Geospatial Analysis of Land Cover and Land Use Changes of the Surrounding Area of Wilpaththu National Park

D. S. Udatiyawala, R.M. K. Ratnayake University of Sri Jayawardenepura dhanushkasenaa@gmail.com

Sri Lankan land cover takes different forms. It has a natural land cover and the use of land has been changed over the time. It is very significant with the nationally recognized and well-known gardens, sanctuaries and parks. A land cover is a land area covered with grass, trees bare lands water etc. The land cover use of different purposes by people, it is a land use. Wilpaththu sanctuary is one of the famous and oldest natural parks in Sri Lanka, which is located in the North western coastal area of dry zone of Sri Lanka. At present as well as over the war during 30 years some of the issues arise regarding land cover changes of Wilpaththu. The objective of this research was to identify the fact whether Willpaththu forest cover is being cleared by humans after the war or whether it was reforested naturally during the war season widening the boarders and now the reforested boarders of the Wilpaththu forest area are cleared and resettled. In conducting the research, secondary data such as Topo sheets, satellite images, metric map of Sri Lanka (1:50000) and google images were used to identify the changes of the land cover and the land use. This study focused on the causes influenced for the changes occurred in the Wilpaththu land cover and land use. Though the currently operating multi-purpose development projects are being monitored and carried out as per the implemented Sri Lankan laws and regulations, the presentation of environmental reports on the effect on the bio diversity and the natural environment. It was discovered that the personal favors, government policies, decision on development projects have affected for the massive clearing. Since 2011, deforestation has been taking place within the boundaries of the Maraichukkaddi-Karadikkuli (Kallaru Forest), Vilaththikulam and Veppal Forest Reserves, with land being cleared for the alleged resettlement of internally displaced people. Finally, it was discovered that temporary human settlements have been established forcefully in certain parts of the Wilpaththu forest cover.

Keywords: land used; land cover; Wilpaththu; spatial analysis