

Dairy Feasibility Study, Kothawan Block (Hardoi)

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Objectives Of The Study

- ▶ Conduct Feasibility Assessment Study of Dairy Sector
- ▶ Establish Market Viability: Identify Potential Market Partners
- ▶ Business Development Plan

Sample Details

- Village Survey
 - 200 villagers were surveyed covering 20 villages belonging to 4 Naya Panchayats covering of 10 farmers from each village
- Market Survey

Parameter	Sample size
Dairy Survey	4 (Parag, Paras, 2 Chilling Plants)
Household Survey	20
Vendors	6
Institutional Buyers	5 (Including Dairy Agents)

Village Survey Findings



Geographical Profile

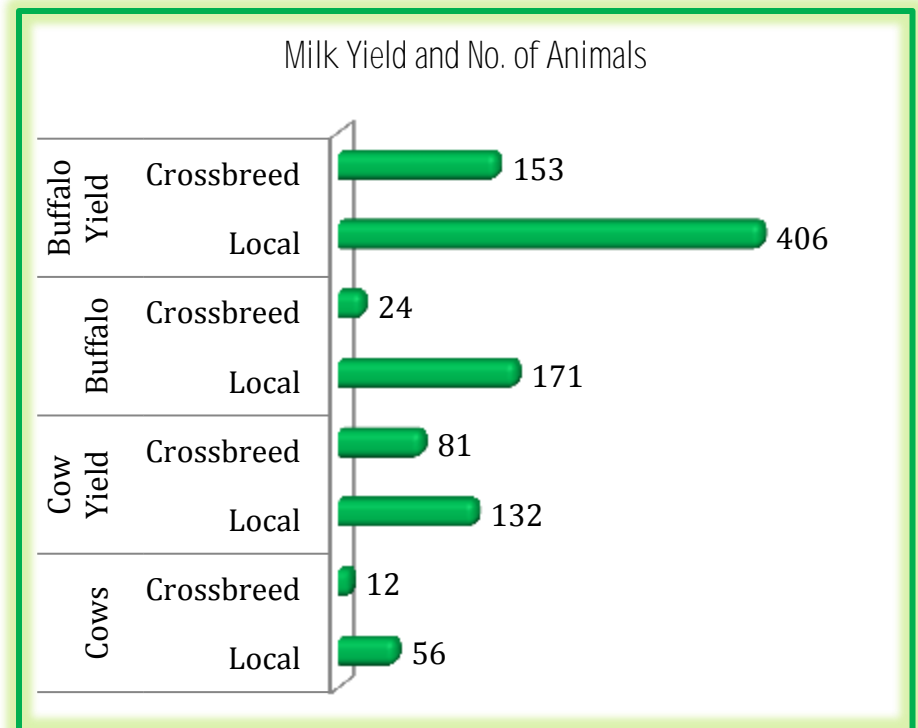
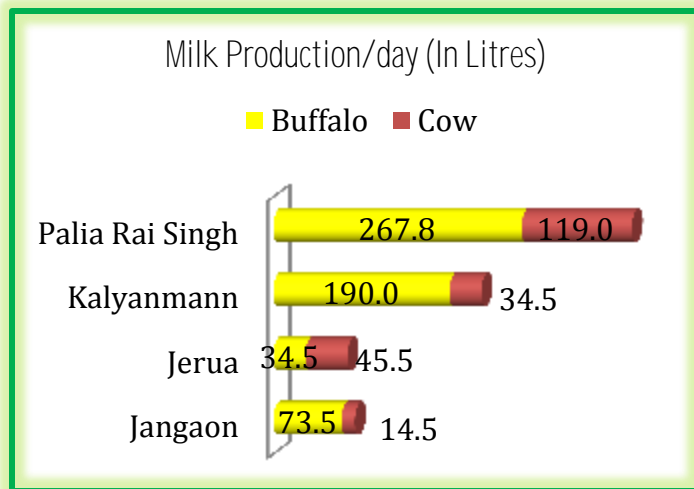
Particulars	Surveyed	Projected (HHs with milch animals)
Villages	20	20
Household	200	7820
Main Occupation – Farming	68.50%	53.56%
Irrigated Land (Bighas)	1436	56148
Land Irrigated by Canal (Bighas)	230	8993
Land Irrigated by Bore (Bighas)	1206	47155
Rainfed Land (Bighas)	82	3206
Fodder grass land (Bighas)	149.4	5842

Milk Production Scenario

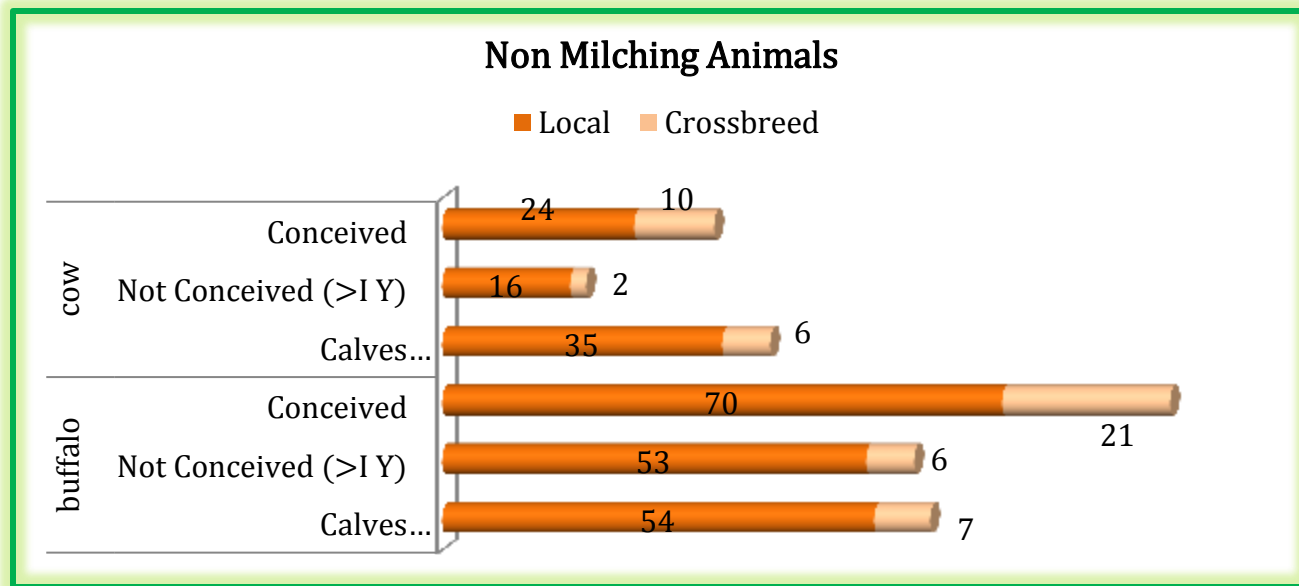
Total Milch Animals	609	23813
Milching buffaloes	448	17518
Milching cows	161	6295
Total Milk Yield (Ltrs) per day	789.3	30862
Milk Consumption by families/ day	417	16305
Surplus Milk per day	372.3	14557
No. of Villagers ready to join	196	10949
Avg milk yield/farmer (Litres)	3.95	3.95
Avg milk surplus/farmer (Litres)	1.86	1.86

Milk Yield

- ▶ Average milk yield
 - ▶ Local cows - 2.36ltr/day
 - ▶ Cross breed cows - 6.75 lit/day.
 - ▶ Local buffaloes - 2.37 lit/day
 - ▶ Cross breed buffaloes -6.38 lit/day



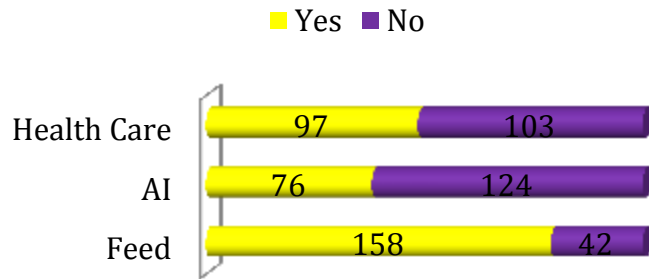
Future Milk Potential



- The projected cattles at different stages in these 20 villages stands out to be 11886

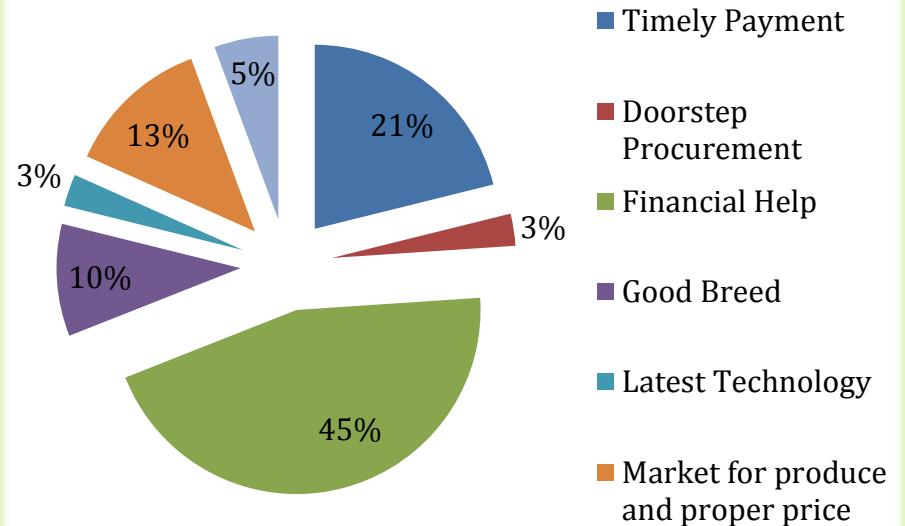
Dairy Services

Access to veterinary services

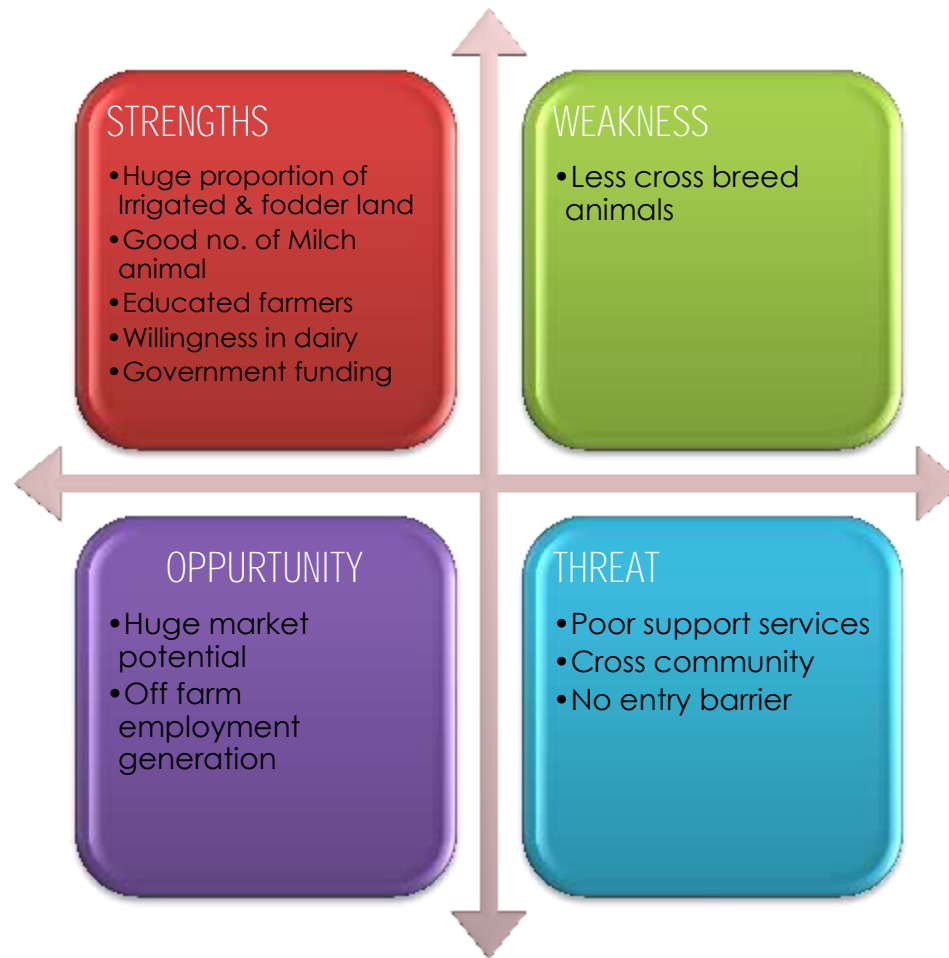


- All services are available only at the block level
- 90% of the farmers demand to have insurance for their cattle

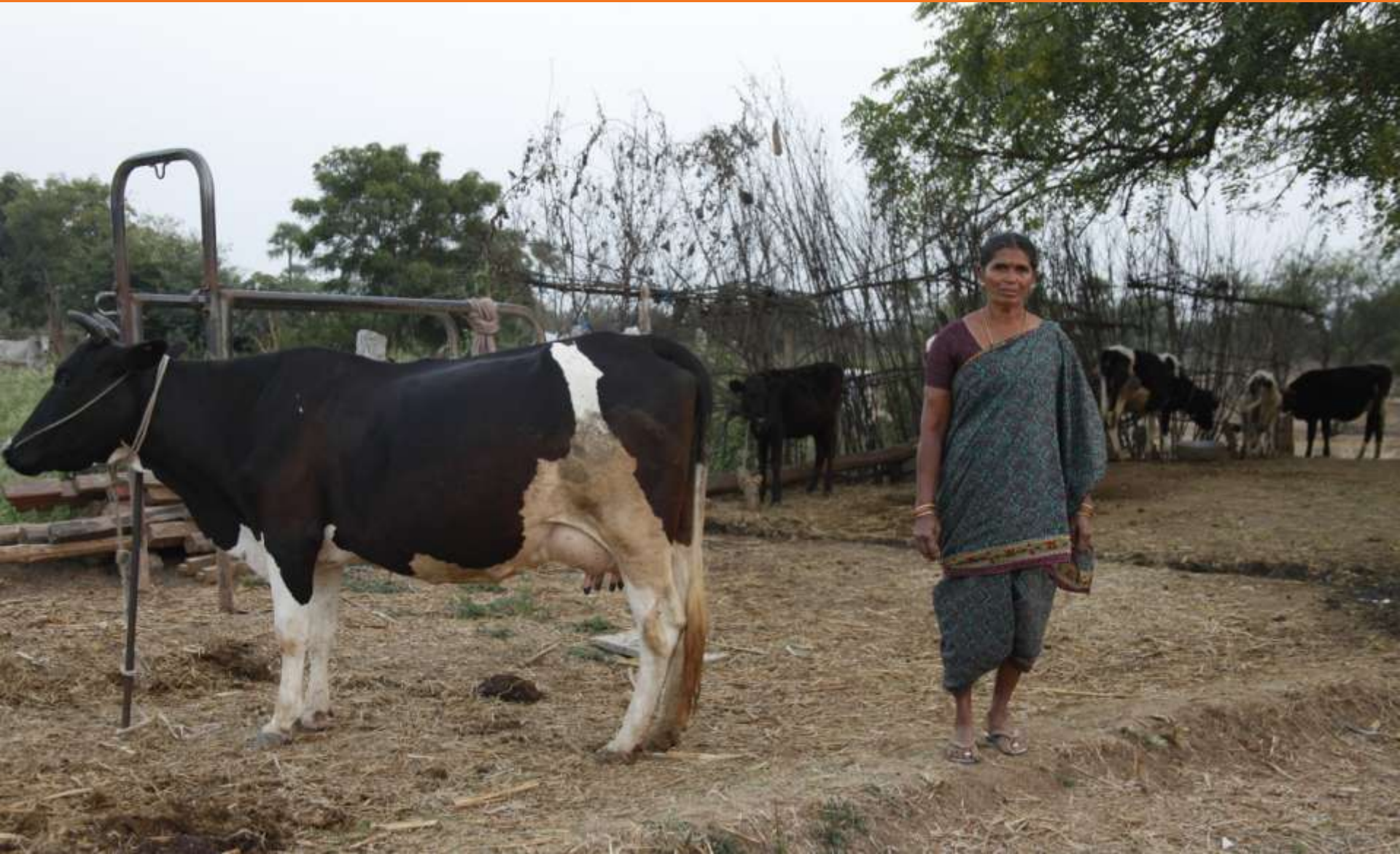
Alternative Services Requirement from Dairy



Swot Analysis - Milk Production



Market Survey Findings

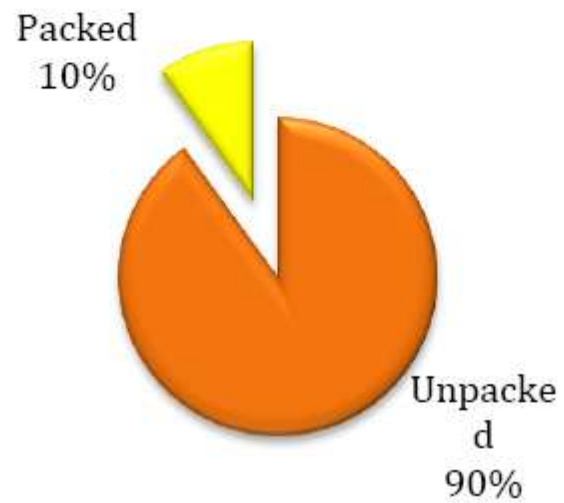


Household Survey

- About 50% of the households spend in the range of Rs. 600 – 900 in a month for milk consumption.
- Out of the surveyed households 90% of the consumers prefer unpacked milk.
- Reason for preference of unpacked milk
 - Home delivery of milk
 - Tastier
 - Unadulterated

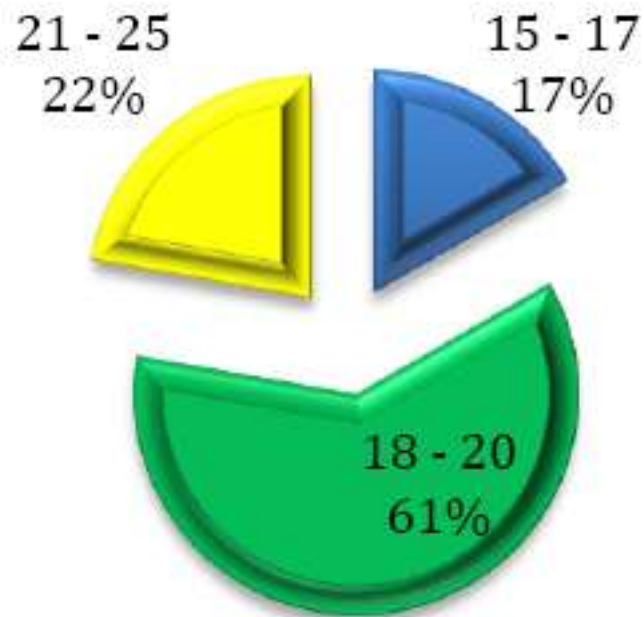
Type of Milk Used

7.4.2 Type of Milk Used



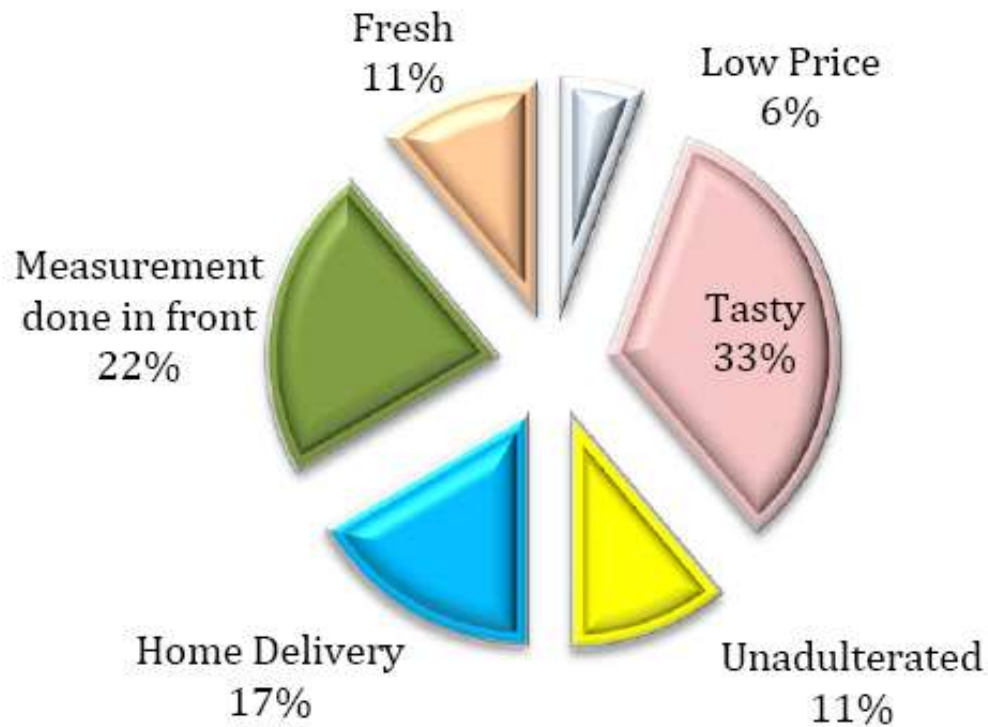
Price of Unpacked Milk

7.4.3 Price of Unpacked milk (Rs.)



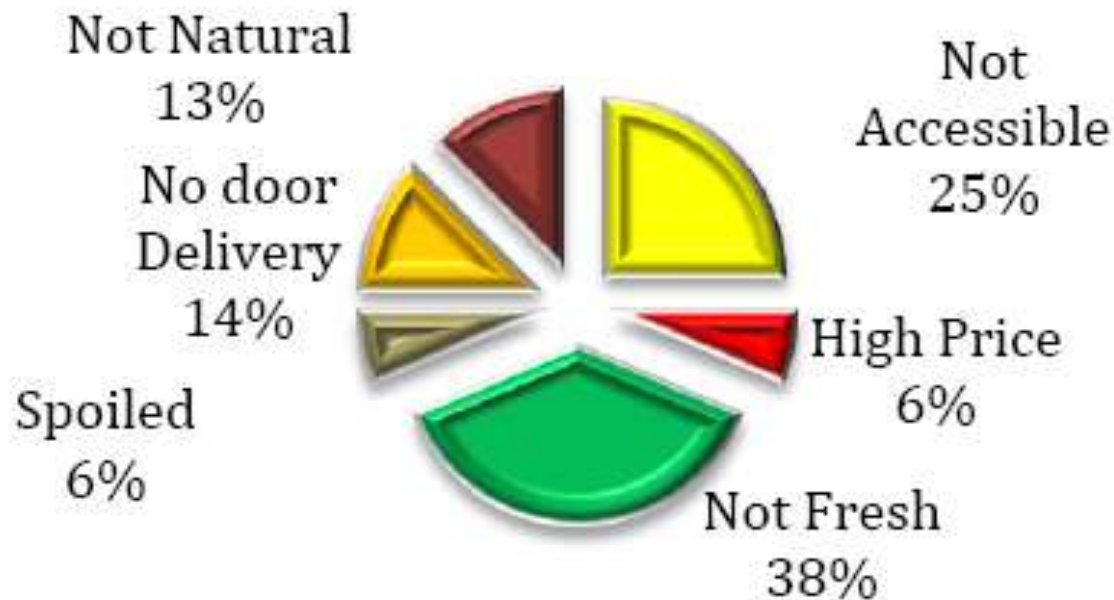
Unpacked Milk - Reasons

7.4.4 Reasons for using unpacked milk (first reason of consumers)

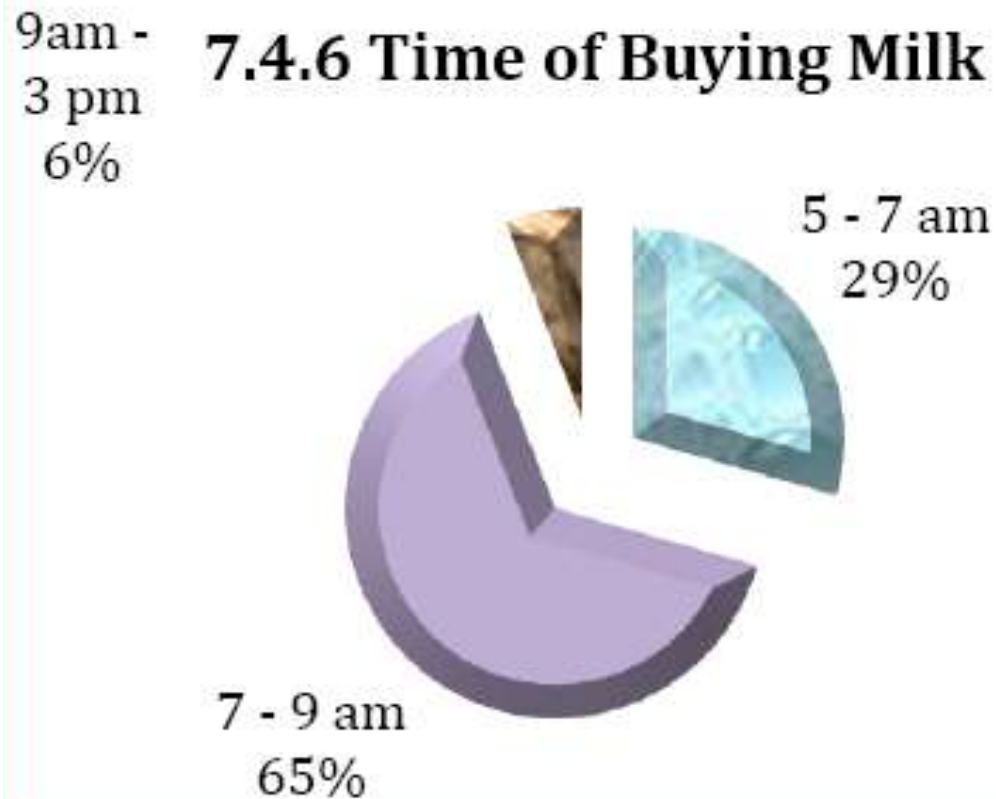


Reasons for not Using Packed Milk

7.4.5 Reasons for not using packed milk (First reason)



Time of Buying Milk



Purchase Loose Milk

7.4.8 Desire to purchase loose milk from dairy

No
15%



Shifting to Packed Milk

7.4.11 Desired changes for shifting to packed milk (First Reason)



Swot Analysis Of Market



Business Development Plan



Technical Feasibility

- ▶ Projected milk potential (surplus milk) in the block is about 14,552 litre from the 20 surveyed villages.
- ▶ Atleast 40% of the total projected milk can be easily tapped by the proposed unit (about 5800 litres)
- ▶ 5000-ltr capacity bulk cooler can be established
- ▶ To minimise the operational costs in the initial period, it is suggested to start with 3000 litre BCU with scope for 2000 litre expansion.

Financial Feasibility

Estimated cost of 3000 ltr milk cooling unit	Rs. 27,50,000
Cost of Human Resources at the dairy	Rs. 4,20,000 p. a.

Income and Expenditure particulars scenario at the Village collection centre												
Particulars	Milk Procurement Scenario											
	40	75	115	150	200	250	300	350	400	450	500	550
Milk Collection /day	40	75	115	150	200	250	300	350	400	450	500	550
Total Income	1632	3060	4692	6120	8160	10200	12240	14280	16320	18360	20400	22440
Total Expenses	3220	3325	4195	4400	5300	6450	7450	8350	9500	10500	11400	12300
Profit/Loss per month	-1588	-265	497	1720	2860	3750	4790	5930	6820	7860	9000	10140

Financial Feasibility

Income and Expenditure particulars scenario at the Dairy Unit

Particulars	Milk Procurement and profitability Scenario														
	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000	4500	5000
Milk Procurement /day	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000	4500	5000
Total Income	11800	17300	22800	28300	33800	39300	44800	50300	55800	61300	66800	77800	88800	99800	110800
Total Expenses	14517	19020	23567	28142	33167	38442	43717	49042	54317	59592	64867	75517	86067	96617	107167
Profit/Loss per month	-2717	-1742	-767	158	633	858	1083	1258	1483	1708	1933	2283	2733	3183	3633

Financial Feasibility

Profitability of the dairy unit

Profitability of the dairy unit										
Particulars	Milk Procurement and profitability Scenario									
Particulars	Year I	Year II	Year III	Year IV	Year V	Year VI	Year VII	Year VIII	Year IX	Year X
Average Milk Collection at BCU	2000	2500	3000	3500	4000	4500	5000	5000	5000	5000
Profit After Tax	-201424	-36196	104805	211320	345553	482228	621656	649209	680257	715243
NPV	1459592									
The NPV at the end of ten years is Rs. 1,459,592. The total plant and machinery expenses (Rs.27,50,000) has been repaid in ten years.										

Market & Environmental Feasibilities

- Market Feasibility
 - Vendors are playing major role in procurement as the dairy unions have stopped procuring milk in the area.
 - Dairy Parag and Paras dairy units, which are operating at 60% of their plant utilisation capacity need milk.
 - Strategy in the initial period should be to sell required milk to the local institutional buyers and the remaining milk should be sold to the large institutional buyers to optimize the profits.
- Environmental Feasibility
 - To make the plant location environmentally feasible one, proper effluent disposal system should be developed at the site.
 - Clearance from the Pollution control board

Establishment Of Dairy Plant

- ▶ Formation of Milk Producers Groups (MPGs)
 - ▶ Preliminary visits to the selected villages
 - ▶ Exposure visit to dairy to members
 - ▶ Follow up meeting of the Exposure visits
 - ▶ Promotion Meeting in the village
 - ▶ Registration meeting in the village
- ▶ Establishment of Dairy Plant and Infrastructure
- ▶ Recruitment and training to the Staff
- ▶ Capacity building of the Members
- ▶ Establishment of External Linkages

Implementation Arrangements

- Capacity Building of the members
 - Members need to undergo the following trainings
 - Cooperative Principles and Bye laws of MPGs
 - Basics of Accounts and records at Village milk centres
 - Best practices for Quality Milk Production
 - Calf rearing and Cattle Management
 - Planning and management of MPG functions

Implementation Arrangements

- ▶ Establishment of External Linkages
 - ▶ Market linkage
 - ▶ Paras dairy, Parag dairy or any other nearby private dairy or chilling plants as mostly setups are underutilized because lack of milk supply.
 - ▶ Tie ups with banks
 - ▶ Credit for animals purchase is among major road blocks for potential of milk availability.
 - ▶ Technical assistance from the Animal Husbandry, Agriculture Departments and Artificial Insemination agencies
 - ▶ Agreement with the transportation agencies
 - ▶ Technical services from the
 - ▶ Insurance services

Thank you