



FLOOD RELATED LAND USE CHANGES FOR LAST 40 YEARS (WITH SPECIAL REFERENCE TO RATNAPURA MUNICIPAL COUNCIL AREA)

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ABSTRACT

Ratnapura flood plain area is an effective ecosystem area and also provides spaces for human settlements, food production and their agricultural productions. Compared to other natural disasters, flood becomes most vulnerable disaster at present. It occurred frequently in the monsoon time period. The study of flood related land use is very important in the present situation. The persons who conducted studies related to floods, identified that flood plain areas are very important for human activities, especially in agricultural sector. The result showed that most of flood affected land-use class was agriculture. The main objective of this research is to study the flood related land use changes in Ratnapura Municipal Council Area for the last 40 years. This study mainly focused on Ratnapura municipal council area. The data was collected using both qualitative and quantitative methods. The data was analyzed using Geographical Information System (GIS) and the Remote Sensing (RS) software included with satellite images, aerial photographs and the digital data. According to the research, the agricultural land use types are the most changed land use type due to the floods compare with other land use types such as transport and administrative sector. The Divisional Secretariat office and some other administrative offices have already been shifted to another area as a result of the floods. Transportation system can be highlighted as unchanged land use type in spite of the flooding. Controlling illegal mining activities and low land filling constructions projects are some of the recommendations that can be highlighted for the controlling of floods.

Keywords: land use, flood related land use types, changes, disasters, ecosystem