

SOCIO-ECONOMIC IMPLICATION OF LAND DEGRADATION AND LAND USE CHANGES IN THE UPPER KOTMALE CATCHMENT

SUMMARY

The land use in the Kotmale Catchment Area has changed over a period of time in association with the trends in human intervention, increasing needs of the population, development policies, and also due to the changes in resource management and resource exploitation. Land degradation is perceived by the local people as the declination of the quality of land, which is caused by multiple causes. The consequences, as in the case of causes, are multiple, depending on the spatial context including socio-economic, landform and climate.

Land degradation in the study area has been a problem of multiple socio-economic implications. There is a serious need to address the causes of land degradation, and rehabilitate degraded areas, by adopting locally feasible land husbandry measures for the sustainable management of the land and its resources. For the purpose of this study, in examining the socio-economic implication of land degradation, it is defined in relation to the social context; the consequences felt, observed and experienced by the people primarily those who depend heavily on land. In the Kotmale Catchment area land is the base of livelihood for the farmers and majority of the catchment dwellers. Throughout the history it has been the source of food, subsistence, employment and also the income.

Inspite of the complexity of the subject area and its spatial variability this study was conducted seriously focusing on the socio-economic implications. Land use changes were examined comparing the extracting the information from the aerial photographs taken in 1998 and 1956. 1956 photographs were used to prepare a base map and compared it with the situation in 1998. A household survey, participatory discussions and time transects were developed to examine the socio-economic implications of land use changes and consequences of land degradation. Analysis was done subjectively to bring out the experience and concerns of the people.

Field study was conducted in 9 villages/communities, including 4 Purana villages, 3 relatively new settlements and 2 plantation settlements. The changes in vegetation cover types, external input, crop rotation, output, quality of production units and their

diversity were discussed referring to field data, gathered on the questionnaire survey and field discussions.

The historical transect of the area was used to relate land degradation with various practices in the area. The indicators of land degradation known to people were adopted as key areas of local concerns. The results revealed that the most crucial implications are related to poverty, which in real terms is related to vulnerability and inadequate income, food insecurity, followed by poor soil condition, water scarcity and reduced biodiversity.

This study reveals that the human-land relationship in the study area has been strong throughout the history, while the use of land and management practices have been changed continuously under the trends in policy, economy and technology more in connection with the move towards market production. It is proposed to promote strategies responsive to the socio-economics of the people enabling the users of land to build their capacity.