

Land Use Changes in Peripheral Rurban Areas of Panadura Urban Council Region

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Land cover changes in rurban areas at the outskirts of the expanding cities take place as a rapid urbanization process. The main objective of this study is to identify what type of land covers have been changed and how is that change going on. The study area selected for this study extends on a buffer zone of 3km width from A8 road (from Panadura to Rathnapura) and 13km distance from Panadura urban council area. The spatial data of this study encompassed with digital data within 1998-2016 years compiled by LUPPD and relevant base maps from the Survey department, Sri Lanka. Arc Map 10.1 was used as a spatial analysis, GIS tool and analyzed via overlaying and geometrical calculations. Relevant ground level verification had been done by Observation and Discussions (Key informant and Focus group). As results of this study, there are major changes with major two land cover types, home gardens and agriculture lands. Within 1998-2016 period, there is an increase of 10.70 % in home gardens and 31.43% declined is found in agricultural lands. Further observations into the composition of the declined agriculture lands it is revealed that paddy lands and rubber lands created by 75.23% and 63.52% respectively. As a whole about 824.83 ha (29.55% out of the total) agriculture lands existed in 1998 had been converted to residential land in 2016. Most agriculture lands converted to residential lands due to the easy accessibility to the capital city of Colombo. Increased demand of land and hence the rising land values and Galanigama interchange of the Southern expressway plays a major role for the changes in the peripheral areas. In conclusion, rurban land changes take place without proper physical planning interventions and therefore it is essential to guide different stakeholders involved in land utilization for sustainable urban land management.

Key words: *Land use, Periphery, Rurban, Sustainable, Urban planning*