ABSTRACT

Crop diversification is a concept, which is opposite to crop specialization. The major aim of the present study is to demarcate the crop diversification regions and changes therein and also to find out the factors responsible for them during 1965-66 to 2005-06. The present study is divided into eight chapters; first chapter deals with introduction part whereas physical determinants and socio-economic attributes of agriculture are discussed in chapter second and third. The study has revealed the land use patterns in chapter fourth, while cropping pattern and changes therein are discussed in chapter fifth. Crop diversification regions are demarcated for 1965-66, 1985-86 and 2005-06 in chapter sixth. Impacts of crop diversification on environment are done in chapter seventh. Whereas conclusions are drawn and suggestions are made in chapter eighth. The study has found that the index of crop diversification according to Gibbs and Martin has declined from .79 in 1965-66 to .75 in 1985-86 and .71 in 2005-06, which shows there is overall decline in crop diversification in the study region. The study has also noted that due to development in agricultural infrastructure, the magnitude of crop diversification has declined throughout the study region. But especially, it has experienced significant decline from high to low crop diversification in central parts of the study region. Whereas, the crop diversification in the western and southern side and along Shiwaliks have experienced increase in the magnitude of crop diversification from low to high. All the spatio-temporal variations are due to uneven distribution of physical and socio-economic environments. The study has also observed that emergence of wheat-rice crop rotation in central parts of the study region are responsible for this change. This shows that region’s agriculture has transformed from highly diversified to specialized. Owing to these changes in cropping pattern and crop diversification, the soils and water resources are severely affected.