

TAMIL NADU RURAL TRANSFORMATION PROJECT

Category of Loan: MICRO (INR 5 to INR 15 Lakhs)

Business Plan for establishing a dairy farm

Introduction

- ❖ *Mrs. AAA of BB Village in Coimbatore district own 3 acres of agricultural lands and growing Fodder and Groundnut.*
- ❖ *She has two cross bred cows and supplying the surplus milk to CC Milk Cooperative Society for the past 3 years*
- ❖ *She has attended on campus training programs on Dairy Farming, Feed and fodder cultivation, Breeding and disease management conducted by Veterinary University Training and Research Centre, Coimbatore*
- ❖ *She has availed a Term loan of Rs. 100000/- with ABC Bank in BB Village and purchased the two milch cattle*
- ❖ *The loan repayment is regular till date*
- ❖ *The present request is for term loan of Rs.11.00 lakhs under TNRTP matching grant Programme for the purpose of establishing a small dairy (5+5) unit*

About the Product

- ❖ *India is leading in production of milk and dairy is one of the major subsidiary activities of most of the farmers. Despite of highest production in the world, there is always a demand supply miss match for milk and milk products..*
- ❖ *Tamilnadu ranks 8th in milk production. Most of the rural people especially women make their livelihood by rearing milch animals and by supplying milk to the Co-operatives.*
- ❖ *Keeping this in view and to improve the rural economy and to enhance the personal income of the stake holders in rural areas, Government of Tamilnadu has increased the procurement price of a litre of cow's milk from Rs. 28 to Rs. 32 and buffalo milk Rs.35 to Rs.41.*

Enterprise and Entrepreneur Profile

1. Profile of the Entrepreneur:

Name	Ms.AAA
Spouse Name	
Age	45
Education	10 th Standard
Aadhaar Card No	86XXXX111111
Address	
Phone No	+91 1111111111
Mobile NO	+91 1111111111
Email ID	dairy@gmail.com
Number of years of experience in business	Three
Trainings attended (no. and hours)	Participated in the on campus training on dairy farming and workshop on control of Mastitis organized by VUTRC, Coimbatore
Spouse's occupation	Agriculture
If Special category	NA

2. Enterprise Profile:

Name of the Enterprise	M/S ABC dairy Farm
Legal Form of Enterprise	Nil
Registration Number	Nil
Registration Date	Nil
Registered with Whom	Nil
GST No (If available)	Not Applied
Udyam Registration number	Not Applied

3. Bank Linkage Details:

Whether the enterprise has separate bank account	Yes
If any bank credit availed	Yes
Name of the bank and Branch	ABC Bank
Nature of the bank facility	Term loan facility
Limit Sanctioned	Rs.100000/-
Balance outstanding as on date	NIL

4. Enterprise Nature:

<i>Type of Enterprise</i>	<i>Farm Sector- Agri. Allied activity</i>
<i>Product to be produced</i>	<i>Milk Production</i>
<i>Service to be offered:</i>	<i>Sale of Milk</i>
<i>Present Demand</i>	<i>The area is offering good demand for milk. The entire milk produced in the village is fully absorbed by the local milk cooperative society as well as by private dairy companies</i>
<i>Current Supply</i>	<i>Due to the increase in the procurement price of the Milk, dairying is the preferred activity in the village and there is considerable increase in the production and supply of milk.</i>

5. Technical Feasibility:

a.Location <i>Brief on Location – Whether well connected to market by road etc.,</i>	<i>The village is easily approachable and well connected by road</i>
b.Land <i>Extent of Land, sq.ft. Panchayat approval, own/leased</i>	<i>Own 3.00 acres agricultural land with adequate water source</i>
c.Building <i>Approved plan from local body, Sq.ft, whether sufficient for the proposed activity</i>	<i>The floor space per adult animal is 70 Sq.Ft Calf require 20 Sq.Ft. 700 Sq.ft cattle shed will be constructed Building plan and approval will be obtained from the Village Panchayat administration</i>
d.Power <i>Whether required power connection is available</i>	<i>SEB power supply is available.</i>
e.Water <i>Whether adequate water is available.</i>	<i>Adequate water is available.</i>
f.Approval <i>Pollution control Board/GST/FSSAI approvals or any other approval is required. Present Status</i>	<i>NA</i>

<p>g. Materials Needed Quantity / Cost / Availability / Delivery Time to be discussed. Raw materials Equipment Technology</p>	<p><u>Raw-materials</u></p> <ul style="list-style-type: none"> ❖ Good looking, high yielding, healthy HF/Jersey cows can be purchased from dairy farms in Karur, Coimbatore, Erode and Trichy ❖ Fodder cultivation has been already taken up in 2.00 acres to fulfil the green fodder requirement ❖ Veterinary Centre in the village is extending animal health care and breeding services ❖ The Milk Cooperative society in the village is functioning effectively and promptly serving the members. ❖ Paddy, Groundnut and Maize grown in and around the area will fulfil the dry fodder requirement ❖ Concentrate Feed- viz: Ground Oil Cake, Rice Bran, Cotton seed are easily available in the whole sale market and shandies nearby the village ❖ Adequate water supply from borewell is ensured for cultivation of fodder crop ❖ The equipment's required for milking, watering, feeding can be easily purchased from towns located nearby the village ❖ Technology: The applicant has undergone necessary training required for dairy farming and capable of adopting new technology
<p>h. Cost of capital assets.</p>	<p>As per Annexure A.</p>
<p>i. Cost of working capital for one operating cycle</p>	<p>The working capital requirement is arrived at Rs.1.75 lakhs as per Annexure C.</p>
<p style="text-align: center;">OR</p>	
<p>25% of projected annual sales turnover if necessary</p>	<p>The assessment has been done as per holding levels detailed in annexure C.</p>

<p>j. Skills Requirements: <i>skilled labour available / Not available If not available: whether people can be trained? If so, training period and training facility?</i></p>	<p><i>The promoter is well experienced in the line of activity for more than 3 years. Agricultural labourers with adequate experience in dairy farming are easily available</i></p>
<p>Production Process:</p>	
<p>Production Plan/cycle <i>(operating cycle may be one-day / week / month or one year as per the activity selected):</i></p>	<p><i>The operating cycle is assumed at one crop season as detailed in Annexure C.</i></p>

6.Commercial Feasibility:

<p>a. Marketing strategy: :</p>	<ul style="list-style-type: none"> ❖ <i>Due to the increase in the procurement price of the Milk, dairying is one of the preferred activity in the village.</i> ❖ <i>The milk produced in the village is fully absorbed by the local milk cooperative society.</i> ❖ <i>Besides, M/S Hudson Agro, Aroma Milk, Suguna Dairy are also procuring milk from this area</i>
<p>b. Pricing & Discounts :</p>	<p><i>Procurement price for the milk has been hiked by the Government very recently, Private companies are also offering best price for milk, based on Fat and SNF content</i></p>
<p>c. Market promotion strategies:</p>	<p><i>Tie-up Arrangement with Milk Coop society</i></p>
<p>d. Physical and digital connectivity:</p>	<p><i>Adequate training will be given to the beneficiary on digital payment channels-POS, QR Code, Credit card, Debit Card, Paytm and Google Pay.</i></p>
<p>e. Risks and risk mitigation planned:</p>	<p><i>Risk assessment details as per Annexure E.</i></p>

7.Environment Assessment:

Category of the enterprise proposed: *White/Green / Orange / Red*

To be entered as per the requirement – **Orange Category Type of Code 2024**

Environment Issue identified	Environment Guidelines or mitigation measures Integrated (Please tick)	Greening Measures identified	Support needed	
		<i>(for green, orange and red categories)</i>	<i>Implement the mitigation measures</i>	<i>Implement the greening measures</i>
Exploitation of local resources (water and energy)	<ul style="list-style-type: none"> •Water •Wood •Electricity 	<i>To ensure adequate measures for Proper disposal of Smoke and waste water</i>	NA	NA
Waste generation and disposal	<ul style="list-style-type: none"> •Dust/air pollutants •Disposal of waste water 	<i>To ensure adequate measures for Proper disposal of Smoke and waste water</i>	NA	NA
Worker and Community safety	<ul style="list-style-type: none"> •Safety measures / gadgets 	<i>Fire extinguishers to be fixed in sensitive places in the unit. Full fire protection dresses and gloves for workers</i>	NA	NA

Whether the activity proposed is in the negative list: *No.*

8. Financial Viability

Cost of the project and Means of the project:

a. Cost of the Project:	(Rs in lakhs)
<i>i. Fixed capital-Cost of all the equipment's /machinery /construction(excluding land cost) As per Annexure-A</i>	9.25
<i>ii. Working capital (As per scale of Finance fixed by SLTC As per Annexure- C</i>	1.75
<i>iii. Pre-operative expenses</i>	**From Own Source
<i>Total cost of the project (i + ii + iii)</i>	11.00
b. Means of the project:	
<i>Loan from financial Institution / Bank (90%):</i>	9.90
<i>Margin money -Borrower's contribution (10%):</i>	1.10
<i>Total means of the project (i + ii)</i>	11.00
c. Matching grant from the project**	3.30
<i>** The preliminary expenses viz: transportation cost of animals- Rs.10000, Interest during holiday period - Rs.36300/-, Insurance premium Rs.25000/- Miscellaneous expenses- Rs.25000, totaling to Rs.0.96 lakh will be met by the borrower from his own source. Hence not included in the project cost. The borrower has sufficient source to meet the preliminary expenses.</i>	
<i>Whether the entrepreneur has the sufficient means to bring in the margin money and has enough buffer to manage any cost escalations</i>	<i>Yes. Applicant has 3.5 lakhs Term deposit with bank</i>

****Matching Grant is @30% of the total cost of the project (excluding pre-operative expenses, land cost, lease). As Matching Grant will be kept in a "Subsidy Reserve Fund" account of the bank as a back-ended grant, it is not shown under the Means of the project. The matching grant to be adjusted as below:**

	(Rs in Lakhs)
<i>Loan initially disbursed by the Bank</i>	- 9.90
<i>Less 30% matching grant</i>	- 3.30

Balance principal amount to be repaid by Borrower - 6.60

Upon completion of minimum period of 18 months and upon repayment of principal amount of Rs.6.60 lakhs and the interest portion, the matching grant of Rs.3.30 lakhs can be adjusted to the loan account of the borrower and the loan account can be closed.

Repayment capacity

- ❖ Loan amount Rs.660000/- is repayable in 60 months @ 11% after holiday period of 6 months.
- ❖ Monthly instalment - principal amount is Rs.17368/-.
- ❖ Last instalment – Rs.17384/-.
- ❖ Though the repayment is fixed for 60 months, upon prompt repayment of 38 instalments, the loan will be closed on the 44th month itself with matching grant amount of Rs.330000/- which is eligible for the project.
- ❖ 50% of net profit and depreciation is taken for DSCR Calculation for the first year, since six months operation in 1 Year.

Debt Service Coverage Ratio:

DSCR to be calculated for the entire repayment period and average DSCR to be considered.

$$\text{DSCR} = \frac{\text{Profit after Tax (Net Profit) + Depreciation + Interest}}{\text{Principal + Interest.}}$$

The basic presumptions and profitability projections are as per **Annexure B.**

Particulars	Year 1 (6 Months)	Year 2	Year 3	Year 4	Year 5
Net profit after tax	32160	198398	329524	458430	577201
Depreciation	22500	45000	45000	45000	45000
Interest*	36300	60182	37256	14330	159
Cash surplus (A)	90960	303580	411780	517760	622360
Principal Repayment	0	208416	208416	208416	34752
Interest	36300	60182	37256	14330	159
Repayment obligation(B)	36300	268598	245672	222746	34911
DSCR A/B	2.51	1.13	1.68	2.32	17.83
Average DSCR			5.09		

- ❖ Details of interest calculation and repayment are available in Annexure D.
- ❖ The average **DSCR at 5.09:1** is above the required DSCR of 2:1 as per MGP guidelines. The repayment capacity of the borrower is comfortable.

Recommendation:

- ❖ As the proposal is viable and complies with the guidelines in respect of Matching Grant Programme, we may recommend the proposal to the concerned Bank

ANNEXURE – A

Cost of the Capital Assets

Capital	Nos	Price per unit (Rs)	Total Cost (Rs)
1.Cow	10	70000	700000
2.Shed @70 Sq.ft per animal	700 Sq.ft	250	175000
3 Equipment Cost	10	1000	10000
4 Cost of chaff cutter (power operated)	1	40000	40000
		Total	925000

ANNEXURE – B

Basis & Presumptions

- ❖ *Type of Animal – Cow - Holstein Friesian/Jersey*
- ❖ *No. of Animals - 10*
- ❖ *No. of animals/batch - 5*
- ❖ *Cost of Animal - Rs.50000 per animal*
- ❖ *Cost of culled animal- Rs.5000*
- ❖ *Transportation Cost/Animal- Rs.1000*
- ❖ *Average Milk Yield (litre/day) 15*
- ❖ *Floor space (sqft) per adult animal 50*
- ❖ *Floor space (sqft) per Calf-20*
- ❖ *Cost of construction per sqft - Rs. 250*
- ❖ *Cost of chaff cutter (power operated)- Rs. 40000*
- ❖ *Cost of equipment per animal- Rs.1000*
- ❖ *Insurance premium (% per annum) 5% of the cost of the animal*
- ❖ *Veterinary aid/animal/ year - Rs.750*
- ❖ *Breeding Service @ Rs.750 per Animal*
- ❖ *Quantity of Concentrate feed in one bag(Kgs)-50*
- ❖ *Cost of concentrate feed - Rs.25/Kg*
- ❖ *Cost of dry fodder - Rs.4/kg*
- ❖ *Cost of cultivation of green fodder- Rs.3/Kg*
- ❖ *Labour Charge@ Rs.1500 per animal/month*
- ❖ *Cost of electricity and water/animal - Rs.250 per animal per month*
- ❖ *Margin (%) 10*
- ❖ *Rate of interest (%) 11*
- ❖ *Repayment period (years) 5*
- ❖ *Selling price of milk/litre (Rs./litre) 32*
- ❖ *Sale price of gunny bags (Rs.per bag) 20*
- ❖ *Sale of Manure@ Rs.1000 per animal*
- ❖ *Lactation days 270*
- ❖ *Dry days 150*
- ❖ *Depreciation on buildings @ 10%/annum*
- ❖ *Depreciation on equipment's @ 20%/annum*

Lactation Chart

Lactation Chart Per animal				
Year	I BATCH		II BATCH	
	<i>Lactation Days</i>	<i>Dry Days</i>	<i>Lactation Days</i>	<i>Dry Days</i>
<i>I</i>	240	120	120	0
<i>II</i>	270	90	210	150
<i>III</i>	270	90	210	150
<i>IV</i>	210	150	270	90
<i>V</i>	210	150	270	90

BATCH I			
Year	Sequence	Days	Cycle
Y 1	L	240	C1
Y1	D	120	C1
Y2	D	30	C1
Y2	L	270	C2
Y2	D	60	C2
Y3	D	90	C2
Y3	L	270	C3
Y4	D	150	C3
Y4	L	210	C4
Y5	L	60	C4
Y5	D	150	C4
Y5	L	150	C5

BATCH II			
Year	Sequence	Days	Cycle
Y 1	L	120	C1
Y2	L	150	C1
Y2	D	150	C1
Y2	L	60	C2
Y3	L	210	C2
Y3	D	150	C2
Y4	L	270	C3
Y4	D	90	C3
Y5	D	60	C3
Y5	L	270	C4
Y5	D	30	C4
Y6	D	120	C4

Feeding Schedule

<i>Type of Feed</i>	Lactation period			Dry Period		
	<i>Quantity (Kg)/ Cow (A)</i>	<i>Cost Per Kg (B)</i>	<i>Feed cost/ day/cow (A x B)</i>	<i>Quantity (Kg)/cow (A)</i>	<i>Cost Per Kg (B)</i>	<i>Feed cost/ day/cow (A x B)</i>
<i>Concentrate Feed</i>	5	25	125	2	25	50
<i>Green Fodder</i>	25	3	75	20	3	60
<i>Dry Fodder</i>	4	4	16	5	4	20
Total			216			130

PROFITABILITY PROJECTIONS

Amount in Rs.

Particulars	Year				
	I	II	III	IV	V
Lactation Days - I Batch (No. of Lactation daysx5)	1200	1350	1350	1050	1050
Lactation Days - II Batch (No. of Lactation daysx5)	600	1050	1050	1350	1350
Total Lactation Days (A)	1800	2400	2400	2400	2400
Dry Days- I Batch (No. of Dry daysx5)	600	450	450	750	750
Dry Days- II Batch (No. of Dry daysx5)	0	750	750	450	450
Total Dry Days (B)	600	1200	1200	1200	1200
Cost of Milk per Litre (C)	32	35	39	43	47
Yield per Animal(D)	15	15	15	15	15
Sale of Milk (A x C x D)	864000	1260000	1404000	1548000	1692000
Sale of gunny bags	3420	5580	5580	5760	5760
Sale of Manure@ Rs.1000 per Animal	8000	10000	10000	10000	10000
Total Benefit	875420	1275580	1419580	1563760	1707760
Cost of Production					
Cost of Feed /Day (Lactation) E	216	227	238	250	262
Total cost of feed during Lactation days (A x E)..... F	388800	544800	571200	600000	628800
Cost of Feed/Day (Dry).....G	130	136	143	150	158
Total cost of feed during Dry days(BxG).....H	78000	163200	171600	180000	189600
Total Cost of feed (F+H)	466800	708000	742800	780000	818400
Cost of Veterinary care	18000	18000	18000	18000	18000
Cost of Electricity	30000	30000	30000	30000	30000
Cost of Labour	180000	180000	180000	180000	180000
Cost of insurance	25000	25000	25000	25000	25000
Total cost	719800	961000	995800	1033000	1071400
Gross Profit ----- I	155620	314580	423780	530760	636360
Admin& selling expensesJ	10000	11000	12000	13000	14000
Operating profit before depreciation. Interest, Tax (I-J) K	145620	303580	411780	517760	622360
Depreciation (L)	45000	45000	45000	45000	45000
Interest on loan(M)	36300	60182	37256	14330	159
Taxes(N)	0	0	0	0	0
Profit after tax{K-(L+M+N)}	64320	198398	329524	458430	577201
Cash Surplus= Profit after tax+ Depreciation-Withdrawal	109320	243398	374524	503430	622201

ANNEXURE –C

Working Capital Requirement

SL.NO	Product Description	Item of Expenditure	No. of Days	Average requirement (Kg per Cow per day)	Cost(Rs)	Working capital Requirement (Rs)
1	Raw Material	Green Fodder	One Season	One acre green fodder per Season per 5 animals	10000/acre	20000
		Dry Fodder	90	5	4	18000
		Concentrate	30	2	35	21000
		Veterinary Services	15	Lumpsum	1000/animal	10000
		Breeding Service	15	Lumpsum	1000/animal	10000
		Water & Electricity	60	Lumpsum	500/animal	5000
		Labour Charges	30	Lumpsum	3000/animal	30000
2	Work in Progress	Green Fodder	0	20	3	600
		Dry Fodder	1	5	4	200
		Concentrate	1	2	35	700
3	Finished Goods	Milk Yield	1	Yield @ 12 litres per day/cow	28	3360
4	Sundry Debtors	Milk Sold	14	Yield per cow @ 12 litres/cow	28	47040
				<i>Total</i>		175900
				Rounded		175000

ANNEXURE D

Loan Amount – Rs.990000/- Interest Rate - 11%

Repayment period – 60 months after a holiday period of 6 months

Net repayment period – 54 months

Date	Particulars	Debit	Credit	Balance	Net Loan	Interest on Net Loan*	Interest Per annum	Principal repayment
01.09.2021	To loan	990000		990000	660000	0		
1	By repayment		0	990000	660000	6050		
2			0	990000	660000	6050		
3			0	990000	660000	6050		
4			0	990000	660000	6050		
5			0	990000	660000	6050		
6			0	990000	660000	6050	36300	0
7			17368	972632	642632	5891		
8			17368	955264	625264	5732		
9			17368	937896	607896	5572		
10			17368	920528	590528	5413		
11			17368	903160	573160	5254		
12			17368	885792	555792	5095		
13			17368	868424	538424	4936		
14			17368	851056	521056	4776		
15			17368	833688	503688	4617		
16			17368	816320	486320	4458		
17			17368	798952	468952	4299		
18			17368	781584	451584	4140	60182	208416
19			17368	764216	434216	3980		
20			17368	746848	416848	3821		
21			17368	729480	399480	3662		
22			17368	712112	382112	3503		
23			17368	694744	364744	3343		
24			17368	677376	347376	3184		
25			17368	660008	330008	3025		
26			17368	642640	312640	2866		
27			17368	625272	295272	2707		
28			17368	607904	277904	2547		
29			17368	590536	260536	2388		
30			17368	573168	243168	2229	37256	208416
31			17368	555800	225800	2070		
32			17368	538432	208432	1911		
33			17368	521064	191064	1751		
34			17368	503696	173696	1592		

35			17368	486328	156328	1433		
36			17368	468960	138960	1274		
37			17368	451592	121592	1115		
38			17368	434224	104224	955		
39			17368	416856	86856	796		
40			17368	399488	69488	637		
41			17368	382120	52120	478		
42			17368	364752	34752	319	14330	208416
43			17368	347384	17384	159		
44			17384	330000	0	0	159	34752
45	Grant @30%		330000	0				330000
		990000	990000				148227	990000

ANNEXURE – E

Risk assessment for the entrepreneur / enterprise

CREDIT RISK:	
a. Whether the borrower is a permanent resident of the area as per KYC Document	Yes
b. No Negative references about the entrepreneur during oral enquiry	Yes
c. In case of SHG Members, the applicant should have completed one-cycle of loan with full repayment	Yes
d. No Previous record of overdue in the loans of the entrepreneur	Yes
OPERATIONAL RISK	
e. No major risks for systems failure (e.g. IT servers kept in risk areas like flood prone or earthquake prone areas) in the proposed business	Yes
f. No major risks for human failure (e.g. chances for monitoring lapse due to remote or decentralized operations) resulting in frauds	Yes
BUSINESS RISK:	
g. The entrepreneur has the adequate experience in the Line of activity selected	Yes
h. The selected activity has enough scope or market	Yes
i. The entrepreneur has a plan to manage the Competition in the industry /sector	Yes
j. The business will be commenced on time as per the plan (Is there any risk for time lapse due to construction or approval from Govt.)	Yes
FINANCIAL RISK:	
k. The entrepreneur can maintain the profit margin assumed	Yes
l. The payment terms of the clients (credit for 15 / 30 /60 days) are manageable to the entrepreneur	NA
ENVIRONMENT RISK	
m. The selected activity is not in the Negative list	Yes

i. I have reviewed all the risk factors and find “No major risk” in the proposal.

ii. I find the following risk as a significant risk and the entrepreneur has the following plan to manage that risk. – No significant risk.

Date:

Name and Signature of OSF