Chapter - VII

Discussion

It is well known that the Central problem of any household involved in farming is to profit maximization. In Central Uttar Pradesh, the majority of farm households are of small and marginal scale. The any kind of farm practices in other word, agricultural diversification may emerge as an important alternative to attain the objectives of outputs growth, employment generation and natural resources sustainability. The recent experiences in Indo-Gangetic Plains indicate that the policy makers and planners increasingly focusing are on modern farming to achieve economic gains and food security. The Central U.P. is primarily known for rice-wheat, and potato based farming system, attributed with good production environment but the rapid growth in the population and increasing demand of food both have become a matter of great concern. The decision making process under the farming system is quite difficult. In this thesis, the institutional factors, which may supports in farming, have been considered. The infrastructure, prices and marketing farm size, irrigation, investment in productive inputs, profit variability, poverty and productivity etc have been discussed in one or another way. Besides biological factors, the socio-economic factors are important in content to opportunity and problems confronting producers and economy and its various sectors keep on changing. Socio economic factors that limits production or adoption of viable favoring systems in Central U.P., needs to be revisited. For future, the central U.P. will remain small-farm dominated, and so new interventions should be favored to low resources farmers, making maximum use of labor and having good cash pay off. In consistence to above the thesis entitled "An Economic Analysis of Existing Farming System and Developing Viable Alternatives in Central Uttar Pradesh" has been selected with precise objectives, which have been studies. The present chapter interprets and discusses the following issues brought forth by the study:

1) What socio-economic characteristic become base for present production system in the study area?

2) To what extent has the size of farm households influenced by the existing system in the study area?

3) What factors are of importance in determining the level of incomes and livelihoods?
It is well known that natural factors are key to determine the production system in a region. Never, the less socio-economic factors- land, holdings, resources situation, market cost, occupation, labor force, genders, implements and machinery indebtedness etc. are also considered in customized and adopting farming system, by the farm households. The possibility of and need for agricultural development arise from several reasons. This needed a adjustment and reorientation of production and reallocation of resource among various alternatives to take advantage to emerging opportunities and face like problems, threats and challenges. New opportunity that make good farming beneficially results from technological break through changes in demand pattern, in changes in government policy, development of irrigation and other infrastructure. Similarly, challenges and threats necessitating for improved farming result from 1) Adverse changes like degradation of natural resources & environment, 2) risk associated with existing production activities. 3) Market and price risk 4) Socio-economic need like employment generation, attending self sufficiency in food sector.

In the study domain, the general picture of village could be considered by pattern of village surroundings. The houses of constructed in hazards manner, the majority of poor farmers possess kuchha houses, made by soils but each villages are connected partially or completely with kaccha/pacca roads. Village economy is agrarian; modern adoptions in farming were seen especially of High Yielding Varieties with crop + livestock farming systems adoption. The rural economically is still basically traditional but pattern in fast changing to the money economy for their livelihood.

Of 100 households; 62 percent and 23 per cent were found as small and marginal farmers. Only 15 per cent households were found under of medium and large size group of land holdings, there by intricately that an uneven distribution is still prevailing upon. The Overall household’s involvement in agriculture 70 per cent and non-agriculture were 30 per cent respectively has been found. The data on caste structure, it was indicated that the proportion share of SC/OBC was more than 66 per cent in total population thereby indicated that the majority of weaker section having done to earns the income for livelihood from hard core.

About family structure, literacy, land structure, the data indicated that a common trend was found in the form of traditional complex family unit with in same compound. The family breakup is being occurred affecting fragmentation of land holdings. A wide variation has been found for literacy. The information on land use pattern in accordance to cropping patterns have supported in developing an understanding for how much area
has been used in different crops. It is revealed that more than 96.43 per cent of land has already been in farming and there is no scope of further horizontal expansion of agriculture. Only option of further agricultural development is assumed by that vertical intensification in terms of diversification, which can help a lot; provided non-traditional crops, may come into.

It is also imperative to know the existence of farm equipment and machinery and other non-farm assets separately for selected districts. Of selected households 7 per cent possessed tractor, 4 per cent electric tube-well, 19 per cent diesel tube-wells, 28 per cent truck/trolley and 21 per cent chaff cutter. However, on small seal farms, the values of non land assists have been found considerably higher than medium as large farm-households. Under these existing poor resources level, there were, commonly found in adoption of farming systems. What we offer for got doom we analysis is that technology is a human product. It reflects the power structure of society. Despite of opportunity availed for raising income from cultivating labor /labors intensive crops-vegetable, maize, potato, with livestock mixed farming system. Rice-wheat with livestock mixed farming system are found common due to stability in income or food security realized by the farmers in the study area. And thus, a technology in never non can it be natural free. That is why adopted of rice-wheat systems in realizable irrigation conducts in common in central U.P. It is well known that cropping system are commonly described by dominant cropping pattern. They include a more complete description which indicate specific performance characteristics, the qualities and quantity of resources on which system are based and technologies has transformed them into a crop in the pattern cane be visualized by data investigated into the rice-wheat cropping system is occupying 50.12 per cent of total gross cropped area remaining with being with other crop like maize 3.34 per cent, mustard 4.49 per cent, Arhar 3.38 per cent, etc of total cropped area respectively. The system wise area coverage was found by 29.00 per cent in rice-wheat, in Kanpur Dehat and 39.58 per cent rice +wheat, in Fatehpur. The important features have been noticed that the allocation by area buffalos in Kanpur Dehat& Fatehpur indicate that diversification have been widely adopted with cultivation of pulses, oil seed crop and vegetables. Numerical description of performance characteristic of cropping system that used has been included the cropping index and diversification index. The overall cropping intensity was found 195 per cent and diversity indices were 2.87 per cent. However, in Central Region of Indo- Gangetic plan, rice-wheat cropping system is prominent, supporting to food security and livelihood particularly for marginal and small holders.
The farmers are the ultimate integrator of the technological components they make. It is also recognized that the farmers have knowledge and skill since long back. Keeping the view the prominent cropping system was seen as: rice-wheat 49.58 per cent. As regards to crop mixed farming system revealed that and innumerable range of mixed farming system, which are vertically, integrated system known for small farm systems. These includes employment of crop residues and by product which posses complex business management socio-economic, education as well as technical issues. This farming system \( (\text{crop} + \text{livestock}) \) mixed farming has been become prime base for food security in the study area.

As regard to factor associated with income and livelihood income achieves level in study area, it is relevant to described about income profitable from different enterprises. It has come into income accrued by farmers from livestock which was much higher than crops. The percent share of livestock to the total agricultural income was 63.85 per cent. The income from livestock was comparatively larger on small farms, than large farm households. This pattern has been found universally in all districts and blocks.

The diversification of agriculture has been widely followed by farmers in Central U.P. Among all factors, the milk development under the private sector named as Raj dairy, Nova dairy, Paras dairy, Rama dairy etc., have established their linkages of local milk chilling centers in Fatehpur and Kanpur Dehat. The numbers of milk chilling centers are more than 23, having milk-chilling capacity of more than 10 lakhs liters/day. The animal agriculture development has been developing to rapidly under the rural institutional framework, resulted into increasing livestock production environment, which presently provides higher income supporting to livelihood particularly small and marginal farmers in the study area.

Another aspect of livelihood supports was non-from agrarian income. The available work force and total number of household population requires livelihood at the minimum level in terms of basic needs food, clothes & sheltered. The overall non-farm income, it was seen from the analysis that, on an average Rs.23390 was earned from business \( (\text{micro enterprising}) \) services and another wags. The level of off-farm income on the farm household belonging to 2 and above size group, land holdings was found positively much higher being Rs. 26402.62/household/annum, while Rs. 22402.82 was earned by farm households of 0-1 marginal farm household a comparatively for lower being Rs. 21473/household/annum by the small land holdings. However, crop and livestock have become complement and supplementary in Central region of U.P. In future
any public intervention if to be made the product from these two enterprises crop and livestock must be linked for value added creations not only for loss aversion but also for enhancing income of rural people so that they can maintain their livelihood. Further it was revealed from study that the households were utilizing 50 per cent of total income on expenditure on food and rest on education, health, social ceremonies and miscellaneous. This indicates that the households were trying to their best the situation of well-being.

As mention in the poverty persisted despite of implementation of green revolution which was supply driven dry man and started from late 60s, despite of doubled the yields of stable crops (rice & wheat). Although the impact of green revolution on the poor was a matter of controversy, time has made it clear that the poor people have benefited significantly through higher incomes cheaper food and increased demand for their labor. However from present study economic picture of rural people in central region was revealed that out of total income Rs/- 64386.96 (average/household/annum) the share of non-farm incomes was 36 per cent while from agriculture it was 64 per cent. Noteworthy that almost 50 per cent the income from all sources was expend on only food of rest expenditure was include on education being 19.52 per cent, medical 11.52 per cent, social-ceremonies 12.26 per cent and miscellaneous 5.34 per cent. This indicates that the complete household livelihood security maintenance could not possible from existing farming system unless off-farm income from different sources. Thus study suggested for a paradigm shift from crop mixed tradition dairy to market-oriented dairy system in the study area.