

Spatial Pattern of Farm Mechanization: A Micro Level Study of Western Trans-Ghaghara Plain, India

Authors : Zafar Tabrez, Nizamuddin Khan

Abstract : Agriculture in India in the pre-green revolution period was mostly controlled by terrain, climate and edaphic factors. But after the introduction of innovative factors and technological inputs, green revolution occurred and agricultural scene witnessed great change. In the development of India's agriculture, speedy, and extensive introduction of technological change is one of the crucial factors. The technological change consists of adoption of farming techniques such as use of fertilisers, pesticides and fungicides, improved variety of seeds, modern agricultural implements, improved irrigation facilities, contour bunding for the conservation of moisture and soil, which are developed through research and calculated to bring about diversification and increase of production and greater economic return to the farmers. The green revolution in India took place during late 60s, equipped with technological inputs like high yielding varieties seeds, assured irrigation as well as modern machines and implements. Initially the revolution started in Punjab, Haryana and western Uttar Pradesh. With the efforts of government, agricultural planners, as well as policy makers, the modern technocratic agricultural development scheme was also implemented and introduced in backward and marginal regions of the country later on. Agriculture sector occupies the centre stage of India's social security and overall economic welfare. The country has attained self-sufficiency in food grain production and also has sufficient buffer stock. Our first Prime Minister, Jawaharlal Nehru said 'everything else can wait but not agriculture'. There is still a continuous change in the technological inputs and cropping patterns. Keeping these points in view, author attempts to investigate extensively the mechanization of agriculture and the change by selecting western Trans-Ghaghara plain as a case study and block a unit of the study. It includes the districts of Gonda, Balrampur, Bahraich and Shravasti which incorporate 44 blocks. It is based on secondary sources of data by blocks for the year 1997 and 2007. It may be observed that there is a wide range of variations and the change in farm mechanization, i.e., agricultural machineries such as ploughs, wooden and iron, advanced harrow and cultivator, advanced thrasher machine, sprayers, advanced sowing instrument, and tractors etc. It may be further noted that due to continuous decline in size of land holdings and outflux of people for the same nature of works or to be employed in non-agricultural sectors, the magnitude and direction of agricultural systems are affected in the study area which is one of the marginalized regions of Uttar Pradesh, India.

Keywords : agriculture, technological inputs, farm mechanization, food production, cropping pattern

Conference Title : ICSSCE 2015 : International Conference on Social Studies, Communication and Education

Conference Location : Rome, Italy

Conference Dates : May 05-06, 2015