

Dairy Hub Training Booklets

Titles

- | | |
|--|------------------------------|
| 1) Importance of Water | 9) Breeding |
| 2) Fodder | 10) Calf Rearing |
| 3) Wheat Straw Enrichment | 11) Diseases and Health |
| 4) Silage (Fodder Pickle) | 12) Mastitis |
| 5) Hay Making | 13) De - Worming |
| 6) Balanced Ration | 14) Mechanized Dairy Farming |
| 7) Dairy Farming as an Enterprise/Business | 15) Vaccination |
| 8) Heat Stress | |

Heat Stress

“Protection from Heat Stress
Better Health - More Production”



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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.



Yours truly,

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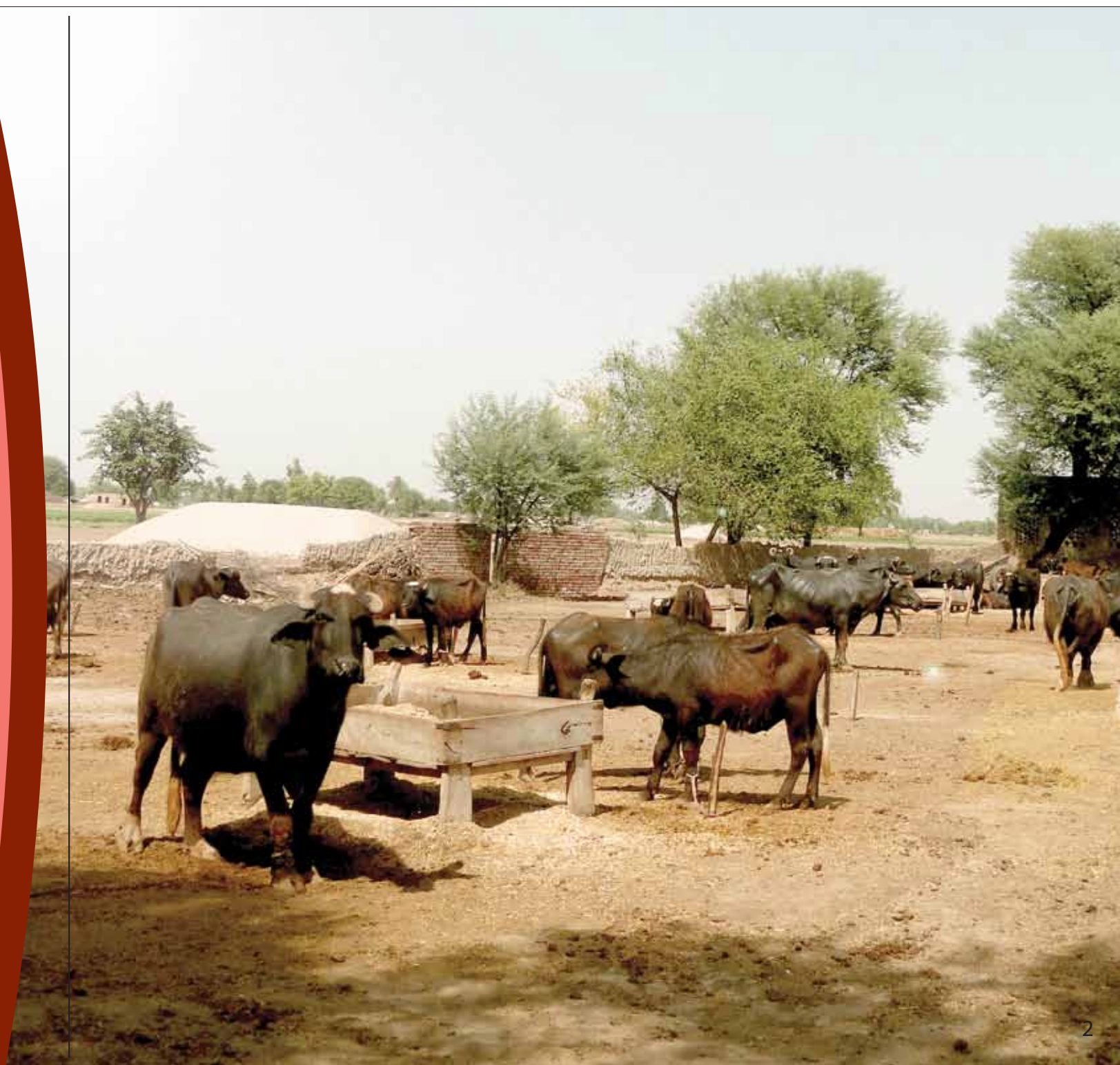
Design agency:
Red Communication Arts

Printer:
Vantage Printers

Feedback
We would appreciate your comments
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Intense weather conditions (intense heat and intense cold) adversely affect the animals' health and production of milk and meat. In Pakistan, especially in the Punjab, it is the intense heat which has a bad effect on their health and production. In the summer, they face the shortage of fodder. Moreover, the traditional practices of animal rearing like tying up the animals, not offering enough water, lack of shade in the farm affects not only production of animals but also causes extreme stress on them which is why milk production in the summer season sometimes decreases up to 30 percent.



Signs of animals affected by Heat Stress:

- Fast breathing with open mouth
- Drinking water again and again
- Loss of appetite
- Dribbling
- Body temperature increases in day time
- Loose motions because of acidity in the stomach

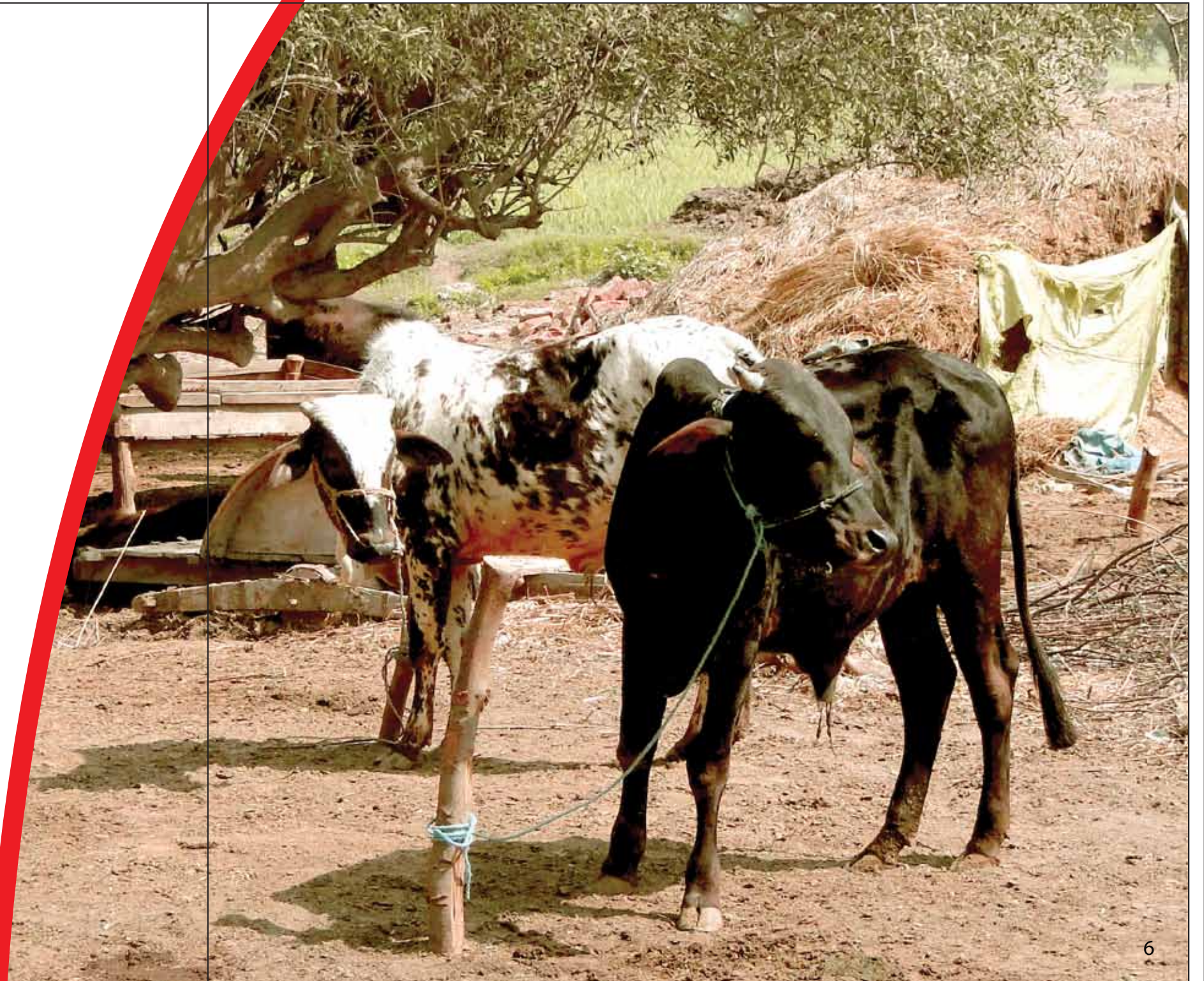


Effects of Heat Stress:

- Significant decrease in milk production
- The animal does not show heat signs, and even if it comes in heat, it does not conceive upon insemination/mating
- Heat Stress on the pregnant animal adversely affects the growth of the unborn baby calf and decreases the milk production in the forthcoming lactation
- The calves do not eat much and thus their weight decreases

It is usually observed that:

- The animals are tied up in the sunshine
- They are given water once or twice only in a day
- Fodder is given to them even at noontime



Remember!

- The most suitable temperature for animals is 8°-15°C, but they can tolerate temperatures from 16° to 34°C if the humidity is not too high
- Temperatures higher than 35°C have an adverse effect on them
- More heat and high humidity in the months of July and August exacerbate this situation
- If no steps are taken to solve these problems, the production of the animals decreases considerably

What is the Solution?

1. Keep the animals in a shady place
2. Availability of fresh water for the animals at all times
3. Bathe the animals again and again. But give them more air from a fan rather than bathing them, in case of high humidity
4. Graze them when the weather is cool
5. Change feeding timings for animals in the summer season

These are important recommendations from experts:

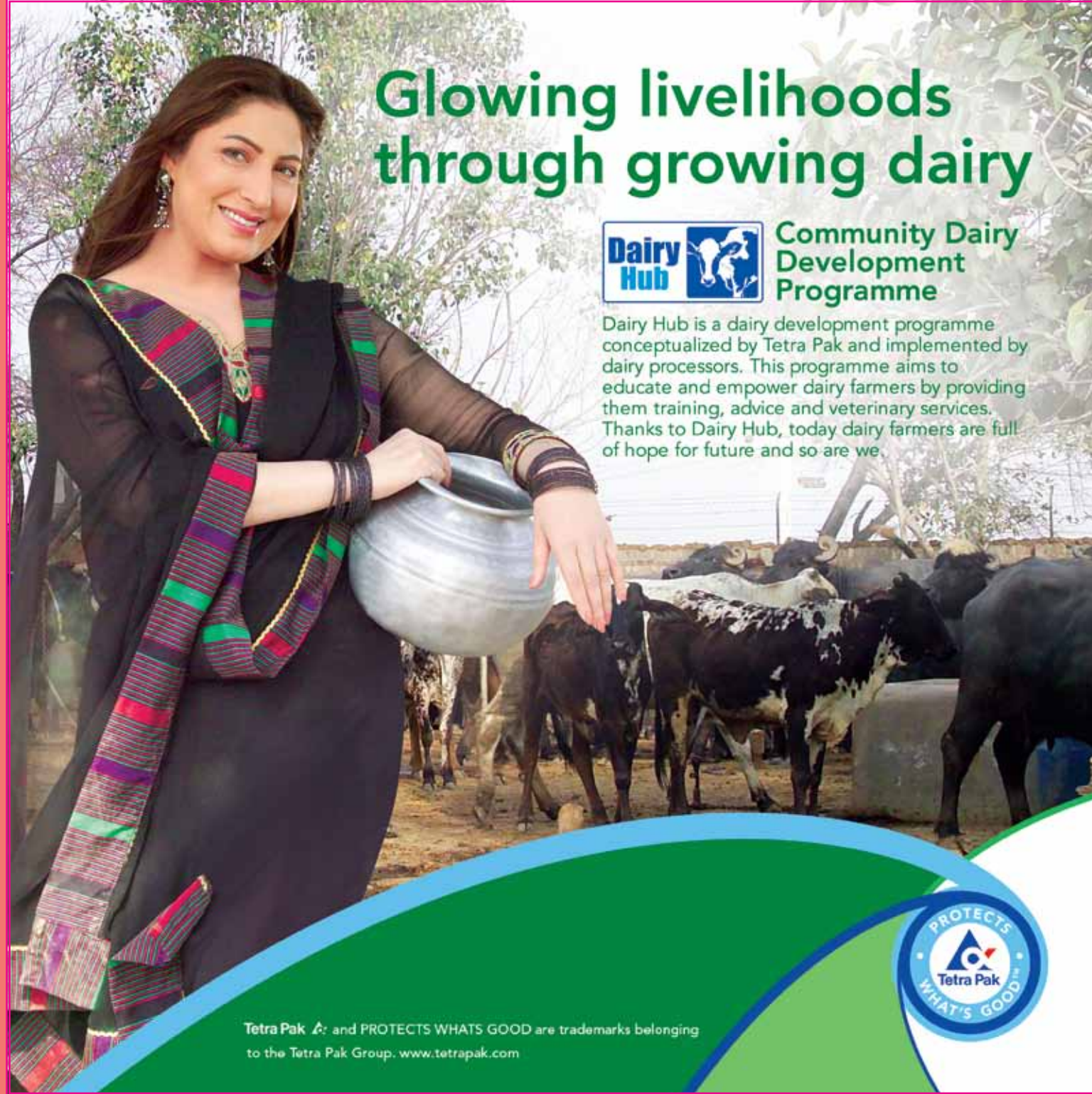
- i. Feed animals at night during summer
- ii. Give them easily digestible fodder of good quality
- iii. Increase the ration/quantity of green fodder
- iv. Give them mineral mixture regularly. Put lumps of salt in their mangers
- v. If the animals are tied in one place, give them water at least five times a day.
- vi. Mix 100 grams sodium bicarbonate in their fodder. It decreases the adverse effects of heat
- vii. Give them 100 gram oil daily

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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