

ANNEXURE 7.60

***A PROPOSAL FOR ESTABLISHING
'TWO COW- MINI DAIRY' UNITS
UNDER THE PROJECT
'MILK SHED DEVELOPMENT PROGRAMME'***

MSDP

2010-11

**Department of Dairy Development
Government of Kerala**

Introduction

Dairying has played a prominent role in strengthening Kerala's rural economy. It has been recognized as an instrument to bring about socio-economic transformations. A symbiotic relationship exists between agriculture and dairy farming. The agricultural by-products provide feed and fodder for the cattle whereas cattle provide manure and thereby helps in increasing the land fertility, draught power for various agricultural operations, nutritional security and ready cash to farming families from sale of surplus milk.

Among livestock based vocations, dairying occupies a pivotal position. Dairying has enormous potential to bring about rapid economic growth in the rural community. It is an important source of subsidiary income to small and marginal farmers and agricultural labourers. It brings frequent and regular cash receipt and thus providing for current expenses and for systematic savings. Dairying furnishes a steady year round use of labour; helps conserve the farm productivity by returning manure to land and thus encourage the growth of crops. It is a flexible enterprise that can be started as a small unit or it can be combined with other type of farming. Today dairying has developed as an industry, an important tool for development.

Dairy production in Kerala has immensely benefited from the genetic up gradation programmes undertaken by the state during the period 1972 to 2000 resulting in cattle population with above 80% cross breeds. There has been a decline in production of milk during 2001 to 2005 which may be attributed to reduction in the number of milch animals in addition to various other factors. The declining trend in production is primarily on account of nutritional stress characterized by shortage of fodder and dry roughage, high cost of health care and economic impact of infectious diseases like FMD and unscientific management. Statistics shows that the supply gap of milk will go on increasing in the coming years, where by cheap quality milk and milk products are likely to make roads in to Kerala from neighboring states and even abroad. If this is allowed to happen the viability of Kerala's dairy enterprise is likely to be undermined and dairy farmers may be forced to quit the sector. Observing these threats, government has taken steps to overcome the situation by implementing cattle induction schemes like Pasugramam, MSDP etc. It has created an upward trend in milk production since last few years. But our demand is much high than the domestic production. Hence it is necessary to find immediate solutions to meet the domestic demand as well as to check the decline in milk production.

The project *Milk Shed Development Programme* (MSDP) is aimed at bringing more farmers / entrepreneurs, SHGs into the dairy sector and to maintain the productivity of crossbred cows and create awareness among farmers in adopting scientific management practices in dairy farming. In order to achieve the above goal, assistance for starting Dairy farm units with 2 animals, 5 animals, & Heifer rearing units are included in this Programme.

Mini-Dairy Unit (Two-cow unit)

Objectives

- To provide a sustainable source of subsidiary income to farmer folks of Kerala.
- To encourage farmers to take up dairying as a business activity.
- To increase the number of productive animals in our cattle wealth.
- To provide self employment opportunities as well as livelihood for the rural youths.

Working of the Project

This project envisages establishing mini dairy farm units comprising of 2 milch cows. The project will be implemented in selected blocks in the state, where the programme was not implemented earlier. Implementation of the project has to be undertaken by the concerned District officers of the department to ensure the effective implementation of the project. Sufficient propaganda will be made through various media. Applications in the prescribed format will be collected, scrutinized and recommended for selection by the Dairy Extension Officer of the concerned blocks. Priority will be given to SC / ST / OBC / Minorities in the two animal unit schemes.

The District Officers will be the sanctioning authority. Selected beneficiaries for the schemes will remit Rs 100/- as registration fees. It will be the responsibility of the District Officer to ensure that animals are purchased from out side the state. A beneficiary committee comprising representatives of the dairy co-operatives of the area, representative of beneficiary, Dairy farm instructor, Veterinary surgeon and Dairy Extension Officer (implementing officer of the concerned block) will be constituted.

The Implementing officer or the Officer deputed will accompany the beneficiary on cattle purchase and facilitate the transport of cattle. Health

and vaccination certificates will be obtained from a registered veterinary surgeon at the time of the purchase. Expenses for Check post remittance, actual Traveling expenses, veterinary aid, medicines etc for a two-cow unit are included in the item miscellaneous.

The Dairy Extension Officer concerned will give training to the selected beneficiaries. The Cows will be purchased from neighboring states of Kerala. A milch cow (freshly calved cow, preferably second lactation) purchased under this scheme will have a minimum milk production of 12 LPD. The beneficiary will obtain health and valuation certificate of the Cow from Veterinary Surgeon and insure it for 3 years with transit cover. All records as per the existing guidelines regarding the distribution of animals will be maintained at the Dairy Extension Service Unit (DESU) Offices concerned. Beneficiary of a two-cow unit will renovate existing cattle shed and those not having shed shall utilize the amount for construction of a new shed.

Marginal farmers and agricultural laborers and SC/ST whose main source of income is agricultural activities will be given preference for two-cow units. The beneficiary will execute an agreement in stamp paper worth Rs 50 /- in the prescribed Proforma and submit it to the DESU. This project shall be loan-linked. Beneficiaries selected for the scheme shall approach banks or other financial institutions for Loans. The subsidy amount for each mini-dairy unit will be sanctioned by the department and debited to the beneficiary's loan account directly.

Beneficiaries shall be encouraged to purchase cattle feed from Dairy Co-operative Society in the concerned area. Also they should be encouraged to pour milk to these dairy co-operatives as a measure to strengthen the entire dairy co-operative system in the state.

Financial Analysis

Following parameters are considered for working out the Scheme:-

- 1) The actual cost of a good quality crossbred milch cow with an average yield of not less than 12 litres per day would vary in the range of Rs.22000/- to Rs.28000/-. The average cost of a cow shall be taken as Rs. 24000/- i.e., Rs.2000/- per litre of milk produced.
- 2) On an average, a cross bred cow requires a covered space of 80 Sq ft. And the construction cost of the shed is Rs. 100/- per Sq ft.
- 3) The average lactation period is 300 days followed by a dry period of two months.
- 4) The average milk production is 12 litres per day per animal.

Total amount required as bank loan = **Rs. 56,160/-** per 'two-cow unit'

The number of two-cow units sanctioned under MSDP for the Annual Plan schemes every year shall be intimated to State Level Bankers' Committee (S.L.B.C).

DETAILS OF CASH OUTFLOWS

1. Feed and Fodder requirement per cow per day

Sl. No.	Particulars.	Rate/Kg	During lactation Period		During dry Period	
			Qty in Kgs	Cost in Rs.	Qty in Kgs	Cost in Rs.
1	Green fodder	1.00	25	25.00	15	15.00
2	Dry fodder	4.00	4	16.00	6	24.00
3	Concentrate	11.00	4	44.00	3	33.00
	Total			85.00		72.00

Therefore the expenses for feeding two cows in one year shall be calculated as:

(Rs. 85.00 x 300 days + Rs. 72.00 x 60 days) X 2 animals =
Rs. 29,820 X 2 = **Rs. 59,640**

2. Details of credit repayment to bank/financial institution

Principal Amount : Rs. 56,160/-

Loan interest : 11% flat rate per annum

Interest Amount : Rs. 6,178 per annum

Repayment period shall be fixed at 3 years

Considering a span of 36 months, Equated Monthly Interest shall be calculated as:

(Principal Amount of Loan + Loan Interest accrued for 36 months) / 36

EMI comes around Rs. 2,075 per month. That means a sum of **Rs. 24,900** will be repaid every year.

The loan scheme is so designed that repayment will be made by 3 years.

- 5) Milk is sold at a rate of Rs. 17/- per litre.
- 6) Bank loan interest shall be fixed at 11 % flat rate and the loan shall be repaid in EMIs.
- 7) Insurance charge is calculated at the rate of .7% per animal for 3 years.
- 8) Feed and fodder requirement is taken as: Dry fodder @ 4 Kg / day; Green Fodder @ 25 Kg /day; Concentrate @ 4 Kg /day. Feed cost is taken as: Dry fodder @ Rs. 5 per kg, Concentrate @ Rs. 11 per kg and green fodder @ Rs. 1 per kg
- 9) One animal produce 10 Kgs of farm yard manure per day (FYM) which will be sold @ Rs 0.50 per Kg.

CAPITAL INVESTMENT

Sl. No.	Item	Dept. assistance (Rs.)	Loan Amount (Rs.)	Beneficiary Contribution (Rs.)	Total (Rs.)
UNIT COST (Single cow basis)					
1	Cost of a milch cow @ Rs. 24000	7200	16800	Nil	24000
2	Transportation Cost @Rs. 1000 per cow	Nil	1000	Nil	1000
3	Insurance premium @ 7% of the cost of cow	Nil	1680	Nil	1680
4	Cattle shed@ Rs. 100 per Sq. Ft for 80 Sq. Ft per cow	Nil	8000	Nil	8000
5	Miscellaneous Costs	Nil	600	Nil	600
6	TOTAL	7200	28080	Nil	35280
	TOTAL FUND for 1 unit	35280			
	Number of units(cows)	2			
	TOTAL FUND OUTLAY for a 'TWO-COW UNIT'	14400	56160	Nil	70560

3. Veterinary Care Expenses

This head of expenses include charges for medicines, Vety. Surgeon' visits A.I. charges etc and shall be taken as Rs. 500 per animal per year. Total expenses for two-cow unit will be **Rs. 1,000** per year

4. Miscellaneous Expenses

This head of expenses include cost of labour if any, maintenance charges etc and shall be taken as Rs. 500 per animal per year. Total expenses for two-cow unit will be **Rs. 1,000** per year

TOTAL CASH OUTFLOWS (per annum): Cost of feed and fodder + Bank loan repayment + Vety care expenses + Miscellaneous = Rs. 59,640 + 24,900 + Rs. 1,000 + Rs. 1,000 = **Rs. 86,540**

DETAILS OF CASH INFLOWS

Sl. No.	Particulars	1 st year	2 nd year	3 rd year
1	Raw milk sales @ Rs 17/-per litre (average milk production per cow is taken as 12 ltrs/day) = 12 lpd x 2 cows x 300 lactation days x Rs. 17/Ltr	1,22,400	1,22,400	1,22,400
2	Cow dung sales @ Rs 0.50 per Kg (on an average, a cow produces 10 kg dung per day) = 10 kg/day x 2 cows x 360 days x Rs. 0.50/Kg	3600	3600	3600
	TOTAL	1,26,000	1,26,000	1,26,000

TOTAL CASH INFLOWS (per annum): **Rs. 1, 26,000**

NET PROFIT: TOTAL CASH INFLOWS - TOTAL CASH OUTFLOWS

NET PROFIT: Rs. 1, 26,000 - RS. 86,540 = Rs.39, 460 per annum

Net Profit would be Rs. 19,730 per cow/year or Rs.1, 644 per cow / month