CHAPTER : III

SELECTED AREA AND SELECTED FARMERS

Past experiences and the environment in which a person lives and works play an overwhelming role in framing his attitudes towards future. Inasmuch as expectations are attitudes, it is desirable to briefly describe and discuss those characteristics of the environment which have some bearing on the expectations of future prices. The present chapter and the next chapter are devoted to such a description. Parts one and two of this chapter are devoted to the brief description of the general economic features of the area and of the selected villages respectively. In the third part socio-economic profile of the selected farmers is attempted.

I

AREA

The district Meerut, to which the three selected villages belong, is situated in the upper doab of the Ganges and Yamuna rivers. The Ganges provides the natural boundary in the east and the Yamuna in the west. In the north of Meerut is the

1 The description here is mainly confined to characteristic features of the agrarian economy. Though, socio-political environment may also affect the economic behaviour, due to author's lack of competence in analysing social and political factors in an adequate manner, and also due to the belief that economic factors play an overwhelmingly important part this description is confined to characteristics of agrarian economy only.
Muszarfarnagar district and in the south Bulandshahr. The land of the district is generally level and plain and gently slopes from north to south. The slope is gradual all through out. From the view point of soil fertility, the district ranks fifth in the Uttar Pradesh.

The normal annual rainfall of the district is 750 m.m. More than fourth/fifth of which is received in the period June to October. Winter rainfall is quite regular and adequate. A very large part of the cultivated area is irrigable. In the year 1966-67 the percentage of area irrigated to net area sown was 76.5. Canals constitute the most important source of irrigation in the district. The net work of canals in the district is now more than a century old. The soils are of three main types i.e., loam, clay and light soil. (bhum-bhum).

On the whole, the district represents one of the best agricultural tracts in the State, consisting of fertile lands and of large areas under irrigation. Principal crops of the district are wheat and sugarcane, both of which are largely irrigated. The main cash crop of the district is sugarcane.

In the country as a whole, the district ranks first in the production (gross output) of sugarcane. At present there are 8

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3 Nearly 85 per cent of area under wheat and about 94 per cent of area under sugarcane is irrigated. (These figures are for the year 1966-67). Source: Office of the district agriculture officer, District Meerut.
sugarmills in the district. Manufacture of Khandasari (brown sugar) is an important cottage industry. The district is well known for producing quality gur. Harpur, situated in this district, is the most important gur and grain market in the country. The district has been ranked first in the State in respect of agricultural development.

II

THE VILLAGES

Location and Communication: The selected villages are situated in the Garhmukteshwar paragana of Napur Tehsil. These villages are at a distance of about 25 to 26 miles from the Meerut city on Meerut-Garhmukteshwar Road. From the Garhmukteshwar town the distance of the villages varies from 2½ miles to 3½ miles. Two villages are linked by a pucca (asphalt) road with Garh-Meerut road, while in the case of third village the link road is still Kuchha, though it is an all-weather motorable road. Information pertaining to transportation and communication facilities available to the villages is summarised in the appendix table III.1.

Area and Population: The total geographical area of the three villages is 1605, 1096, 855 acres, and the respective population in 1971 was 5387, 1967 and 1612. The number of households

5 See V.M. Jakhade and H.B. Shivanaggi (I-32)
according to 1971 census were 1078, 293, 295 in the three villages. Two villages namely Khilwai and Janupura which are comparatively smaller in size are predominantly Hindu villages while the third village Dotai with a population of 5387 is a Muslim dominated village. In the predominantly Hindu villages most of the cultivating households are of Tyagi caste, while in the third village nearly 75 per cent of the cultivating households are Muslim and remaining 25 per cent are either Rajputs or Brahmins.

Soil and Land Utilisation: The soil of all the three villages is mostly a mixture of loam and light (bhur-bhur) soils. The fields are well laid out. Even during the heavy rains there is no problem of drainage in the Khilwai and Janupura villages. In the Dotai village during heavy rains water gets accumulated at the village site but the cropped area around the village is seldom affected due to this. The land utilisation pattern of the three villages is given in the appendix Table III.2. The percentage of cultivable area to the total geographical area is 86.26 in Khilwai, 87.68 in Dotai and 93.09 in Janupura. The land under miscellaneous tree crops (mainly mango and peach orchards) in the villages Dotai, Khilwai and Janupura is 1.25, 8.21 and 0.48 per cent of the total geographical area of these villages respectively.

Irrigation: In the year 1969-70, the percentage of area irrigated to net area sown was 83.40 in the village Dotai while
in the remaining two it was about 93 per cent. The main source of irrigation are distributories of Upper Ganges canal. The facility of canal irrigation is available in these villages since the later half of nineteenth century. In the last five or six years a number of tubewells, mostly private owned, have come up in these villages. These tube-wells are mostly in the command area of the canal and due to this the increase in the percentage of area irrigated to the net area sown has not been very significant. However, the per acre availability of water has increased significantly and farmers are now more assured of getting water than in the earlier years. Due to this facility of perennial irrigation in the area weather variability plays a relatively minor part, unlike most of the country.

**Crop Pattern**: The main crops of the selected villages are sugarcane, wheat, maize and paddy. In 1969-70 about 28 per cent of the gross cropped area in each of the three villages was under sugarcane and the percentage of area under wheat to gross cropped area was about 29 in village Khilwai and it was 28 and 35 in the villages Janupura and Dotali respectively. Maize accounted for about 9, 13 and 14 per cent of gross cropped areas in the three villages. Not only wheat and sugarcane account for lion's share in the gross cropped area but they also mainly determine what other crops are to be grown. For example, if in a plot farmer wishes to take wheat
in rabi then he will grow, in kharif, either maize or jowar and if he wishes to take sugarcane after fallowing then he will mostly go for either cotton or maize-urad. Details of the crop pattern of the selected villages are summarised in the appendix table III.3.

The following crop rotations are quite popular in the selected villages:

(1) One year crop rotation:
   (a) Maize - wheat
   (b) Jowar (fodder) - wheat
   (c) Paddy - wheat or gram

(2) Three year crop rotations:
   (a) Fallow - Sugarcane, Sugarcane Ratoon, - Peas
       or
   (b) Wheat - Sugarcane, Sugarcane Ratoon, fallow.

Until 1966, the plots from which sugarcane ratoon was harvested in the beginning of the crushing season i.e. in the month of November, were generally kept fallow or peas was grown in them but after the introduction of high yielding varieties of wheat, farmers have started taking wheat in these plots also.

6 Jowar is mostly grown to serve as fodder.
This has been made possible mainly because most of the HST varieties are late sowing ones and, thus now farmers get enough time for field preparation. Nowadays taking wheat in plots from which sugarcane ratoon is harvested is quite common. Most of the kharif crops are sown in the June and rabi crops from end of October to middle of December. Sugarcane is planted mostly during February - March and the crushing season begins from November. However, in some areas sugarcane planting work continues till April because planting of sugarcane in plots in which some rabi crop, mainly wheat, was there is quite popular and wheat is mostly harvested only towards the end of March (later than any other rabi crop).

The intensity of cropping during 1969-70 was about 150 in the selected villages (see Appendix Table III.3). This is indeed a very high rate of intensity of cropping if the fact that sugarcane is a long duration crop is kept in view.

Availability of Labour: In the neighbourhood of these villages there is no industrial complex and as a result the agricultural labour is available in abundance, though in peak periods i.e. in November, which is the time of sowing of wheat, and again in June, at the time of weeding in sugarcane, for a few days, scarcity of labour is felt. During those days farmers manage to get labourers from the nearby mazaar villages.7

7 Prior to abolition to Zamindari system in Uttar Pradesh, i.e. 1950, there were one or two villages attached to each big village (selected village), which were called Mazara of these villages and land in these villages was mostly owned by farmers of the bigger villages. This land was partly self cultivated and partly leased out. After the abolition of Zamindari the leased out land was acquired by the tenants but most of the inhabitants of these Mazara (now revenue villages) have very small sized holdings and hence, mostly go for agricultural labour.
Mechanization: It may be mentioned that till 1967 all the farms were bullock operated since no one in any of the selected villages owned a tractor nor was tractor easily available on hire. By 1970, however, there were 16 tractors in the selected villages most of which were hired out too. This facility of getting tractor services on hire made it comparatively easy to sow wheat after harvesting sugarcane in November, and, to take sugarcane after harvesting wheat by March end.

Farmers: Farmers of these villages are quite industrious. This may be the impact of availability of irrigation facility for a long time. Prior to switching over to sugarcane cultivation i.e. around the first world war, farmers of these villages used to cultivate indigo. As they have been growing cash crops quite extensively for a long time, they are quite prosperous, enterprising and forward looking. This is evident from the fact that in one of the selected villages in which electricity was first made available in 1967 for domestic use by now (1971) most of the houses have electric connections.

Competition between Sugarcane and Wheat: Wheat and maize are the two staple crops of the farmers of these villages. Though wheat accounts for only about 28 per cent of the gross cropped area of the villages, quite a sizable amount of wheat is sold every year by the farmers of these villages. In a way
wheat is the second cash crop of these villages, the first being sugarcane. Two more advantages in the case of wheat are that (i) it is possible to take kharif crop and (ii) it allows for greater flexibility in crop pattern (unlike sugarcane in the case of which land has to be committed for one and half to two years). Since land is equally suitable for cultivation of both sugarcane and wheat, these two crops inspite of their sowing periods being different compete with each other for area. No doubt, sugarcane can be taken in plots in which wheat is grown in rabi and in the same way wheat can also be sown after harvesting sugarcane in November but the scope of doing so, in both the cases, is very limited due to the constraints of time, drought power and other resources.

Production of Gur: Farmers of these villages supply cane to the Simbhawali Sugar Mill, located at Simbhawali at a distance of 5 miles from Grahmakteshwar town and at about 4½ to 7½ miles from the selected villages. Farmers of one village which is at a distance of about 4½ miles from the sugar factory supply it at the factory gate and the remaining two at their respective centres. In addition, gur is prepared in

8 In fact the farmers supply cane to sugarcane development union (Government supported cooperative organisation) which supplies it to the factories. The union collects the cane at different collection centres from where it is transported by trucks to the factory. These collection centres are called 'centres'.
these villages on a very large scale. Of the total cane produced in these villages more than 60 per cent goes into the production of gur. Three or four farmers join together and install a Kaholu (indigenous cruiser) and produce gur throughout the winter season i.e. from November to March. In these villages there would hardly be a farmer who either exclusively supplies cane to the factory or exclusively uses it for gur preparation. Even in the year in which it is more profitable to sell cane directly to the sugar factory than selling the gur in the market, farmers do prepare gur and sell it in the market. This is mainly due to the following two reasons. Firstly, the quantity of the cane which a farmer can supply to the factory depends on his cane supplies in the proceeding three years and if in any year a farmer wishes to supply in excess of the quota fixed on the basis of his supplies in the proceeding three years, the factory is not obliged to take it. Secondly, the total estimated supply to the factory of a farmer is divided into many cart or trolley loads (a farmer could supply), which is regulated in such a way that the total estimated supply by a particular farmer reaches the factory by 15th of April (or any other day at which the factory is expected to stop its current year's crushing) i.e. at fixed intervals (say of 4 days or 7 days or 15 days). Thus, a farmer is expected to supply one cart
load or trolley load of cane to the factory at regular intervals, throughout the crushing season. Since sugarcane tops are generally used as fodder all throughout the winter in these villages farmers prefer cutting cane for preparing gur as regulation of its production is in their own hands. As a rule, all throughout the winter most of the farmers go on producing small quantities of gur every day or every third or fourth day which ensures regular supply of fodder. The gur is mostly sold in the Grahmukteshwar market.

Market and Marketing of Agriculture Produce: Grahmukteshwar mandi, the main buying and selling centre, for the farmers of the selected villages is located in Grahmukteshwar (popularly known as Garh). Most of the farmers of the selected villages sell their produce in Garh market only, though in each selected village, there are one or two local traders who make purchases within the village and to sell, later, in the Garh market. Since the Garh market is linked with the two villages by pucca road and tongas and cycle rikshaws ply between Garh and these villages (they charge only about 20 paise for 40 Kgs. load) a new arrangement has emerged whereby it is not necessary for the farmer to go to the market to sell whatever little quantity of gur he has to dispose of and to make some special arrangement for its transportaton. Most of the farmers send their produce through these tongas and rickshaws to their
usual kachha adatiyas, who sell it on their behalf. The farmers go only to collect the amount whenever they need money.

Garhmukteshwar was a small mandi before 1955, but since that year a new market yard was developed mainly by pacca adatiyas of Hapur market. Now a days these pacca adatiyas do their business in Hapur market in the morning and come to Garh market in the after noon, the distance between the two being only 20 miles. Hence, in the Garh market most of the business is transacted only in the afternoons. Since the pacca adatiyas in the Garh market also operate in the Hapur market, the prices at which the commodities are sold in the Garh market on any day are generally the same as those in the Hapur market on that day. It will not be wrong, therefore, to say that the Garh market is only a sub-market of the Hapur market.

III

SOCIO-ECONOMIC PROFILE OF THE SELECTED FARMERS

In the following paragraphs some of the salient demographic, social and economic features of the farmers selected for intensive study are narrated.

9 Kachha Adatiya is commission agent who operates on behalf of village sellers in the assembling market.

10 Pucca Adatiya acts as a commission agent for shorffs and big exporting firms but he never deals directly with the producers, his dealings are through Kachha Adatiyas.
Caste: Of the 90 selected farmers, 60 belonged to the Tyagi community and 20 were Muslims while the remaining 10 belonged to Rajput and Vaisya communities. Distribution of the selected farmers by caste is given in the appendix table III.4.

Education: Table No. III.5 in the appendix gives number of farmers according to their educational attainments. It is quite significant that 67 out of the total 90 were literate. Nine among them were matriculates and 22 had gone up to 8th class. The highest educational attainment of any selected farmer was intermediate. Some times it is suggested that the education not only of the decision maker but of other members of the family may also have some impact on the organisation of farm activities. In the case of most of the selected farm families many members other than the decision makers were also literate and educated. Table III.6 in the appendix shows the educational attainment of the family members of the selected households.

Age, Duration in Occupation and Duration as Decision Maker:

About 66 per cent of the selected farmers were of age of 45 years and above and only 10 per cent of the selected farmers were less than 35 years of age. The distribution of selected

Tyagi is a Brahmin sub-caste and is concentrated only in four or five districts of Western U.P. Their main occupation is farming and a large number of them were Zamindars before the abolition of Zamindari system in U.P.
farmers by age groups is given in the appendix Table III.7.

Of the 90 selected farmers only 3 followed some other occupation (other than cultivation) before taking up the present occupation while the remaining 87 had started their careers in farming only. Only 2 farmers were in cultivation occupation for a period of less than 5 years, while other 71 had been in cultivation occupation for 15 years or more. Forty-nine out of these 71 had been doing cultivation for more than 25 years or so. In other words, most of the selected farmers were engaged in cultivation for a fairly long time. Further, 69 out of the 90 had been the main decision makers for their farms for the last 15 years at least. The remaining 21 had been decision makers on their farms for periods ranging from 3 years to 14 years. Table No. III-8 in the appendix gives the number of farmers by the number of years for which they had been decision makers for their farms.

Sixty-eight farmers out of the selected 90 were actively participating in all farm operations, while 18 were doing only supervision work; the remaining 4 farmers were actively participating in some farm operations in addition to the supervision work. On most of the selected farms more than one active family member actively participated in farm operations. The Table No. III.9 in the appendix shows the
number of adult family members actively participating in farm operations.

Of the 90 selected farmers 28 had to go out occasionally either to see their family members staying in cities or towns, or in connection with the subsidiary occupations followed by them. Though the remaining 62 were also going out of the village but the frequency of their trips was just once or twice in a year.

Market Knowledge: On the basis of scores, assigned on the basis of replies to questions pertaining to the past prices of gur and wheat, farmers were rated on a 5 point scale of market knowledge. A very large number of the selected farmers had quite satisfactory knowledge of the prevailing market prices. The ratings obtained by the respondent farmers is as follows. (The procedure for rating is explained in the foot-note below).

12 The farmers were asked to state prices of both wheat and gur in the three preceding (preceding the month of enquiry) months i.e. for the January 1969, and November, December, 1969. They were also asked to give prices of both gur and wheat during the two preceding farm harvest months i.e. wheat prices were to be given for June 1969 and June 1968 and similarly gur prices for January-February 1969 and January-February 1968. On each correctly reported price one mark was given and on each reported wrong reply minus one mark was given. Farmers scoring 8 to 10 marks were rated as excellent in their market knowledge and those scoring more than 4 marks but less than 8 as very good while those getting less than 4 but more than 0 as good. Similarly those securing between 0 and -4 were rated as poor and those less than -4 as very poor.
Operational Holding and Crops: The size of the operational holding of the selected farmers ranged from 3.61 acres to 42.13 acres. The size of the operational holdings of 18 selected farmers were less than 7 acres while operational holdings of 12 farmers were of more than 20 acres. Thus, most of the selected farmers, 52.2 per cent owned medium sized holdings, i.e. between 7 to 20 acres. The average size of holding of the selected farms was 12.99 acres in 1969-70. The distribution of selected farmers by size of operational holding groups is given in the appendix table III.10, which also gives the proportion of area irrigable in the total operational holdings in different size groups. It can be seen from the table that the percentage of area irrigable to the total operated area varied from nearly 85 per cent to 91 percent in different size of holding groups. Of the 90 selected farmers, 4 were tractor owners, and 8 farmers owned tube-wells.

The main crops of the selected farmers were sugarcane, wheat, maize and paddy. Sugarcane and wheat together accounted for more than 55 per cent of the gross cropped area. All the selected farmers sold large quantities of gur every year and
and most of them also sold wheat\textsuperscript{13}.

To sum up, the selected farmers on whose intensive study the findings of the present work are mainly based were selected from the tract which is agriculturally well developed, having large proportion of area under cash crops and having the benefit of perennial irrigation. Farmers of the tract are generally industrious and prosperous. The selected farmers had enough experience of doing cultivation and were decision-makers for their farm activities for quite some time. Some of them operated small sized farms, and a few operated large farms of sizes of more than 20 acres, but a majority were medium size farmers. Wheat and sugarcane were the two main crops grown by the selected farmers of which wheat is also the staple crop of the area. A part of the sugarcane produce went into the manufacturing of \textit{gur} while the other part was supplied to cane development union which in turn sold it to the nearby sugar manufacturing unit.

\textsuperscript{13} Details of pattern of sale during the year 1968-69 to 1969-70 are given in the chapter IV.