DETAILED PROJECT REPORT

ON

SETTING UP OF EFFICIENT MILK COLLECTION CENTRE

&

BULK STORAGE OF MILK

FOR

PRIMARY DAIRY COOPERATIVES

IN

TAMIL NADU

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Abbreviations

SL NO.	Abbreviation	Full form
1	PDC	Primary Dairy Cooperative Society
2.	DMU	District Milk Union
3.	CSISAC	Central. Sector Integrated Scheme on Agricultural Co-operation
6.	BMC	Bulk Milk Coolers
7.	DG	Diesel Generator

EXECUTIVE SUMMARY

The xyz Primary Dairy Cooperative society, is one of the 30 PDC's registered and affiliated to the District Milk Union to collect milk from the scattered dairy farmers and bringing them under one umbrella for getting remunerative price for the milk produced in the village. The society is focused on supporting its member-farmers in their dairy farming activity with the needed inputs, technical and advisory services and in the processing and marketing of their surplus Milk. It is also selling some through direct sales to residents and institutional buyers like retailers, foodservice entities, hospitals, schools etc., in the village from its collection centre.

The society was set up through a campaign & with the support of the Dairy Department 10 years ago and has 200 members and aims at increasing its membership. The Board is democratically elected and running in profit for the last 3 years with an accumulated profit of Rs. 10 lakhs. The society is collecting about 1500 liters of milk per day and after meeting the local needs during the morning and evening hours sends the milk to the District union to which it is affiliated for processing and value addition.

At times some of the milk becomes sour due to the hot climate and delay in the time taken for the milk to be collected in the centre and it to, reach the chilling unit. This is a huge drain on the society, as the District Union does the quality check at its receiving point and rejects the entire lot if found to be of low quality.

The members of the society are mainly women having high yielding variety of animals yielding about 5 to 15 liters' of milk per day. The women members are facing the problem of milking their animals in time due to lack of professional milking man at their door step and high cost in milking. The educated unemployed youth of the village also do not want to enter into this occupation as it is considered low strata job and requires a lot of physical labor and time.

***Goal*:**

The society aims at reducing its loss of revenue through sour age/spoilage of milk due to the time taken for milking, collection and transportation to the Union for further processing. They would also like to take advantage of the bonus price offered for supply of chilled milk by the Union and the option for local sale of milk thought out the day and saving on transportation cost.

Objectives of the project:

a) Provide need-based quality inputs to the farmer-members. To enhance the keeping quality of milk and also to avoid economic losses to farmers due to spillage/sour age of milk.
b) To produce improved quality products by the Milk Union, for export as well as to meet the domestic requirements.

c) To reduce the transportation cost by regulating transportation of the milk on alternative days and also through reduction in expenditure on purchase and maintenance of cans.
d) Skilling the unemployed youth in gainful employment in the village as milk collectors and to Provide market intelligence and market access to the farmer-members.
e) Ensure sustainable development of the society while being focused on serving the member-farmers as per their needs.

Proposed Investment and Sources of funding:

FUNDS REQUIREMENT	Amount/Rs.			
				Total
- Mechanical Milking machine @7000/- (20)				140,000
- Bulk Cooler 2000 Lts.				6,15,000
- Installation and commission				20,000
- Margin money				1,27,000
- Total				9,02,000
FUNDS SOURCES - PROPOSED	**Loan NCDC**	**Subsidy**	**Own**	**Total**
Custom Hiring Center				
- Proportion	65%	15%	20%	100%
- Amount of Finance	586,300	135,300	180,400	902,000

Introduction

Our country is topping the Globe as the highest milk producer, but what about its quality? Our place in the international market as far as its acceptability is concerned is now at stake. Now it is the time to upgrade the quality of our milk in a similar quantum, and to provide hygienically safe milk and milk products to the consumers in consonance with the Draft Codex International code of Hygienic practices for Milk & Milk products. The sole criterion for determining quality is no longer FAT/SNF but the bacteriological quality of the milk. This is possible only by the proper handling of milk from the udder of the animal to the super market shelf. Since the ambient temperature in our country is as high as 45^{o} C, milk is likely to sour easily. Improvement of Raw milk quality can be ensured only by following stringent hygienic practices from the udder of the milk animal to the chilling centre and its prompt cooling to 7^{o}C or below within a time span of 2 hours. This is easily attainable in the western countries where dairy farming is taken up as an industry & processing is done on the farm itself and not as back yard farming like in India. Here, the surplus milk is brought to the small collection centers by the individual producers, and then taken to the Milk union for chilling and processed, which is a long drawn process and time consuming.

2. Project proposal:

The best alternative to the present system of milk collection is usage of small milking machines for faster, hygienic and cheaper milking and thereafter cooling it at the collection centre itself using Bulk Cooling Tanks. The usages of such tanks have become popular in the recent past because, it not only helps in increasing the shelf-life of milk but also provides systematic and economic way of the procurement of milk. It also ensures procurement of more Milk by covering untapped farther areas for Milk Collection and still has it chilled within 2 hours of milking as required by Draft Codex International standards.

For the Indian Dairy industry to comply with international standards the only line open is to use the above cold chain. The initial capital investment will pay back in the long run, as the system will eliminate the use of manual milking men & speed up the milking process, milk cans, milk Souring, reduction in transportation cost, better return etc.

3. Beneficiary:

The Village level Primary Milk Cooperative Societies affiliated to the District Cooperative Milk Union was incorporated 10 years ago and has 200 members covering the entire village. It has a paid up capital of Rs. 2000/- and aims at having further addition to its membership. The Board is democratically elected and the society is running in profit for the last 5 years. The society is running from a shop owned by it in the village in the main road. At present the society has an accumulated profit of Rs. 10 lakhs. The society is collecting about 1500 liters of milk per day and after meeting the local needs of about 200 liters during the morning and evening hours sends the milk to the District union to which it is affiliated for processing and value addition in milk cans. The society also owns 60 milk cans and

a milko tester. The society is not having any loans at present and is working with its own funds. The accounts of the society have been audited till date. The society aims at increasing its business to 2000 liters per day and reduce its operational cost and increase its profit by introducing mechanical milking machines and bulk coolers.

4. Need for the project

The members are facing the problem of hygienic and timely supply of milk to the society and the society in turn to the Milk Union. It was also observed that the transportation cost of the collected milk and the cans used and its maintenance is a drain on the profits of the society. These factors are hampering the growth of the society and its capacity to produce more milk and reach the 2000 liter per day capacity. The members are mainly women who have to take care of house hold coarse and can devout only part time for the work of growing cows for milk production. They are dependent on professional milking man for extraction of milk and for taking it to the society in the morning and afternoon.

The society in its annual General Body meeting informed that NCDC is funding societies having adequate potential and security to purchase necessary equipments to modernize the operations of the society. The society from its accumulated profits and with support offered by NCDC is proposing to create assets for its milk Collection Centre. The major asset proposed to be acquired - at a cost of Rs. 6.35 lakhs - is a Bulk Milk Cooler with a capacity for cooling 2000 liters of milk and 20 Mechanical Milking Machines at a cost of Rs. 7000/- each. The society is also proposing to skill their unemployed youth to enter the dairy business as operators of the Mechanical milking machines and act as door to door collection agents.

5. Objectives:

The NCDC assistance is sought for purchase of milking Machines, and Bulk milk coolers with the following objectives.

a) To ensure hygienic, faster and economical milking,
b) To enhance the keeping quality of milk and also to avoid economic losses to farmers due to spillage/sour age of milk.
c) To produce improved quality products for export as well as to meet the domestic requirements.
d) To reduce transportation cost by regulating transportation of the milk on alternative days and also reduction in the expenditure on purchase and maintenance of additional milk cans.
e) To ensure availability of raw milk for local sales in the collection centre for a longer period and maximize profits for the primary.

6. Potential

The NCDC has a programme with a subsidy component of 15% of the project cost under the CSIAC for financing Milking machines, and Bulk Milk Cooling Units, which can be introduced in the primary dairy coops by the Milk Unions to mutual advantage. The scheme has potential to finance in almost all the operation flood programme (OFP) districts and also to some extent in non- OFP districts in the state of Tamil Nadu. The increased profitability will attract more framers into the business of dairy and increase the quantum of collection of milk for the society.

7. Project Details:

i. **Components**: The components are milking machines, Bulk Milk Cooling Unit comprising of bulk coolers, DG set, accessories such as water heater, water storage tanks etc.

ii. **Capacity**: The capacity utilisation of Milking Machines is ranging from 10 to 20 liters per hour and Bulk Milk Cooling Units is ranging from 1500 to 2000 liters.

iii. **Specifications**: The specifications of different models manufactured by two firms are given in Appendix 1.

iv. **Equipment suppliers**: The machinery should be as per BIS standards and are presently manufactured in the country by Alfa Laval, IDMC, PRAJ, etc. The addresses of few manufacturers are given in Appendix II for guidance of entrepreneurs/appraisers.

v. **Processing**: The operations involve milking, collection and chilling of milk to a temperature of 6 to 4 ^{o}C within 2 hours of milking.

vi. **Advantages:**

a) Hygienic and faster collection of milk at the collection centre and the main dairy.
b) Saving on manpower.
c) Elimination of souring/curdling of milk because of cooling at the collection centre itself.
d) Adulteration of milk and spillage from cans can be eliminated during transportation.
e) Transportation cost can be brought down by regulating transportation to the main dairy either on alternative days or once in a day.
f) Saving of initial investment on purchase of cans and subsequent maintenance cost (Repairs, cleaning etc.) of those cans.
g) Improved quality of milk can be supplied to the main dairy to manufacture quality products for domestic as well as export markets.
h) Flexibility in milk collection time results in increase in volume of milk collected at the centers.
i) Farmers will get better returns for the quality of milk.
j) Chilling at the Main dairy can be avoided.

k) Employment generation for the skilled youth of the village

8. Technical Collaboration:

Since the process is simple no technical collaboration is envisaged for the project; however the Milk Unions would be providing guidance to the societies/collection centres in purchase and installation of Milking machines, Bulk Milk Coolers, and also training of manpower in operations and maintenance.

9. Capital Cost:

The capital cost varies with the capacity and the specifications of the Bulk Milk Coolers. However, two models of milking machines with capacity of 10 and 12 ltrs have been considered and for Bulk milk coolers 2000 litre capacity, whose unit cost is Rs. 7000/- and Rs. 35 lakhs respectively. The detailed unit cost is given in the Annexure I. It is assumed that the Milking machines will be either owned by the society or hired out by the farmer/skilled worker on custom hiring basis. In case of the society it will be operated by trained unemployed youth trained under skill development at a fixed fee collected from the farmer who uses his services. if given to the farmers the cost would be collected by the society from the amount due to the farmers out of his milk collection in easy installments. For the Bulk coolers the space available in the existing collection centre/cooperative society will be sufficient to install the equipment and accordingly no cost on civil structures is considered. In case additional civil structures are required, the same may be considered under the project cost.

10. Economics of the project:

Based on the various techno economic parameters furnished in Annexure II, the economics of the project has been worked out and presented in Annexure III for Milking Machines and Milk coolers. The items of income include the user fee collected for milking machines and the incremental income due to reduction in souring/curdling of milk, spillage and pilferage of milk, saving of expenditure on transportation, purchase and maintenance of cans and chilling cost received from the union while the expenditure includes the operational cost of cooler (fuel/power), repairs, maintenance and additional manpower. In case, the unit is financed along with Automatic Milk Collection Station, the existing staff of the society will be sufficient to manage the unit. No additional expenditure on manpower is required.

10. Financial Analysis:

The cash flow statement covering the Benefit Cost Ratio (BCR) Net Present Worth (NPW) and Internal Rate of Return (IRR) has been worked out for the project and presented in Annexure IV. For the models of 2000 litres, the DSCR is 2.72, NPW is Rs.9.2 lakhs and IRR is 15% respectively. As such the project is viable and the entire bank loan can be repayable in eight years without any grace period and accordingly the repayment has been fixed at eight years for the model project. (Annexure V)

11. Funding:

Financial assistance for purchase of 20 Mechanical Milking Machines and one Bulk Milk Cooling unit of 2000 liters capacity would be considered for financial support by NCDC. Out of the total project cost of Rs. 9,02,000 NCDC is to provide a term loan of Rs. 586,300 for 8 years and back ended subsidy of Rs. 1,35,300 from Central Govt. and the balance 20% of Rs. 1,80,400 to be chipped in by the society.

12. Lending Terms and other requirements:

12.1 Loan assistance: The society or Milk collection centre should normally meet 20% of the project cost out of their own resources and 15% through back ended subsidy. The balance 65% is financed by NCDC as loan.

12.2 Interest rate: Interest rate will be as determined by NCDC as existing at the time of actual release. In the present case we have considered interest rate of 10.60%

12.3 Security: As stipulated by NCDC either FDR or bank guarantee or property owned by the society will be offered as security.

12.4 Annual maintenance contract/Insurance: The society may take adequate insurance cover for the asset or enter into annual maintenance contract with the supplier.

12.5 Repayment period: Depends upon the gross surplus generated, it may be up to 8 years with no moratorium for principal.

13. Special terms and conditions:

The special terms and conditions of the project are given in Annexure VI.

Annexure - I

Cost estimates/ assumptions.
Unit cost, NCDC loan and margin money - Bulk Milk Cooling unit + Milking Machines.

(Rs. in lakhs)

S.No.	Particulars	Capacity :2000 lit.
I	Manual Milking machines @ Rs.7000/- 20 Nos.	1.40
II.1	Cost of Bulk Milk Cooler with DG set	6.15
II.2	Installation and commissioning	0.20
II	Total cost	6.35
III	Margin Money (20%)	1.27
5	NCDC loan (65%)	5.863

Annexure - II

Techno-economic parameters - Bulk Milk Cooling Units

Sr. No.	Particulars	Model: **2000 liters**
A	Income	
1	Installed capacity (liters per day)	2000
2	Capacity utilisation (%) First year Second year Third year onwards	70 80 90
3	Reduction in souring and curdling of milk as % of milk procured	1.00
4	Saving in income due to reduction in souring / curdling (Rs./lit of sour milk)	2.65
5	Reduction in spillage and pilferage in cans during transportation as % of milk procured	1.00
6	Cost of raw material - Milk (Rs./lit.)	28
7	Payment received from unions for chilling of milk (Rs./lit)	0.10
8	Saving in investment and repair of cans (Rs./lit.)	0.04
9	Saving in transportation cost of milk (Rs./lit.)	0.10
10	Income from Hiring of Milking Machines (Rs./lit.)	0.04
B	**Expenditure**	
1	Power and fuel consumption (Rs.)	0.07
2	Repairs and maintenance (Rs.)	0.02
3	Manpower - one person (Rs.per month) additional cost	2500
C	**Others**	
1	Depreciation (%)	10
2	Interest rate (%)	10.6
3	Repayment period (years)	8

Annexure - III

CASH FLOW STATEMENT Rs. In lakhs

1	2	3	4	5	6	7	8	9	10	11	12
	Particulars/ year		I	II	III	IV	V	VI	VII	VIII	Total
	Milk Procurement (in litres/day)		1500	1600	1800	1800	1800	1800	1800	1800	13900
A	**REVENUE**										
1	Payment received from Milk Union for Chilling	@Rs.0.10/litre	0.548	0.584	0.657	0.657	0.657	0.657	0.657	0.657	5.074
2	Income from Milking machines	@Rs.0.04/litre	0.219	0.234	0.263	0.263	0.263	0.263	0.263	0.263	2.029
3	Saving due to reduction in souring and curding of milk (@1%xRs2.65)	1% @ Rs.2.65/litre	0.145	0.155	0.174	0.174	0.174	0.174	0.174	0.174	1.344
4	Saving due to non spillage	1% @ @28/litre	1.533	1.635	1.840	1.840	1.840	1.840	1.840	1.840	14.206
5	Saving in repair and replacement of cans	@Rs.0.04/litre	0.219	0.234	0.263	0.263	0.263	0.263	0.263	0.263	2.029
6	Net saving on transportation cost of milk	@Rs.0.10/litre	0.548	0.584	0.657	0.657	0.657	0.657	0.657	0.657	5.074
	TOTAL REVENUE		**3.211**	**3.425**	**3.853**	**3.853**	**3.853**	**3.853**	**3.853**	**3.853**	**29.756**
B	**Additional Expenditure**										
1	Electricity and fuel	@Rs.0.07/litre	0.383	0.409	0.460	0.460	0.460	0.460	0.460	0.460	3.551
2	Repair and maintenance	@Rs.0.02/litre	0.110	0.117	0.131	0.131	0.131	0.131	0.131	0.131	1.015
3	Man power cost	Rs.2500/person/month	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	2.400
4	Interest	@10.6%	0.621	0.544	0.466	0.388	0.311	0.233	0.155	0.078	2.797
5	Depreciation	@10% on Rs.6.35	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	6.200
6	Repayment		0.733	0.733	0.733	0.733	0.733	0.733	0.733	0.733	5.863
	TOTAL PAYMENT		**2.922**	**2.877**	**2.865**	**2.788**	**2.710**	**2.632**	**2.555**	**2.477**	**21.826**
	NET REVENUE		**0.289**	**0.548**	**0.988**	**1.066**	**1.143**	**1.221**	**1.299**	**1.376**	**7.930**
	CASH ACCRUALS (net profit + depreciation+ repayment+interest)		**2.418**	**2.600**	**2.962**	**2.962**	**2.962**	**2.962**	**2.962**	**2.962**	**22.790**
	Repayment+interest payment		1.354	1.277	1.199	1.121	1.044	0.966	0.888	0.811	8.660
	Net available		1.064	1.323	1.763	1.841	1.918	1.996	2.074	2.151	14.130
	DSCR		**1.79**	**2.036**	**2.47**	**2.642**	**2.838**	**3.066**	**3.335**	**3.654**	
	ADSCR									**2.728**	

Annexure IV

Income and Expenditure Account Rs. In lakhs

1	2	3	4	5	6	7	8	9	10	11	12
	Particulars/ year		I	II	III	IV	V	VI	VII	VIII	Total
	Milk Procurement (in litres/day)		1500	1600	1800	1800	1800	1800	1800	1800	13900
A	**INCOME**										
1	Saving due to reduction in souring and curding of milk (@1%xRs2.65)	1% @ Rs.2.65/litre	0.145	0.155	0.174	0.174	0.174	0.174	0.174	0.174	1.344
2	Saving due to spoilage	1% @ @28/litre	1.533	1.635	1.840	1.840	1.840	1.840	1.840	1.840	14.206
3	Payment received from Milk Union for Chilling	@Rs.0.10/litre	0.548	0.584	0.657	0.657	0.657	0.657	0.657	0.657	5.074
4	Saving in repair and replacement of cans	@Rs.0.04/litre	0.219	0.234	0.263	0.263	0.263	0.263	0.263	0.263	2.029
5	Net saving on transportation cost of milk	@Rs.0.10/litre	0.548	0.584	0.657	0.657	0.657	0.657	0.657	0.657	5.074
6	Income from Milking machines	@Rs.0.04/litre	0.219	0.234	0.263	0.263	0.263	0.263	0.263	0.263	2.029
	TOTAL INCOME		**3.211**	**3.425**	**3.853**	**3.853**	**3.853**	**3.853**	**3.853**	**3.853**	**29.756**
B	**EXPENDITURE**										
1	Electricity and fuel	@Rs.0.07/litre	0.383	0.409	0.460	0.460	0.460	0.460	0.460	0.460	3.551
2	Repair and maintenance	@Rs.0.02/litre	0.110	0.117	0.131	0.131	0.131	0.131	0.131	0.131	1.015
3	Man power cost	Rs.2500/per/m	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	2.400
4	Interest	@10.6%	0.621	0.544	0.466	0.388	0.311	0.233	0.155	0.078	2.797
5	Depreciation	@10% on Rs.6.35	0.775	0.775	0.775	0.775	0.775	0.775	0.775	0.775	6.200
	TOTAL EXPENDITURE		**2.189**	**2.144**	**2.132**	**2.055**	**1.977**	**1.899**	**1.822**	**1.744**	15.963
	NET PROFIT		**1.022**	**1.281**	**1.721**	**1.799**	**1.876**	**1.954**	**2.032**	**2.109**	**13.793**
	CASH PROFIT (net profit + depreciation)		**1.797**	**2.056**	**2.496**	**2.574**	**2.651**	**2.729**	**2.807**	**2.884**	**19.993**
	NET PROFIT BEFORE INTEREST		**1.643**	**1.825**	**2.187**	**2.187**	**2.187**	**2.187**	**2.187**	**2.187**	**16.590**

IRR Calculation	Year	
Investment/Project cost	0	-9.02
Cash in flow	1	1.643
	2	1.825
	3	2.187
	4	2.187
	5	2.187
	6	2.187
	7	2.187
	8	2.187
IRR		15%
Rate of interest		10.60%

Net present worth		
	1	1.643
	2	1.825
	3	2.187
	4	2.187
	5	2.187
	6	2.187
	7	2.187
	8	2.187
	Total	16.59
	NPV@15%	**Rs. 9.52**
	Project Cost	Rs. 9.02

PRIMARY COOP. MILK SOCIETY				Annex V
	Repayment Schedule			
	Loan	Rs.	5.863	lakhs
	Rate of interest		10.60%	
	Period			
	Loan	Installment	Interest	Total
1	**5.863**	0.732875	0.621478	1.354353
2	5.130125	0.732875	0.543793	1.276668
3	4.39725	0.732875	0.466109	1.198984
4	3.664375	0.732875	0.388424	1.121299
5	2.9315	0.732875	0.310739	1.043614
6	2.198625	0.732875	0.233054	0.965929
7	1.46575	0.732875	0.15537	0.888245
8	0.732875	0.732875	0.077685	0.81056
	Total	**5.863**	2.796651	8.659651

ANNEXURE VI

Special Terms and Conditions - Bulk Milk Cooling Units

The financing bank may ensure that:

1. the milk union/ dairy identifies the societies/ milk collection centers whose milk collection is about 1400-1800 litres and 3000-4000 litres per day for installing 2000 litres & 5000 litres capacity bulk milk cooling units taking into consideration the likely acceptance of the dairy farmers for the shift in the system.
2. the union/ dairy guides the society for purchase and installation of BMCU.
3. the union/ dairy trains the secretary and other staff of the society/ milk collection centre in the operation and maintenance of BMCU.
4. the society/ milk collection centre enters into an annual contract with the equipment supplying firm for maintenance of BMCU.
5. the society/ milk collection centre insures the BMCU, provided the insurance coverage is available.
6. the milk union/ dairy explores the possibility to get subsidy from other agencies for purchase of BMCU by the societies/milk collection centers.
7. the union/ dairy provides tie-up arrangement for the repayment of bank loan.
8. the union provides adequate compensation to the societies/ milk collection centre to meet the chilling cost of milk.
9. the union/ dairy gives better price for good quality chilled milk supplied by the society/milk collection centre.

Appendix I

Technical specifications of bulk milk coolers

Particulars	De Laval Models			Indian Dairy Machinery	
	Dx2000	IBT2000	DxC5000	2000	5000L
1. Basis of Design	ISO 5708	ISO 5708	ISO 5708	N.A.	N.A.
2.Types of Cooling System	Direct	Direct	Direct	Direct	Direct
3. Shape of Tank	Open type Semi-	Horizontal Semi- cylindrical	Horizontal Horizontal cylindrical	Open Horizontal cylindrical	Closed Horizontal cylindrical
4. Compressor type	Hermetic	Hermetic	Hermetic	Hermetic	Hermetic
5. No. of compressors	One	One	Two	One	Two
6. No. of fans	Two	Two	Four	N.A.	N.A.
7. Power supply	3 phase 415V,50Hz	3 phase 415V,50Hz	3 phase 425V,50Hz	Single Phase 220V, 50 Hz	3 Phase 415 V,50Hz
8. Connected load	6.92 kw	6.92 kw	12.75 kw	N.A.	N.A.
9. Voltage stabilizer	10 KVA	10 KVA	20 KVA	10 KVA	20 KVA
10. Temperature to 4 C	From 35 C	From 35 C	From 35 C	From 35 to 4 C	to 4 C to 4 C
11. Cooling time	3 hours	3 hours	3 hours	3 hours	3 hours
12. Diesel Generator	10 KVA	10 KVA	10 KVA	10 KVA	10 KVA

APPENDIX III

Technical details of the Bulk Milk Cooler with the price list.

S. No	Item Description	Make
1	Tank Inner Body (Common)	Stainless Steel 304 Grade & 2.0 mm Thickness
2	Tank Outer Body (Common)	Stainless Steel 202 Grade & 1.5 mm Thickness
3	Thermal Insulation (Common)	Glass wool & Thermo cool Combination
4	Agitator (Common)	0.5 HP Agitator
5	Valve (Common)	One Out Let Valve
6	Control Panel (Common)	Electrical Control Panel for Equipment's
7	Temperature Digital Indicator	Sub Zero Digital Indicator
8	Tank Capacity	2,000 Liters
9	Refrigeration Unit Capacity-2000 Ltrs	3 T.R (02 Number)
10	Tank Capacity	3,000 Liters
11	Refrigeration Unit Capacity-3000 Ltrs	3 T.R (02 Number)
12	Tank Capacity	5,000 Liters
13	Refrigeration Unit Capacity-2000 Ltrs	3 T.R (03 Number)

PRICE SCHEDULE

S. No	**Description**	**Quantity**	**Unit Rate**
1.	Supply of 2,000 Liter's BMC	01	3,60,000.00
2.	Supply of 3,000 Liter's BMC	01	4,42,500.00
3.	Supply of 5,000 Liter's BMC	01	5,88,400.00