

## Conservation of animal genetic resources

## K.Anilkumar

normous wealth in ∡genetic resources of domestic animals is one of the pillars of the national livestock sector. emphasis for more milk production coupled with the fast mechanization leads to depletion of these resources. This in turn necessitates the need for conservation of the domestic animal diversity.

Even in a small state like where animal husbandry was a subsidiary occupation, at least four genetic groups of animals could be identified. But the present economical position of the state or the country does not provide the needed inputs for conserving these animals. Hence the question is why should we conserve the animals with the capacity to produce only 2 liters of milk a day.

**Objectives** 

1. Economic potential in a particular ecological niche

The best example of such a group is the Indian dairy breeds like Sahiwal, Sindhi and Gir. They have the potential to sustain themselves economically with their milk production

2. Genetic insurance

It is a needed objective. With the crossbreeding policy, the local genetic resources are getting eroded. This can lead to irrecoverable loss of the genotypes. The newly introduced animals

may not be adaptable to the climatic and management conditions. Hence we should conserve the local animals as a genetic insurance against future calamities.

3. Ethical and cultural requirements

The local animals are closely knitted with the traditions and lives of the people who rear them. For example the Toda buffaloes have a role in almost all the social activities of the Toda tribe who maintains

- 4. Demonstrate the national pride in preserving samples of indigenous or native cattle breeds that may not be of commercial value.
  - 5. Environmental considerations

The ability of the Indian farmers to maintain huge number of livestock without the adequate supply of feed and fodder is a conundrum for the foreign scientists. The role played by these animals whose dung acts as a source of organic manure and fuel, the animals as a eco-friendly machine for farm operations and milk as a source of nutrition for the young is to be lauded.

6. As a source of unique characters possessed by the breed

Many of the breeds of animals have its own unique characters that may be of some commercial value. The Badavari buffaloes with high fat content of milk, Garole sheep with the ability to thrive in saline water, Bengal goats with high prolificacy and the Vechur cattle with its short stature are some of the examples.

7. Health of consumers of animal products

Acceptance of milk as a complete food even by the ancient Hindu sadhus has given the animal and its products a divine stature.

8. Research and development requirements

The ever growing science and its tools necessitates the presence of as many diverse animals as possible. Moreover the possibility of isolating and using the useful genes or genetic material in future is a reality now.

## Types of conservation

In general the whole conservation efforts can be classified as invivo conservation in which the conservation is done at the breeding tract of the breed

Carried over to page 29

Dr.K.Anilkumar Assistant Professor, Department of Animal Breeding and Genetics College of Veterinary and Animal Sciences Mannuthy