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Kapil Tomar
Preface

Agriculture plays an important role in economic development, such as provision of food to the nation, enlarging exports, transfer of man power to non-agricultural sectors, contribution to capital formation and securing markets for industrialization (Johnston & Mellor, 1961). Agricultural development is an integral part of overall economic development. Agriculture is the main stay of Indian economy and prosperity of agriculture can significantly contribute to the general prosperity of the nation. The continued high growth of agriculture is essential to meet the food and nutritional security requirements of the people and provide livelihood and income in rural areas.

Agriculturally, the Ganga-Yamuna Doab is one of the most important part of Uttar Pradesh. It lies between the two important streams- The Granga and the Yamuna. Agriculture occupies an important place in the economy of Uttar Pradesh and more specially in Upper Ganga-Yamuna Doab, it not only provides food to the people but also raw material to numerous agro-based industries. In the last three decades, agriculture in the upper Ganga-Yamuna Doab has shifted from subsistence to commercial agriculture. The upper Ganga- Yamuna Doab is one of the fertile regions of the state of Uttar Pradesh but comparatively the yields of crops are below than the states of Punjab & Haryana.

The upper Ganga-Yamuna doab consists of seven districts, namely, Saharanpur, Muzaffarnagar, Meerut, Gautam Budh Nagar, Baghpat, Ghaziabad and Bulandshahr. The entire region of the Upper Ganga Yamuna Doab forms a part of the Ganga and Yamuna plain. The alluvial deposits brought down by the Himalayan rivers spread over the entire area and the general slopes of the plain gently runs towards the eastern parts of the state of Uttar Pradesh. The alluvial deposits of the Upper Ganga-Yamuna Doab comprises the khadar lands which contains newer alluvium.

Agriculture occupies an important place in the economy of Uttar Pradesh and specifically in the Upper Ganga- Yamuna Doab; It provides raw
materials to the numerous agro-based industries based in the region. About 70% of the working population is directly or indirectly engaged in agriculture. In the last two to three decades agriculture in the Upper Ganga- Yamuna Doab has changed its shape and shifted from subsistence to commercial agriculture. The Upper Ganga- Yamuna Doab is one of the fertile regions of the state of Uttar Pradesh but its crop yields are low as compare to states of Punjab and Haryana. There is still a considerable scope for the improvement of agriculture production and productivity per hectare and per agricultural worker, particularly on small and marginal farms which will help to increase income levels and improve the quality of life of the people in the rural areas.

Since the major part of the study area is rural and agrarian in character, a study of agricultural development -A green revolution experience during 1985-86 and 2005-06 of great relevance and significance for determining various parameters and problems of agriculture. Relief, climate, soil, water resources, population characteristics, aspects of agricultural modernization, land use patterns, cropping patterns, parameters of agricultural development and various levels of agricultural development constitutes the subject matter of the present study.

Based on these premises, the entire work has been divided in to seven chapters. The first chapter deals with the Introduction of the agriculture and related factors. This chapter has focussed on the importance objectives & hypothesis of the study area, its methodology & techniques and location & extent of the study area.

The second chapter investigates the natural resources of the upper Ganga- Yamuna Doab region. i.e. physical terrain, soils & drainage, weather conditions & its water resources. The chapter discussed and investigates the land resources of the upper Ganga-Yamuna Doab region i.e. General land use, agriculture land use, Non-agriculture land use, agricultural wasteland, pastures & orchards.

The fourth chapter investigates the cropping pattern and temporal changes from one district to another, pattern of food crops in the region, pattern of commercial crops & pattern of minor & other crops in the upper Ganga-Yamuna Doab region. The fifth compressed population, resources and its impact an agriculture development in the upper Ganga-Yamuna Doab region; viz growth of population, social & economic
structure of population, density of population (Agricultural as well as Physiological density of population).

The sixth chapter investigate the social & economic parameters and technological inputs of the region. It discussed about land holdings, man-land ratio, irrigation and irrigated area, pattern of farm implements and pattern of hybridization in upper Ganga-Yamuna Doab region. The seventh chapter emphasize and agriculture development in the upper Ganga- Yamuna region and its future prospects. It discused about region prospects in agriculture modernization, Commercialization; Intensification, Diversification, Diversification of rural economy and after all, the planning perspectives for agricultural development in the upper Ganga-Yamuna Doab region.

Keeping in view, the above facts, the topic entitled "Spatio-temporal Perspectives of agricultural development in upper Ganga-Yamuna Doab" was taken for the purpose of research study. It is believed that the result is drawn from this study will attract the attention of Government, planners, and agriculturalists, Scientist, villagers and research scholars and the suggestion proposed one the basis of the conclusion of the study would prove helpful in increasing the role of agriculture in the economic development of the region and the country.