Commercial Venture Support to Dairying

Under Rashtriya Krishi Vikas Yojana 2014-15

Animal Husbandry Department

Government of Kerala

Index

Executive Summary

Dairying in Kerala has now gained the status of a profitable enterprise where there is ample scope for marketing milk and milk products. Out of the total milk consumed in Kerala, about 25% is met from the neighbouring States. Since agriculture is the main income source for the farmers of Kerala, crop residues and agricultural byproducts are available in plenty, which can be utilized for feeding animals. Due to fall in price of agricultural crops and natural calamities, dairying is the best alternative source of income for the farmers of Kerala. This project is intended to provide commercial venture support to dairying by assisting farmers to venture into 10 cow dairy units. The objective is to increase milk production of the state by establishing 500 dairy farms with a unit size of 10 cows each with a project cost of 3000 lakh with subsidy of 750 lakh. 500 farmers of the state will be eligible for assistance and the project will be implemented in entire State. The expected output of the project is to increase the milk production by 0.24 lakh tonne and 0.36 lakh tonne of organic manure annually. An annual income of Rs 8 lakh is expected per farmer venturing into this project.

Introduction

The white revolution of 70's had made spectacular land marks in Indian milk production scenario. India is the largest milk producer of the world and milk has been ranked as the number one farm commodity. Rural prosperity by dairy farming is the tire need of the hour. Recently livestock production has taken a new turn by venturing itself on commercial basis. The higher production potential of the cross bred animals and its economic sustainability has its mainstay on judicious balanced feeding round the year. Presently the chronic shortage of feed coupled with the poor quality of fodder is widely regarded as the major constraint in animal production. It has been estimated that with the present feed and fodder resources we are able to meet only 46.6% of animal requirements, which in turn resulted in 50% of the desired products. It is imperative to say that in the present system of intensive livestock production, increasing concentrate feeding has increased the milk production cost and substantially decreased the profits of farmers. The increasing cost of feed ingredients and its seasonal variability also adds to the gravity of the situation. Certain branded feeds also have a detrimental affect on animal health and reproduction. Green fodder is the essential components of feeding high yielding milch animals to obtain desired level of milk production. The

present fodder crop area of 8.3 million hectare could not be increased due to increasing pressure on cultivated land for food and commercial crops. The Sustainability of dairy industry in India largely depend on the quality of herbage based animal feed and fodder. To produce the targeted quantity of green fodder, the best option is to maximize the fodder production per unit area and per unit time. High yielding fodder crops and fodder crop sequences are important to harness year round fodder production. At this juncture intellectual simulation and economic rewarding are essential to attract and / or to retain youth in dairy farming for sustainable development. This could be achieved only by generation of meaningful and viable technologies and transferring the same for adoption by the millions of rural folk. Milch cow rearing can improve the long term viability of the dairy herd. Minimising calf mortality through monitoring the health and weights of calves will save costs of replacements later on. Furthermore, monitoring growth during the first six months and ensuring optimal growth, will allow heifers to be bred earlier, which not only increases the amount of milk produced over the course of the cows life but also increases fertility, helping the cow conceive at the desired time. Over their life, cows successfully bred earlier will also produce more calves. Having a comprehensive management plan and

knowing the true costs of heifer rearing will allow producers to realise the full potential of their dairy herds.

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Details of Similar Projects Implemented

Assistance to Dairy Farms under NABARD's "Dairy Entrepreneurship Development Scheme" and Animal Husbandry Department's "Ksheeraganga" scheme has lead to the emergence of numerous commercial Dairy farms in the state.

Objective

Provide commercial venture support to dairying by promoting 500 dairy farms of 10 cows and increase milk production of the state by 0.24 lakh tonne annually

Area of implementation

Entire state

Background of Implementing Agency

The project will be implemented by the Animal Husbandry Department Kerala through its Veterinary Dispensaries / Veterinary Hospitals in all Panchayats / Municipalities of the State. The milk produced can easily marketed through the wide network of milk societies under Dairy Development Department and KCMMF.

Mode of implementation

500 farmers who are presently engaged in dairying and are eligible for finance from banks (Bank loan of Rs 4 lakh) will be selected as beneficiaries. The selected beneficiaries should preferably utilize a minimum of 1 acre of land for farming and fodder cultivation and should market the milk produced. The financial outlay of the project for one farmer will be Rs 6 Lakh of which Rs 4 lakh will be the bank loan, Rs 0.5 lakh farmer's contribution and Rs 1.5 lakh will be the RKVY subsidy.

- The Dairy farmers are to be selected by the District Animal Husbandry Officers as per beneficiary selection score card.
- The Veterinary Surgeons / Senior Veterinary Surgeons of the respective Grama Panchayats will be the implementing officer of this project.
- Training on scientific cattle rearing, shed construction, fodder cultivation should be given to the farmers.
- Bank loan should be arranged to the beneficiaries.
- Fodder cultivation should be started by the beneficiary sufficiently earlier before shed construction and purchase of animals.
- A scientific cattle shed of 1000 sft should be constructed by the beneficiary.
- Crossbred cows with an average yield of 16 ltrs/day are to be procured by the farmers within the first month of calving in batches of five cows at an interval of six months.
- The cows should be insured for a period of 3 years under Gosuraksha scheme.
- The milk should be marketed in nearby milk societies.

Financial analysis

Unit cost

S.No	Particulars	Amount (Rs.)
1	Cost of 10 cross bred cows @ Rs 40000	400000
2	Insurance for 3 years @ 3.45 % premium (Gosuraksha policy)	13800
3	Transportation cost Rs 500 / cow	5000
4	Equipments / Utensils / Miscellaneous	2200
5	Fodder cultivation	10000
6	Milking Machine	55000
7	Cattle shed, Thatched - 1000 sft	114000
	Total unit cost	**600000**
	Bank loan	400000
	Assistance(25% of Total Project cost)	150000
	Beneficiary share	50000

Note :

1. Cross bred cows with an average milk yield of 16 ltrs/cow per day are to be purchased in two batches at an interval of 6 months.
2. Cows in the first or second lactation should be purchased within 30 days of calving.

Cash Flow Chart

A	Recurring expenditure						
		1st year	2nd year	3rd year	4th year	5th year	6th year
1	Cost of concentrates: Production – 1kg / 3 kg milk Pregnancy – 1 kg from 6th month onwards @ Rs 19/ kg of feed.	239083	304000	306058	306058	304000	295767
2	Fodder cultivation charges: (1st year charges included in the fixed costs)	0	10000	10000	10000	10000	10000
3	Labour charges : @ Rs. 3000 / month	36000	36000	36000	36000	36000	36000
4	Veterinary aid	2000	2000	2000	2000	2000	2000
5	Insurance : @ 3.45% (insurance for first 3 years included in the fixed costs)	0	0	0	13800	0	0
7	Depreciation on sheds:	0	2000	2000	2000	2000	2000
	Total	277083	354000	356058	369858	354000	345767
B	Loan repayment						
1	Principal Rs.400000	66667	66667	66667	66667	66666	66666
2	Interest @ 13 %	52000	43333	34667	26000	17333	8667
	Total repayment	118667	110000	101334	92667	83999	75333
C	Total recurring expenditure (A+B)	395750	464000	457392	462525	437999	421100

D	Receipts						
	Sale of milk @ Rs. 28/ltr	1019200	1276800	1288000	1288000	1276800	1232000
	Sale of dung @ Rs. 200/ton	14600	14600	14600	14600	14600	14600
	Sale of gunny bags	1510	1920	1933	1933	1920	1868
	Total	1035310	1293320	1304533	1304533	1293320	1248468
E	Nett income (D-C)	639560	829320	847141	842008	855321	827368
F	**Monthly income**	**53297**	**69110**	**70595**	**70167**	**71277**	**68947**

IRR = >35 %

Note:

1. Expenditure for rearing calves is met from it's sale.
2. Cost of concentrate feed can be reduced if it is made in the farm itself.
3. Biogas plant, if installed, acts as energy saver, improves quality of manure, controls emission of green house gases.

Trouble shooting points:

1. When average milk yield per animal falls below 16 ltrs/day, immediate culling and replacement should be followed.
2. Breeding parameters should be optimum.
3. Availability of replacement stock should be ascertained.

Financial Outlay & Source of Funding :

S.No	Particulars	Source of Funds (in Lakh)			
		Beneficiary share	Bank Loan	RKVY	Total
1	Unit cost for one farmer	**0.5**	**4**	**1.5**	**6**
2	Unit cost for 500 farmers	**250**	**2000**	**750**	**3000**

ASSISTANCE REQUIRED UNDER RKVY = RS 7.5 CRORE

Time Frame & Phasing :

S.No	Activities	Period
1	Beneficiary Selection	May 2014
2	Training	June 2014
3	Arranging of Bank loan	June 2014
4	Fodder Cultivation	June 2014
5	Shed construction	July 2014
6	Purchase of animals – Ist batch	August 2014
7	Purchase of animals – IInd batch	February 2015

Monitoring :

A committee consisting of District Panchayat President, District Animal Husbandry Officer, Grama Panchayat Presidents and Veterinary surgeons of the respective panchayats should be constituted for monitoring the project at the District level.

Output and outcome

1. An Increase in milk production of 0.24 lakh metric tonne is expected per year.
2. Dairying made more profitable. Annual income of Rs 8 Lakh is expected per beneficiary
3. An increased production of 0.36 lakh tonne of organic manure for agriculture production.

Director of Animal Husbandry