TOPIC

Low cost nutrition management in dairy cattle by using locally available fodders without affecting the milk production with the help of an android-based mobile application.

PLANNING

As everyone knows fodder and feed cost contributes about nearly 75 to 80% of the working capital in dairy cattle sector.

Any changes using the modern technology, to decrease the feed cost will definitely have yet good impact in the profit of the dairy farmers.

One such plan is, implementing an easily feasible mobile application for accurate calculation of proper nutritive feeding regime, with locally available low cost fodder for dairy cattle.

Initially for this purpose at field level, we must select nearly 4 or 5 villages, and has to make the interested diary farmer as a farmer interested group.

Simultaneously with subject experts and Android based mobile application has to be designed with the following features.

1) Predicting the body weight by taking a picture of the cattle.
2) Provision for entering the milk production of the cattle.
3) Based on the above 1 & 2 data, the module for calculation of daily nutrition requirement of the cattle.
4) All locally available fodder materials / feed supplements / nutrient supplements along with their nutritive values have to be added in the program
5) By just taking the photograph of the cattle and entering the milk yield quantity this application will calculate and further give the low cost locally available feeding regime which is also nutritively compatible, for the daily requirement of the cattle

IMPLEMENTATION

After devising such an application, it has to be forwarded to the farmer interested group and requested to be installed in their mobile.

Further it should be requested them to give their cattle details required and to follow the prescribed regime as calculated for feeding their animals.

MONITORING

The farmers has to be repeatedly monitored for following the feeding regime recommended by the Application.

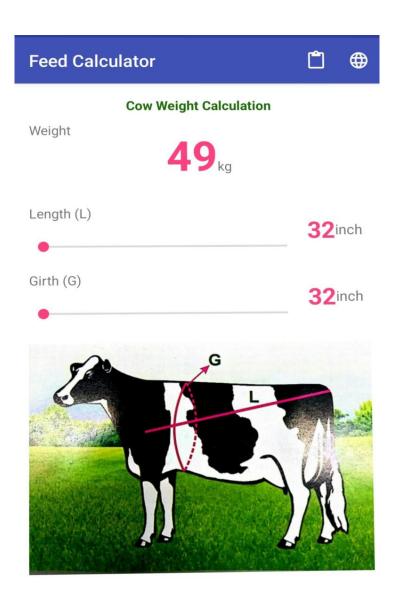Their response has to be recorded regularly on everyday basis.

Any changes or updates required in the application should be then and there communicated to the expert team and it has to be updated.

Status on everyday milk production and daily feed cost have to be obtained and documented on field basis.

EVALUATION

The expense of the farmers towards the feed/ fodder, for every unit of the milk produced, before and after implementing the application, has to be compared and this technology can be further evaluated and expanded over a wider area.

Application Measuring Body weight of Dairy Cow

Application Providing Feed Chart

Feed Chart

Crossbred cow weight **400** kg ▾

Milk yield (lit./day) Fat Percentage - 4.5%

| 6 | 9 | 12 | 15 | **18** |

Green Fodder	18.3 kg/day
Dry Fodder	5.6 kg/day
Concentrated Feed	5.2 kg/day

Concentrated Feed Composition

Maize	1.82 kg/day
Coconut / Sunflower De-Oiled Cake	0.52 kg/day
Soya Bean Meal / Groundnut De-Oiled Cake	1.98 kg/day
Gram Chunnies	0.00 kg/day
De-Oiled Rice Bran	0.73 kg/day