

Changes of Physical Environment in the Areas of *Pinus* vegetation in Sub Mountain Grass Lands: Special Reference to Imbulpe Divisional Secretariat Division in Balangoda

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The *pinus* vegetation has been introduced to the sub mountain upper catchment area on 1953 in Sri Lanka. Sub mountain grass land was one of the largest vegetation in upcountry lands. Changes of Physical Environment rapidly increased with the expanding deforestation of *pinus* cultivation. The main research objective was identifying the impact on major physical changing component in *pinus* reforestation area. It has become a major challenge for equilibrium in upcountry area. Belihuloya, Niththamaluwa, Landuyaya and kumburutheniwala beat were selected as the study area. Primary data collected by questioner and semi structural interview with selected important sectors. As well as collect data by field observation. Secondary data collected by using books, magazine and web pages. Data analyzed by using descriptive analyzed method and maps. It was identified changes of physical environment spread of *pinus* vegetation. It has caused for agriculture in this rural area. The major findings are increasing soil erosion, changing of drainage system in this area and it was effected to rural economic and their activities directly and indirectly. It is need to regularly and systematic institutional plan for mitigate physical environment impact from the *pinus* reforestation in Sub mountain grass land area. Introduce suitable local reforestation trees will be a possible solution for this physical environmental changes related to *pinus* reforestation area by responsible organization.

Key words: Pinus vegetation, physical changes, Sub Mountain grass land, reforestation

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