

## Dairy Hub Training Booklets


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# Mechanized Dairy Farming

“Adopt Modern Ways -  
Make your Farm Profitable”



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Dairy Hub is a Community Dairy Development Programme, which has been initiated for the development of small farmers. The aim of this programme is to keep farmers informed about modern ways of dairy farming, to provide practical help for improving their skills and to increase production of their animals. This programme will increase not only the average production of animals but also the income of farmers, and thus decrease considerably the rate of poverty in rural areas. This booklet is a part of this programme.



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We would appreciate your comments

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Yours truly,

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Limited

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Dairy Farming has made considerable progress in Pakistan during the last few years. Yet this progress is not sufficient. We are still far away from our goal. Rearing animals in a traditional way is not very profitable. It can become a very good business if it is run in a proper manner.

When we consider the European system, we know that the basic cause of their progress is the scientific ways that they use for dairy farming. Modern ways means the use of machinery, good fodder for the animals, record-keeping and protection of animals against diseases.

## Feed:

Special attention is given to the feeding of animals. But it is noted that there should be a balance on the expenses on and the yield from the animals. For this, different feed is provided to the lactating and non-lactating animals. But it is ensured that they get feed with balanced nutritious value. Moreover, continuous supply of fodder with standard nutrition should be ensured for better production. That is why silage is used throughout the year. Changes in their feed are made gradually because then they do not realize the change in the taste and effects of the feed. Sudden changes in their feed spoils the animals' digestive system. Apart from silage, hay (dry fodder) too is given to the animals. Concentrates instead of cotton feed is given to them for a balanced diet. All the feed ingredients are present in it. It increase their production. Moreover, different types of minerals are of vital importance for them.



## Modern Machinery for Dairy Farming:

### 1. Fodder Harvesting and Chopping Machines:

Nowadays such machines are available in Pakistan, which not only cut the fodder in the field, but also chop and put it in the trolleys at the same time. Then these trolleys put the chopped fodder in the feeding mangers automatically. Moreover, these machines are used for silage making on a large scale. One machine works as much as 25 to 30 men in a day.

### 2. TMR Wagon:

Fodders of different kinds, concentrates and other ingredients of feed are put into the TMR wagon to make balanced feed for animals. This machine then makes a sort of mixture of all these ingredients. This way the animals get all the nutrients in their feed. As all the ingredients are mixed well in this feed, it becomes easily digestible. The animals eat it with good appetite and their production increases.



### 3. Instruments to save the animals from heat stress:

As high yielding animals are kept in modern dairy farms, arrangements are also made for their comfort and to save them from scorching heat. Special equipment is used for that purpose.

They include strong fountains, ventilators and water-sprinkling equipment. They cause a considerable decrease in the intensity of heat. Nowadays all this equipment is controlled through an automatic system which controls the temperature of the sheds.



#### 4. Milking machines:

Milking machines are being abundantly used in modern dairy farms. These days most modern milking parlors have been fixed there, which milk about 50 animals simultaneously. Medium scale farmers can decrease their expenses as well as increase milk production by using mobile milking machines or the bucket milking system.

#### Selection of animals for modern dairy farming:

It is very important to choose the best breed of dairy animals for successful dairy farming. Forty percent profit depends on the breed of the animals. Animals with less potential cannot give the highest production even if you give them the best feed and other comforts. The below-mentioned points must be taken care of when buying animals for a successful dairy farm:

1. An authentic record of the animals milk production
2. Ability to get pregnant soon after giving birth to a calf
3. Minimum calving interval
4. Long lactation length
5. Early puberty
6. Animals must be disease free, especially udder structure should be balanced

### Protection against diseases:

A good dairy farm is recognized by minimum number of sick animals. The animals should be neat and clean. Their sheds are regularly cleaned, and they should be vaccinated and de-wormed regularly. As many diseases spread when enough feed is not given to animals, it is important to give full attention to the quality of their feed. By safeguarding animals against diseases we can increase their milk production and also save a huge amount of money that we might have to spend on the treatment of these diseases.



### Record Keeping of the Dairy Farm:

A modern successful dairy farming is possible only if we keep an up-to-date record of its expenses and income. Unfortunately in Pakistan there is no trend of keeping a record of dairy farms. This is the reason that dairy farming has not become a success story so far. We cannot know our losses if we do not maintain a record of our expenses and income. Recording keeping tells us which of the animals are giving more production and profit and which of them are giving less production and profit. That is why the animals are tagged, which bears the animals identity number. The entire record of that animal is then maintained in a register or in a computer software. This way, we know the production of every animal. Moreover, a record of all the expenses on the machinery and the feed in the farm is easily maintained.

### Better Management:

It is important to rear the animals well and to provide them a clean and comfortable shelter, where they can eat and drink well and walk and ruminate freely.

It is observed that the milk-giving ability of the animals decreases considerably when many animals are kept in a congested place. But if a better environment is provided, their production increases. It is also necessary to make proper arrangements to protect the animals from heat and cold. It is observed that milk production decreases by 20-30% during the very hot season. Similarly, if the building of the farm is not comfortable, the animal eats less and becomes a prey to different diseases easily.

In a modern dairy farm, the animals are untied, so they not only move freely but they are also provided clean and fresh water all the time. Being untied, they eat according to their need , which positively affects their health and production.



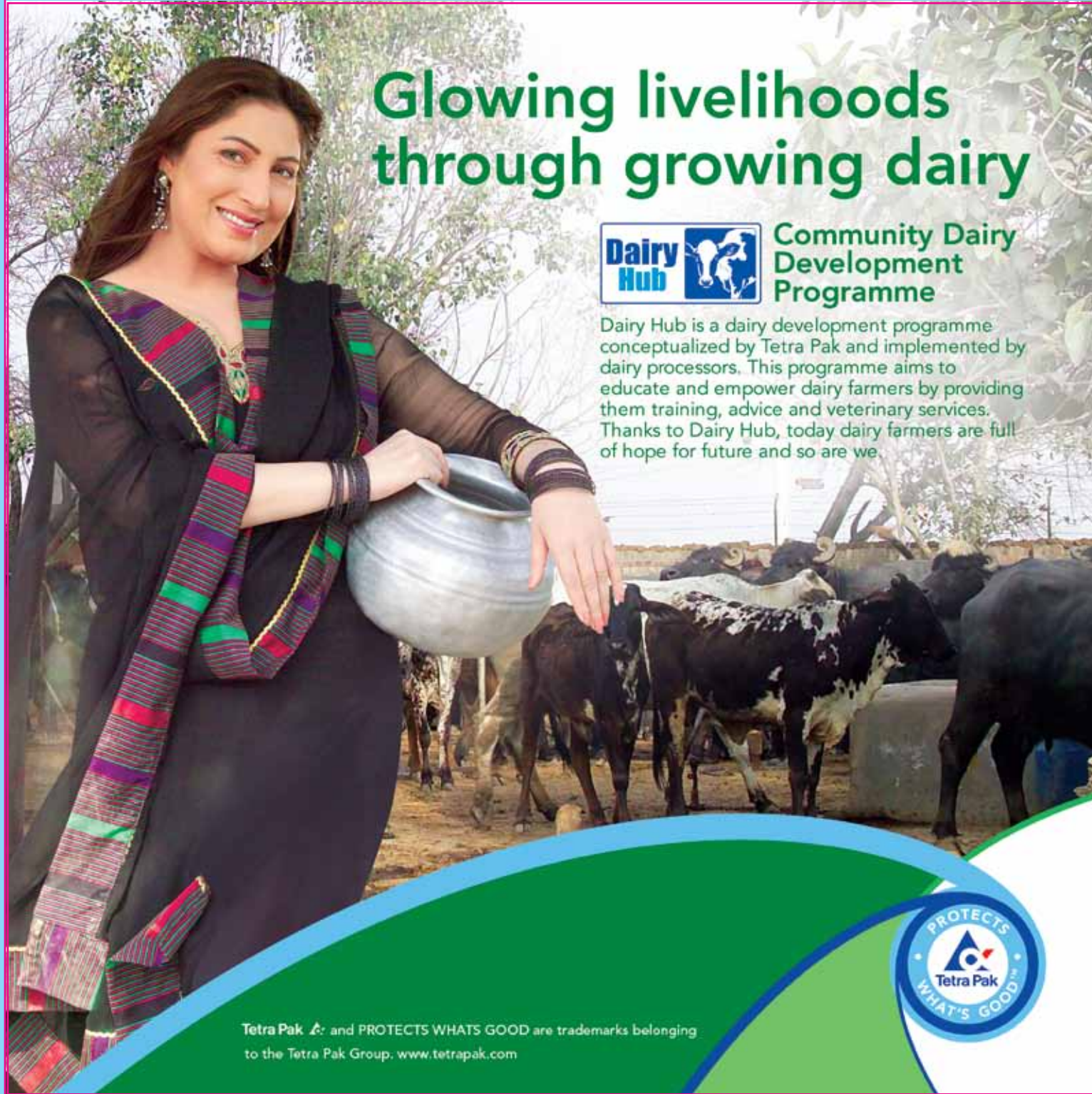


# Glowing livelihoods through growing dairy



## Community Dairy Development Programme

Dairy Hub is a dairy development programme conceptualized by Tetra Pak and implemented by dairy processors. This programme aims to educate and empower dairy farmers by providing them training, advice and veterinary services. Thanks to Dairy Hub, today dairy farmers are full of hope for future and so are we.



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Dairy Hub is an important step by Tetra Pak towards the well-being of dairy farmers. It will certainly open new vistas of progress for dairy farmers. I congratulate Tetra Pak on the opening of a new era for the prosperity of dairy farmers. All these training booklets are a part of this developmental programme and they have been written specially for the help and guidance of dairy farmers.

Based on various topics, these training booklets contain important pieces of information and suggestions which will help the farmers in better rearing of their animals, protecting them from different diseases and to increase their milk production.

I do hope that this effort by Tetra Pak will be useful for the prosperity of the farmers and help them solve their problems regarding health of their animals.

*Talat*

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