

Dairy Hub Training Booklets


Titles

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| 2) Fodder | 10) Calf Rearing |
| 3) Wheat Straw Enrichment | 11) Diseases and Health |
| 4) Silage (Fodder Pickle) | 12) Mastitis |
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| 6) Balanced Ration | 14) Mechanized Dairy Farming |
| 7) Dairy Farming as an Enterprise/Business | 15) Vaccination |
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Diseases and Health

“Healthy Animals - Prosperous Farmers”



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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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Healthy animals are essential for obtaining better production. For this, the farmer must know how to rear them, the causes of common diseases and how to protect them from diseases. It is common practice that farmers pay more attention to cash crops than to animals. That is why animals are victimized by many contagious and non contagious diseases. The common causes of disease include lack of balanced feed, neglecting vaccination and not maintaining a hygienic environment.



The diseases usually found in dairy animals are :

- HS (Hemorrhagic Septicemia)
- Foot and Mouth Disease
- Black Quarter
- Mastitis
- Prolapse
- Milk Fever
- Red Water
- Indigestion/Tympany
- Tick Fever



Infectious Diseases:

- Foot and Mouth Disease
- HS
- Black Quarter
- Mastitis
- Tick Fever

Non Infectious Diseases:

Non infectious diseases are caused by the lack of balanced feed and deficiency of essential minerals.

They include:

- Milk Fever
- Red Water
- Prolapse
- Indigestion/Tympany

Foot and Mouth Disease (FMD):

Foot and Mouth Disease is the most dangerous contagious disease. It not only decreases milk production in the animal but also adversely affects its overall health, thus causing economic loss to farmers.

Symptoms:

The symptoms of foot and mouth disease include:

1. High fever
2. Decrease in milk production
3. Blisters in the mouth, hooves and udder
4. Frothing from the mouth
5. Lameness due to blisters between the hooves
6. Loss of appetite

Transmission of FMD

This disease spreads because of a special kind of virus which is secreted through animal faeces and body secretions e.g. mouth froth, its milk and the pus in their blisters. The virus of this disease is also transferred from animal to animal and from one shed to the other, and it can travel even miles through air. It spreads very quickly from affected animals, especially if there is high humidity (the rate of moisture in the air). This virus may attack healthy animals too if they share feed or are kept with affected animals. Cross bred animals are more prone to this disease than indigenous ones. It also spreads during the transportation of affected animals.

Prevention of FMD:

1. Regularly vaccinate your animals against FMD, usually twice a year – in February-March and September-October.
2. If any animal is suffering from this disease, isolate it from the healthy animals immediately. Also separate its feed and milking from other animals.
3. In case there is an outbreak of FMD in any area, don't send your animals there for grazing and any common pond in that area.
4. When purchasing a new animal, ensure that it is not suffering from foot and mouth disease, and isolate it from the other animals for 21 days, to observe if it is free from FMD.
5. Pay special attention to shed hygiene and sanitation.

Treatment of FMD:

- Wash the hooves and mouth of affected animal with a mixture of 1 percent potassium permanganate, or apply boric acid or glycerin on blisters and lesions.
- Feed the affected animals with soft and easily digestible foods, and isolate them from healthy animals, to check the transfer of disease.

- Arrange feeding and water for the affected animals away from other healthy animals so that this disease does not spread to others.
- If possible, let the affected animals walk on warm sand. Consult the veterinary doctor if the animal is off feed or if it is suffering from high fever.

Haemorrhagic Septicemia (HS):

In our country, this disease usually affects animals in the plains near rivers and in those areas where the water level below the earth is high. Moreover, animals are more prone to it when their temperature is low during the rainy season or in those areas where the immunity of the animals is weakened after a drought in hot and arid places.

How does HS spread?

This disease usually attacks calves below the age of two years. It causes death of the animal if appropriate treatment is not administered on time. This disease is a major cause of financial loss to farmers.

HS spreads from a special microbe (bacterium) which is usually present in the body of the animal. It gets a chance to attack the animals when their immunity is low due to shortage of food or due to extreme weather conditions like very hot or very cold climate.

Symptoms:

These symptoms appear in this disease:

1. Swelling of the throat and tongue
2. Blue colour of the tongue
3. High fever and frothing from the mouth
4. Difficulty in breathing due to intense swelling of the throat and peculiar sounds from the throat
5. The animals may die quickly due to choking if no immediate and proper treatment is administered.

Precautions:

- Get your animals vaccinated against this disease twice a year – in May-June and November-December.
- Keep the animals' sheds clean and spray limestone powder in it from time to time.
- Keep the affected animals away from healthy animals and feed them easily digestible fodder.
- Pour water on the animal's head in case of high fever and consult the doctor without delay.

Note: Remember! Delay in treatment can cause the death of the animal and financial loss for you.

3 - Black Quarter:

This disease is found usually in the hilly areas, but it also spreads to the animals of the plains through transportation of sick animals. It may cause the death of the animal if not treated promptly.

Symptoms:

1. Swelling on the shoulder
2. Heat in the swollen part of the body
3. Pain and a peculiar sound if the shoulder is pressed
4. Limping

Prevention:

- Sheds and mangers of the animals should be regularly cleaned.
- Isolate newly bought animals from the rest of the herd for 15 days and get them vaccinated.
- Keep affected animals away from healthy animals.

Harm caused by Ticks and its prevention:

Ticks make an animal's life miserable. They suck the blood of the animals, cause a variety of diseases and even endanger their lives. They also cause a considerable loss of milk and meat production.

In Pakistan, the most suitable time for the growth of ticks is from February to October.

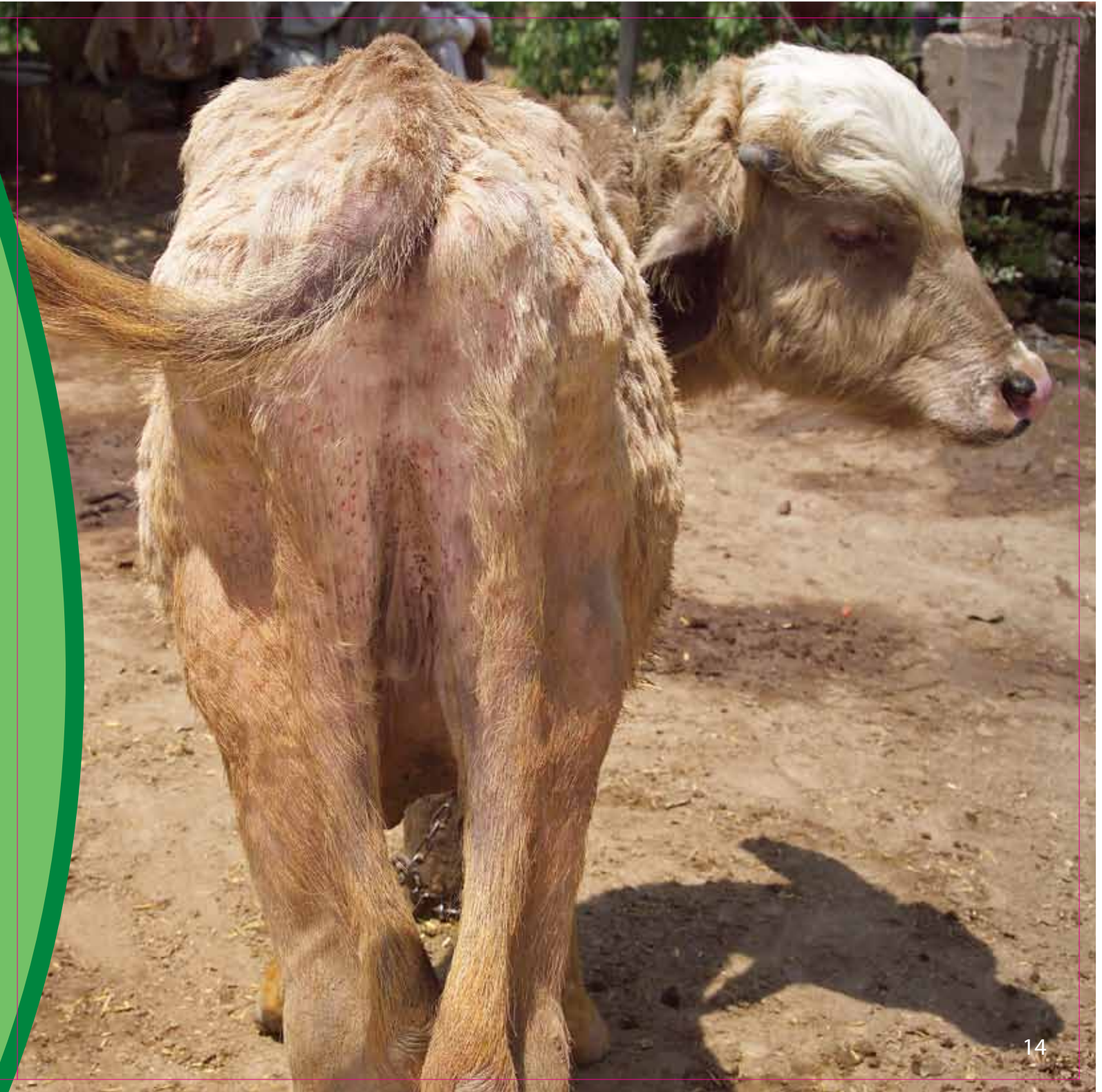
Diseases due to ticks:

The diseases spread amongst animals due to ticks include:

- Tick fever
- Hepatitis

Both are fatal diseases which weaken the animal and cause its death.

Cross-bred animals are more prone to diseases caused by ticks, especially younger calves. Special care should be taken to protect them.



Precautions:

As ticks are found in several areas around the farm or shed, barks of trees, cracks in walls and mangers and piles of wood, these cracks should be closed, farms and sheds should be kept clean and limestone powder should be sprayed in the shed every fortnight to stop the growth of ticks.

Our farmers sometimes take precautions to kill the ticks, but they do not get rid of the breeding places of ticks. So they re-populate to attack the animals again. It is important not only to safeguard the animals but also their sheds.

Treatment:

- If ticks are found on animals, kill them with insect spray according to the advice of the doctor.
- Spray the body parts between legs and udder of the animals. Take care to protect the animals' mouth and eyes from the medicine. The animals should not be able to lick it from their body.
- If there are ticks at the farm, spray the premises every 21 days till the farm and the animals are completely get rid of them.

5. Prolapse:

This disease is more prevalent in buffaloes than in cows. It attacks the calf before or soon after its birth. In the case of prolapse, its germs attack the animal through dirt (mud), dung and dust. If the animal is pregnant, it becomes restless or miscarries/aborts. Treatment requires a long time.

Precautions:

- Do not let dogs, cats and chickens come near the animal which is suffering from prolapse.
- Tie the calf in front of its mother.
- Cover the prolapse with a clean piece of cloth.
- Use clean water, soap and towel when treating the prolapse.
- Give water more frequently to animals if they are suffering from prolapse.
- Stand the animal on a place when its fore part is lower from its hind part.
- Do not get the animal treated by a quack. Consult an expert veterinary doctor only.

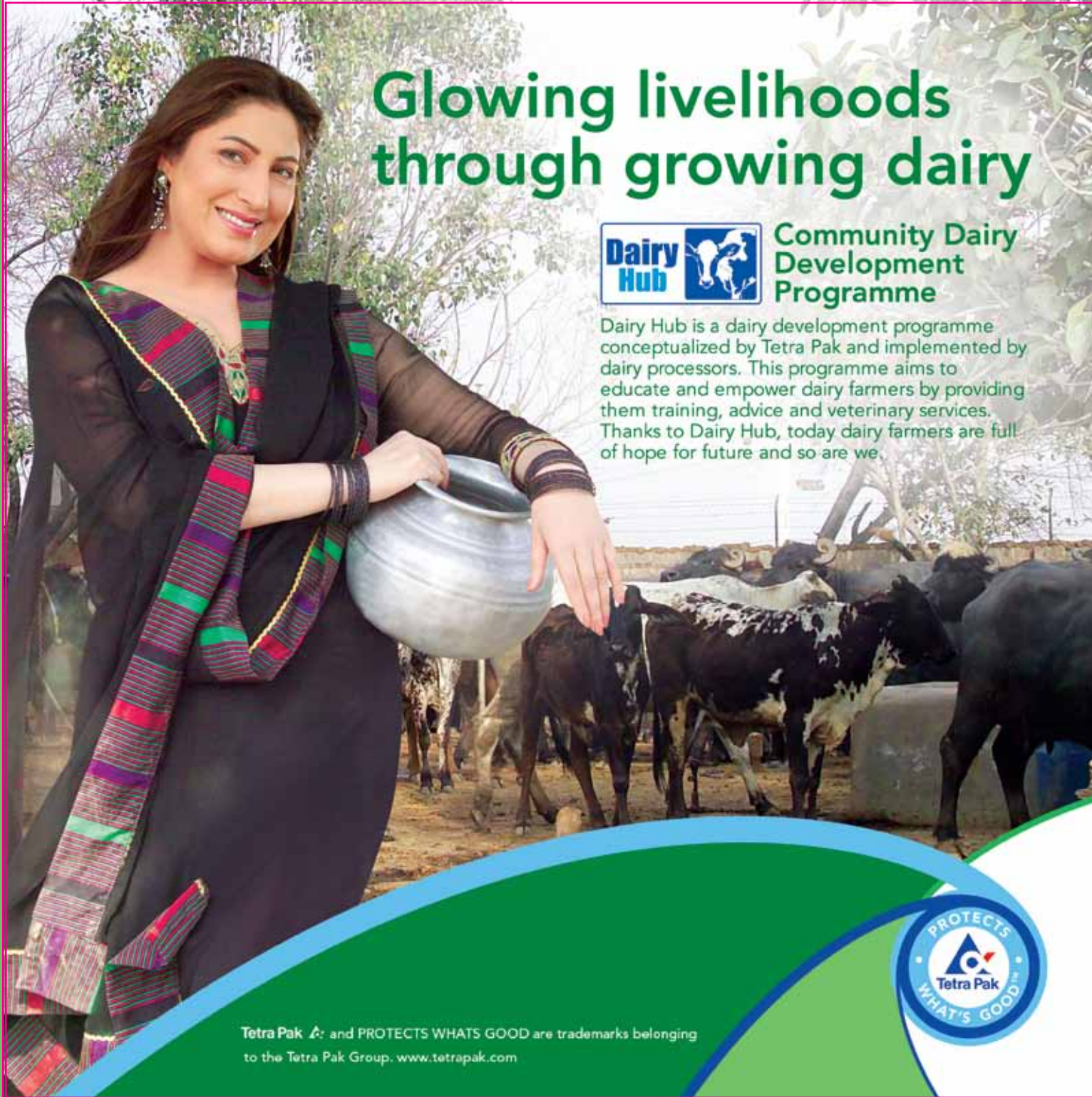


Glowing livelihoods through growing dairy



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.

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