

DAIRY DEVELOPMENT DEPARTMENT

ANNUAL PLAN 2015-16



PRODUCTION AND CONSERVATION OF FODDER IN FARMER'S FIELDS AND DAIRY CO-OPERATIVES (Head of Account: 2404-00-102-77)

Continuing and Ongoing Schemes

Plan Outlay (Fodder Development): Rs. 500.00 Lakh

PRODUCTION AND CONSERVATION OF FODDER IN FARMER'S FIELDS AND DAIRY CO-OPERATIVES

COMPONENT – FODDER DEVELOPMENT (PLAN OUTLAY – Rs 500.00 LAKH)

01. INTRODUCTION

Kerala produces only 60% of the roughages required for cattle in Kerala. One of the main constraints for increasing milk production is the shortage of quality fodder. Marginal and small farmers who are the major cattle owners of the state have limited space for fodder development. Whatever space available, the whole of which is mostly devoted to producing cash crops. Since fodder is not directly yielding any benefit, fodder cultivation takes a back seat. Such dairy farmers anyway need fodder to reduce their cost of production and thus would be eager to purchase fodder if readily available. Cows of Kerala are one of the high yielding animals of India. Lack of fodder and high cost of cattle feed leads to underfeeding of these animals resulting in suboptimal production of milk. Necessary steps needs to be taken for improving the fodder availability in the state and ensuring optimal feeding of these animals so that we can increase the productivity of these animals to their optimum potential.

The present cost of milk production is mainly driven by the cost of concentrates and external inputs for productivity. The farmer's expenditure on feeding of the productive animal is influenced by the difference of the setting price of milk with the cost of concentrate feed. This compels the farmers to adopt under feeding practices which lead to malnutrition resulting in a longer inter-calving period and reduction in the production potential of the crossbred animals.

A cost effective feeding practices for productive crossbred animal can be achieved by decreasing the dependence on external input i e., concentrates and increasing the internal input system through fodder production at farmer's level for nutrient availability & its balancing for optimum productivity by assisting farmers in adopting fodder cultivation in their own lands. This envisages focused attention on the special need to develop feed resources by improving availability of green fodder.

The project is intended to ensure the availability of fodder in farmer's field where the available land is utilized by adopting integrated cropping pattern. The cultivation can be pure crop or inter crop.

In the current scenario, where competing demands on land renders even expansion of food/cash crops a difficult proposition, the probability of increasing area under fodder crops is very difficult. It is therefore imminent to adopt a multi-pronged strategy for adequate availability of fodder in order to provide a buffer to the farmer even in times of climatic variability. This strategy envisages supply of quality seeds, promoting production of fodder crops, extending fodder cultivation to currently fallow and unutilized lands, promotion of dual purpose varieties of crops which has the potential of meeting fodder requirements in season and off-season, promotion of non-traditional fodder, post-harvest technologies for preservation of fodder etc.

Besides, improving productivity in areas already under fodder cultivation, improving productivity of grazing and pasture lands, raising perennial fodder crops on field bunds and boundaries, peri-urban areas and exploiting unutilized and under-utilized fodder crops are also some of the promising options to enhance fodder availability. Plant Breeders in India have also identified a number of varieties/hybrids which could give a better quality and higher yield of crop residue without any compromise in grain yield.

Mechanization in the field of fodder development is a need of the hour. Farm mechanization has been helpful to bring about a significant improvement in agricultural productivity. Thus, there is strong need for mechanization of agricultural operations. The factors that justify the strengthening of farm mechanization in the country can be numerous. The timeliness of operations has assumed greater significance in obtaining optimal yields from different crops, which has been possible by way of mechanization. As production increases with mechanization of the farm operations, it creates a good scope for commercialization of fodder cultivation. Normally, there are good chances to reduce the cost of production if farm operations are mechanized as it saves labour, both human and bullock. In the absence of mechanization, the ever-increasing wage rate of human labour and cost of upkeep of draught animals will increase the cost of production much higher. Further, large

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

scale production means less per unit cost on the farms. Farm machines have not only increased the mechanical advantage, but also helped to reduce drudgery while performing the different agricultural operations. The contributions of agricultural mechanization in various stages of crop production could be viewed as saving in seeds, saving in fertilizers, saving in time, reduction in labour, increasing in cropping intensity and higher productivity.

For the year 2015-16, as per the plan document, it has been proposed to undertake fodder development activities for **Rs 500 lakh** in the state. Out of Rs 500 lakh, Schemes with plan assistance of **Rs 500** are ongoing schemes of 2014-15 with no alteration in components and plan assistance.

During 2015-16, under the Fodder Development Programme itself it is envisaged to cultivate perennial fodder in 1975 Ha of land. It is proposed to celebrate 'Fodder day' during the year and in connection with it 50,500 fodder tree seedlings will be planted across the state.

02. OBJECTIVES

- To cultivate perennial green fodder (CO-3) crops in **1975 Ha** of land.
- To introduce new scientific low cost feeding culture among Dairy farmers.
- To uplift the sustainability and reliability in dairying by reducing the feeding cost by 30%
- Giving assistance to azolla cultivation, irrigation assistance and mechanization of fodder cultivation activities.
- To improve the general health of the milch animal and the quality of milk produced.
- To ensure the availability of green fodder throughout the season by assisting the farmers by providing planting materials and cultivation assistance.
- To ensure fodder and planting materials availability in the area.
- To generate employment and income to the producers by sale of fodder.
- To enhance the capacity of farmers for adoption of fodder production technology through field level training and demonstrations.
- To establish 50 number of DCS based women GOPALIKA groups for fodder marketing.

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

03. FINANCIAL OUTLAY

DAIRY DEVELOPMENT DEPARTMENT ANNUAL PLAN : 2015-16 PRODUCTION AND CONSERVATION OF FODDER IN FARMERS FIELDS AND DAIRY CO-OPERATIVES							
SL NO.	SCHEME COMPONENTS	UNITS	NO OF UNITS	UNIT COST	UNIT SUBSIDY	TOTAL COST	TOTAL SUBSIDY
				(RS)	(RS)	(Lakhs)	(Lakhs)
COMPONENTS UNDER 2404-00-102-77-34 - OC							
1	Fodder cultivation -20 cents & above (Ha)	Ha	1400	54500	20000	763.000	280.000
2	Fodder cultivation- below 20 cent (Ha)	Ha	575	7500	7500	43.125	43.125
3	Transportation cost	Lumpsum	Lump sum	120000	120000	1.200	1.200
4	Fodder seminar & Fodder day celebration at the District level & State Level	Lump sum	Lump sum	300000	300000	3.000	3.000
5	Dairy Promoters incentive (Incentive @ Rs 4000 /Month for 8 months)	Nos	152	32000	32000	48.640	48.640
6	Assistance for Azolla Cultivation	Nos	3000	1000	600	30.000	18.000
7	Irrigation Assistance	Nos	84	20000	10000	16.800	8.400
8	Mechanization& Modernization of fodder cultivation	Nos	50	20000	10000	10.000	5.000
9	Cultivation of Fodder trees including live fencing	Nos	50500	5	5	2.525	2.525
10	Seasonal crops for fodder production (seed cost)	Ha	50	2240	2240	1.120	1.120
11	Scheme for Maize cultivation	Ha	60	14150	14150	8.490	8.490
12	Fodder cultivation and marketing by women groups (GOPALIKA GROUP)	Nos	50	100000	75000	50.000	37.500
13	Assistance to State Fodder Farm, Valiyathura, Tvm	Lump sum	Lump sum	2500000	2500000	25.000	25.000
SUB TOTAL : 2404-00-102-77-34 - OC						1002.900	482.000
14	2404-00-102-77-04 TE (1) TOUR TA	Lump sum	Lump sum	Lump sum	Lump sum	10.000	10.000
15	2404-00-102-77-05 OE-4 OTHER ITEMS	Lump sum	Lump sum	Lump sum	Lump sum	5.000	5.000
16	2404-00-102-77-45-POL	Lump sum	Lump sum	Lump sum	Lump sum	3.000	3.000
GRAND TOTAL						1020.900	500.000

04. SCHEME PROPER

04.01 PERENNIAL FODDER CULTIVATION – ABOVE 20 CENTS

(Plan Outlay – Rs. 280.00 lakh)

The Scheme envisages assisting cultivation of perennial fodder in a total area of 1400 Ha of land providing planting material free of cost and assistance for cultivation to farmers. Application for assistance under the scheme will be invited from the dairy farmers for cultivation of fodder in suitable land with perennial irrigation source by the Dairy Extension Officer concerned. Necessary awareness in the proposed programme will be given through Dairy Extension Service Unit, Dairy Co-operative Societies, Local Self Government Institutions, All India Radio, Farm Information Bureau and local dailies. The farmers rearing animals and willing to spare land or arrange land on lease for fodder production will be selected for the programme. The minimum area of cultivation for which assistance given will be limited to 20 cents and multiple of 10 cents. There will be no upper limitation of area for availing assistance and the beneficiaries will be eligible for assistance by covering at least an area of 20 cents. The selected beneficiary will have to register name at the Dairy Extension Service Unit of the concerned block by paying registration fees of Rs.9/- per cent of land. The sanctioning authority will be the District Officer. The registration fees collected will be remitted by the Dairy Extension Officer in the Treasury.

The cultivation will be done by using stem cuttings/rooted slips of Hybrid Napier (CO3 / CO4) which will be made available to the farmers free of cost. The distribution of slips and seeds to the selected/ registered beneficiaries will be ensured by the Deputy Director of the concerned districts from the Government farms, approved fodder nurseries maintained by the Dairy Co-operative Societies/ NGO's /Individuals approved by the Director based on recommendation of the Deputy Director.

In order to get maximum growth and production, the requirement of stem cuttings per hectare of land is estimated as 15000. The subsidy given to the beneficiaries for cultivation of fodder under the scheme will be Rs. 12500/ Hectare of land in addition to the root slips supplied free of cost . Value of root slips supplied /hectare of land is estimated to be Rs.7500/- . Therefore the total subsidy for cultivating fodder in one hectare of land comes to Rs 20000/-.

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

Unit Cost (for 1 Ha fodder cultivation)

SI.NO	PARTICULARS	AMOUNT
		(in Rs)
1	Cost of slips (15000 /Ha) 15000 X 0.50 Ps/slips	7,500
2	Land preparation - 25 man days X Rs.500 /man day	12,500
3	Basal Manuring	15,000
4	Planting - 20 man days X Rs.500 /man day	10,000
5	Weeding/irrigation - 10 man days X Rs.500 /man day	5,000
6	Top dressing	4,500
Total Cost per Ha		54,500
Subsidy @ Rs 20,000/ Ha		
(Cultivation assistance @ Rs 50/- cent & slip cost @ Rs 0.50 Ps / slip); Slips are distributed free of cost.		

Financial Outlay

Area (in Ha)	Subsidy per Ha (Rs.)	Total Plan Assistance
		(Rs. in Lakhs)
1400	20000	280.00

**04.02. PERENNIAL FODDER CULTIVATION – BELOW 20 CENTS
(Plan Outlay – Rs. 43.125 Lakhs)**

The Scheme envisages assisting cultivation of perennial fodder in a total of 575 hectares of land providing planting material free of cost by the Dairy Development Department. There will be no registration fees for non subsidy plots. Application for assistance under the scheme will be invited from the dairy farmers for cultivation of fodder in suitable land with perennial irrigation source by the Dairy Extension Officer concerned. Necessary advertisement will be given through Dairy Extension Service Unit, Dairy Co-operative Societies, and Local self government institutions, All India Radio, Farm Information Bureau and local dailies.

For non subsidy plots the cultivation will be done by using seeds of guinea / Congo signal /stem cuttings/rooted slips of Hybrid Napier (CO3). The distribution of slips and

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

seeds to the selected beneficiaries will be ensured by the Deputy Director of the concerned districts from the Government farms, approved fodder nurseries maintained by the Dairy Co-operative Societies/ NGO's /Individuals approved by the Director based on recommendation of the Deputy Director . Planting materials –Slips/ Seeds which will be supplied free of cost to farmers.

Financial Outlay

Area (in Ha)	Subsidy per Ha (Rs.)	Total Plan Assistance
		(Rs. in Lakhs)
575	7500	43.125

04.03 TRANSPORTATION COST (Plan Outlay – Rs. 1.20 Lakh)

An amount of Rs. **1,20,000/-** has been kept apart to meet the transportation cost of fodder , planting materials and seeds within the districts.

04.04 DISTRICT LEVEL FODDER SEMINAR & 'FODDER DAY' CELEBRATIONS (Plan Outlay - Rs. 3.00 Lakh)

It is proposed to conduct district level Fodder Seminar in all the 14 districts along with the celebration of 'Fodder Day' on a predetermined date involving the farmers, officials of the various departments, dairy co operatives, representatives of the dairy industry and experts / scientists from universities etc. Discussions on topics of relevance to the current situation in the field of fodder production will be made. Exhibits of relevance to fodder production will be displayed in the event. Short duration fodder crop seeds like maize, jower, cowpea etc will be distributed to farmers on the 'Fodder day' celebration in each district. Best sustaining farmers in fodder cultivation will be honored during the function. A sum of Rs. 3.00 Lakh is provided for the 'Fodder day' celebrations in State level and district level with fodder exhibitions.

04.05. DAIRY PROMOTER'S INCENTIVE

(Plan Outlay - Rs 48.64 Lakh)

To familiarize the cultivation of green fodder, commercial fodder production, cultivation of fodder in cultivable waste land under irrigated condition, to get maximum yield by doing timely operations, dairy farmers need constant timely interaction and persuasion to establish the crop, in addition to the available amenities. Hence it is proposed to utilize the service of trained matriculate in the field, one in each block on incentive basis, designated as **Dairy Promoters**. The incentives to be paid to them are Rs.4000/ month. They will be given 2 days training on which is required for field and they shall be engaged for 8 months.

Rs. 4000 x 8 months x 152 blocks = Rs. 48.64 lakh

04.06 ASSISTANCE FOR AZOLLA CULTIVATION

(Plan Outlay – 18.00 Lakh)

3000 farmers will be assisted for establishing Azolla cultivation. Azolla is a Fern which grows on top of water surface and multiplies profusely. The yield of crop/ sq. meter/day is 250 grams .To feed one animal 1/kg/day is ideal. To get a yield of 1 kg of Azolla /day, a unit with 4 sq. meter is required. The total estimated cost of cultivation for one pit is Rs.1000/. The assistance per unit of Azolla is Rs. 600/- The expected cost of an Azolla kit which consist of Silpaulin sheet, Azofert, Azophose, Azolla seed, collection net etc. is estimated to Rs.475/-. The cost of Labour, Bricks, Farm Yard Manure estimated as Rs.525/-. Each selected beneficiary will be given one Azolla kit worth Rs.475/-and Rs.125/- as cultivation assistance. The registration fee at Rs.75/- per beneficiary will be collected. Azolla kit will be made available from Natural Resources Development Project /Approved Dairy Co-operatives / Brahmagiri Development Society/other charitable institutions/firms/individuals approved by the Director of Dairy Development on recommendation by the concerned Deputy Directors. Payment towards the cost of Azolla kit will be given by the Deputy Director against invoice certified by the Dairy Extension Officers after distribution of kits and training / demonstration to the beneficiaries by the agency selected for the distribution of Azolla kits. Frequent visit & verification will be done by the implementing and supervisory officers concerned.

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**



UNIT COST

AZOLLA - UNIT COST		
SI.NO	PARTICULARS	AMOUNT (Rs)
1	Silpaulion Sheet 150 GSM/4M ²	355
2	Azophose 1 Kg	10
3	Azofert 1 Kg	35
4	Azola seed 1 Kg	50
5	Collection Net	25
6	Bricks (50 No.s x Rs 3.50)	175
7	Farm Yard Manure	50
8	Labour Charges	300
GRAND TOTAL		1000
SUBSIDY		600
Cost of Azolla Kit - Rs 475		
Cultivation Assistance - Rs 125		

Savings in any component can be utilized for any other component in the scheme

FINANCIAL OUTLAY

FINANCIAL OUTLAY - AZOLLA CULTIVATION						
TOTAL UNITS	UNIT COST			COST FOR TOTAL UNITS		
	TOTAL	SUBSIDY	BENEF. CONT	TOTAL COST	SUBSIDY	BEN. CONTR
	Rs	Rs	Rs	Rs in Lakh	Rs in Lakh	Rs in Lakh
3000	1000	600	400	30.00	18.00	12.00

04.07 IRRIGATION ASSISTANCE (Plan outlay – Rs 8.40 lakh)

This Scheme envisages providing irrigation assistance for existing fodder plots having source of irrigation. Pump sets, storage tanks, connecting hose, sprinkler system, drip system etc. can be established under this scheme. Assistance may be given for Rain water harvesting purpose also. Preference will be given to those beneficiaries having fodder plots with more than 50 cents area.

Subsidy component will be limited to 50 % of the total cost or a maximum of Rs. 10,000/- to each unit.



FINANCIAL OUTLAY

FINANCIAL OUTLAY - IRRIGATION ASSISTANCE						
TOTAL UNITS	COST FOR ONE UNIT			COST FOR TOTAL UNITS		
	TOTAL	SUBSIDY	BENEF. CONT	TOTAL	SUBSIDY	BENEF. CONT
	Rs	Rs	Rs	Rs in Lakh	Rs in Lakh	Rs in Lakh
84	20000	10000	10000	16.800	8.40	8.40

04.08 MECHANIZATION AND MODERNISATION OF FODDER CULTIVATION (Plan outlay – Rs 5.00 lakh)

The economic viability of a dairy unit largely depends on the availability of fodder grass. Better resource management and farm mechanization have led to an increase in the fodder yield, despite the challenges posed by adverse climate, soil and water salinity. Mechanization will encourage dairy farmers to take up fodder production on commercial basis. It includes providing machineries like tillers, harvester, chaff cutter, etc. This will help in reducing the labour cost and thereby make fodder cultivation economically viable occupation to those having sufficient land. Use of chaff cutters will prevent wastage of fodder and improve its intake and thus help in easy assimilation of the nutrients. The project envisages providing financial assistance for the purchase of machinery based on the requirement of the beneficiary. 50 % of the cost of the machinery or Rs 10000/- whichever is less will be provided as assistance.



Financial Outlay

FINANCIAL OUTLAY MECHANISATION AND MODERNISATION OF FODDER CULTIVATION						
TOTAL UNITS	UNIT COST			COST FOR TOTAL UNITS		
	TOTAL	SUBSIDY	BENEF. CONT	TOTAL	SUBSIDY	BENEF. CONT
	Rs	Rs	Rs	Rs in Lakh	Rs in Lakh	Rs in Lakh
50	20000	10000	10000	10.00	5.00	5.00

04.09 CULTIVATION OF FODDER TREES INCLUDING LIVE FENCING (Plan Outlay - Rs 2.525 Lakh)

Dairy farmers of Kerala find it difficult to cultivate sufficient fodder to feed their animals as the land holdings are small and pressure on the land from cash crops are high. They turn to other non conventional feed stuff such as tree leaves and other crop residues to meet the requirement of roughage. Fodder trees such as Agathi, Subabul, Gliricidia etc are rich in crude protein and if fed regularly can help in reducing the cost of milk production. The project envisages promoting cultivation of Agathi / Subabul / Gliricidia for fodder in coastal areas, riverbanks and other available areas. The seedlings of Agathi / Subabul / Gliricidia shall be supplied to the farmers free of cost so as to encourage them to take up cultivation of fodder trees. Dairy cooperatives / SHG's / NGO's/ Students Dairy Clubs shall produce seedlings using seeds obtained from KLDB, other fodder research stations and approved fodder farms. Fodder trees suitable for coastal areas, river banks shall be made available for such areas. The Dairy development department shall provide Rs. 5.00 /seedling (including transportation) supplied to the farmers. 50,500 seedlings shall be planted/distributed to farmers on the proposed 'Fodder day' celebration of the year 2015-16. The Dairy Extension Officer shall maintain a list of beneficiaries.

04.10 CULTIVATION OF SEASONAL CROPS FOR FODDER PRODUCTION AS GREEN ROUGHAGE (MAIZE/ COW PEA/ SORGHUM)

Plan Outlay – Rs. 1.120 Lakhs

Maize is an ideal fodder crop from many aspects, as it is quick growing palatable and nutritious. It can be preserved easily and very palatable silage can be made from it and it can be fed to all kinds of livestock. It can be cut for fodder within two months after sowing. Maize can be cultivated both for grain as well as fodder purposes.

The paddy cultivation in Kerala is in two seasons viz. kharif and rabi. The rice fields after the harvest of rabi crop remain fallow for a period of 4-5 months. The residual moisture in the paddy fields can be tapped for growing short duration crops. Fodder varieties of Maize (*Zea Maize*) can be grown as a pure crop and a crop combination of Jowar (*Sorghum Sudanense*) can be successfully cultivated in these fallows. Maize is a green succulent nutritious fodder and can be fed either as green or as silage (conserved fodder). As a fodder crop it is very important to harvest the crop at the proper time. The optimum period of getting maximum feeding value of the crop is during silking and the milk stage of the grain and thereafter the feeding value goes down rapidly. Fodder yield varies according to soil fertility, season, cultivar and management practices. The average yield of the crop is 30-40 tonnes /ha. At the milk stage the plant contains 25-30 % dry matter.

The legume crops helps in atmospheric Nitrogen fixation and used as an inter crop for fodder production. The biomass produced has high nutritive value because of the higher crude protein content in legumes.

It is proposed to cultivate 50 Ha under Maize/Sorghum /Cowpea. Fodder Maize can be intercropped with CO-3, CO-5 or Cowpea at 3:1 ratio and harvested together to provide nutritious fodder.

04.11 SCHEME FOR MAIZE CULTIVATION FOR GRAIN PRODUCTION (Plan Outlay – Rs 8.490 lakhs)

Introduction

Maize is one of the important coarse cereal crops grown in different agro-climatic conditions. It is being used for manufacturing lot of industrial products. In addition it is used as an important feed and fodder for animals. Maize is rich source of starch, proteins, fat and minerals. Maize is a major component of cattle feed mixture providing the much needed carbohydrate in the animal ration. At present the feed companies like Kerala Feeds, Milma feeds and feed factories run by Dairy co-operatives are procuring Maize from Northern States incurring heavy expenditure. Quite often they face difficulties in procuring Maize due to seasonal fluctuation and non-availability. If Maize is cultivated in the state on a large scale the seeds can be made available to Kerala Feeds/Milma feeds/Dairy co-operatives on a buy back arrangement and the Stover (crop residue) can be fed to cattle as dry roughage.

The Scheme

The scheme envisages cultivating Maize as a pure crop by selected farmers who have sufficient land / are willing to cultivate in leased land. The minimum area to be cultivated is 25 cents. The scheme will be implemented in those districts which have proximity to the Feed factories and have the suitable Agro-climatic conditions favoring maize cultivation.

The beneficiary selection may be done at the district level. Priority should be given to the land near the Feed Factories. Application for the scheme will be invited by the Dairy Extension Officer concerned. On receipt of application the implementing officer and subordinates should verify the applications and the sanctioning authority will be the District officer. The selected beneficiary will sign an agreement that they will give the maize seed produced to the Feed factories on the rate fixed by the Board of Feed factories. In the event of the price of Maize grains provided by Feed factories is lower or Feed factories are not in a position to collect the Maize grains , the farmer will be free to sell it as directed by the Dairy Development Department . Since Maize is not commonly cultivated for grain purpose in Kerala, the selected beneficiaries will be given training on package practices of Maize crop for grain production. Also the implementing officers will be given a chance to visit the fodder farms in other states, mainly Maize grown for grain purposes.

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

Individuals /SHG's/DCS/NGOs can be provided assistance under the scheme. The Stover can be utilized by the beneficiary himself for feeding his cattle or can be sold to other farmers through the DCS on mutually agreed price.

Financial outlay

Component	Area	Unit Seed rate	Unit seed Cost	Total Plan Outlay
	Ha	Kg	Rs./Kg	Rs.
Maize Seed	60 Ha	25	65	97,500.00
Assistance to farmer per Ha @ Rs.12500/Ha	60 Ha			7,50,000.00
Implementation Expenses				1500.00
Grand Total				8,49,000.00

To get the maximum yield of maize, farmers will be given seeds by the Department from the certified agencies. In order to get maximum growth and production, the requirement of seed per hectare of land is estimated as 25 Kg . The assistance given to the beneficiaries for cultivation of Maize in one Ha of land will be Rs.12500 in addition to the seeds supplied free of cost. Value of seeds supplied /hectare of land is estimated to be Rs. 1625/-(25 Kg x Rs.65 /Kg of seed, the rate per kg seeds may change).

Therefore the total assistance for cultivating Maize in one hectare of land comes to Rs 14,125/-.

Financial outlay in Maize production (Rs./Ha)

SI.NO	PARTICULARS	AMOUNT	SUBSIDY (Rs)
1	Cost of seeds (@25 Kg /Ha) 25X Rs.65/Kg)	1,625.00	1,625.00
2	Cultivation expenses such as Land preparation , basal manuring, fertilizers, planting , weeding pest control, irrigation, pesticides, top dressing, harvesting, rent for crusher, cost for drying the seed etc.	42,000.00	12,500.00
	Total Assistance per Ha		14,125.00

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

The average yield per Ha of Maize is 2.3 tons of grains. In Kerala condition the yield may be slightly lesser and we may assume it to be 2 tones/Ha, which will result in 636 tones of seed which can be procured by Feed factories. The seeds produced will be procured by Feed factories at a price fixed by the Board of the Feed factories.

The crop residue (Stover) can be sold to other farmers through the Dairy Co-operatives as dry roughage for which there is high demand and will be remunerative for the farmer cultivating maize.

Monitoring :

The District Deputy Director under the guidelines issued then and there will monitor the implementation.

Conclusion :

The scheme will help in addressing the shortage of dry matter required for cattle in the State as well as provide some quantity of raw material for feed manufacturing within the state itself.

If any savings is available in any component of the schemes, that amount will be utilized for purchase of seasonal fodder.

**04.12 SCHEME FOR FODDER CULTIVATION AND MARKETING BY WOMEN GROUPS
(GOPALIKA GROUPS) (Plan Out lay – Rs 37.50 lakh)**

Introduction

The non availability of land for fodder cultivation discourages many farmers from taking up dairying. If fodder is made available at cost on a regular basis many of these farmers will take up Dairying or increase the number of animals reared which would boost up the milk production of the state. There are many women groups within the area of operation of a Dairy Cooperative who are willing to cultivate, collect and market fodder to the needy farmers at a cost. These women groups can be assisted to cultivate fodder in their own or leased land and also collect the natural grass and other crop residues available in the locality , chaff it and pack in gunny bags and bring it to the DCS where the needy farmers can purchase it .

**DAIRY DEVELOPMENT DEPARTMENT
FODDER DEVELOPMENT PROGRAMME : 2015-16**

The scheme

The scheme envisages assisting the women groups under the supervision of the Dairy cooperative to take up fodder cultivation and marketing to the needy farmers. Groups consisting of two or more women can be formed within the area of a DCS. The group members may take up fodder cultivation in their own land or in leased land. The minimum area to be cultivated should be one acre. They may also collect locally available natural grass or other crop residues like plantain leaves and stem, coconut leaves after removing the spine and other stem and leaves (tapioca, pineapple etc) which can be chaffed and mixed with the cultivated grass. A chaff cutter will also be provided to them. A shed to store the collected and chaffed fodder and a platform balance to weigh the fodder will also be provided. The chaffed fodder will be packed in gunny bags and carried to the DCS where dairy farmers come twice daily to pour milk. Those farmers who are in need of the fodder will purchase the fodder at a cost decided by the women group based on the demand in the area.

Assistance for One Gopalika Group

Sl. NO	Particulars	Cost	subsidy
1.	Cost of cultivation of fodder in One acre of land	20000	15000
2.	Chaff cutter , and electrical accessories	20000	15000
3.	Shed for storing equipments, tools ,implements and fodder	20000	15000
4.	Weighing balance (platform type)	20000	15000
5.	Tools and implements for cultivation , harvesting , gunny bags for packing chaffed fodder etc	20000	15000
	TOTAL	1,00,000	75,000

The estimated cost for establishing one unit is Rs. 1,00,000/-. for which Rs. 75,000/- will be provided as subsidy for the first year. The remaining amount has to be channelized by the beneficiary group through own fund or bank loan. It is estimated that the group will be able to sell about 150 to 200 tons of fodder a year at an estimated cost of Rs. 3/Kg.

Financial Outlay –Gopalika Women Marketing Groups

FINANCIAL OUTLAY MECHANISATION AND MODERNISATION OF FODDER CULTIVATION						
TOTAL NUMBER OF GROUPS	UNIT COST			COST FOR TOTAL UNITS		
	TOTAL	SUBSIDY	BENEF. CONT	TOTAL	SUBSIDY	BENEF. CONT
	Rs	Rs	Rs	Rs in Lakh	Rs in Lakh	Rs in Lakh
50	100000	75000	25000	50.00	37.50	12.50

**04.13 ASSISTANCE TO STATE FODDER FARM, VALIYATHURA, TVM
(Plan Outlay – Rs. 25 Lakh)**

The Sewage farm under Dairy Development Department at Valiyathura, Trivandrum is producing fodder for supply to the dairy farmers in and around the city. The Farm also supplies root slips, stem cuttings for fodder propagation in addition to the sale of fodder. In the Governor’s address 2013 -14, it was declared that the sewage farm will be upgraded as State Fodder farm and a fodder training centre will be established. The treated water from the sewage treatment plant can be used for irrigating the fodder cultivated in the farm. Necessary infra structure is to be created for upgrading the farm as State Fodder Farm and to establish the fodder training centre. The existing fodder cultivation is to be sustained for supplying fodder and planting material to farmers. It is proposed to set apart a portion of the outlay to meet the expenditures incidental to the activities of the farm, crop maintenance, fodder/ planting material, to dig a Bore well, purchase PVC storage tank, facilities for irrigation using treated water from Sewage treating plant, de-silting of canals, repairs and maintenance of buildings, fencings, transportation, purchase of farm equipments and small implements, a Hydroponic machine for Demonstration purpose, etc. Consultancy charges for the preparation of plan and estimate for the proposed training centre will also be met from the budget provision.

Plan Outlay (Lump sum Amount) – Rs 25 lakh

05. CALENDAR OF ACTIVITIES

Sl.No	Activity	Month of 2014
1	Inviting applications	May 15
2	Acceptance of Applications	May 15 – June 15
3	Verification, processing of application and Finalization of beneficiary list	May 15 – June 15
4	Distribution of planting materials	June 15 – July 15
5	Sowing/Planting	June 15 – July 15
6	1 st Harvest	Aug 15 – Sept 15
7	Verification/Monitoring by Department officers	May, June , July, Aug months of 2015
8	Evaluation of scheme	Oct, Nov, Dec months of 2015

06. MONITORING

The Dairy Extension Officers shall be the implementing officers of the programme at field level. The Dairy Farm Instructors, based on the directions from the Dairy Extension Officers shall be responsible for application scrutiny and field level inspections at various stages of the fodder development programme. The Deputy Director shall monitor the district level progress of the fodder development schemes. All schemes shall be monitored by the Deputy Directors of concerned districts. The field level inspection will be conducted by a team of officers entrusted for the purpose by the Director. The Director shall be in charge of the state level monitoring of the fodder development programme

07. CONCLUSION

The above schemes will help to nurture the fodder development activities of the state, will generate self employment opportunities and will help to reduce the feed cost and thereby ensuring the socio-economic security of the farmers.



DIRECTOR