CHAPTER - I
INTRODUCTION

The green revolution in late sixties has contributed significantly in boosting up the agricultural production in country and making it self sufficient in food front. But, there are enough evidence that results of green revolution are limited to wheat and paddy. Annual compound growth rate of population in India was 2.14 percent as per 1991 census. The area under food grain crop which was 124.32 million hectare in 1970-71 decreased to in the level of 123.44 million hectare in 1995-96 but the production increased from 108.42 million tonnes to 185.05 million tonne and productivity from 872 kg to 1499 kg per hectare in India against 20.65 million hectare, 3894 million tonne and 1886 kg/hectare in U.P. State, respectively. Annual compound growth rate of food grain production in 1995-96 was 3.7 percent in the country. In 1995-96 the area, production and productivity of course grain was 31.49 m. hect., 24.62 MT, 941 kg/hect, of Pulses, 23.92 M. hect., 13.19 MT, 552 kg/hect. and 26.35 M. hect., 22.43 MT and 85 kg/hect. of Oilseed crops. The respective figure of U.P. State were 5.56 MH, 4.98 MT, 896 kg and 2.92 MH, 2.25 MT, 770 kg and 1.72 MH, 1.47 MT and 855 kg/hect. In India trend of area, productivity and production of pulses and course grain for the last 26 years is static, but it is up going for the oilseed crops. Against it, a sharp rise in index of production and productivity of wheat and rice is proving our partial success in food front. In India the increase in area, production and productivity of pulses, oilseeds and course grain in 1995-96 against 1970-71 was 6.12%, 11.59%, 10.53% for pulses, 52.57%, 130% and 61.78% in the oilseeds and a decrease of 45.92% in area, 3.14% in production of course grain with an increase of 41.50% in its productivity. The production and productivity of wheat for the same period
increased by 162.77% and 90.74% respectively. In India pulses, which are generally cultivated under rainfed condition are the major source of protein in the vegetarian diet of human being, contribute in maintaining soil fertility and supply fodder to the livestock, shared 43.3% of the area and 35.15% of the world’s production. It’s productivity in 1991 in world and in India was 807 kg and 534 kg per hect, respectively.

The production of pulse is far behind to the need of human being in India. Due to static area, production and productivity of pulses, per capita availability which was 64 gms in 1951-52 declined to the level of 40 gm in 1990. The projected requirement of pulses in India during the beginning of twenty first century is 19 million tonnes. It may be fulfilled only by increasing area, production and productivity of these crops which is only possible by developing High Yielding Varieties, stable genotypes, enrichment of gene-bank, new cropping system, change in socio-economic environment, appropriate price policy, effective services of the personal engaged in transfer of technology programme and development of pulse based crop-rotations, research programme, to improve pulse production in rainfed and irrigated area, taking into account the priorities to protect from adverse environment, should be framed.

The course grains like Jowar and Bajara covers major area among the Kharif season crops. These are the major component of human diet in the central part of India viz. southern part of U.P. State, M.P., Maharashtra and Andhra Pradesh. The stagnation in its area and production in the country is because of poor technology and low prices.

The oilseed crops are not only the main source of edible oil, but also popularly used in manufacturing various types of industrial products like paints, cosmetics and
scent. Mustard, Rapeseed, groundnut, Soyabean, Linseed, Sesamum are the major oil seed crops cultivated in India. The cake of the oilseed crops is major nutrient supplying ingradient in cattle feed. Oilseed crops cover 15.2 percent of the gross cropped area of the country. The area, production and productivity of oilseed crops in India increased by 52.57%, 147.02% and 61.78% respectively which is too low when compared with wheat and paddy. In U.P., Oilseed crops covered 6.6% of the total cropped area and contributing 6.5% of the total agricultural production.

Planners and policy makers have marked the stagnation in area, production and productivity of pulses, oilseeds and course grain and started a number of programmes to boost up the production of these crops in irrigated and rainfed condition. Integrated cereal development programme, Oilseed Production Project (OPP) and National Pulse Development Project (NPDP) have been started by the Central Govt. to enhance the production of these crops in the country. Under these programme high yielding varieties seed, fertilizer, Rhizobium culture, agricultural implement, plant-protection chemicals, sprinkler sets and minikits are provided to the farmers in subsidised rate. Thus, it is undeniable fact that the area in which slow growth crop are dominating and rainfed farming is practiced the research work relating to their production and identifying inhibiting constraint will be of high importance to the planner and policy maker at the regional and national level.

In Hamirpur district of U.P. State, which is characterised with rainfed farming and hard soil, where slow growth crops like Jowar, Arhar, Moong, Urd, Gram, Lentil, Pea, Mustard, Linseed, Soyabean, Til are dominating in cropping pattern and cover more than
72% of the total cropped area has sufficient justification for conducting the present research work.

It is of utmost important to know the trend in area, production and productivity of slow growth crops, correlation in variation of these variables, level of technology adopted in their cultivation, existing level of resource use and yield, constraint inhibiting the adoption of technology and yield, and contribution of slow growth crop in farm economy and developing suitable strategy for increasing production of these crops.

Therefore, the present study entitled “An Economic Inquiry of Slow Growth Crops in Distt. Hamirpur, U.P.” has been conducted with the following objectives:-

**Objectives:**

1. To analyse the time series data with respect to area, production, productivity of slow growth crops to workout fluctuation (variation) and trend.

2. To correlate the variation in area, production, productivity of slow growth crops with variation in their prices, and area, production, productivity and prices of other important competitive crops and rainfall.

3. To findout the existing level of technology adopted in the cultivation of slow growth crops and the extent to which it deviates from recommended technology in the study area.

4. To identify the major constraints in the adoption of new technology of slow growth crops.

5. To develop strategy for increasing the production of slow growth crops in the study area.