



Cropping Scheme of Green Fodder for Husbandry of 100 Milch Cow

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INTRODUCTION

Due to the fertility of our country's soil, earning foreign exchange from leather and bone, our agricultural work and the majority of the country's population being vegetarian, how important has been the dairy industry in the country. Hence, dairy farming has now taken the form of dairy industry. Therefore, that is where other aspects of dairy are important. Along with them, sufficient green and succulent fodder should be available to the dairy farm animals to provide continues and cheap milk from the dairy farm, if we can give succulent and green fodder to our animals throughout the year, then along with keeping our animals healthy, their milk yield will also be high, so that this business will be profitable from the economic point of view and it can also be adopted as a business. Is, in order to give lush and green fodder to the animals throughout the year, we will have to make a cropping scheme on the farm for fodder crops. Therefore, that green fodder is available daily. Here the scheme of one such dairy farm is being given to make students understand.

In fact, an economic and ideal dairy farm should start with 100 milking animals, because small farms are generally not good from economic point of view, it is expected that 100 milking animals will be given annually. We will continue to give 700 litres of milk per day. These figures have been appointed on the basis that about 70% of the animals of the farm they will continue to give milk all the time and the yield per animal will be 10 litres per day throughout their life. Only high quality animals will be kept on the farm. Their management, care, food, etc. will all be under the supervision of a scientifically qualified and experienced officer. Before setting up the farm, help should be taken from the Animal Husbandry Department so that all the facilities provided by the State Animal Husbandry Department like artificial insemination (A.I.) and distribution of bulls can also be availed.

REQUIREMENTS or BASIC NEED

The best principle to determine the area of land for setting up a dairy farm is that there should be one acre of land behind each of the adult cows on the farm. The crop rotation on the farm should be such that green fodder, silage and dry fodder can be available in sufficient quantity to the animals throughout the year. As far as possible, the ratna fodder should also be cultivated its own farm.

SELECTION OF LAND FOR ESTABLISHMENT OF DAIRY FARM

While selecting the land, special attention should be paid to its fertility and irrigation

facilities. In addition to cultivable land, as far as possible there should be separate arrangement for pasture. So that animals can be raised at less cost. Special attention should be paid to the management of pastures. Good grass should be grown in it and the method of systematic grazing should be adopted. But as far as possible it should be 30% of the area of the farm. Horticulture in some land other than growing fodder for livestock and some crops like potatoes, sugarcane, etc. should also be grown, so that more income can be.



SELECTION OF SITE or LOCATION

It should be installed at a proper distance from the city. So that milk can be transported to the city by local transportation or horse cart. If the farm is 10 km from the city. If it is more than a 10-kilo meter, then a permanent vehicle will have to be taken instead of a local transportation, which is a very valuable item Milk distribution should be done by one or two depots in the nearby city. As far as possible, the method of distributing milk from house to house should not be adopted. If due to any reason milk has to be distributed from house to house, then rupees 02 per kg extra should be fixed for it.

There is not much benefit if milk is converted into ghee and butter. Therefore, as

far as possible all the milk of the farm should be sold in that condition. For making butter on the farm, a contractor should procure cream and its price should be fixed on the yield of butter itself.

The cattle herders who have trouble in the distribution of milk. They can sell their farm milk through a contractor. Now days the government is also establishing a cooperative milk union for such people and to solve the milk problem in the cities. Many such associations have been opened across the country. If any such association comes in your area, then the milk of your farm should be sold to them.

LAND REQUIREMENT FOR FODDER CULTIVATION & SENTINATION

A. Plan for 100 milch animals – 40 hectares of land is required while planning for 100 milch animals. The division of land should be done as follows.

For Fodder	20 Hectares
Pasture	08 Hectares
Buildings And Roads	08 Hectare
Horticulture And Other Crops	04 Hectare
Total	40 Hectares

B. Number of animals on the farm: With 100 milch cows the number of animals will be as follows:-

(01)	Milking Cow	70 (Because 2/3 of the cows on the farm live in milk the other dry)
(02)	Dry Cow	30
(03)	Heifer (2 – 3 Years Old)	20 (Because only 5 years of cows are considered productive. Therefore, every year one-fifth of the cows have to be changed.)
(04)	Heifer (1 – 2 Years Old)	24
(05)	Sniffing calves (From 01 Years Old) Underage	30 (Because death is more in this stage)
(06)	Bull	02
(07)	Bull	16
(08)	Horse for Tonga	01
Total Number animals will at farm		163

C. Average Body Weight of Animals: -

Cow (100 x 300)	30000 kg
Heifer (1 – 2 Years) 20 x 200	4000 kg
Heifer (1 – 2 Years Old) 24 x 150	2300 kg
Calf (30 x 40)	1200 kg
Bull (2 x 400)	800 kg
Ox (16 x 450)	7200 kg
Horse (1 x 300)	300 kg
Total Body weight in Kg	47100 kg

FEED REQUIREMENTS

Since every 100 kg. The body weight of the animal is generally 6 kg. Eat green fodder every day. Hence, the required quantity of green fodder will be 2826 kg (6/100 x 47100 kg). However, some fodder is wasted every day and their dry matter percentage varies. Therefore, to meet this shortfall, about 374 kg

on the farm. Green fodder will be needed more. Therefore, one day's fodder will be required to be 3200 kg.

$$\begin{aligned}
 (2826 + 374 \text{ kg}) &= 3200 \text{ kg} \\
 \text{Requirement of one day} &= 3200 \text{ kg} \\
 &= 30 \times 3200 \text{ kg} \\
 &= 96000 \text{ kg}
 \end{aligned}$$



A. Cropping Scheme: -

- The following cropping scheme fulfils the requirement of green fodder throughout the year it is estimated that water and fertilizer facilities will be available on.
- **For August to December** (i.e. 5-month plan): -

Total quantity of fodder required = 96000 X 5
= 480,000 kg
= 4800 quintals

It is 350 quintals more fodder cutting, transportation and the animals that leave etc. will make up for the shortcomings.

Waste chari and jowar karbi should be made. Similarly, more Jowar, Chari M.P., Bajra etc. should be kept as karbi. The area of 4 hectares which is left for other crops. In this way crops should be sown. Such as wheat, barley, tur, lentils, gram, urd, moong, paddy, mustard and

sugar cane etc. Where we will get other income from these crops, as well as their remaining parts will be used as fodder for livestock. Along with this, it should always be kept in mind that we should even the concentration for the animals should not be bought from the market. The good thing is that by sowing oilseeds crops, they should also be prepared on their own farm. In order to make the food balanced and tasty and to prepare cheap food, it will also be a matter of foresight that there must be a system of making silage on the dairy farm.

If all these things are taken care of then it can be said with full confidence that this business is not only a means of live hood but also the requirements of today's milk. It can take the form of an industry.

For January to April (04 Month Plan): -

Need of total amount of fodder

Area (in hectare)	Crops	Average production/ Hectare (Quintals)	Total production/ Hectare (Quintals)
2	Oats (in cowpea field)	150	300
3	Rijka (in the field of maize)	150	450
2	Barseem (in the field of sorghum)	150	300
4	Napier grass	350	1400
3	Peas (in M.P. Chari's field)	100	300
3	Barseem (Green latter's field)	225	675
3	Guinea hey (in the moth field)	150	4502

For May to July (03 Month Plan): -

Total quantity of fodder required = 9600 x 3 = 28800 kg = 2880 quintals

Area (Hectare)	Crops	Average yield Per Hectare (Quantal)	Total yield (Quintals)
4	Napier Grass	300	1200
3	Guinea Grass	125	375
3	Ridges	120	360
2	Robia (in oat field)	50	100
2	Maize (in Barseem's field)	100	200
3	Jowar (in Barseem's field)	200	600
			3885

