,217**	**22,75,343**	**26,94,513**	**29,91,157**	**33,14,820**	**34,76,943**	**36,50,879**
Fixed Cost	10,47,315	11,32,125	11,83,071	12,25,981	12,75,339	13,13,368	13,56,323
BEP Sales	**12,70,854**	**13,80,130**	**14,44,413**	**14,97,708**	**15,58,422**	**16,05,525**	**16,58,235**
Average BEP sales	**14,87,898**						

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	4,10,457	2,61,500	6,71,957
2	31/03/2024	9,87,753	2,33,325	12,21,078
3	31/03/2025	12,45,509	2,08,271	14,53,781
4	31/03/2026	14,23,123	1,85,981	16,09,104
5	31/03/2027	16,15,136	1,66,139	17,81,276
6	31/03/2028	17,02,002	1,48,468	18,50,471
7	31/03/2029	17,93,689	1,32,723	19,26,412
IRR	**40.92%**			
Payback Period	**2 Years 7 Months**			

4.9. 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**

2 Working Capital Requirement

	Heads of Expenses	Amount/year
A	Raw Material	5,65,500
B	Salary	6,12,000
C	Utilities	1,40,000
D	Other Expenses	35,000
	Sub total per year	**13,52,500**

Working capital requirement (for 15 days) 57,000