Innovative Dairy Development Project for Poor Rural Women

GCSRA Policy Paper
2016

Status of animal husbandry in India

- India has largest livestock population in the whole world. It has-
  - 57% of world's buffaloes
  - 15% of world's cattle
  - Over 30 crore bovines
  - 11 crore buffaloes
  - Livestock population has showed 3% annual growth
- Dairying is an important source of supplementary income & year-round employment to poor farmers, hence
  - A dairy based project must be inclusive
  - Surplus fodder and agricultural biomass can be utilised as feed

Status of animal husbandry in India

- **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**
- **However, average milk production per cattle is low in India needing considerable improvement-**
  - **Cross bred cows yield 6.80 kg/ day**
  - **Indigenous cows yield 2.5 kg/day; and**
  - **Buffaloes yield 4.90 kg/day**

Status of animal husbandry in India

- **Most favoured approach in the past was to give one or two milch cattle to poor family**
- **Arrange subsidy and loan for the purchase of cattle;**
- **Dairying activity was not treated comprehensively, resulting into-**
  - **Poor quality 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**
  - **Less number & poor quality of cattle could not make much improvement on poverty level**
  - **Also resulted into high level of loan default**

Innovative Dairy Development Project

- **Present project is innovative & reduces project risks considerably**
- **Main objectives of this initiative are-**
  - **To achieve 40% income increase for participating women**
  - **To make dairy farming a sustainable and expandable activity**

Innovative Dairy Development Project
Strategy

- **Following strategy has been developed-**
  - **Providing one-year old calves will reduce diversion risk**
  - **Every beneficiary will have to pay joining contribution in advance to show her seriousness and need**
  - **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**
- **Advantages of the new Strategy are-**
  - **Fraud of purchasing poor quality cattle will be avoided**
  - **Cost of cattle will be much lower**
  - **Rearing calves will give them time to adjust to the new activity**
  - **Chances of cattle diversion will be low**
  - **Project risks will be reduced due to better linkages**

Innovative Dairy Development Project

- 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
- Every beneficiary will have to deposit a fixed joining contribution in cash to show her seriousness
- As part of pre-project activity, linkages like training, insurance, loan and milk procurement will be arranged
- Beneficiary to construct cattle shed by providing local construction material and labour. Required cement will be given from project
- A pair of 1-year old calves will be purchased for every participating family having
- Project will provide seed for protein rich fodder and cattle feed
- Local milk co-operative will procure milk and also deduct loan amount from milk proceeds
- 100% beneficiary survey will be carried out through field workers cum paravets every year and findings will be uploaded at the website
- Project will be funded through a combination of beneficiary contribution (15%), loan (50%) and subsidy (35%)
- All the participants will be women

Innovative Dairy Development Project
Components

- **The Project will have following components-**
  - **Pre-project activities including 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 Authority 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**

Innovative Dairy Development Project
Components

- **Provision of Veterinary & AI Services, consisting of training of staff and provision of inputs.**
- **Staffing, monitoring & supervision, including data collection, concurrent monitoring & evaluation, uploading the findings on Authority's website**

Implementing partners

- **The Project will be implemented by the district level dairy co-operatives in their area**
- **Likely districts can be- Banaskantha, Patan, Mehsana, Sabarkantha, Aravali, Dahod, Panchmahals, Anand, Narmada, Surat, Navsari, Dangs and Valsad**
- **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 Authority's website**
- **GCSRA will develop the monitoring app, upload the beneficiary specific data on its website, identify the implementing Dairy co-operative, finalise agreement with it and supervise every project**
- **Funding company will provide programme funds in multiples of 300 families (or 600 calves), enter into an agreement with implementing Dairy, conduct monitoring visits to the project area**

Commitments expected from District Dairy Co-operative

- **Following commitments will be expected from the implementing Dairy-**
  - **It will arrange source for reliable supply of quality calves**
  - **It will verify and maintain records of every dead calf and replace it within 3 months by charging the Project for the additional expenditure**
  - **It will engage required veterinary officers on contract for dedicated work with project beneficiaries only**
  - **It will 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.**
  - **It will obtain a line of credit for the Project from a reliable lending agency**
  - **It will take required action against its employees found to be diverting project supplies or diluting quality of inputs**

Innovative Dairy Development Project
Unit cost of inputs

Input	Units	Unit cost
Cost of calf	2	3000
Cost of shed	1	2000
Cost of fodder seed/ year		500
Cost of cattle feed/ year		10,000
Insurance	2	300
Training/ year for 4 years		500
Milking vessel	1	1000
Veterinary support	2	600

Innovative Dairy Development Project
Per beneficiary expenditure

Expenditure Stream						
	Y-1	Y-2	Y-3	Y-4	Y-5	Total
Annual expenses	21800	13800	21450	20450	26600	104100
Participant's cash contribution	2000	1500	13550	20450	26600	64100
Subsidy	5000	3500	3000			11500
Loan	14800	8800	4900			28500
Income Stream						
Compost	1000	1000	1500	1500	2000	7000
Sale of milk			35000	70000	70000	175000
Total income	1000	1000	36500	71500	72000	182000
Net profit/ loss	-15800	-9300	18050	51050	45400	89400

Innovative Dairy Development Project
Management cost

- **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 & IT cost	200,000	35,000
Concurrent monitoring	600,000	100,000
Management & Implementation Cost		393,000
Programme cost (Subsidy component)		34,50,000