ABSTRACT

The study was taken up to expose the existing status of the man-nature interaction and livelihood strategies of the tribals of Idukki District, Kerala with an aim to reveal the environmental sustainability of their life pattern. The major part of the study was done on the Muthuva community, the prominent forest dwelling tribals. The hamlets (kudis) were categorised into three zones (zone 1, 2, and 3) from the interior to the periphery. The study involved extensive field visits and interaction with the tribal communities in different hamlets. Information was also gathered from secondary sources like Government documents, local bodies, public health centres etc. Primary data generated through surveys were analysed to assess the existing demographic and related aspects. To evaluate the existing tribal situations Fuzzy theory was applied as a mathematical tool.

It was found from the study that the tribals still maintain the tradition of conserving the natural resources in the forests. They are found to be aware of the fact that their health and welfare are intimately linked to the state of the forest environment. They exhibit characteristic population features related to sex ratio, literacy rate, work habits, food habits, consumption pattern, agricultural activities, political awareness etc. Many of the life style diseases that are common in other communities are found rare or absent among tribal community. Tribal culture is found instrumental to the conservation and protection of the forest ecosystem. It is found that Fuzzy theory can be applied for evaluation of tribal welfare and management programmes. Management strategies and welfare schemes have to be implemented cautiously conserving their traditional life style, values and ethics with a view to help continue their nature friendly healthy sustainable practices.

**Key words:** Tribes of Idukki, conservation of forest, tribal sustainable practices, tribal welfare.