

D-01: Status of terrestrial fauna in the proposed Kukule Ganga hydropower project area

H D V S Vattala

(Dept of Wildlife Conservation, Battaramulla)

This study was conducted from September 1991 to March 1993 to assess the impact of the proposed hydropower project on terrestrial fauna.

Five different habitats were selected within the project area: dense forest, open forest, grassland, paddy and homesteads. Line transects were conducted in all habitat types and mammals, birds, reptiles, amphibians, snails and butterflies seen and calls identified were recorded.

In the project area, 17 mammal species (excluding small mammals such as shrews, mice, rats and bats) were recorded in the course of field investigations. Most mammals inhabited dense and open forest. Two endemic species (*Macaca sinica* - Toque Macaque and *Presbytis senex* - Western purple faced leaf monkey) were found in dense and open forest.

81 birds species were identified during the survey in the project area. 8 of the endemic species found were also listed as threatened. The highest number of bird species was recorded from open forest, followed by homesteads, dense forest, paddy land and grassland in that order.

For reptiles 4 serpentoids and 7 tetrapoids were recorded in the project area. Of the serpentoid reptiles *Balanophis ceylonensis* (Blossom krait) and *Trimeresurus trionocephalus* (Green pit viper) are not only endemic but also threatened. Three species of endemic tetrapod reptiles were also observed: *Cetratophora aspera* (Rough nosed horned lizards), *Otocryptis weigmanni* (Earless lizard) and *Nesia burtoni* (Three toed snake skink).

Of the 38 amphibians found in the country 7 were observed in the project area. Of these, 3 are endemic species, namely, *Bufo Kelaarti* (Kelaart's toad), *Rana corrugata* (Corrugated frog) and *Rana aurantiaca* (Lesser wood frog). They are also threatened.

Highest number of species was recorded from the dense and open forests. An equally high number of species was observed in the homesteads. This is to be accounted for by the large number of trees found there which form a suitable

secondary habitat for many species. Paddy fields and grasslands are of comparatively minor significance. It is clear that for purposes of conserving terrestrial fauna, dense and open forests are the most important habitats. Degradation of forest will lead to the loss of species, and mainly to the loss of endemic and threatened species.