

## **Paper 49**

### **Dairy Goat – A Potential Candidate for the Dairy Science Park Peshawar, Pakistan**

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## **Introduction**

Pakistan has been blessed with rich livestock resources. Cattle, buffaloes, sheep and goats are major food animals producing 46.4 billion kg milk and 3.1 billion kg meat, at a value of US\$ 28.5 billion per annum. The population of the four species of animals showed respective growth of 141, 143, 61 and 269%, with goats recording the highest growth rate, reaching the present population of 158 million heads (Economic Survey, 2011) (Figure 1). The distribution of the goat population in the provinces of Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan and Northern Areas (+FATA), is 39.5, 21.7, 13.5, 22.4 and 2.8%, respectively. Goats and sheep contribute a significant share (19%) of meat produced in the country (Figure 2). The Khyber Pakhtunkhwa, the Northern Province of Pakistan with its arid and hilly nature inhabits majority of the small ruminants. These animals are kept by the farmers on small scale under extensive farming system. Sheep and goats, being small-sized ruminants, are capable of integrating into the dissimilar socio-economic situations that is prevailing in Pakistan.

## **Potential**

Pakistan has several goat breeds (Khan et al., 2003). Beetal goat is the most popular milk breed, found in the central Punjab, possessing a massive head, Roman nose, long, broad and pendulous ears, well-developed udder and long teats. Milk yield of Beetal goats has been recorded at 190 L in 150-day lactation period. The goat is fertile with more than 50% twinning or triplet births. Male Beetal goats having body weights of 70 to 80 kg are being raised especially for sacrifice on Eid-ul-Azha. Dera Din Panah goat is found in Muzaffargarh and Multan Districts. It has a large head and Roman nose. Milk yield has been recorded at 160 L in 150-day lactation period. Twin births are common in this breed. Hairy goat is a milk breed while Kajli (Pahari) goat is a meat breed of Southern Punjab. Nachi and Pothowari goats are meat breeds of Southern and Teddy is of the Northern Punjab. In the Sindh province, Chappar, Bari, Bugri, Tapri and Desi meat breeds and Jattan, Kamori and Pateri milk breeds are found. Damani is a dual purpose while Gaddi and Kaghani are meat breeds of the Khyber Pakhtunkhwa province. In Baluchistan, Kurasani goat is a dual purpose breed and Lehri is a meat breed.

Goats survive well under the rural environment. They are acclimatised to the diverse agro-climatic conditions and manifest higher fertility and short generation interval, and thus are the animal of farmers' choice. Because of their low maintenance cost, quick return on capital and low capital investment risk, goats are ideally suited for the poor rural folk

especially the marginal and landless labourers. To cut cost of production, goats are usually taken care by engaging family members, especially children and women.

## Opportunities and challenges

Goats are spread throughout the four provinces of Pakistan. This animal has the highest growth rate among food animals, thus goat rearing is a profitable enterprise for the local community. Goats are preferred over sheep due to its higher fertility rates and tasty mutton. The price of goat meat is also higher than beef or poultry providing goat farmers with good income.

The federal government of Pakistan is presently executing several projects in livestock sector at an estimated cost of Rs 8.8 billion (Economic Survey, 2011). These projects focus on promoting milk and meat production/marketing; strengthening of extension services and delivery system to livestock farmers; prevention and control of livestock and poultry diseases; up-gradation of animal quarantine services and provision of veterinary services at farmer's door step. During the 2009 to 2010 period, technical and financial assistance were provided to farmers, totaling 13,171 fattening operations involving 381 678 animals under the Meat Development Project. Goat has been an important species of these development programmes.

The International Workshop on Dairy Science Park was held at the Agricultural University Peshawar (Qureshi et al., 2011). The conference was attended by more than 450 delegates from all the four provinces of the country belonging to a variety of segments of the society. Various activities have been proposed for productivity enhancement and industrial applications.

Some projects have been identified for implementation at Agricultural University Peshawar. Besides the support already provided to the Faculty of Animal Husbandry and Veterinary Sciences, this University is also willing to sponsor some additional activities. It provides a liaison office to The Khyber Pakhtunkhwa Chamber of Commerce and Industry for supporting commercially viable projects. The provincial government and other local and international donors are expected to sponsor some viable projects. Goats are being considered as small enterprises targeted at self employment, food security and export to the Halal food market. Local and international investors are being invited to establish partnership with the Dairy Science Park.

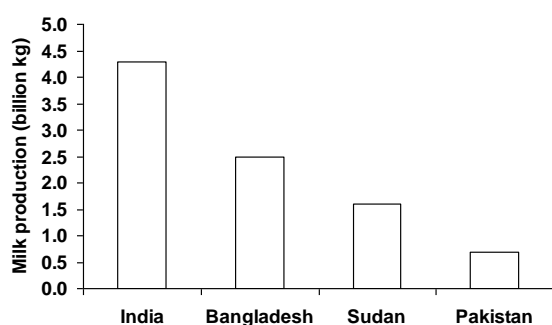


Figure 1. Pakistan's ranking in goat milk production

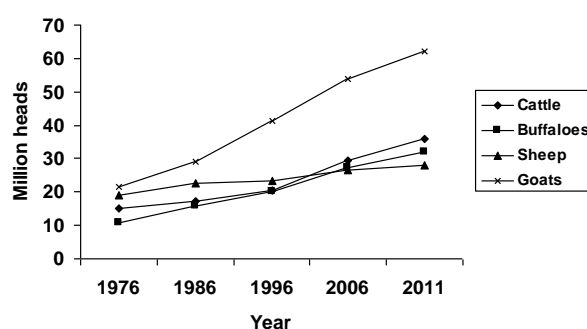


Figure 2. Change in livestock population

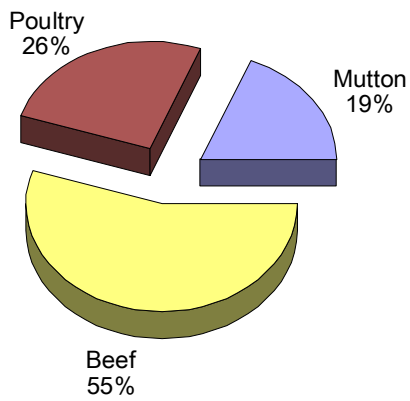


Figure 3. Meat production by food animals

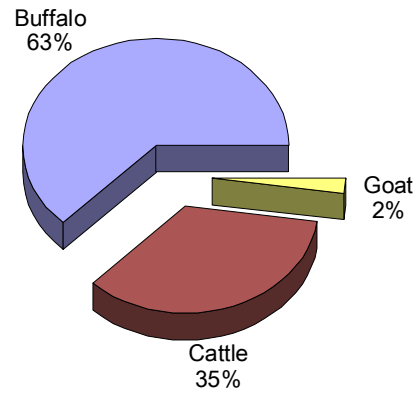


Figure 4. Milk production by food animals

## References

Economic Survey, 2011. Government of Pakistan, Economic Affairs Division, Islamabad.

Khan, B.B., A. Iqbal and M.I. Mustafa, 2003. Sheep and goat. Production. Department of Livestock Management, University of Agriculture Faisalabad.

Qureshi, M.S., 2011. Proceedings, International Workshop on Dairy Science Park - Peshawar - Nov 21–23. Managing editor. Agricultural University, Peshawar, Pakistan.