

## **Dairy Products**

1. **Model Bankable Project for Financing "Dudha Sarita" Milk Booth**
2. **Creation of alternative employment opportunities for truck drivers through dairy farming in selected districts of Maharashtra**

### **Model Bankable Project for Financing "Dudha Sarita" Milk Booth**

#### **1. Background**

During the state credit seminar for the year 2004-05 held on 22 December 2003 for Maharashtra State, Shri D.V. Khillare Regional Dairy Development Officer from Government Dairy Department told that they want to promote 'Aarey Saritas' i.e. Milk Booths in Pune, Solapur & Sangli district. On their request the study was undertaken by the undersigned on 7, 8 & 10 April 2004 in the area of Pune, Pimpri- Chichwad Municipal Corporations. Discussions were held with Shri D.V. Khillare, RDDO, Shri A.R. Jadhav, Dairy Manager, Shri S.D. Bhujbal, MPO, Shri V.D. Lokare, Circle Inspector, Shri S.D. Kulkarni, AMDO of Government Milk Supply Scheme & Government Dairy Development Department. The details like various input costs and output prices etc. were also collected from existing few milk booth "Aarey Sarita" owners of the area. The data and discussions with the various agencies/personnel formed the basis for formulation of the project.

#### **2. Introduction**

Dairy Development Department of GoM and Rajya Sahakari Dudh Mahasangh Maryadit (MAHANANDA) coordinates main activities concerning creation of infrastructure for dairy development i.e. milk procurement, product manufacture, supply of inputs to milk producers, milk & milk product supply to consumers, extension education and training to milk producers etc. The milk production was 6090 thousand tonnes during 2001-02 and the estimated per capital daily milk availability was 172 gms. The average milk procurement under organised sector i.e. Government and Coop. sector is about 25% of the total milk production in the state.

There are 115 chilling plants with an aggregate capacity of 21.10 lakh litre per day, 61 processing plants with installed capacity of 67.50 LLPD & 9 milk powder plants with a capacity of 141 MT/day under Government & Coop. sector. There are 35 coops. with a capacity of 42.06 LLPD, 68 Pvt. units with a capacity of 55.75 LLPD & 38 other units with 34 LLPD. (a large scale dairy plant near Baramati in Pune District has been established with an aggregate processing capacity of 7 LLPD) i.e. a total of 141 units with 131.76 LLPD capacity are registered under MMPO Act. There are a total of 104 taluka & district unions/federations operating in the state.

Government Dairy Scheme Pune is having one lakh litre milk processing plant. At present the plant is supplying milk and milk products to the consumers of Pune and Pimpri Chinchwad area through its 300 milk booth called as "Dudh Sarita". Each booth

supplies the milk to the consumers ranging from 100 to 650 litre per day. The milk is being supplied to the booths in two shifts i.e. morning & evening as per requirement of booth owner on cash and carry basis. The Government Dairy supplies 65000 litres of milk per day at present. During winter i.e. in flush season it increases to 75000 litre per day. Other milk products like ghee, table butter, shrikhand and paneer of Govt. Milk Plant are also supplied through milk booth on cash and carry basis only. The quantity of milk product supplied by Government Milk Supply Scheme are as below :

No.	Product	Quantity	
		Lean season	Flush season
1	Milk (lit/day)	60000-65000	70000-75000
2	Ghee (lit/day)	600-700	1500-2000
3	Shrikhand (kg/day)	150-200	200-300
4	Table butter (kg/month)	400-500	500-600
5	Paneer (kg/day)	4-5	5-7

The Government MSS pays the following commissions to the booth owner :

1. Milk - Rs.0.80 per litre plus 0.40 per litre milk transport
2. Ghee - Rs.10 per litre (Avg)
3. Paneer - Rs.10 per kg (Avg)
4. Shrikhand - Rs.4 per kg (Avg)
5. Table Butter - Rs.10 per kg (Avg)

Sale of milk upto 250 litre milk per day sale is a part time job and the booth owner can utilise remaining time for other work like sale of bread, eggs, biscuits, snack packets etc. He can also run a STD-PCO booth , magazine library etc. and earn more money/income.

At present there is an urgent need of at least 150 milk booths to be established/renovated in Pune, Pimpri Chinchwad area by Government Milk Supply Scheme, Pune.

### 3. **Objectives**

Financial assistance is to be extended for establishment/renovation of milk booth i.e. Dudh Sarita etc. to the educated (at least Xth pass) unemployed youths with the following objectives.

1. To provide good quality milk and milk products to the consumer of the area.
2. To provide part time employment to the youths in urban area.
3. Renovation of old & broken milk booths so as to maintain a neat and clean (hygienic) condition in the shed with an attractive appearance.

### 4. **Beneficiaries**

1. Existing beneficiaries of Government milk supply scheme Pune, who would want

to renovate the very old and broken milk booths. Selection of beneficiaries shall be done by Milk Supply Scheme & the loan application shall be forwarded to the financing Bank & Branch through MSS.

2. Educated unemployed youth selected by milk supply scheme for setting up of a new milk booth on his own land or leased land.
3. Those youths who will be able to sell at least 100 litres of milk per day.

## **5. Area**

The scheme shall be implemented by Government milk supply scheme within the area of Pune, Pimpri Chinchwad Municipal Corporation Limits. This scheme can be replicated in other cities also by milk coop. unions/milk coop. federation / Pvt. dairy plant owners etc.

## **6. Unit cost**

Two models of "Dudh Sarita" have been developed according to their make for consideration of the financial institutions. The choice of model is to be given to the borrower.

Model A - A milk booth (8'x6') made of MS steel

Model B - A milk booth (8'x6') made of wood

Both the model will have a small size 3'x3'x15" show case/ almaria and a platform of 5'x15". The unit cost for model 'A' is arrived at Rs.40000/- and that of model 'B' is Rs.45000/-. The details of the unit cost is given in Annex ure-I.

## **7. Margin money & bank loan**

Since the beneficiaries are educated unemployed, a margin of 15% of Total Financial Outlay (TFO) is considered. The loan amount for model A & B works out to be Rs.34000 and Rs.38250 per unit respectively. However, down payment & bank loan shall be decided by financing bank as per RBI guidelines. Loan from banks with refinance facility from NABARD is available for starting "Milk Booth". For obtaining bank loan, the borrower should apply through the Govt. Milk Supply Scheme to the nearest branch of a commercial bank in their area in the prescribed format which is available in the branches of financing banks.

## **8. Working capital**

The Government milk supply scheme will sell/supply the milk and milk products to the booth owner on "cash & carry" basis for which there is a need to provide working capital. The requirement of working capital for a booth selling 100 litres of milk per day is worked out at Rs.24000/- (Annex ure-II). However, the banks may assess & extend working capital on the basis of need of each booth.

## **9. Interest rate**

The rate of interest on both the term loan & cash credit loan shall be decided/fixed by the concerned financing bank to the ultimate beneficiary. Here for calculation of cash flow and repayment we have assumed an interest @ 12% per annum.

## **10. Economics of the project**

The assumptions and various techno economic parameters for working out the economics of the milk booth are given in Annex ure-II & III and are based on field visits under taken in Pune city. The detailed economics of the scheme is given in Annex ure-IV. Model A is having lower total financialoutlay than Model B & so IRR & BCR will be more than model A .

## **11. Financial analysis**

The cash flow analysis covering the Benefit Cost Ratio (BCR), Net Present Worth (NPW) and Internal Rate of Return (IRR) has been worked out for the project model 'B' & presented in Annex ure-V. The BCR, NPW & IRR works out to be 1.48:1, Rs.32622 and more than 50% respectively.

## **12. Security**

Security will be as per RBI guidelines issued from time to time.

## **13. Repayment period of loan**

The repayment period depends upon the gross surplus generated. The loan shall be repaid in suitable monthly/quarterly installments within a period of about 5 years without any grace period. From Annex ure-VI it is observed that after repaying bank loan and interest thereon, sufficient amount (avg. Rs.15000/year) is left to the beneficiary during the project period besides the stock value of assets Rs.16000/- at the end of project (after 5 years). For assured repayment a tripartite agreement between the financing bank, milk supply scheme/milk union/milk federation/milk plant and the borrower may be executed.

## **14. Insurance**

The financing bank may ensure that the borrower takes adequate insurance of assets created, subject to availability of insurance cover.

## **16. Conclusion**

Captioned proposal is found to be technically feasible and financially viable.

## **Annexure-I**

### **Establishment of "Dudh Sarita" Milk Booth**

#### **Project Cost**

No.	Items of investment	Amt. Rs.	Remarks
1	Shed or Booth (8'x6')		
a)	MS steel make	8000	
b)	Wood make	13000	
c)	With small size 3'x3'x15' show case/almirah & 5'x15' platform	3000	
2	Fridge 200-250 lit. (1)	13000	
3	Ceiling fan (1)	1200	
4	Furniture - stool or chair (1)	200	
5	Deposit with GMSS/milk union fed.	6000	
6	Electrification	1000	
7	Margin money for working capital	6000	
8	Miscellaneous/contingencies (4-5%)	1600	
	Total (a) MS steel make	40000	
	Total (b) Wood make	45000	

#### **Note**

Item-wise costs are average & indicative costs only. Banks are at liberty to vary the costs and also the items of investment to any extent depending upon the local conditions and subject to financial viability.

## **Annex ure-II**

### **Requirement of working capital (100 litre milk sale/day)**

1	Assume 50% the milk is sold on credit for one month by booth owner	Rs.13x50 lit x30 days Rs.19500/- per month
2	Land lease	Rs.1800/- per year
3	Electricity	Rs.600/- for 2 months
4	Insurance	Rs.2000/- one year
5	Misc. exp.	Rs.100 pm
	Total	Rs.24000/-
	<b><u>Note</u></b>	
		<ul style="list-style-type: none"><li>• Government MSS sale the milk to booth owner on cash &amp; carry basis.</li></ul>

	<ul style="list-style-type: none"> <li>• Margin money for working capital to be capitalised @ 25% i.e. Rs.6000.</li> <li>• The cash credit limit works out to Rs.18000/- taking into consideration the margin money @ 25%.</li> </ul>	
6	Total project cost	Rs.45000
7	Margin money 15%	Rs.6750
8	Bank loan 85%	Rs.38250
9	Rate of interest assumed	12% per year on term loan & CC
	<b>Cash Credit Limit</b>	
10	Working capital requirement	Rs.24000
11	Margin money 25%	Rs.6000
12	Cash credit limit (for 100 lit/day milk sale)	Rs.18000

### **Note**

1. Interest on CC limit for the purpose of calculation, the outstanding amount of Rs.15000 has been assumed (Rs.1800 interest/annum) throughout the year.

### **Annex ure-III**

#### **A. Income criteria per booth**

1. Minimum 100 lit. of fluid milk shall be sold per day
2. Avg. 2 lit. ghee shall be sold per day
3. Avg. 1 kg shrikhand sold per day
4. Table butter Avg. 1.5 kg shall be sold/month
5. Paneer - Avg. 1 kg shall be sold/month

#### **B. Income calculations**

No.	Product	Commission	Total income/month (Rs.)
a)	Milk	Rs.0.80/litre (100x0.8x30) excluding transport	2400
b)	Ghee	Rs.10/litre (2x10x30)	600
c)	Shrikhand	Rs.4/kg (1x4x30)	120
d)	Table Butter	Rs.10/kg (1.5x10)	15
e)	Paneer	Rs.10/kg (1x10)	10
	Total income per month		Rs.3145/-
	Total annual income		Rs.37740/-

#### **C. Expenditure per annum**

No.	Particulars	Amt. Rs.
1	Electricity Rs.300/month	3600
2	Land lease rent	1800
3	Insurance of booth, equip (5% per year)	2000
4	Transportation of milk (Rs.0.40 per litre is given by Government MSS)	Nil
5	Repair & maintenance of booth from 2nd year	2000
6	Miscellaneous expenses (Rs.50/month)	600
	Total	1000

#### Annex ure-IV

#### Income & Expenditure Statement

No.	Particulars	I year	II year	III year	IV year	V year
1	Income	37740	37740	37740	37740	37740
2	Expenditure	8000	10000	10000	10000	10000
3	Profit (Gross)	29740	27740	27740	27740	27740

#### Annexure-V

#### Cash Flow Analysis

No.	Particulars	I year	II-IV year	V year
<b>A</b>	<b>Costs</b>			
a)	Capital cost	45000	---	---
b)	Recurring cost	8000	10000	10000
	Total cost	53000	10000	10000
<b>B</b>	<b>BENEFITS</b>			
a)	By way of commission	29740	27740	27740
b)	Stock value of assets (Depreciation : 10% per year)	---	---	16000
	Total benefit	29740	27740	43740
<b>C</b>	<b>NET BENEFIT</b>	(23260)	17740	33740
<b>D</b>	<b>BCR</b>			
a)	DF @ 15%	0.807	1.986	0.479
b)	PW B @ 15%	24000	55092	20952
c)	PW C @ 15%	42771	19860	4790
d)	BCR @ 15%	100044	67421	<b>1.48:1</b>
<b>E</b>	<b>NPW @ 15% (Rs. 32622)</b>	(18770)	35231	16161
<b>F</b>	<b>IRR</b>			

DF @ 45%	0.690	1.030	0.156
PWNB @ 45%	16049	18272	5263
DF @ 50%	0.666	0.938	0.132
PWNB @ 50%	(15491)	16640	4453
<b>IRR = More than 50 percent</b>			

## **Annexure-VI**

### **Repayment Schedule**

1. Bank loan - Rs.38250/-
2. Interest rate - 12% per annum
3. CC utilised - Rs.15000/-

No.	Particulars	I year	II year	III year	IV year	V year
1	Gross profit	29740	27740	27740	27740	27740
2	<b>Repayments</b>					
a)	Principal	7650	7650	7650	7650	7650
b)	Interest on TL	4590	3672	2938	2350	1880
c)	Interest on WC	1800	1800	1800	1800	1800
d)	Total repayment	14040	13122	12388	11800	11330
3	Net surplus left to beneficiary	15700	14618	15352	15940	16410

### **Creation of alternative employment opportunities for truck drivers through dairy farming in selected districts of Maharashtra**

Recently, Brihanmumbai Municipal Corporation imposed a ban on the entry of trucks into Mumbai city which are more than 8 years old. Because of this, large number of drivers who are solely depending their livelihood on this activity lost their jobs. Government of Maharashtra is planning to rehabilitate these truck drivers by providing alternative employment/income generating activity which has potential in those districts. Similar problem will be faced in other states also due to the ban on the old vehicles due to the pollution problem. Dairy farming is identified as one of the activities for providing employment and as a source of income to these truck drivers. We have developed a profile for credit support to these people and the salient aspects are as under :-

### **Implementation of Scheme**

The scheme will be implemented throughout India in the areas having the issue of the ban of the old trucks above 8 years which is more likely to be faced by the affected persons in and around the Metros particularly Mumbai and surrounding districts; States around Delhi like Punjab, Haryana; parts of UP; Madras; Kolkata and their surrounding



areas around these Metros.

### **Species/Breed of Animals**

Most of the farmers in Maharashtra are maintaining crossbred animals( HF & Jersey crosses) because of good market for milk provided by the milk unions, Dynamix Dairy and other private dairies. However in some areas the farmers having more demand buffaloes of Murrah, graded Murrah, Jafarabadi, mehsana, surti breeds are recommended.

### **Unit Size**

The size of the mini dairy unit may be 5 to 10 animals depending upon the size of land holding (1 acre of irrigated land is required for every 5 animals for feeding purpose). The drivers staying in the areas where the fodder is available in the market either dry fodder in the harvesting season or the green fodder is available on contract basis from the fodder growing farmers or sometimes the fodder plots are available on lease for certain period. For such cases banks will not insist for the land with the party as most of the drivers may not have their own land.

### **Forward and Backward Linkages**

Dynamix Dairy and other milk unions are providing the forward linkages through village milk cooperative societies or agents who are collecting milk and making the payment on regular basis. They are also providing the backward linkages in terms of breeding cover, treatment of animals, vaccination etc.

### **5. Selection and Purchase of Animals**

The selection and allotment of the animals to different farmers may be taken up by the AH departments , private or cooperative dairies like Dynamix Dairy or other milk unions so that the quality animals can be made available to the farmers. The selection of animals may be from other milk shed areas or other states like Karnataka, some parts of Gujarat or Punjab & Haryana. or the available markets in those areas.

### **6. Training of Beneficiaries**

Since these truck drivers may not have any experience in dairy farming, it is necessary that they should be trained in dairy management either at training centers of dairy department, AH department, NGO like BAIF Pune in the same districts or in the nearby districts for a period of 15 days. The expenditure on training if any, can also be incorporated in the unit cost of investment.

### **7. Margin Money and Repayment Period**

In case of the truck drivers, we may request the bankers to consider the margin money upto 10% of the project cost and repayment period of 5 to 6 years.

## **8. Security**

The assets created may be considered as security by the banks without insisting on collateral security etc. as the drivers may not be able to offer such additional activity.

## **9. Economics of a Mini Dairy Unit**

The economics of dairy units of 2 animals and 10 animal mini dairy unit is enclosed for perusal.

SLBC may discuss the scheme in the quarterly or special forum in consultation with State Government, Milk unions, private dairies, bankers and a few truck drivers. and due publicity may be given with arrangement to cover the scheme under ARF for refinance claims. The banks may be advised to circulate the scheme to the bank branches. Animal Husbandry / Dairy department may be made the nodal department to identify and guide the affected people . The necessary workshops may be organized to impart few days training to these truck drivers.