

PRESENT STATUS OF GOAT AND PONY GENETIC RESOURCES IN DELFT ISLAND IN JAFFNA PENINSULA OF SRI LANKA

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A study was conducted to find the phenotypic characteristics of Delft goats and ponies, and their status in terms of production and management system. A total of 63 and 24 households rearing goats and ponies, respectively, were surveyed and the information on management aspects, breed characteristics, socio economic status and behavior of the animals were collected using a pre-tested structured questionnaire. The data were analyzed using descriptive statistics, using Statistical Package for Social Sciences (SPSS version 14) and analysis of variance was performed using SAS 9.1.3. The results revealed that livestock farming is more concentrated towards the west part of the Delft Island where the environment and the resource levels are conducive for farming. Contribution of Delft goat farming to the total earning of the farm mainly comes through the sales of animals, and it ranges from 10 - 90% reflecting a high variation in economic scale of farming. Grazing is the main type of feeding method (>60%) practiced by farmers during both wet and dry seasons. Most of the farmers (79.4%) did not provide housing to goats during the dry season. The average flock size of the Delft goat is 17.8 and the male:female ratio is 1:7. Delft goats are small to medium in size with an angular shaped body. The predominant colours are black, brown and white, and the mean heights at withers of buck and does were 62.72 ± 4.42 and 63.42 ± 4.12 cm, respectively. The color and appearance of brown goat are similar to the description of the extinct goat breed called "Akyub".

The ponies inhabited in the Delft Island are mostly in the wild or feral, and only some are domesticated mainly to get a help in other livestock activities such as herding cattle and goats. Snare loop capturing is the most common method used in catching ponies from the wild, and branding is the usual method for identification. Special management practices not are adopted by farmers for ponies under captivity. Behavior and social groups of feral ponies include harem, one mature male with females and adult males groups. Ponies are small in size compared to the similar populations in the world, and with angular body. Predominant colours are black, golden brown and reddish brown. The mean height at withers for these three colour categories are 114.75 ± 8.81 , 116.2 ± 5.45 , 112.10 ± 6.51 cm, respectively, and showed no significant difference ($p>0.05$) in body parameters. Environmental threats and scarcity of resources are the main causes for reduction in the populations of both Delft goat and pony populations. Accordingly, the goats and ponies in Delft Island are found to be unique genetic resources, and their population dynamics and breeding management indicate the need for conservation.