

Executive Summary of Proposed project

1	Name of Project	<i>Dairy Development in Bundelkhand region under Special Package for drought mitigation of GOI</i>
2.	Project Location	Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia Districts
3.	Nodal Agency for Project Implementation	Madhya Pradesh State Cooperative Dairy Federation Limited, Bhopal
4.	Correspondence address	Dugdha Bhawan, Habibganj, Bhopal – 462023 (MP)
5.	Phone no Fax no. Email	0755-2602145 0755-2583149 mpcdf@sancharnet.in
6.	Project Objectives	<ul style="list-style-type: none"> • Organizing 260 new DCSs during the project period. • Promoting entrepreneurship in dairy vocation and providing alternative source of income locally to about 7800 milk producer members. • Induction of cattle in phased manner by dovetailing the existing schemes. • Achieving the milk procurement target of 12,990 KGPD in the project period. • Ensuring regular supply of 12, 612 liters processed milk to the consumers of Bundelkhand region alongwith transfer of surplus quantity to sister milk unions in closer proximity. • Providing essential veterinary cover for better health care of the animals through 138 artificial Insemination Centers. • Supply of balanced Cattlefeed to milk producers at moderate prices. • Establishment of milk chilling infrastructure through 6 Bulk milk coolers of 3000 to 5000 liters capacity (i.e, One BMC in each district) at initial stage, • Establishment of Fodder Densification Unit at Sagar & Datia. • Strengthening of Fodder demonstration & development programme in the region. • Provision and strengthening of Technical Input Services, Animal Health Care etc to milk producers. • Capacity building of milk producers and DCS staff.
7.	Project Activities	<ul style="list-style-type: none"> • Establishment & Strengthening of Milk Processing / Chilling, Feed & Fodder facilities • Dairy Cooperatives Organization • Milk procurement & marketing • Input services • Manpower development / Capacity Building • Cattle induction through dovetail of schemes. <ul style="list-style-type: none"> ▪ Project planning & monitoring
8.	Project duration	3 years from the date of sanction
9.	Project Cost	Rs 2130.71 lakhs (Rs.21.31 crores)
10.	Project Finance	100% grant assistance under Special Bundelkhand package for Drought mitigation approved by GOI

Physical Targets under the project

S.No.	Particulars	Unit	End Of Project Status
1.0	DCS Organization	Number	260
2.0	DCSs Functional	Number	260
3.0	Milk Producers Members	Number	7,800
4.0	Milk Procurement	Kg/day	12,990
5.0	Milk Marketing	Liters/day	12,612
6.0	Artificial Insemination Centers	Number	138
7.0	Artificial Insemination Performance	Number / mth	2,760
8.0	Fodder Densification Units	Number	02
9.0	Capacity building of milk producers	Number	7,800
10.0	Bulk milk coolers	Number	06

Fund Requirement under the project

The total outlay of the project is **Rs. 2130.71 lakhs** at current prices. The component -wise details are given below.

(Rupees in Lakhs)

No.	Total Project	Yr-I	Yr-II	Yr-III	Total
1	Establishment / Revival of Primary Dairy Cooperatives	73.250	642.520	48.700	764.470
2	Human Resources Development & Training	40.715	42.631	41.194	124.540
3	Technical Input Services	52.512	399.769	454.947	907.228
4	Managerial Operations	103.065	104.097	127.314	334.475
	Total	269.542	1,189.017	672.155	2,130.713

Dairy Development in Sagar, Chattarpur, Panna, Damoh, Tikamgarh & Datia Districts under Special Bundelkhand Package for drought mitigation of GOI

Background

Dairying was hardly known as an organized activity at the time of formation of the State of Madhya Pradesh in 1956. The dairy trade was unorganized and largely under the control of milk traders, middlemen and vendors. Dairying, as an allied activity to agriculture, provides many rural families with their only source of continuous income. Lately, the concept has undergone a lot of change owing to the participative and interactive approach having been organized on proper lines as an integrated and inter-linked activity involving production, processing and marketing.

Coverage

Presently only 5 Milk Unions (viz., Bhopal, Indore, Ujjain, Gwalior and Jabalpur) are operating. The Milkshed area of the Cooperative structure is thinly spread over in 44 out of 48 districts. However, the milk routes cover only about 10% of the total villages in the state.

Overview

The Cooperative Dairy structure has played the role of a development agent and has been an important participant in the rural development program initiated by the Government to generate subsidiary employment & alleviate poverty. The Cooperative Dairy structure in the State was created under the Operation Flood (OF) programme with the financial support of National Dairy Development Board (NDDB).

MP State Cooperative Dairy Federation Ltd (MPCDF) is the apex body of the 3 tier dairy cooperative structure in the State of Madhya Pradesh for organized dairy development.

The First Tier - Village level Cooperative Societies- the DCSs, Second Tier - Central Society i.e. Cooperative Milk Unions, and Third Tier - Apex Society i.e. MPCDF has become the mainstay for almost all dairy development activities in the State.

At the primary level are the Village milk producer's Dairy Cooperative Societies (DCSs) that are welded together into 5 regional Cooperative Milk Unions which operate facilities for milk & feed processing, collection & distribution of milk and provides the milk producer members a full range of technical input services.

The 5 regional Cooperative Milk Unions situated at Bhopal, Indore, Ujjain, Gwalior and Jabalpur procure raw milk from the village level dairy cooperative societies, process it in the dairy plant and market the pasteurized liquid milk in sachets under the brand name of "Sanchi" to the urban consumers. The surplus quantities of liquid milk is transferred to other milk unions of the State under State Milk Grid (SMG) or the milk unions outside the State under the National Milk Grid (NMG) or converted into milk products by the Milk Unions.

The milk products are manufactured and marketed under the brand name of “Sanchi” by the milk unions and also marketed by the apex federation MP State Cooperative Dairy Federation Limited under the brand name of “Sneha” within and outside the MP State.

The milk unions that own and operate the milk processing and associated infrastructure in their milk shed have gradually evolved into self-supportive organizations and have registered a great degree of success on account of operational independence.

However, a common platform for evolving uniform policy and coordinated systems and procedures is provided by the apex milk federation i.e. MPCDF. It maintains liaison with GOMP / GOI regarding policy making and implementation of Dairy development activities, advises & guides its member milk unions regarding all aspects of Managerial, Monitoring and auditing issues.

Current Scenario

Today the apex federation (MPCDF) with its five regional Cooperative Milk Unions is procuring 5.16 lakh kilograms of milk daily from its 2.56 lakh milk producers associated to 5583 dairy cooperatives. The local milk sale is to the tune of 4.47 lakh liters daily thus disposing the balance under State/National milk grid arrangements and product making. During financial year 2009-2010, the 5 Milk unions have together registered an operating profit (Before Depreciation & deferred liabilities) to the tune of Rs. 12.71 crore (till February 2010).

Dairy Profile in Madhya Pradesh at a Glance

- MPCDF and its affiliated five Milk Unions are proudly recognized as the largest dairy development organization of the state of Madhya Pradesh.
- MPCDF is also the first in the state for obtaining license for manufacturing export grade milk powder.
- All 5 milk dairy plants have ISO Certification adopting modern technology for milk processing.
- Milk processing capacity of 9.0 lakh litres/day & chilling capacity of 5.23 lakh litres/day.
- Drying capacity (SMP manufacturing) of 30,000 Kgs/day.
- Balanced Cattlefeed ‘Sudana’ of 200 Metric Tons/day – Two Cattle feed Factories at Pachama (Sehore district) and Mangliya (Indore). The GOI has sanctioned establishing a new Cattlefeed unit at Seoni during this plan period.
- 640 Artificial Insemination Centers.
- Association of over 2.56 Lakh milk producing farmer members (comprising about 70-75 % representing economically weaker sections).
- Turnover (sale realization from milk & milk Products by five Milk Unions) of about Rs. 555.12 crore in 2009-10 (till February 2010).
- Transfer of Rs. 388 crore in 2009-10 (till February 2010) from urban to rural economy.

Emerging Challenges in Dairying in the State

Today, the challenges faced by our dairy sector are immensely complex. The rules governing international trade in international commodities are also changing fast with the WTO accord. Currently, the rural population is widely scattered in 55,393 inhabited villages of the State in which the coverage of dairy activities is limited to only 8-10%.

Currently, dairying as an activity of income generation to the rural masses in the districts of Sagar Division needs to be promoted as a venture for self-sustenance and economic development. The Cooperative Dairy Sector has to usher in the new era, bringing-in the changes in the strategic management policies along-with its sustaining development objectives.

In order to compete amidst stiff business competition both with private and giant cooperatives, there is an immense need to raise the level of state's dairying scenario and create the dairy infrastructure and strengthen them with latest technological up-gradation, expand the level of operations by tapping the uncovered potential areas through establishment of new milk collection centers, laying new milk routes, promoting cattle induction, setting up bulk milk coolers of rated capacities in match to the milk availability/ potential and prioritizing milk automation systems etc. There is a need to lay adequate thrust on these activities in the districts falling in the jurisdiction of Bundelkhand region

Districts profile

Parameters	Sagar	Chattarpur	Panna	Damoh	T'garh	Datia
Geographical Area (Sq.Km)	10,252	8,687.0	7,135.0	7,306.0	5,048.0	2,691.0
Total Population (in Lakhs)	20.2	14.7	8.56	10.8	12.0	6.3
(a) Male	10.7	7.9	4.5	5.7	6.4	3.4
(b) Female	9.5	6.9	4.1	5.1	5.6	2.9
Literacy (percent)	68.1	53.4	61.6	68.1	55.8	73.5
(a) Male	80.0	65.5	74.0	80.0	68.8	82.9
(b) Female	54.5	39.4	47.8	54.5	41.0	62.5
Density -Per Sq.Km	197.2	169.8	119.7	148.1	238.3	233.3
Operational Holdings (ha / holding)	2.5	2.3	2.0	2.3	1.7	2.5
Area under food grain ('000ha)	464.2	379.2	250.4	278.8	256.0	80.5
Area under Wheat ('000ha)	228.6	104.2	81.1	99.8	128.2	70.4
Gross irrigated area (% GCA)	24.4	35.0	17.7	21.4	54.3	40.9
Forest Area ('000ha)	288.8	214.3	299.4	267.0	66.6	20.8
No. of Villages	2230	1594		1405	1799	710
No. of Villages electrified	1776	1062	921	1108	860	539
Surface Road length (Kms)	1423.0	1472.00	967.00	1437.0	1177.0	387.00

Road density (per '000 sq.km)	138.8	169.45	135.53	196.69	233.16	189.89
No. of Hospitals	18	16	08	9	13	06
No. of dispensaries	50	54	38	35	46	23
No. of AI centers	0	00	00	0	0	03
(a) Cow(Indigenous)	383673	248858	318472	286739	208754	73936
(b) Cow (cross bred)	2828	776	1715	642	1599	120
(c) Buffalo (indg)	111819	211067	152992	87078	151659	129952
(d) Buffalo(crossbred)	2063	3798	3354	1307	3187	242

Need for the Project in Bundelkhand region

Today, the challenges faced by our dairy sector are immensely complex. The dairy development programme is thinly spread over 44 out of 48 districts in the state. The remaining 4 districts viz., Sagar, Tikamgarh, Panna and Chattarpur are devoid of dairy development. Currently, the rural population is scattered in 52,143 inhabited villages of the State in which the coverage of dairy activities is limited to only 8-10%. The combined milk processing capacity of five regional Cooperative Milk Unions is 9.0 lakhs liters per day and chilling capacity of 5.23 lakh liters per day.

The apex Federation (i.e., MPCDF) is making efforts in expanding the dairy processing and chilling infrastructure through exploring the avenues from the various beneficiary aided and dairy development oriented programs of both GOI and GOMP from time to time. The objective is only to improve the dairy scenario and bring the state of Madhya Pradesh at par with that of developed states in the country. There still lies wide gap in extending the coverage of dairying across the state. Though adequate measures are underway in increasing the milk production through large scale cattle induction in organizing new milk routes and strengthening the existing milk routes through gap filling arrangements. There also is more urgent need to address creation of dairy processing, chilling infrastructure and explore the market of milk producers belonging to remote areas in districts where dairying is yet to be promoted significantly.

As the state government is also committed to enlarge the scope of dairying across the state, the proposed initiative focuses to expand the scope of dairy development in Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia Districts falling in Bundelkhand region. The project envisages creation of dairy infrastructure, chilling facility, fodder densification, promoting subsidiary dairy extension activities. Therefore, this project.

PROPOSED PROJECT

1.0 DAIRY COOPERATIVE SOCIETIES PLAN

1.1 The following table illustrates plan for organizing 260 DCSs in the project: The district wise details of the dairy cooperative societies under the project shall be as under :

Project Districts	Year wise Organization of DCSs				Total functional DCSs at End of the Project
	Yr-1	Yr -2	Yr -3	Total	
Sagar	16	10	15	41	41
Chattarpur	20	20	20	60	60
Panna	10	10	10	30	30
Damoh	13	24	19	56	56
Tikamgarh	16	15	15	46	46
Datia	10	10	07	27	27
Total	85	89	86	260	260

- 1.2 The project proposes to organize 85 DCSs in the Year-I, 89 DCSs in the Year-II and 86 DCSs in the Year-III of the project period thus, totaling to 260 DCSs in the six districts of the project. All the 260 DCSs would be newly organized and shall be functional by End of Project.
- 1.3 To ensure viability of operations in the initial years, the DCSs will be given Managerial Subsidy @Rs.5000, Stationary @ Rs.1500/-, First aid kit @ Rs.1500/-, Travis @ Rs 5000/-, Furniture & Fixture @ Rs.7000/-, chemicals for milk testing equipments @ Rs.10,000/-. The total fund required for DCSs establishment/revival would be Rs.78 lakhs {estimated @ Rs.30,000 per DCS} as indicated in 1(a) in the table below. This will be done with a view to equip the DCSs with financial resources to run the society without constraints up to point of self sustenance
- 1.4 In addition the dairy Cooperatives would be provided Stainless steel milkcans @ 6 milk cans per dairy cooperative considering at Rs.2500/- per milk can. The essential items for DCSs are taken into account based on prevailing trends adopted in the ongoing projects in the state. The details are summarized at 1(c) in the table below.
- 1.5 The DCSs being limited in number and being in low procurement area, an amount of Rs.6/- per kg fat will be paid to DCS for sustaining viability. Similarly, Rs.600 per month per DCS would be reimbursed to the Society towards the salary of Secretary from Supervision charges built up in the project . If required, the DCS Commission on Feed &Fodder would be paid on higher side for sustaining DCS viability. However, this provision is already built up in the project in the Balanced Cattlefeed Promotional Assistance head. The operating statement of typical DCS is given at **Annexure - 1 (page no.17)**
- 1.6 **Milk Routes :**

The milk routes attached to each district of the proposed project are as under :

A	Sagar milk routes	B	Panna milk routes
1	Sagar--Deori-Tada-Keshli	1	Ajaygarh-Singhpur-Panna
2	Sagar-Rahatgarh	2	Ajaygarh-Manpur-Barkola
3	Sagar-Banda-Shamgarh	3	Ajaygarh-Bhapatpur

C	Chattarpur milk routes	D	Damoh Milk Routes
1	Chattarpur-Rajnagar	1	Damoh-Singhrampur-Tejgarh
2	Chattarpur-Doomra-Rajnagar	2	Damoh-Abhana-Tendukheda-Jahalon
3	Chattarpur-Bijabar-Kishangarh	3	Damoh-Pateri-Kumhari-Sagoni
4	Chattarpur-Naugaon-Eshanagar	4	Damoh-Pathria-Kervana-Batiagarh-Fatehpur
		5	Damoh-Hatta

E	Tikamgarh milk routes	F	Datia Milk Routes
1	Tikamgarh-Digoda-Lidhora-Prithvipur	1	Datia-Unnav
2	Tikamgarh-Palera	2	Datia-Katila-Dinara
3	Tikamgarh-Baldevgarh		

- 1.7 The actual location of BMC, Dairy cooperatives and their number in these routes will depend on the actual ground conditions/ available infrastructure, milk potential, village distance and evaluation of other operational needs in the field, while implementing the project. The milk route map of each district is given at **page no 18 to 23.**

1.8 **Milk Cooling System through BMCs Installation :**

- 1.8.1 Bulk Milk Cooler (BMC) of 3000 to 5000 Liters capacity is proposed for installation under the project. This capacity is reasonable enough to begin with, considering the milk procurement quantity expected during lean and flush seasons under given circumstances.

The milk from the adjoining village dairy cooperatives / cluster DCSs would be brought to the location and would be chilled at prescribed temperature. The milk would be transported through Road Milk Tanker to the nearest Chilling / processing dairy plant for further processing and product conversion.

It may however, be clarified that the Bulk Cooler Installation & its operations at the Village level would consume a rational time period of approximately 6 months. The time lag could be due to procedural complexities including place identification, land finalization, building construction, electrification and other infrastructural amenities arrangement, order placement, delivery and finally its proper installation. Thus a time bound action plan covering all major activities would be prepared in advance by project in successfully implementing them during the project period.

The proposed efforts would enhance the chilling facilities of the region / state and provide ready market to rural milk producers even belonging remote areas. The system will evolve faith of milk producers, register their active participation and would reflect in increased milk production. Accordingly the financial institutions including Banks would be encouraged to take up Cattle financing as a major activity for income generation in the catchments area of BMC.

1.8.2 A total of 6 BMCs have been proposed where, 1 BMC at Sagar would be taken up in the Year-I and remaining 5 BMCs have been proposed in Year-II at Chattarpur, Panna, Damoh, Tikamgarh & Datia districts. The rated capacity of BMC is reasonable enough to begin with, considering the milk procurement quantity expected during lean and flush seasons under given circumstances.

1.8.3 The cost of Bulk milk cooler (BMC) is estimated @ Rs.25 lakhs for each project district. The cost includes Civil works, electrical connections, water tank, furniture, fixtures, tubewell, power backup generator, milk pump, AMCU, electronic weigh machine etc. The total fund requirement for installing 6 BMCs is estimated at Rs.150.00 lakhs. The details are summarized at 1(d) in the table below.

1.9 At Sagar, it is proposed to establish a full-fledge dairy plant of 10,000 liters capacity duly equipped with requisite packing facilities. The estimated cost is Rs.467.47 lakhs. The details are summarized at 1(e) in the table below. In addition, the details of equipments along with their costs have been given at Annexure-

1.10 Milk Marketing & Publicity : The project aims at promoting the local sale of milk through milk parlours, milk booths at strategic locations in the project area thus benefiting the local consumers besides generating mass awareness on the hygienic pasteurised packed milk. A provision of Rs.2.00 lakhs per district per year have been made in the project. A total of Rs.30.00 lakhs is provisioned for all the 6 project districts. The details are summarized at 1(f) in the table below.

1.11 The consolidated summary of expenses on **Establishment of Primary Dairy Cooperatives at Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia Districts** under the proposed project is discussed below in Table- 1

TABLE-1

(Rs. in Lakhs)

No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation / Revival with Travis	0.300	25.500	26.700	25.800	78.000
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	12.750	13.350	12.900	39.000
d	Milk Cooling System (BMC 3000-5000 Liters)	25.000	25.00	125.00	0.00	150.000
e	Strengthening of Dairy Plants including packing machine	0.000	0.000	467.470	0.000	467.470
f	Strengthening of Milk Marketing & Publicity	2.000	10.000	10.000	10.000	30.000
	Total		73.250	642.520	48.700	764.470

2.0 Human Resource Development & Training

- 2.1 For the successful project implementation, an effective training & extension programme is essential. Recognizing the need, a well designed training programme suited to the needs of the personnel working in DCSs including members of the "Management Committee" (of the Dairy Cooperative Society formed under the society bye-laws) will be conducted. These programmes and their related training charges are currently being adopted in the ongoing approved IDDPs and other government sponsored projects in the cooperative dairy sector in the state
- 2.2 It is also essential to provide the bare minimum training to village level functionaries thus emphasizing on cooperative extension, livestock management practices, milk collection system, apart from first aid and maintenance of DCS accounts. Hence, funds are provisioned in the project.
- 2.3 The training of secretaries, testers and Animal Health Worker will help understand their primary responsibilities in handling dairy operations at village society level. The cost of DCS Secretary training is estimated at Rs.3300 per head. Hence, a total of Rs.8.58 lakhs is provisioned for training 260 DCS Secretaries of 6 project districts, during the project period.
- 2.4 The cost of DCS Tester training is estimated at Rs.1100 per head. Hence, a total of Rs.2.86 lakhs is provisioned for training 260 DCS Testers of 6 project districts, during the project period.
- 2.5 The cost of Animal Health Worker training is estimated at Rs.6,500 per head. Hence, a total of Rs.16.90 lakhs is provisioned for training 260 Animal Health Workers of 6 project districts, during the project period.
- 2.6 The training of the Management Committee members will be primarily aimed at creating awareness about their rights and duties for the efficient running of Dairy Cooperative Societies. The cost Management Committee members training is estimated at Rs.1000 per head. Hence, a total of Rs.23.40 lakhs is provisioned for training 2340 Management Committee members of 6 project districts, during the project period.
- 2.7 The main thrust of the training programme would be on demonstrating and communicating the benefits of scientific dairying to the members so that dairying could be adopted on a commercial basis, over-riding the subsistence-oriented practices. The activities under the training and extension programme would include milk yield competitions, audio-visual shows, circulation of posters/pamphlets, organizing visit of farmers to a good cooperative milk organization and training of personnel managing DCSs.
- 2.8 The Farmers Induction Programme is estimated at Rs.2,000 per head. Organizing visit of farmers to a good cooperative milk organization outside state is beneficial for orientation of milk producers to adapt themselves to the outside developments in dairy vocation. Hence, a total of Rs.41.60 lakhs is provisioned for training 2080 milk producing farmers of 6 project districts, during the project period

- 2.9 The cost of Member Orientation Programme is estimated at Rs. 10,000 per DCS. Hence, a total of Rs.26.00 lakhs is provisioned for orienting 260 DCS members of 6 project districts, during the project period. The objective lies in upgrading awareness to Cooperative Society operations, record maintenance, attaining self reliance etc.
- 2.10 The cost of Cooperative Development Program is estimated at Rs.2,000 per DCS. Hence, a total of Rs.5.20 lakhs is provisioned for 260 DCSs of 6 project districts under Cooperative Development Program, during the project period
- 2.11 The training Programme of the Functional staff i.e., Secretary, Tester and Animal health Worker will be organized at the nearest Milk Union Training Centers. The MPCDF/Bhopal Milk union has already developed a full-fledged training module in this regard. The same module shall be replicated here too.
- 2.12 An amount of Rs.124.54 lakhs have been provisioned in the project for conducting all the above trainings, orientation visits / programs etc.
- 2.13 The consolidated summary of expenses on Human Resource Development & Training of **Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia Districts** under the proposed project is discussed below in Table-2

TABLE- 2

(Rs. in Lakhs)

No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
2	Human Resources Development & Training					
a	DCS Secretary	0.033	2.805	2.937	2.838	8.580
b	DCS Tester / Helper	0.011	0.935	0.979	0.946	2.860
c	Animal Health Worker	0.065	5.525	5.785	5.590	16.900
d	Management Committee Members	0.010	7.650	8.010	7.740	23.400
e	Member Orientation Programme	0.100	8.500	8.900	8.600	26.000
f	Farmer Induction Programme	0.020	13.600	14.240	13.760	41.600
g	Cooperative Devpt. Programme	0.020	1.700	1.780	1.720	5.200
	Total		40.715	42.631	41.194	124.540

3.0 TECHNICAL INPUT SERVICES FOR MILK PRODUCTION ENHANCEMENT:

- 3.1. Milk production enhancement in the Project area is of vital importance so as to achieve project's financial viability. The milk production in the DCSs shall have to be increased to the economically viable level by high yield cattle and

improvement of the local breed of milch cattle through organised cattle-breeding programme.

- 3.2. **ARTIFICIAL INSEMINATION** : The project aims at providing animal health care to animals of milk producers of DCSs. Artificial insemination services would be provided to all DCSs for upgrading the local herd.
- 3.3. 138 AI centers will be established in the project area during the project period. The project bears provision of providing AI kit with containers, Cost of Liquid nitrogen, LN2 transport and transport containers, semen storage containers & sterility camps. LN2 expenses have been considered @ 22 litre/ AI centre / month. The cost of LN2 has been considered @ Rs. 25 / litre. An estimated amount of Rs.707.23 lakhs is required for taking up these activities in the project jurisdiction. The year wise targets of AI are as under:

Year of operation	AI centre proposed during the year	No of AI centres at End of Project	AI performance (@ 20 AI/centre/month)
Year-I	22	22	440
Year-II	46	68	920
Year-III	70	138	1400
TOTAL	138	138	2760

3.4 **PROMOTION OF CATTLEFEED AND DENSIFIED FODDER**

- 3.5 The use of Balanced Cattle Feed (BCF) will be familiarized among the farmers through a carefully designed extension programme. BCF reduces direct dependence on green fodder, improves milk yield and also improves general health of the animal both in the wet and dry seasons.
- 3.6 In addition, promoting the fodder densification units is emphasized in the Sagar and Datia districts. A provision of Rs.600 lakhs is provisioned for the purpose. The estimates of Rs.300 lakhs per Fodder Densification Unit (FDU) is based on the NDDDB pattern and cost components. However, there lies the requirement of meeting the FDUs recurring expenditure as soon as their operation commences. These have not been considered at this stage and shall therefore, be proposed later under the project separately.
- 3.7 The project will procure the Cattle feed from the affiliated Cattle feed plants of MPCDF, Bhopal at the prevalent rates. It is proposed to provide feed subsidy @ Rs 2/- per liter of the milk supplied by milk producer in the system. An estimated amount of Rs.176.66 lakhs is provisioned in the project proposal. This would help procuring estimated levels of milk from the milk producers besides supporting them in usage of cattlefeed in regular way.
- 3.8 The consolidated summary of expenses on Technical Input services of **Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia districts** under the proposed project is discussed below in Table-3

TABLE - 3

(Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
3	Technical Input Services					
a	AI Kit with Containers	0.350	7.700	16.100	24.500	48.300
b	LN2 Cost	0.066	1.452	3.036	4.620	9.108
c	LN2 Transport Container	0.200	4.400	9.200	14.000	27.600
d	LN2 Transport	0.120	2.640	5.520	8.400	16.560
e	Semen Storage Containers	0.250	3.000	0.000	0.000	3.000
f	Sterility Camps	0.100	8.500	8.900	8.600	26.000
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	24.820	57.013	94.827	176.660
i	Establishment of Fodder Densification Unit	300.000	0.000	300.000	300.000	600.000
	Sub Total		52.512	399.769	454.947	907.228

4.0 **MANAGERIAL OPERATIONS**

- 4.1 The estimated fund required for managerial operations discussed hereunder is approximately 20% of the total fund infusion in the project. These expenses are though recurring in nature but, hold prominence in project operations, their continuance and long term sustenance.
- 4.2 The project proposes establishing and developing sound Management Information Systems in each district. An amount of Rs. 2.00 lakhs per district is provisioned for this activity and the amount shall be admissible to the affiliated milk union for the project district dealing with.
- 4.3 The funds are provisioned in the project for ensuring prompt & regular operations of Bulk milk coolers @ Rs.0.50 per liter of milk chilling (amounting Rs. 44.17 Lakhs), continuous and regular field supervision of the field operations @ 1200 /DCS/month (amounting Rs. 74.74 lakhs), meeting working Capital requirement of the project for Rs. 130.68 Lakhs, propulsion charges for plying the vehicles in the project area for Rs.35.10 Lakhs.
- 4.4 The Bulk Milk Coolers of 3000-5000 liters capacity would be installed in the proposed project area. The raw milk would be collected from the villages falling in the respective Blocks on the milk routes / clusters and would be chilled at the prescribed temperature. Thereafter the milk would be transported to the nearest Chilling / Dairy plant for processing, packing and marketing. The milk would be transported through Road Milk Tankers from the BMC location.
- 4.5 The tanker of 5000 LPD is preferred for lifting and transporting the milk to the destination. Road milk tanker of 9000 liters would be desirable for longer distance and higher volume milk collection. The milk being a perishable commodity with a very short life, hence, all necessary precautions are required to preserve and maintain milk quality. The volumes being larger everyday

hence, it becomes important that the risks of cost and quality involved should be preserved & ensured from lifting point till destination point.

- 4.6 Hence, 3 Road Milk Tanker (2 RMTs for Sagar and 1RMT for Datia) of 5000 to 9000 Liter capacity @ Rs.15.00 lakhs per tanker has been provisioned. In case of need for more RMTs, particularly in project district where no provision is made, then the Implementing milk union will have the discretion to decide and purchase, on assessment of desired number of RMTs of reasonable capacity, from within the total provisioned amount of Rs.45 lakhs (for 3 districts)
- 4.7 The activity hold great significance in ensuring sustained dairy field and chilling operations in the longer duration. The cost calculations are based on the actual practices observed in the approved ongoing Clean milk production and Intensive Dairy Development Projects in the state.
- 4.8 The funds are provisioned for Project preparation and Consultancy services for MPCDF for availing the professional skill. The total amount of Rs.54.77 lakhs shall be admissible to the MP State Cooperative Dairy Federation Ltd., the apex Federation in Bhopal and also the implementing agency of the project across the state. The MPCDF shall be at liberty to use these funds for its activities in the manner it deems fit.
- 4.9 The Jabalpur Milk Producers Cooperative Union, Jabalpur affiliated to MP State Cooperative Dairy Federation Limited, Bhopal will operate the activities. Later depending on the progress across the bundelkhand region the desired initiative would be taken for constituting Milk Union at Sagar thus, following prescribed procedures. Under the proposed project, the manpower will be recruited on contractual basis to run the project operations, as per requirement and need. The details of staff structure required to run the project is given at **Annexure-B (at page no.24)**. The project operations can sustain generating and meeting the yearly salary / wages of Rs.34.80 lakhs. The details are given at **Annexure - C (at page no.25)**.
- 3.9 The consolidated summary of expenses on Managerial Operations of **Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia districts** under the proposed project is discussed below in Table- 4

TABLE- 4

(Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
4	Managerial Operations					
a	Management Information Systems	Lumpsum	6.000	3.000	3.000	12.000
b	BMC Operations	0.50 / liter	6.205	14.253	23.707	44.165
c	Supervision & Extension (Rs. Per DCS / Month)	1200	12.240	25.056	37.440	74.736

d	Working Capital	15 days	9.180	21.087	35.073	65.340
e	Propulsion Charges (on KM)	Rs.6.5/3000	11.700	11.700	11.700	35.100
f	Milk Tanker	15.00	45.000	0.000	0.000	45.000
g	Project Planning & Monitoring (MPCDF)	2.5%	12.740	29.000	16.394	58.134
	Sub Total		103.065	104.096	127.314	334.475

5.0 **FUND REQUIREMENT:**

5.1 The total estimated cost of **Sagar, Tikamgarh, Chattarpur, Panna, Damoh & Datia districts** under the proposed project is **Rs. 2130.71 lakhs** at current prices. The component-wise details are given below.

(Rupees in Lakhs)

No.	Total Project	Yr-I	Yr-II	Yr-III	Total
1	Establishment of Primary Dairy Cooperatives	73.250	642.520	48.700	764.470
2	Human Resources Development & Training	40.715	42.631	41.194	124.540
3	Technical Input Services	52.512	399.769	454.947	907.228
4	Managerial Operations	103.065	104.097	127.314	334.475
	Total	269.542	1189.017	672.155	2130.713

The **Year-wise Physical and Financial details** of each of the project district viz., Sagar, Chattarpur, Panna, Damoh, Tikamgarh & Datia are given ahead from **page no. 29 to** .

5.2 **Project Tenure :**

The proposed project is for three (3) years from the date of sanction.

5.3 **Implementing Agency :**

The implementing agency for the proposed project would be Gwalior milk union for Tikamgarh & Datia districts. Whereas, the Jabalpur Milk Producers Cooperative Union Ltd, Jabalpur would implement Sagar, Chattarpur, Panna & Damoh districts.

Both the milk unions are affiliated to MP State Cooperative Dairy Federation Limited (MPCDF), Bhopal.

5.4 **Project Monitoring and Evaluation**

The proposed project will be implemented by MP State Cooperative Dairy Federation Ltd., Bhopal. A separate cell will be setup at the Federation level for implementing the activities envisaged.

The Project Monitoring Committee will monitor the project performance on quarterly basis :

No.	Members	Status
1.	Managing Director, MPCDF	Chairman
2.	Officer In-charge (AH&F), GOMP	Member
3	Joint Director, Veterinary Services	Member
4.	Chief Executive Officer, Jabalpur Milk Union, Jabalpur	Member
5.	General Manager (Finance), MPCDF	Member
6.	General Manager (Field Operations), MPCDF, Bhopal	Member
7	Incharge (Monitoring & Planning), MPCDF, Bhopal	Convener

- ❖ Based on the audited project accounts the Fund Utilization report will be submitted to respective funding authority by Project through implementing milk union.
- ❖ The project performance will be reviewed on regular basis by the Board of Directors of Jabalpur Milk Union (till formation of milk union at Sagar) and MP State Cooperative Dairy Federation, Bhopal.

5.5 **Project Impact :**

The proposed project is expected to benefit 7,800 milk producer members in arranging them alternative source of income locally and would also support in milk productivity enhancement program in bundelkhand region. Further, it supports in milk availability to sister Milk Union by selling them the surplus milk after meeting local consumption thus contributing to the income of the local producers.

The project will lend the possibilities of extending milk processing, chilling and marketing facilities to the masses of Sagar, Chattarpur, Panna, Damoh, Tikamgarh, Datia districts and adjoining areas. The milk producers will get the opportunity of ready market at their door step through gaining membership of dairy cooperatives, technical input facility from the respective Veterinary Department services, Chilling facilities for preserving and maintaining the milk quality, generate alternate source of employment to the women and rural youth and timely & quality milk to the consumers at large.

The material Balance statement of the Bundelkhand project is given at **Annexure -D (at page no.26 to 28)**. Depending on the operational levels, the project is stated to be viable and shall generate an income of Rs.342.46 lakhs in year-I of the project to Rs.1133.63 lakhs in Year-III of the project. The Consolidated 6 districts of Bundelkhand project shall earn net profit of Rs.3.42 lakhs in Year-I, Rs.10.52 lakhs in Year-II and Rs.16.20 lakhs in Year-III.

Important Note :

The Managing Director, M.P. State Co-operative Dairy Federation, Bhopal reserves the right to appropriate the funds allocation in the project after assessing the need and significance of project activities that are in-built in the proposal. Action will be taken in this regard with prior intimation to project sanctioning authority.

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Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Sagar

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	16	10	15	41
b	Milk Cans for Dairy Cooperatives	Number	96	60	90	246
c	Milk Cooling System (BMC 3000 LPD)	Number	1	0	0	1
d	Strengthening of Dairy Plants	Number	0	1	0	1
e	Strengthening of Milk Marketing Network	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	480	780	1230	1230
b	Capacity Building					
	- DCS Secretary	Number	16	10	15	41
	- DCS Tester / Helper	Number	16	10	15	41
	- Animal Health Worker	Number	16	10	15	41
	- Management Committee Members	Number	144	90	135	369
	- Member Orientation Programme	Number	480	300	450	1230
	- Farmer Induction Programme	Number	128	80	120	328
c	Cooperative Development Programme	Number	16	10	15	41
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	640	1200	2060	2060
3	Technical Input Services					
a	AI Centres	Number	4	7	11	22
b	AI Performance (Per Month)	Number	80	140	220	440
c	AI Kit with Containers	Number	4	7	11	22
d	LN2 Cost	Number	4	7	11	22
e	LN2 Transport Container	Number	4	7	11	22
f	LN2 Transport	Number	4	7	11	22
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	16	10	15	41
i	Establishment of Fodder Densification Unit	Number	0	1	0	1

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Sagar

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	4.800	3.000	4.500	12.300
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	2.400	1.500	2.250	6.150
d	Milk Cooling System (BMC 3000 LPD)	25.000	25.000	0.000	0.000	25.000
e	Strengthening of Dairy Plants including packing machine	467.470	0.000	467.470	0.000	467.470
f	Strengthening of Milk Marketing & Publicity	2.000	2.000	2.000	2.000	6.000
	Sub Total		34.200	473.970	8.750	516.920
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.528	0.330	0.495	1.353
	- DCS Tester / Helper	0.011	0.176	0.110	0.165	0.451
	- Animal Health Worker	0.065	1.040	0.650	0.975	2.665
	- Management Committee Members	0.010	1.440	0.900	1.350	3.690
	- Member Orientation Programme	0.100	1.600	1.000	1.500	4.100
	- Farmer Induction Programme	0.020	2.560	1.600	2.400	6.560
c	Cooperative Development Programme	0.020	0.320	0.200	0.300	0.820
d	Establishment / Development of Training Centre	20.000	0.000	0.000	0.000	0.000
	Sub Total		7.664	4.790	7.185	19.639
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.400	2.450	3.850	7.700
b	LN2 Cost	0.066	0.264	0.462	0.726	1.452
c	LN2 Transport Container	0.200	0.800	1.400	2.200	4.400
d	LN2 Transport	0.120	0.480	0.840	1.320	2.640
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	1.600	1.000	1.500	4.100
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	4.672	8.760	15.038	28.470
i	Establishment of Fodder Densification Unit	300.000	0.000	300.000	0.000	300.000

Special Bundelkhand Package - Dairy Development Activities

Sagar Division		District		Sagar		
	Sub Total		9.716	314.912	24.634	349.262
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	1.168	2.190	3.760	7.118
c	Supervision & Extension (Rs. Per DCS / Month)	1200	2.304	3.744	5.904	11.952
d	Working Capital	15 days	1.728	3.240	5.562	10.530
e	Propulsion Charges	3000Km/Rs 6.5	2.340	2.340	2.340	7.020
f	Milk Tanker	15.00	30.000	0.000	0.000	30.000
g	Project Planning & Monitoring (MPCDF)	2.5%	8.573	20.142	1.466	30.181
	Sub Total		47.113	32.156	19.531	98.801
	Grand Total (1-4)		98.693	825.828	60.100	984.622

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Tikamgarh

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	16	15	15	46
b	Milk Cans for Dairy Cooperatives	Number	96	90	90	276
c	Milk Cooling System (BMC 3000 LPD)	Number	0	1	0	1
d	Strengthening of Dairy Plants	Number	0	0	0	0
e	Strengthening of Milk Marketing Network	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	480	930	1380	1380
b	Capacity Building					
	- DCS Secretary	Number	16	15	15	46
	- DCS Tester / Helper	Number	16	15	15	46
	- Animal Health Worker	Number	16	15	15	46
	- Management Committee Members	Number	144	135	135	414
	- Member Orientation Programme	Number	480	450	450	1380
	- Farmer Induction Programme	Number	128	120	120	368
c	Cooperative Development Programme	Number	16	15	15	46
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	640	1400	2310	2310
3	Technical Input Services					
a	AI Centres	Number	4	8	12	24
b	AI Performance (Per Month)	Number	80	160	240	480
c	AI Kit with Containers	Number	4	8	12	24
d	LN2 Cost	Number	4	8	12	24
e	LN2 Transport Container	Number	4	8	12	24
f	LN2 Transport	Number	4	8	12	24
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	16	15	15	46
i	Establishment of Fodder Densification Unit	Number	0	0	0	0

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Tikamgarh

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	4.800	4.500	4.500	13.800
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	2.400	2.250	2.250	6.900
d	Milk Cooling System (BMC 3000 LPD)	25.000	0.000	25.000	0.000	25.000
e	Strengthening of Dairy Plants including packing machine	150.000	0.000	0.000	0.000	0.000
f	Strengthening of Milk Marketing & Publicity	2.000	2.000	2.000	2.000	6.000
	Sub Total		9.200	33.750	8.750	51.700
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.528	0.495	0.495	1.518
	- DCS Tester / Helper	0.011	0.176	0.165	0.165	0.506
	- Animal Health Worker	0.065	1.040	0.975	0.975	2.990
	- Management Committee Members	0.010	1.440	1.350	1.350	4.140
	- Member Orientation Programme	0.100	1.600	1.500	1.500	4.600
	- Farmer Induction Programme	0.020	2.560	2.400	2.400	7.360
c	Cooperative Development Programme	0.020	0.320	0.300	0.300	0.920
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		7.664	7.185	7.185	22.034
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.400	2.800	4.200	8.400
b	LN2 Cost	0.066	0.264	0.528	0.792	1.584
c	LN2 Transport Container	0.200	0.800	1.600	2.400	4.800
d	LN2 Transport	0.120	0.480	0.960	1.440	2.880
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	1.600	1.500	1.500	4.600
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	4.672	10.220	16.863	31.755
i	Establishment of Fodder Densification Unit	200.000	0.000	0.000	0.000	0.000

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Tikamgarh

	Sub Total		9.716	17.608	27.195	54.519
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	1.168	2.555	4.216	7.939
c	Supervision & Extension (Rs. Per DCS / Month)	1200	2.304	4.464	6.624	13.392
d	Working Capital	15 days	1.728	3.780	6.237	11.745
e	Propulsion Charges	3000Km/Rs 6.5	2.340	2.340	2.340	7.020
f	Milk Tanker	15.00	0.000	0.000	0.000	0.000
g	Project Planning & Monitoring (MPCDF)	2.5%	0.878	1.805	1.576	4.259
	Sub Total		9.418	15.444	21.493	46.354
	Grand Total (1-4)		35.998	73.987	64.623	174.607

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Chhatarpur

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	20	20	20	60
b	Milk Cans for Dairy Cooperatives	Number	120	120	120	360
c	Milk Cooling System (BMC 3000 LPD)	Number	0	1	0	1
d	Strengthening of Dairy Plants	Number	0	0	0	0
e	Strengthening of Milk Marketing Network	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	600	1200	1800	1800
b	Capacity Building					
	- DCS Secretary	Number	20	20	20	60
	- DCS Tester / Helper	Number	20	20	20	60
	- Animal Health Worker	Number	20	20	20	60
	- Management Committee Members	Number	180	180	180	540
	- Member Orientation Programme	Number	600	600	600	1800
	- Farmer Induction Programme	Number	160	160	160	480
c	Cooperative Development Programme	Number	20	20	20	60
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	800	1800	3000	3000
3	Technical Input Services					
a	AI Centres	Number	5	10	15	30
b	AI Performance (Per Month)	Number	100	200	300	600
c	AI Kit with Containers	Number	5	10	15	30
d	LN2 Cost	Number	5	10	15	30
e	LN2 Transport Container	Number	5	10	15	30
f	LN2 Transport	Number	5	10	15	30
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	20	20	20	60
i	Establishment of Fodder Densification Unit	Number	0	0	0	0

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Chhatarpur

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	6.000	6.000	6.000	18.000
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	3.000	3.000	3.000	9.000
d	Milk Cooling System (BMC 3000 LPD)	25.000	0.000	25.000	0.000	25.000
e	Strengthening of Dairy Plants including packing machine	0.000	0.000	0.000	0.000	0.000
f	Strengthening of Milk Marketing & Publicity	2.000	0.000	0.000	0.000	0.000
	Sub Total		9.000	34.000	9.000	52.000
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.660	0.660	0.660	1.980
	- DCS Tester / Helper	0.011	0.220	0.220	0.220	0.660
	- Animal Health Worker	0.065	1.300	1.300	1.300	3.900
	- Management Committee Members	0.010	1.800	1.800	1.800	5.400
	- Member Orientation Programme	0.100	2.000	2.000	2.000	6.000
	- Farmer Induction Programme	0.020	3.200	3.200	3.200	9.600
c	Cooperative Development Programme	0.020	0.400	0.400	0.400	1.200
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		9.580	9.580	9.580	28.740
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.750	3.500	5.250	10.500
b	LN2 Cost	0.066	0.330	0.660	0.990	1.980
c	LN2 Transport Container	0.200	1.000	2.000	3.000	6.000
d	LN2 Transport	0.120	0.600	1.200	1.800	3.600
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	2.000	2.000	2.000	6.000
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	5.840	13.140	21.900	40.880
i	Establishment of Fodder Densification Unit	200.000	0.000	0.000	0.000	0.000

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Chhatarpur

	Sub Total		12.020	22.500	34.940	69.460
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	1.460	3.285	5.475	10.220
c	Supervision & Extension (Rs. Per DCS / Month)	1200	2.880	5.760	8.640	17.280
d	Working Capital	15 days	2.160	4.860	8.100	15.120
e	Propulsion Charges	3000Km/Rs 6.5	0.000	0.000	0.000	0.000
f	Milk Tanker	15.00	0.000	0.000	0.000	0.000
g	Project Planning & Monitoring (MPCDF)	2.5%	0.953	2.012	1.906	4.871
	Sub Total		8.453	16.417	24.621	49.491
	Grand Total (1-4)		39.053	82.497	78.141	199.691

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Panna

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	10	10	10	30
b	Milk Cans for Dairy Cooperatives	Number	60	60	60	180
c	Milk Cooling System (BMC 3000 LPD)	Number	0	1	0	1
d	Strengthening of Dairy Plants	Number	0	0	0	0
e	Strengthening of Milk Marketing Network	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	300	600	900	900
b	Capacity Building					
	- DCS Secretary	Number	10	10	10	30
	- DCS Tester / Helper	Number	10	10	10	30
	- Animal Health Worker	Number	10	10	10	30
	- Management Committee Members	Number	90	90	90	270
	- Member Orientation Programme	Number	300	300	300	900
	- Farmer Induction Programme	Number	80	80	80	240
c	Cooperative Development Programme	Number	10	10	10	30
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	400	900	1500	1500
3	Technical Input Services					
a	AI Centres	Number	3	6	9	18
b	AI Performance (Per Month)	Number	60	120	180	360
c	AI Kit with Containers	Number	3	6	9	18
d	LN2 Cost	Number	3	6	9	18
e	LN2 Transport Container	Number	3	6	9	18
f	LN2 Transport	Number	3	6	9	18
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	10	10	10	30
i	Establishment of Fodder Densification Unit	Number	0	0	0	0

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Panna

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	3.000	3.000	3.000	9.000
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	1.500	1.500	1.500	4.500
d	Milk Cooling System (BMC 3000 LPD)	25.000	0.000	25.000	0.000	25.000
e	Strengthening of Dairy Plants including packing machine	150.000	0.000	0.000	0.000	0.000
f	Strengthening of Milk Marketing & Publicity	2.000	2.000	2.000	2.000	6.000
	Sub Total		6.500	31.500	6.500	44.500
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.330	0.330	0.330	0.990
	- DCS Tester / Helper	0.011	0.110	0.110	0.110	0.330
	- Animal Health Worker	0.065	0.650	0.650	0.650	1.950
	- Management Committee Members	0.010	0.900	0.900	0.900	2.700
	- Member Orientation Programme	0.100	1.000	1.000	1.000	3.000
	- Farmer Induction Programme	0.020	1.600	1.600	1.600	4.800
c	Cooperative Development Programme	0.020	0.200	0.200	0.200	0.600
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		4.790	4.790	4.790	14.370
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.050	2.100	3.150	6.300
b	LN2 Cost	0.066	0.198	0.396	0.594	1.188
c	LN2 Transport Container	0.200	0.600	1.200	1.800	3.600
d	LN2 Transport	0.120	0.360	0.720	1.080	2.160
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	1.000	1.000	1.000	3.000
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	2.920	6.570	10.950	20.440
i	Establishment of Fodder Densification Unit	200.000	0.000	0.000	0.000	0.000

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Panna

	Sub Total		6.628	11.986	18.574	37.188
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	0.730	1.643	2.738	5.110
c	Supervision & Extension (Rs. Per DCS / Month)	1200	1.440	2.880	4.320	8.640
d	Working Capital	15 days	1.080	2.430	4.050	7.560
e	Propulsion Charges	3000Km/Rs 6.5	2.340	2.340	2.340	7.020
f	Milk Tanker	15.00	0.000	0.000	0.000	0.000
g	Project Planning & Monitoring (MPCDF)	2.5%	0.613	1.452	1.095	3.160
	Sub Total		7.203	11.244	15.043	33.490
	Grand Total (1-4)		25.121	59.520	44.907	129.548

Special Bundelkhand Package - Dairy Development Activities

Gwalior Division

District Datia

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	10	10	7	27
b	Milk Cans for Dairy Cooperatives	Number	60	60	42	162
c	Milk Cooling System (BMC 3000 LPD)	Number	0	1	0	1
d	Strengthening of Dairy Plants	Number	0	0	0	0
e	Strengthening of Milk Marketing Network	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	300	600	810	810
b	Capacity Building					
	- DCS Secretary	Number	10	10	7	27
	- DCS Tester / Helper	Number	10	10	7	27
	- Animal Health Worker	Number	10	10	7	27
	- Management Committee Members	Number	90	90	63	243
	- Member Orientation Programme	Number	300	300	210	810
	- Farmer Induction Programme	Number	80	80	56	216
c	Cooperative Development Programme	Number	10	10	7	27
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	400	900	1380	1380
3	Technical Input Services					
a	AI Centres	Number	3	6	9	18
b	AI Performance (Per Month)	Number	60	120	180	360
c	AI Kit with Containers	Number	3	6	9	18
d	LN2 Cost	Number	3	6	9	18
e	LN2 Transport Container	Number	3	6	9	18
f	LN2 Transport	Number	3	6	9	18
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	10	10	7	27
i	Establishment of Fodder Densification Unit	Number	0	0	1	1

Special Bundelkhand Package - Dairy Development Activities

Gwalior Division

District Datia

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	3.000	3.000	2.100	8.100
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	1.500	1.500	1.050	4.050
d	Milk Cooling System (BMC 3000 LPD)	25.000	0.000	25.000	0.000	25.000
e	Strengthening of Dairy Plants including milko scan	200.000	0.000	0.000	0.000	0.000
f	Strengthening of Milk Marketing & Publicity	2.000	2.000	2.000	2.000	6.000
	Sub Total		6.500	31.500	5.150	43.150
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.330	0.330	0.231	0.891
	- DCS Tester / Helper	0.011	0.110	0.110	0.077	0.297
	- Animal Health Worker	0.065	0.650	0.650	0.455	1.755
	- Management Committee Members	0.010	0.900	0.900	0.630	2.430
	- Member Orientation Programme	0.100	1.000	1.000	0.700	2.700
	- Farmer Induction Programme	0.020	1.600	1.600	1.120	4.320
c	Cooperative Development Programme	0.020	0.200	0.200	0.140	0.540
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		4.790	4.790	3.353	12.933
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.050	2.100	3.150	6.300
b	LN2 Cost	0.066	0.198	0.396	0.594	1.188
c	LN2 Transport Container	0.200	0.600	1.200	1.800	3.600
d	LN2 Transport	0.120	0.360	0.720	1.080	2.160
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	1.000	1.000	0.700	2.700
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	2.920	6.570	10.074	19.564
i	Establishment of Fodder Densification Unit	300.000	0.000	0.000	300.000	300.000

Special Bundelkhand Package - Dairy Development Activities

Gwalior Division

District Datia

	Sub Total		6.628	11.986	317.398	336.012
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	0.730	1.643	2.519	4.891
c	Supervision & Extension (Rs. Per DCS / Month)	1200	1.440	2.880	3.888	8.208
d	Working Capital	15 days	1.080	2.430	3.726	7.236
e	Propulsion Charges	3000Km/Rs 6.5	2.340	2.340	2.340	7.020
f	Milk Tanker	15.00	15.000	0.000	0.000	15.000
g	Project Planning & Monitoring (MPCDF)	2.5%	0.988	1.452	8.472	10.911
	Sub Total		22.578	11.244	21.444	55.266
	Grand Total (1-4)		40.496	59.520	347.345	447.361

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Damoh

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	13	24	19	56
b	Milk Cans for Dairy Cooperatives	Number	78	144	114	336
c	Milk Cooling System (BMC 3000 LPD)	Number	0	1	0	1
d	Strengthening of Dairy Plants	Number	0	0	0	0
e	Strengthening of Milk Marketing Network / Publicity	Number	1	1	1	3
2	Human Resources Development & Training					
a	DCS Membership	Number	390	1110	1680	1680
b	Capacity Building					
	- DCS Secretary	Number	13	24	19	56
	- DCS Tester / Helper	Number	13	24	19	56
	- Animal Health Worker	Number	13	24	19	56
	- Management Committee Members	Number	117	216	171	504
	- Member Orientation Programme	Number	390	720	570	1680
	- Farmer Induction Programme	Number	104	192	152	448
c	Cooperative Development Programme	Number	13	24	19	56
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	520	1610	2740	2740
3	Technical Input Services					
a	AI Centres	Number	3	9	14	26
b	AI Performance (Per Month)	Number	60	180	280	520
c	AI Kit with Containers	Number	3	9	14	26
d	LN2 Cost	Number	3	9	14	26
e	LN2 Transport Container	Number	3	9	14	26
f	LN2 Transport	Number	3	9	14	26
g	Semen Storage Containers	Number	2	0	0	2
h	Sterility Camps	Number	13	24	19	56
i	Establishment of Fodder Densification Unit	Number	0	0	0	0

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Damoh

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	3.900	7.200	5.700	16.800
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	1.950	3.600	2.850	8.400
d	Milk Cooling System (BMC 3000 LPD)	25.000	0.000	25.000	0.000	25.000
e	Strengthening of Dairy Plants including packing machine	0.000	0.000	0.000	0.000	0.000
f	Strengthening of Milk Marketing & Publicity	2.000	2.000	2.000	2.000	6.000
	Sub Total		7.850	37.800	10.550	56.200
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	0.429	0.792	0.627	1.848
	- DCS Tester / Helper	0.011	0.143	0.264	0.209	0.616
	- Animal Health Worker	0.065	0.845	1.560	1.235	3.640
	- Management Committee Members	0.010	1.170	2.160	1.710	5.040
	- Member Orientation Programme	0.100	1.300	2.400	1.900	5.600
	- Farmer Induction Programme	0.020	2.080	3.840	3.040	8.960
c	Cooperative Development Programme	0.020	0.260	0.480	0.380	1.120
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		6.227	11.496	9.101	26.824
3	Technical Input Services					
a	AI Kit with Containers	0.350	1.050	3.150	4.900	9.100
b	LN2 Cost	0.066	0.198	0.594	0.924	1.716
c	LN2 Transport Container	0.200	0.600	1.800	2.800	5.200
d	LN2 Transport	0.120	0.360	1.080	1.680	3.120
e	Semen Storage Containers	0.250	0.500	0.000	0.000	0.500
f	Sterility Camps	0.100	1.300	2.400	1.900	5.600
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	3.796	11.753	20.002	35.551
i	Establishment of Fodder Densification Unit	200.000	0.000	0.000	0.000	0.000

Special Bundelkhand Package - Dairy Development Activities

Sagar Division

District Damoh

	Sub Total		7.804	20.777	32.206	60.787
4	Managerial Operations					
a	Management Information Systems	Lumpsum	1.000	0.500	0.500	2.000
b	BMC Operations	0.50/lit	0.949	2.938	5.001	8.888
c	Supervision & Extension (Rs. Per DCS / Month)	1200	1.872	5.328	8.064	15.264
d	Working Capital	15 days	1.404	4.347	7.398	13.149
e	Propulsion Charges	3000Km/Rs 6.5	2.340	2.340	2.340	7.020
f	Milk Tanker	15.00	0.000	0.000	0.000	0.000
g	Project Planning & Monitoring (MPCDF)	2.5%	0.736	2.138	1.879	4.753
	Sub Total		8.301	17.591	25.181	51.074
	Grand Total (1-4)		30.182	87.664	77.038	194.885

Special Bundelkhand Package - Dairy Development Activities

Sagar & Gwalior Division

Districts All

(A) Physical

S. No.	Components / Parameters	Unit	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation	Number	85	89	86	260
b	Milk Cans for Dairy Cooperatives	Number	510	534	516	1560
c	Milk Cooling System (BMC 3000 LPD)	Number	1	5	0	6
d	Strengthening of Dairy Plants	Number	0	1	0	1
e	Strengthening of Milk Marketing Network	Number	6	6	6	18
2	Human Resources Development & Training					
a	DCS Membership	Number	2550	5220	7800	7800
b	Capacity Building					
	- DCS Secretary	Number	85	89	86	260
	- DCS Tester / Helper	Number	85	89	86	260
	- Animal Health Worker	Number	85	89	86	260
	- Management Committee Members	Number	765	801	774	2340
	- Member Orientation Programme	Number	2550	2670	2580	7800
	- Farmer Induction Programme	Number	680	712	688	2080
c	Cooperative Development Programme	Number	85	89	86	260
d	Establishment / Development of Training Centre	Number	0	0	0	0
	Milk Procurement	KGPD	3400	7810	12990	12990
3	Technical Input Services					
a	AI Centres	Number	22	46	70	138
b	AI Performance (Per Month)	Number	440	920	1400	2760
c	AI Kit with Containers	Number	22	46	70	138
d	LN2 Cost	Number	22	46	70	138
e	LN2 Transport Container	Number	22	46	70	138
f	LN2 Transport	Number	22	46	70	138
g	Semen Storage Containers	Number	12	0	0	12
h	Sterility Camps	Number	85	89	86	260
i	Establishment of Fodder Densification Unit	Number	0	1	1	2

Special Bundelkhand Package - Dairy Development Activities

Sagar & Gwalior Division

Districts All

(B) Financial ((Rs. in Lakhs)

S. No.	Components / Parameters	Unit Cost	Year 1	Year 2	Year 3	Total
1	Establishment of Primary Dairy Cooperatives					
a	DCS Organisation with Travis	0.300	25.500	26.700	25.800	78.000
b	DCS Building with land, electricity, water road etc.	0.000	0.000	0.000	0.000	0.000
c	Milk Cans for Dairy Cooperatives	0.025	12.750	13.350	12.900	39.000
d	Milk Cooling System (BMC 3000 LPD)	25.000	25.00	125.00	0.00	150.000
e	Strengthening of Dairy Plants including packing machine	0.000	0.000	467.470	0.000	467.470
f	Strengthening of Milk Marketing & Publicity	2.000	10.000	10.000	10.000	30.000
	Sub Total		73.250	642.520	48.700	764.470
2	Human Resources Development & Training					
a	DCS Membership					
b	Capacity Building					
	- DCS Secretary	0.033	2.805	2.937	2.838	8.580
	- DCS Tester / Helper	0.011	0.935	0.979	0.946	2.860
	- Animal Health Worker	0.065	5.525	5.785	5.590	16.900
	- Management Committee Members	0.010	7.650	8.010	7.740	23.400
	- Member Orientation Programme	0.100	8.500	8.900	8.600	26.000
	- Farmer Induction Programme	0.020	13.600	14.240	13.760	41.600
c	Cooperative Development Programme	0.020	1.700	1.780	1.720	5.200
d	Establishment / Development of Training Centre	0.000	0.000	0.000	0.000	0.000
	Sub Total		40.715	42.631	41.194	124.540
3	Technical Input Services					
a	AI Kit with Containers	0.350	7.700	16.100	24.500	48.300
b	LN2 Cost	0.066	1.452	3.036	4.620	9.108
c	LN2 Transport Container	0.200	4.400	9.200	14.000	27.600
d	LN2 Transport	0.120	2.640	5.520	8.400	16.560
e	Semen Storage Containers	0.250	3.000	0.000	0.000	3.000
f	Sterility Camps	0.100	8.500	8.900	8.600	26.000
h	Balanced Cattlefeed Promotional Assistance	2.00/lit	24.820	57.013	94.827	176.660
i	Establishment of Fodder Densification Unit	200.000	0.000	300.000	300.000	600.000

Special Bundelkhand Package - Dairy Development Activities

Sagar & Gwalior Division

Districts All

	Sub Total		52.512	399.769	454.947	907.228
4	Managerial Operations					
a	Management Information Systems	Lumpsum	6.000	3.000	3.000	12.000
b	BMC Operations	0.50/lit	6.205	14.253	23.707	44.165
c	Supervision & Extension (Rs. Per DCS / Month)	1200	12.240	25.056	37.440	74.736
d	Working Capital	15 days	9.180	21.087	35.073	65.340
e	Propulsion Charges	3000Km/Rs 6.5	11.700	11.700	11.700	35.100
f	Milk Tanker	15.00	45.000	0.000	0.000	45.000
g	Project Planning & Monitoring (MPCDF)	2.5%	12.740	29.000	16.394	58.134
	Sub Total		103.065	104.097	127.314	334.475
	Grand Total (1-4)		269.542	1189.017	672.155	2130.713

Special Bundelkhand Package - Dairy Development Activities

S. No.	District	Year 1	Year 2	Year 3	Total
1	Sagar	98.693	825.828	60.100	984.622
2	Tikamgarh	35.998	73.987	64.623	174.607
3	Chhatarpur	39.053	82.497	78.141	199.691
4	Panna	25.121	59.520	44.907	129.548
5	Datia	40.496	59.520	347.345	447.361
6	Damoh	30.182	87.664	77.038	194.885
	Total	269.542	1189.017	672.155	2130.713

Special Bundelkhand Package - Dairy Development Activities

S. No.	District / Component	Year 1	Year 2	Year 3	Total
1	Sagar				
	Establishment of Primary Dairy Cooperatives	34.200	473.970	8.750	516.920
	Human Resources Development & Training	7.664	4.790	7.185	19.639
	Technical Input Services	9.716	314.912	24.634	349.262
	Managerial Operations	47.113	32.156	19.531	98.801
	Total	98.693	825.828	60.100	984.622
2	Tikamgarh				
	Establishment of Primary Dairy Cooperatives	9.200	33.750	8.750	51.700
	Human Resources Development & Training	7.664	7.185	7.185	22.034
	Technical Input Services	9.716	17.608	27.195	54.519
	Managerial Operations	9.418	15.444	21.493	46.354
	Total	35.998	73.987	64.623	174.607
3	Chhatarpur				
	Establishment of Primary Dairy Cooperatives	9.000	34.000	9.000	52.000
	Human Resources Development & Training	9.580	9.580	9.580	28.740
	Technical Input Services	12.020	22.500	34.940	69.460
	Managerial Operations	8.453	16.417	24.621	49.491
	Total	39.053	82.497	78.141	199.691
4	Panna				
	Establishment of Primary Dairy Cooperatives	6.500	31.500	6.500	44.500
	Human Resources Development & Training	4.790	4.790	4.790	14.370
	Technical Input Services	6.628	11.986	18.574	37.188
	Managerial Operations	7.203	11.244	15.043	33.490
	Total	25.121	59.520	44.907	129.548
5	Datia				
	Establishment of Primary Dairy Cooperatives	6.500	31.500	5.150	43.150
	Human Resources Development & Training	4.790	4.790	3.353	12.933
	Technical Input Services	6.628	11.986	317.398	336.012
	Managerial Operations	22.578	11.244	21.444	55.266
	Total	40.496	59.520	347.345	447.361
6	Damoh				
	Establishment of Primary Dairy Cooperatives	7.850	37.800	10.550	56.200
	Human Resources Development & Training	6.227	11.496	9.101	26.824
	Technical Input Services	7.804	20.777	32.206	60.787
	Managerial Operations	8.301	17.591	25.181	51.074
	Total	30.182	87.664	77.038	194.885
7	Total				
	Establishment of Primary Dairy Cooperatives	73.250	642.520	48.700	764.470
	Human Resources Development & Training	40.715	42.631	41.194	124.540
	Technical Input Services	52.512	399.769	454.947	907.228
	Managerial Operations	103.065	104.097	127.314	334.475
	Grand Total	269.542	1189.017	672.155	2130.713

36
6
43
16

CAPITAL INVESTMENT AT DCS :

Project : Bundelkhand Project

S. No.	Particulars	Amount
1	MANAGERIAL SUBSIDY @ Rs.	5000
2	STATIONERY @ Rs.	1500
3	FIRSTAID KIT @ Rs.	1500
4	TRAVIS @ Rs.	5000
5	FURNITURE AND FIXTURE @ Rs.	7000
6	TESTING EQUIPMENT & CHEMICALS	10000
		30000

PROPOSED EQUIPMENT WITH COST FOR DAIRY PLANT :													
SAGAR													
S. No.	DAIRY EQUIPMENTS		CAPACITY	Rate (Rs. In Lakh)	Quantity	Total Value							
1	CIVIL WORK (INCLUDING SERVICE AREA, PROCESSING AREA, STORE & ADMINISTRATIVE BLOCK)			100.00	1	100.00							
2	STAINLESS STEEL MILK CANS		40 LITRE	0.025	100	2.50							
3	DAIRY DOCK AUTOMATION SYSTEM			5.00	1	5.00							
4	DUMP TANK		1000 LITRE	1.30	2	2.60							
5	MILK PUMP		10,000 LPH	0.37	1	0.37				576			
			5,000 LPH	0.25	1	0.25						137	
6	CAN SCRUBBER		450 LITRE	0.60	1	0.60						10	
7	MINI CRATE WASHER			3.00	1	3.00						33	
8	MILK CHILLER		10,000 LITRE	5.00	1	5.00						15	
9	MILK STORAGE TANK (RAW MILK)			8.00	2	16.00						10	
10	MILK STORAGE TANK (PASTEURISED MILK FOR PACKING)			8.00	2	16.00						9	
11	PASTEURISER WITH HOT WATER GENERATOR		5,000 LITRE	16.50	1	16.50						45	
12	HOMOGENISER		5,000 LPH	30.00	1	30.00						259	
13	CREAM SEPARATOR		5,000 LPH	15.00	1	15.00							
14	BUTTER CHURN		3,000 KG	12.00	1	12.00							
15	BUTTER TROLLY		1,000 KG	0.50	1	0.50							
16	GHEE MELTING VAT		1000 KG	2.50	1	2.50							
17	GHEE KETTLE		500 LITRE	2.50	1	2.50							
18	GHEE SETLING TANK		500 LITRE	1.25	1	1.25							
19	GHEE STORAGE TANK		5000 LITRE	1.00	1	1.00							
20	GHEE PACKING MACHINE (IS3 - SINGLE HEAD - MECHANICAL)			5.00	1	5.00							

PROJECTED MATERIAL BALANCE/OPERATING STATEMENT									
Project		Bundelkhand							
S.No.	PARTICULARS				Year of Operation				
		I	II	III					
1	DAYS				365	365	365		
			FAT %	SNF %					
2	OWN MILK PROCUREMENT(KGPD)				3400	7810	12990		
	FAT %				5.70%	5.70%	5.70%		
	SNF %				8.70%	8.70%	8.70%		
3	SMG/NMG PROCUREMENT :								
	SMG :	WHOLE MILK	6.50%	9.00%	0	0	0		
		SKIM MILK	0.05%	9.00%	0	0	0		
	NMG :	WHOLE MILK(COW)	4.00%	8.50%	0	0	0		
		SKIM MILK	0.05%	9.00%	0	0	0		
4	Total FAT AVAILABLE (KGS)				70737	162487	270257		
5	Total SNF AVAILABLE (KGS)				107967	248007	412497		
6	TOTAL MILK PROCUREMENT				1241000	2850650	4741350		
7	FAT & SNF LOSS IN PROCESSING :		0.50%	FAT	354	812	1351		
				SNF	540	1240	2062		
8	Sales :(LPD)				365	365	365		
	LOCAL/METRO :								
	- STANDARD MILK : LOCAL			60%	1800	3000	4800		
		: Other			0	0	0		
		: TOTAL	4.50%	8.50%	1800	3000	4800		
	- TONED MILK : LOCAL			40%	1200	2000	3200		
		: Other			0	0	0		
		: TOTAL	3.10%	8.50%	1200	2000	3200		
	- DOUBLE TONED MILK		1.65%	9.15%	0	0	0		
	TOTAL :				3000	5000	8000		
	FAT DISPOSAL IN LOCAL MILK SALE (In Kgs)				44437	74062	118499		
	SNF DISPOSAL IN LOCAL MILK SALE(In kgs)				95867	159779	255646		
9	TRANSFER TO MILK UNION(SKIM)		0.10%	9.00%	0	0	0		
		WHOLE MILK	5.70%	8.70%	0	2600	4700		
			104						
	FAT DISPOSAL IN BULK MILK SALE (In Kgs)				0	55716	100717		
	SNF DISPOSAL IN BULK MILK SALE(In kgs)				0	85040	153726		
10	FAT DISPOSAL IN LIQUID MILK(In Kgs)				44437	129778	219216		
11	SNF DISPOSAL IN LIQUID MILK(In kgs)				95867	244819	409372		
	TOTAL MILK SALE(In Kgs)				1127850	2857220	4774565		
12	SURPLUS FAT FOR PRODUCTS	(In Kgs)			25946	31897	49689		
13	SURPLUS SNF FOR PRODUCTS	(In Kgs)			11560	1948	1063		
14	INDEGENIOUS PRODUCT :								
	-FLAVOURED MILK(LPD)		1.80%	9.20%	0.0	0.0	0.0		
	-BUTTER MILK (LPD)		1.80%	2.90%	0.0	0.0	0.0		
	-SHREEKHAND (MT)		12.00%	9.10%	0.0	0.0	0.0		
	-RABADI (MT)		13.50%	25.80%	0	0	0		
15	FAT IN ABOVE	(In Kgs)			0	0	0		
16	SNF IN ABOVE	(In Kgs)			0	0	0		
17	SURPLUS FAT FOR MAIN MILK PRODUCTS	(In Kgs)			25946	31897	49689		
18	SURPLUS SNF FOR MAIN MILK PRODUCTS	(In Kgs)			11560	1948	1063		
					352	59	32		

PROJECTED MATERIAL BALANCE/OPERATING STATEMENT								
Project		Bundelkhand						
S.No.	PARTICULARS				Year of Operation			
		I	II	III				
19	Commodities Required For Recom./Recon.:							
	QUANTITY OF WHITE BUTTER		80.00%	1.00%	0	0	0	0
	QUANTITY OF SKIM MILK POWDER		1.00%	95.00%	0	0	0	0
20	PRODUCT MANUFACTURING (MTS) :							
	Fat & snF loss 3.0% in product making.							
	Qty.of Ghee		100.00%	0.00%	0	0	0	0
	Qty.of White Butter		80.00%	1.50%	25557	31418	48944	
	Qty.of SMP		1.00%	95.00%	11412	1508	336	
21	MARKETING : (Kgs)							
	Ghee - Sanchi	(Consumer Pack)			0	0	0	0
	- Sneha	(Consumer Pack)			0	0	0	0
	- Sanchi	(Bulk Pack)			0	0	0	0
	TOTAL				0	0	0	0
	SMP	: CONSUMER PACK			0	0	0	0
		: BULK PACK			11412	1508	336	
		: TOTAL			11412	1508	336	
	WHITE BUTTER				0	0	0	0
22	OPENING STOCK :							
	Ghee				0	0	0	0
	SMP				0	0	0	0
	WHITE .BUTTER				0	0	0	0
23	CLOSING STOCK							
	Ghee				0	0	0	0
	SMP				0	0	0	0
	WHITE .BUTTER				0	0	0	0
24	COMMODITIES PURCHASED :							
	Ghee				0	0	0	0
	SMP				0	0	0	0
	WHITE .BUTTER				0	0	0	0
25	COST OF RAW MATERIAL :							
				<u>UNIT COST</u>				
				0.00	0.00	280.00	290.00	305.00
	PROCUREMENT PRICE Rs/KgFAT							
	FAT		15.96		44551	129793	219220	
	SNF				106709	246251	409691	
	NET RECEIPTS				31214149	63017526	104993200	
					E	293.06	228.48	226.96
					I	296.02	232.06	230.25
	DCS COMMISSION Rs/KgFAT				6.00	6.00	6.00	
	Purchase of DCS milk				198.06	471.21	824.28	
	DCS commission				4.24	9.75	16.22	
	Purchase of SMG/NMG Milk	FAT	SNF					
	SMG Milk	15.00	6.50%	9.00%	0.00	0.00	0.00	0.00
	NMG Milk	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Commodities Purchased	WB	100.00		0.00	0.00	0.00	0.00
		SMP	68.50		0.00	0.00	0.00	0.00
	Commodities Purchased				0.00	0.00	0.00	0.00
	Transportation : DCS TO DAIRY/CC			Rs/Lit	1.30	1.20	1.10	

PROJECTED MATERIAL BALANCE/OPERATING STATEMENT							
Project		Bundelkhand					
S.No.	PARTICULARS				Year of Operation		
				I	II	III	
				16.13	34.21	52.15	
		:CC/IMC TO DAIRY	0.50	6.21	14.25	23.71	
26	COST OF PROCESSING AND CHILLING						
		: CONTRACTUAL LABOURS	0.54	6.09	15.43	25.78	
		: ELECTRICITY & WATER	0.42	4.74	12.00	20.05	
		: FURNACE OIL / COAL / DIESEL	0.26	2.93	7.43	12.41	
		: CHILLING EXPENSES(MISL)	0.11	1.24	3.14	5.25	
		: CHEMICALS & DETERGENTS	0.04	0.45	1.14	1.91	
		: REPAIRS & MAINTENANCE & OTHERS	0.03	0.34	0.86	1.43	
		: CONSUMABLES & OTHERS	0.07	0.79	2.00	3.34	
		: SMP CONVERSION COST (Rs/Kg)	19.00	23.37	3.09	0.69	
		: TOTAL PROCESSING +CHILLING COST	1.47	20.47	39.95	45.09	70.87
27	COST OF PACKING						
		Milk Packing(SACHET)	0.54	5.91	9.86	15.77	
		Product packing					
		-GHEE	5.50	0.00	0.00	0.00	
		-SMP(BULK)	0.00	0.00	0.00	0.00	
		-WHITE BUTTER	0.42	0.11	0.13	0.21	
		-FLAVOURED MILK	17.45	0.00	0.00	0.00	
		-BUTTER MILK	0.88	0.00	0.00	0.00	
		-SHREEKHAND	16.41	0.00	0.00	0.00	
		-RABADI	0.00	0.00	0.00	0.00	
		-TOTAL PACKING		6.02	9.99	15.97	
28	COST OF MARKETINHG :						
	MILK SALE :						
		Retail Transport Etc.	0.78	8.54	14.24	22.78	
		Distributor/Retail Commission	1.00	10.95	18.25	29.20	
		Concession to Card Holders	20.0%	0.25	1.28	2.04	
		Others Crate consumption	0.00	0.00	0.00	0.00	
		Marketing Advertisement	0.05	0.62	1.43	2.37	
		TOTAL Milk MARKETING COST :		20.88	35.19	56.39	
		TOTAL FEDERATION CHARGES :					
			SMG	NMG			
		SMG/NMG MARKETING COST	0.30	0.00	0.00	0.00	0.00
		Commercial TAX		0.00	0.00	0.00	
		TOTAL MARKETING COST :		24.30	42.01	67.73	
29	AUDIT FEES		0.30%	1.03	2.05	3.40	
30	TOTAL VARIABLE COST :			295.94	628.55	1074.34	
31	FIXED COST :						
32	SALARY AND WAGES :			34.80	34.80	34.80	
			30000				
		Provision for Gratuity		1.00	1.00	1.00	
		Provision for Bonus		0.20	0.20	0.20	
		TOTAL SALARY & WAGES COST :		36.00	36.00	36.00	

PROJECTED MATERIAL BALANCE/OPERATING STATEMENT							
Project		Bundelkhand					
S.No.	PARTICULARS				Year of Operation		
					I	II	III
33	ADMINISTRATION EXPENSES :						
	Administrative Expenses						
	Supervision Vehicle				0.00	1.00	1.00
	Security				0.00	1.00	1.00
	Postage & Telephone				0.00	1.00	1.00
	RENT AND TAXES				0.00	1.00	1.00
	INSURANCE				0.00	0.10	0.10
	STATIONARY				0.00	0.50	0.50
	OTHERS INCLUDING TA OF THE STAFF				0.00	1.50	1.50
	TOTAL ADMINISTRATION COST :					6.10	6.10
34	FIELD OPERATION :						
	Procurement & Extension					1.00	1.00
	TRAINING/HRD					0.00	0.00
	Artificial Insemination/Cattle Camp					0.00	0.00
	Feed & Fooder					0.00	0.00
	TOTAL TIP COST :				0	1.00	1.00
	Interest on WC				0.00	LACS	16.5%
					0.00	0.00	0.00
35	TOTAL FIXED COST :					43.10	43.10
36	TOTAL EXPENSES					339.04	671.65
37	OPERATING INCOME : RS IN LAKHS						
	Sales as						
	LOCAL :						
	- STANDARD MILK : LOCAL				26.00	170.82	284.70
	- TONED MILK : LOCAL				24.00	105.12	175.20
	- DOUBLE TONED MILK				22.00	0.00	0.00
	TOTAL LOCAL MILK SALE :					275.94	459.90
	TRANSFER TO MILK UNION (WHOLE MILK)				112.00	16.13	0.00
					116.00	16.70	
					122.00	17.57	
	TOTAL LIQUID MILK SALE					275.94	618.42
	PRODUCTS :						
	-FLAVOURED MILK				50.00	0.00	0.00
	-BUTTER MILK				20.00	0.00	0.00
	-SHREEKHAND				80.00	0.00	0.00
	-RABADI				0.00	0.00	0.00
	-Ghee				270.00	0.00	0.00
	-SMP				144.00	16.43	2.17
	-WHITE BUTTER				196.00	50.09	61.58
	TOTAL PRODUCT SALE :					66.52	63.75
	SERVICE CHARGE AGAINST SMP PRODUCTION ON SERVICE CHARGES					0.00	0.00
	TOTAL INCOME					342.46	682.17
						1133.63	

PROJECTED MATERIAL BALANCE/OPERATING STATEMENT							
Project		Bundelkhand					
S.No.	PARTICULARS				Year of Operation		
					I	II	III
38	OPENING & CLOSING STOCK VARIATION						
	-Ghee			216.00	0.00	0.00	0.00
	-SMP			122.40	0.00	0.00	0.00
	-WHITE BUTTER			92.48	0.00	0.00	0.00
	TOTAL				0.00	0.00	0.00
39	CASH PROFIT / LOSS (-)				3.42	10.52	16.20
	SERVICE CHARGE TO MILK UNION AGAINST TECHNICAL SUPPORT				0.00	0.00	0.00
40	NET PROFIT / LOSS (-) AFTER DEFERRED LIABILITIES				3.42	10.52	16.20
	DEPRECIATION				0.00	0.00	0.00
41	NET PROFIT /LOSS AFTER DEPRECIATION				3.42	10.52	16.20

OPERATING COST DETAILS OF A TYPICAL DAIRY COOPERATIVE SOCIETY :							
S.No.	PARTICULARS	YEAR OF OPERATION					
		I	II	III			
1	AVERAGE DAILY PROCUREMENT (LPD)				40	45	50
2	ANNUAL PROCUREMENT (LTRS)	FAT%	5.70%		14600	16383	18236
		SNF%	8.70%				
3	MILK SALE (within DCS village)	(LTR)			365	410	456
4	MILK SALE TO MILK UNION	(KG)			14662	16453	18313
4	INCOME FROM SALES : (Rs)						
	4.00	TO MILK UNION @ Rs.	280.00	PER KGFAT	234006	262585	292283
	4.10	COMMISSION TO DCS	6.00	PER KGFAT	5014	5627	6263
	4.20	LOCAL MILK SALE	17.13	PER LTR	6252	7015	7809
	4.30	SAMPLE MILK SALE			292	328	365
	4.40	OTHER INOCME (Commission on Feed , Fodder & Ghee Sale etc.)			8190	9190	10230
		TOTAL INCOME			253755	284745	316949
5	OPERATING COST :						
	5.10	COST OF RAW MILK (Rs/L)	16.13		235469	264226	294110
	5.20	HEAD LOAD @ Rs/LTR.	0.00		0	0	0
	5.30	TESTING EXPENSES *	per testing	0.07	1022	1022	1022
	5.40	SALARY TO DCS STAFF			10800	10800	10800
		- SECRETARY			6000	6000	6000
		- TESTER/HELPER			0	0	0
		- AHC/AI WORKER					
	5.50	TRAVILLING EXPENSES			900	900	900
	5.60	HOUSE RENT(DCS OFFICE)			1800	1800	1800
	5.70	STATIONARY *			1200	1200	1200
	5.80	OFFICE EXPENSES			1200	1200	1200
	5.90	GENERAL BODY MEETING EXPENSES			1000	1000	1000
	5.10	MISL. EXPENSES			500	500	500
		TOTAL OPERATING COST :			259891	288648	318532
6	SUPPORT TO DCS :						
	6.10	REIMBURSEMENT TOWARDS SALARY OF SECRETARY			7200	7200	7200
		TOTAL SUPPORT TO DCS :			7200	7200	7200
6	OPERATING SURPLUS/DEFICIT				1064	3297	5618