

## **A preliminary investigation on the diversity among farm animals in Pussellawa area**

Biodiversity among farm animals is an important measurement to assess the value of animal genetic resources and its sustainability. There is little information available regarding farm animal biodiversity in Sri Lanka. The present study was carried out with the objective of investigating the existing level of biodiversity in farm animals in a selected area as a case study.

A survey was carried out at Doragala area in Pussellawa. Cattle, goat and poultry species were included in this study. Data collection was carried out by multiple visits to farms during the study period. Information regarding body parameters, breed characters, production data, breeding methods, purpose of rearing, management systems and feeding system were collected.

The Doragala gramasevaka area covers about 18 km<sup>2</sup> of land comprised with 10 villages with 660 families. The human population is about 2498 in this area. 19.3% of farm families engaged in livestock production and 88.6% of them reared only cattle. Only 7.4% of farmers kept both male and female in the farmyards. The purpose of rearing cattle was for milk and meat production and for breeding, goats were mainly used for meat production and breeding purpose, poultry was used for meat and egg production.

100% of cattle found in the area were European crosses. Seven crosses were identified and their proportional representation in the cattle population of the area as follows; 42.5% Friesian crosses, 12.6% Jersey crosses, 14% Jersey . Friesian, 11.9% Friesian . Shaiwal (AFS), 14.7% Ayrshire crosses, 1.5% Ayrshire . Jersey and 2.8% Ayrshire . Friesian. Variations in body colour and pattern, body size, horn type and udder size could be seen within the crosses. Production parameters such as calving interval, lactation period and milk yields were also varied widely within and between the crosses. Goats found in the area were 55% local breeds, 35% Sannan crosses, 5 % Jamnapari and 5% Boer crosses. Variation in certain phenotypic characters could be observed among goat populations. Poultry population in the area consisted of widespread village chicken and a commercial flock of Shever. The result of this preliminary investigation revealed that an existence of high level of diversity within the farm animal species in Pussellawa area.