

Project Profile

Dairy Development

For sustainable livelihood



Gujarat CSR Authority

Project Profile – Dairy Development

Background & rationale

India is endowed with the largest livestock population in the world. It accounts for about 57.3 per cent of the world's buffalo population and 14.7 per cent of the cattle population.¹ The facts and figures are outlined in the table below.

Table 1: Facts and Figures

Status of Animal Husbandry in India- Facts and Figures	
✓	57% of world's buffaloes
✓	15% of world's cattle
✓	Over 30 crore bovines, with 11 crore buffaloes
✓	livestock population has showed 3% annual growth
✓	Milk output in 2011-12 was 12.8 crore tonnes & worth Rs. 305,000 crore
✓	Milk production is expected to grow to 18 crore tonnes by 2020

Milk Output and Production	
✓	Milk output in 2011-12 was 12.8 crore tonnes & worth Rs. 305,000 crore
✓	Milk production is expected to grow to 18 crore tonnes by 2020.
✓	Average milk production is as follows:
○	Cross bred cows yield 6.80 kg/ day
○	Indigenous cows yield 2.5 kg/day; and
○	Buffaloes yield 4.90 kg/day

As per the National Dairy Development Board (NDDB), the Indian dairy industry is all set to experience high growth rates in the next eight years with demand likely to reach 200 million tonnes by 2022 from 132 million tonnes in 2013. Presently, only 20% of milk production comes from the organized sector comprising co-operatives and private dairies. The factors driving the growth in the dairy sector include rising disposable incomes, advent of nuclear families and fast/instant food gaining ground in India.² Gujarat dairy co-operatives have a 3-tier structure termed as the Anand Pattern Co-operatives. The milk is collected at village level societies and processed by district unions themselves. While district unions market the liquid milk, the marketing of surplus milk and milk-products is undertaken by state level federation viz. Gujarat Co-operative Milk Marketing Federation Limited, Anand (GCMMF). The dairy industry in Gujarat state is well-established at present and is seen as a role model for replicating in other states of the country.

Dairy farming is an important source of subsidiary income to small/marginal farmers and agricultural labourers. In addition to milk, the manure from animals provides a good source of organic matter for improving soil fertility and crop yields. The *gobar gas* from the dung is used as fuel for domestic purposes and also for running engines for drawing water from wells. The surplus fodder and agricultural by-products are utilised for feeding the animals. Since agriculture is mostly seasonal, there is a possibility of finding employment throughout the year for rural population through dairy farming. The main beneficiaries of dairy programmes are usually small/marginal farmers and landless labourers. The village women are the primary caretaker of cattle and play a significant role in dairy farming.

¹ https://www.nabard.org/pdf/Dairy_farming.pdf

² <http://indiamicrofinance.com/indian-dairy-industry-report-2014-pdf.html>

Animal Husbandry thus plays a significant role in supplementing family incomes and generating employment in the rural sector, besides providing cheap and nutritional food to millions of people. The most favoured animal husbandry approach in the past was to give 1-2 milch cattle to poor families, with subsidized loans being facilitated for the purchase of cattle. Dairying activity was not treated comprehensive`ely, resulting into the following issues:

- poor quality of cattle
- diversion of cattle to non-beneficiaries
- lack of veterinary support resulting in high level of cattle death or reduced milk supply
- no support for other inputs like fodder, feed, shed, breed improvement or milk procurement

The low numbers & poor quality of cattle could not make much dent on poverty level of the target households. Hence, the need to ensure addressal of these challenges is pertinent.

Objectives of the project:

The main objectives of innovative dairy development project is enumerated below:

- to achieve 40% income increase for participating women
- to make dairy farming a sustainable and expandable activity

Expected Benefits

The support provided by companies would result in tangible and intangible benefits for Sponsor Company as outlined below:

Table 2: Tangible and Intangible Benefits

Tangible Benefits	Intangibles
<ul style="list-style-type: none"> ❖ Community support & appreciation ❖ Social license to operate, through cooperative community engagement ❖ Risk mitigation by community ownership ❖ Recognition through awards ❖ Stronger Relations within Communities through Stakeholder Engagement 	<ul style="list-style-type: none"> ❖ Enhanced reputation by way of supporting projects benefitting communities at the 'bottom of the pyramid' ❖ Enhanced commitment for CSR activities ❖ Social branding ❖ Enhanced credibility within community and sector ❖ Contribute towards National Rural Livelihood Mission

Opportunity for CSR intervention

The project focuses on women, who are the driving force of this programme. Increasing the productivity of animals, better health care and breeding facilities and management of dairy animals can reduce the cost of milk production. The funding companies could play a vital role in this direction. Companies could also develop proper production, processing and marketing infrastructure, which could be capable of meeting international quality requirements. A dairy project brings immense opportunities for the funding companies to work in the following areas of the project:

- raising productivity of dairy animals and enhancing livestock practices (with healthcare support)
- empowering women through dairy-based livelihood activities
- creating a sustainable enterprise for women, with micro-finance / co-funding support
- strengthening milk cooperatives

Potential project area

The potential project areas, where the project could be introduced within the state would be the villages which are remote in terms of accessibility, i.e. are located far from the urban human settlements (cities & towns). Nearness of dairy farm to a veterinary aid centre and artificial insemination centre shall be ensured in the project and districts shall be chosen as priority, based on the local need assessments.

Emphasis shall be laid on investment in terms of creation of (or linkage with) common physical infrastructure which is suited to the context of dairy development, institutional mechanisms to run the project and development of manpower that is competent to provide support services on a sustainable basis. The likely project areas could be Banaskantha, Patan, Mehsana, Sabarkantha, Aravali, Dahod, Panchmahals, Anand, Narmada, Surat, Navsari, Dangs and Valsad.

Target population

Socio economically backward sections within the districts of Gujarat. The target beneficiaries shall be poor women living in villages. The project will also reach out to small and marginal producers and help improve their lives through increase in income from dairy project.

Project implementation

The core strategy of the programme is to build vibrant community institutions of women, which through credit support, funding assistance and government subsidies can run self-managed dairy units. The focus is on a demand driven approach for community participation and ownership in implementation. The project would be funded through a combination of beneficiary contributions (15%), loan (50%) and subsidy (30%). The women participants, will be federated at the higher level to become dairy service providers, business entities and valued clients of the banking system. The financing strategy will be based on a robust financial model where the community organization leverage funds from various sources rather than from just a single dose of subsidy.

The beneficiaries will be provided with one year old calves that will reduce diversion risks. There will be a joining contribution by each beneficiary, which may be collected at the beginning of the project. A saturation approach will be followed to reduce implementation cost and improved monitoring. Certain key linkages will have to be tied up as part of pre-project activities. The dairy development programme entails the following components:

- survey in programme villages, selection of veterinary officer and paravet, selection of participants, participants to undergo training programme,
- recovery of joining contribution from individual beneficiaries, development of fodder plot & construction of cattle sheds, tie up for hybrid calves & their quality assessment,
- development of monitoring App, tie up with lending agency and creation of calf replacement fund at GCSRA level
- calf procurement & management, including purchase of calves, immunisation & health check of calves, providing cattle feed on monthly basis, regular collection of progress data
- training & awareness generation, including 3 well-spaced training programmes for every beneficiary consisting of project concept, calf management & milch cattle management
- provision of veterinary & artificial insemination Services, consisting of training of staff and provision of inputs; and
- staffing, monitoring & supervision, including data collection, concurrent monitoring & evaluation, uploading the findings on GCSRA's website

The detailed implementation plan for the Dairy project is provided below.

A. Implementation

The detailed implementation plan for the Dairy Project is provided below. The project aims to **cover all 33 districts** of Gujarat. The project would be implemented for a minimum period of five years.

Figure 1: Implementation model

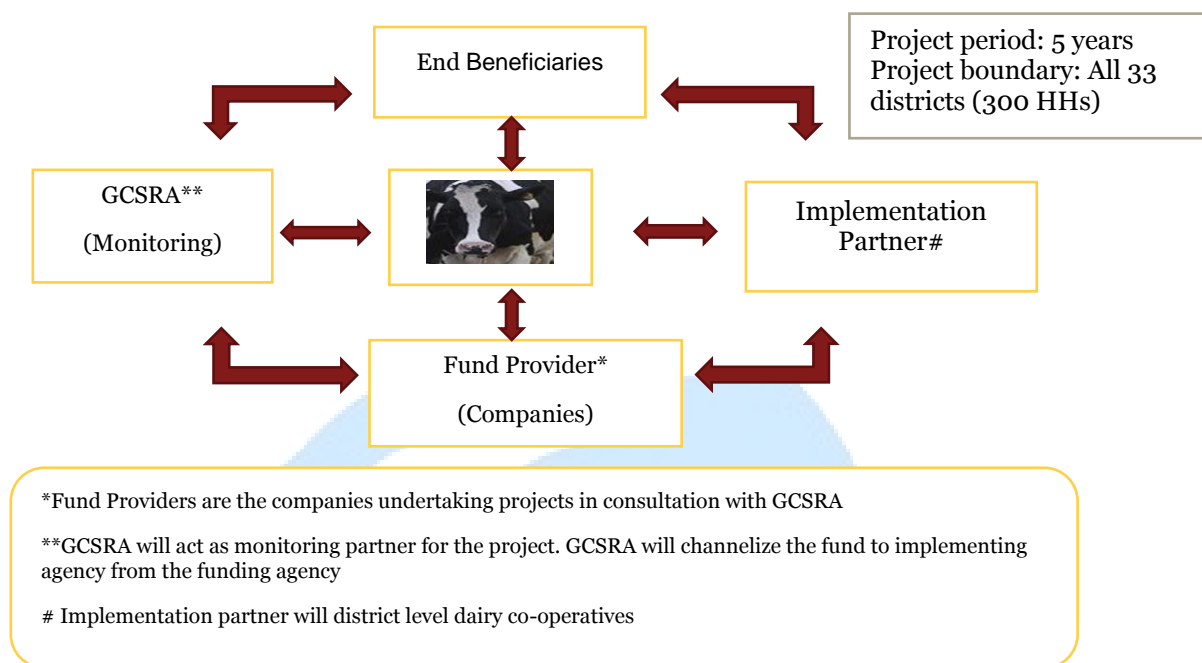


Table 3: Step By Step Implementation Process

Stages	Implementation Process	Roles & Responsibility
Identification of eligible families	A survey for identification of eligible families will be carried out to identify poor women having access to at least 0.25 acre of land for fodder and some homestead land for cattle shed.	GCSRA, Funding Company, Dairy Co-operative
Beneficiary contribution	All beneficiaries will be women. Every beneficiary will have to deposit a fixed joining contribution in cash to show her seriousness.	GCSRA, Funding Company, Dairy Co-operative, beneficiary
Capacity building	Every beneficiary will be trained in every aspect of the project including animal care, fodder management, animal health, milk marketing and financial management.	GCSRA, Funding Company, Dairy Co-operative
Linkage with Banks	Interested beneficiaries will be linked to banks for the credit support facilities.	GCSRA, Funding Company, Dairy Co-operative
Construction of Cattle shed	Beneficiary to construct cattle shed by providing local construction material and labour. Required cement will be given from project.	GCSRA, Funding Company, Dairy Co-operative
Purchase of calves	A pair of 1-year old calves will be purchased for every participating family.	GCSRA, Funding Company, Dairy Co-operative
Fodder Management	Project will provide seed for protein rich fodder and cattle feed as well as encourage scientific and sustainable fodder management practices.	GCSRA, Funding Company, Dairy Co-operative
Collection of milk	Local milk co-operative will procure milk and also deduct loan amount from milk proceeds.	GCSRA, Funding Company, Dairy Co-operative

Stages	Implementation Process	Roles & Responsibility
Funding	Project will be funded through a combination of beneficiary contribution (15%), loan (50%) and subsidy (35%).	GCSRA, Funding Company, Dairy Co-operative
Impact Assessment	100% beneficiary survey will be carried out through field workers cum paravets every year and findings will be uploaded at the website	GCSRA and External agency

B. Implementation agency

The Project shall be implemented by GCSRA as a monitoring agency, with support from Dairy Co-operative and Banking institutions for technical and financial support in setting up the infrastructure of the Dairy units proposed to be run by women. The GCSRA team shall work in collaboration with Corporates, Government institutions and dairy co-operatives and will act as a coordination and management agency.

Roles and responsibilities

- **Gujarat CSR Authority**

- GCSRA will act as an advisory and monitoring agency of the CSR activities i.e. conduct baseline survey, strategic plan for the project, coordination between donors, technical service providers, monitoring & evaluation, documentation and (physical/financial) reporting for the Project, issues compliance certificate for the CSR activities.
- GCSRA will develop a monitoring app, upload the beneficiary specific data on its website, identify the implementing Dairy cooperative, finalise agreement with it and supervise every project.
- A State level core team will be created at GCSRA to arrange 100% verification of the calves purchased, participant's compliance with the conditions and level of their training. It will be supported by a field team
- An external monitoring & evaluation agency will carry out concurrent monitoring & evaluation activity. Its report will be uploaded at the **Authority's website**.

- **Implementation Partners:**

- The Project will be implemented by the district level dairy cooperatives in their area, which shall:
 - arrange source for reliable supply of quality calves
 - verify and maintain records of every dead calf and replace it within 3 months by charging the Project for the additional expenditure
 - engage required veterinary officers on contract for dedicated work with project beneficiaries only
 - engage required paravets on contract basis to exclusively work for the project and arrange supply of inputs to them for carrying out AI work, vaccination work, etc.
- The cooperatives will obtain a line of credit for the Project from a reliable lending agency
- They will also take required disciplinary action against its employees, as and when required.

- **Corporates**

- Funding company will provide programme funds in multiples of 300 families (or 600 calves), enter into an agreement with implementing Dairy project, conduct monitoring visits to the project areas.

List of success indicators

Project Outputs

- Number and % of smallholder families engaged in dairy related livelihood activities in the villages
- Change in number of women involved in dairy development (compared to baseline levels)

Desired Outcomes

- Increase in income and better living standards of women involved in dairy
- Improved health of animals
- Better quality of service delivery through dairy units

Potential Impact

- Enhanced economic condition of households
- Improved milk consumption pattern and nutritional status of the target households

C. Partnerships

The project shall team up with the following institutions.

- **Government Institutions:** Department of Animal Husbandry, National Dairy Development Board
- **Dairy Co-operative:** Organizations working in the respective districts in the dairy development
- **Banks:** Will be the financing partner

D. Anticipated benefits from the project

The anticipated benefits associated with the project are outlined below:

- **Considerable improvement in the quantum and quality of milk production in villages,** thereby leading to better health and nutritional benefits to families involved in the project
- **Women empowerment:** Women involved in dairy activities will be empowered to take decisions in their family and financial matters.
- **Enhanced livelihood opportunities:** Dairy activities will enhance livelihood opportunities thereby making women self-dependent and employed.
- **Better animal care:** The project will promote better animal care with focus on cleanliness and healthy environment for animals.

Estimated Financial Costs

The estimated financial costs is provided below. The costs would also include 4% administration costs to be paid to GCSRA as an overall agency for monitoring and managing the project:

Table 4: Estimated Unit Cost

Input	Units	Unit Cost
Cost of Calf	2	3,000
Cost of shed	1	2,000
Cost of fodder seed/year		500
Cost of cattle feed/year		10,000

Input	Units	Unit Cost
Insurance	2	300
Training/year for 4 years		500
Making vessel	1	1,000
Veterinary support	2	6,00

Table 5: Estimated per beneficiary expenditure

	Y-1	Y-2	Y-3	Y-4	Y-5	Total
Annual Expenses	21,800	13,800	21,450	20450	26600	1,04,100
Participant's Cash Contribution	2,000	1,500	13,550	20450	26600	64,100
Subsidy	5,000	3,500	3,000			11,500
Loan	14,800	8,800	4,900			28,500
Income stream						
Compost	1,000	1,000	1,500	1,500	2,000	7,000
Sale of milk			35,000	70,000	70,000	1,75,000
Total income	1,000	1,000	36,500	71,500	72,000	1,82,000
Net profit/loss	-15,800	-9,300	18,050	51,050	45,400	89,400

Table 6: Project Management Cost for a unit of 300 families

Annual Cost		
	Unit Cost	Pro Rata Cost
Programme Management		50,000
Programme Implementation cost		
Veterinary Officer	300,000	100,000
Field worker cum AI staff	108,000	108,000
Development of App and IT cost	200,00	35,000
Concurrent monitoring	600,000	100,000
Management and Implementation cost		393,000
Programme Cost (Subsidy Component)		34,50,000

Workplan

#	Activity Description	Y1		Y2		Y3		Y4		Y5	
		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10
1	Engagement with dairy co-operatives										
1	Identification of eligible families										
3	Identification of Veterinary Doctors										
4	Beneficiary contribution and enrolment										
5	Linkage with Banks										
6	Construction of cattle shed										

#	Activity Description	Y1		Y2		Y3		Y4		Y5	
		H1	H2	H3	H4	H5	H6	H7	H8	H9	H10
7	Calf procurement and Management										
8	Training and awareness generation										
9	Fodder Management										
10	Collection of Milk										
11	Reporting										
12	Impact Assessment (one-time, end of project)										

Monitoring

- GCSRA will act as the monitoring agency for the CSR project implementation and ensure compliance as per CSR Rule requirements.
- Based upon the progress of the year, GCSRA will provide support to the company to develop a success framework, under which, performance indicators shall be defined and the baseline levels as well as targets defined over a 5 year horizon, on an annual basis. Once defined, the targets can then be broken down into yearly input-output-outcome targets, with impact criteria defined over 5 years on the districts post the project implementation.
- GCSRA will also conduct evaluation and impact assessment of the projects

Reporting

The implementing agency i.e. the milk Co-operative would be responsible for the following:

- generates progress reports for GCSRA and company as per agreed timelines
- ensure reporting on CSR activities to GCSRA on quarterly, six monthly and annual basis as against the funds disbursed to them

GCSRA would be responsible for reporting on the overall CSR activity management and annual compliance and issue a compliance certificate to the company.