Socio-economic Profile of Farmers Supplying Horticultural Produce to a Vegetable Market in Punjab

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ABSTRACT

The aim of the present research paper is to explore the socio-economic profile of these farmers who supply horticultural crops to the vegetable market of Tanda Urmar town of district Hoshiarpur of Punjab. The data for the present research work was collected through fieldwork in April 2012. The results reveal that about 2/3 of the total farmers are in the category of mature farmers (40 to 60 years of age), with most of them inheriting this profession from their ancestors. More than 70% of the farmers are either illiterate or have education up to matriculation standard only. Half of the farmers have a family size of 5 to 6 members (medium sized families). Although most of the vegetable growers own small to medium landholdings, but still a majority of them are earning a handsome amount of money per month (more than Rs. 10,000) all the year round. Farmers with medium and small landholdings (3 to 6 acres) are more engaged in this profession of growing vegetables. Both seasonal and non-seasonal vegetables are grown by the farmers by using chemical fertilizers, insecticides, pesticides and herbicides. 45% of the farmers belonged to villages lying within a radius of 4 km from the market. Bicycles, rickshaws, carts, jeeps and tractor-trailers are used for transporting farm produce to the market. The main problems faced by the farmers are fluctuating prices of the vegetables, low procurement prices of commission agents, lack of government regulating policies, lack of opportunities for direct selling and inclement weather.

Keywords
Horticulture, farmers, vegetable market, commercial farming

1. INTRODUCTION

Marketing of agricultural crops is the most crucial aspect of commercial farming. Farmers’ markets are the places where farmers congregate to sell all types of farm products. These markets play a major role in the distribution of farm produce and exist in a variety of forms like vegetable markets, fruit markets, grain markets etc. Out of these, a vegetable market or ‘sabzi mandi’ can be defined as a place where several producers gather on a regular basis to sell vegetables and fruits to the customers[1]. The fresh horticultural products are marketed through a system of farmers (producers), intermediaries (commission agents and wholesale dealers) and retailers and consumers (buyers). Out of these, the farmers (producers) are the most important component of the whole mechanism, because they form the real foundation on which the entire vegetable marketing system rests.

Commercial farming of vegetables has remained a popular choice among farmers of Punjab from a long time. Earlier the cultivation of vegetables was considered a part-time activity done for earning quick money in a short period of time. However, with the advent of new varieties of hybrid seeds, good irrigational facilities, easy availability of insecticides and pesticides and rising prices of vegetables due to their ever increasing demand, more and more farmers have been motivated to take up vegetable cultivation as their primary occupation. The aim of the present research paper is to explore the socio-economic profile of these farmers who supply horticultural crops to the vegetable market of Tanda Urmar town of district Hoshiarpur of Punjab.

2. DATA SOURCE AND METHODOLOGY

The data for the present research work was collected through fieldwork in April 2012. Structured interview schedules were prepared. In all 20 farmers were selected at random and interviewed. The collected data was processed and tabulated manually. Simple percentages were calculated to analyze the data. The final output was represented through various statistical diagrams.

3. SOCIO-ECONOMIC ATTRIBUTES OF FARMERS (PRODUCERS)

As far as the vegetable market of Tanda Urmar is concerned, it is estimated that approximately 40 to 50 farmers come to this market daily to sell their produce to the commission agents and retailers. For the present fieldwork study, 20 farmers have been interviewed using a structured questionnaire. The respondents were chosen at random during the survey. Among these 20 farmers, 17 were full time farmers while 3 were part time vegetable growers.
(i.) Age Group
As far as the age group of the vegetable growing farmers is concerned, out of the total 20 interviewed farmers 5 farmers were below 40 years of age (young farmers), while 13 farmers were between the age of 40 to 60 years (mature farmers) and the remaining 2 farmers were above 60 years of age (old farmers). Thus, about 65% of the total farmers are in the category of mature farmers (40 to 60 years of age). The reason for a big proportion of farmers belonging to this category is that most of them inherited this profession from their ancestors. They have medium to large family size with medium sized landholdings (3-6 acres). The pressure of sustaining big families on medium-sized farms led these farmers to adopt vegetable cultivation since they found this option more viable and rewarding than growing cereal crops.

(ii.) Educational Level
As far as the educational level of the surveyed farmers of Tanda vegetable market is concerned, 2 farmers were illiterate, 12 had received education up to class 10th, while 4 farmers were graduates and 2 farmers had completed post graduate degrees. It is evident from these figures that more than 70% of the farmers were either illiterate or had education up to matriculation standard only, while the remaining 30% possessed higher educational qualifications. The low level of education among the vegetables cultivators is due to the fact that although horticulture is a scientific profession yet it does not require any specialized skills. The farmers can easily get themselves trained in it, even if they have little formal education.

(iii.) Family Size
On the basis of family size, the families of vegetable growing farmers can be divided into three categories i.e. small sized families (upto 4 members), medium sized families (5 to 6 members) and the large sized families (more than 6 family members). Out of the total 20 farmers interviewed, 8 had small sized families, 10 farmers had medium sized families and 2 belonged to the category of having large sized family. These figures reveal that half of the farmers (50%) have a family size of 5 to 6 members (medium sized families), 40% of the farmers belong to the small sized families (upto 4 members in family), while just 10% of the farmers had large family size (more than 6 members in family).

(iv.) Monthly Income
On the basis of monthly income of the vegetable-growing farmers, three categories of farmers were formed viz. low income group (monthly income below Rs. 10,000), middle income group (monthly income ranging between Rs. 10,000 to 20,000) and high income group (monthly income above Rs. 20,000). Only one farmer belonged to the low income category while 14 farmers were in the middle income group and 5 farmers belonged to the high income group. This data reveals although most of the vegetable growing farmers own small to medium landholdings, but still a majority of them are earning a handsome amount of money per month. This fact can be
used to motivate other small and marginal farmers to shift from cereal crops to vegetable cultivation, since their small landholdings are comparatively more viable of fetching higher remuneration in case of vegetables than other crops.

(v.) Vegetable Cultivation as an Occupation
As far as the profession of vegetable cultivation is concerned, 5 farmers had a family background of growing vegetables. Their fathers and forefathers cultivated vegetables even before independence of India. These farmers had applied the expertise of their elders in this profession. The Green Revolution helped such farmers immensely and thus increased their profits manifold. The remaining 15 farmers were attracted towards this profession after the advent of Green Revolution. This agricultural revolution brought wheat-rice cropping pattern in Punjab, which became very popular among the farmers of Tanda region as well. But the high costs of farming inputs and low farm profits on small landholdings forced the farmers to go for vegetable cultivation. The sandy loam soils of this area are quite favourable for vegetable growing. Their newly adopted profession improved the economic conditions of the farmers. They also realized that growing vegetable crops was more profitable than cereal crops, since by growing vegetables they could earn money all the year round.

(vi.) Size of Landholdings
The data on landholdings collected from the surveyed farmers revealed that 6 farmers have small land holdings (below 3 acres) while 11 farmers have medium sized landholdings (3 to 6 acres) and the remaining 3 farmers are having large land holdings (above 6 acres). It is evident from the above data that farmers with medium and small landholdings are more engaged in this profession of growing vegetables. The farmers having large landholdings are least interested in this profession, the reason being that farmers with large landholdings prefer to cultivate cereal crops (wheat, rice, corn etc.) and cash crops (sugarcane, sunflower etc.).

(vii.) Types of Crops Cultivated
As far as crop types grown by the farmers throughout the year are concerned, at present both seasonal and non-seasonal vegetables are grown by the farmers. Earlier the non-seasonal vegetable crops were not sown in this region. But it became possible only due to the availability of good quality hybrid seeds of early season variety, main season variety and late season variety. The Punjab Agricultural University, Ludhiana has also played an important role in providing the latest varieties of seeds to the farmers which are suitable for different parts of the year. The survey of the 20 farmers in this study revealed that the farmers of Tanda area grow almost all the vegetables both in summers and winters. Root vegetables like carrot, beet root, turnip and sweet potatoes are grown in winters, while radish and potatoes are grown both in summers as well as in winters. The leafy vegetables like coriander, spinach etc. are grown both in winters as well as in summers, while lettuce, fenugreek and cabbage are cultivated in winters. The flower vegetables like cauliflower are cultivated only in winters. The fruit vegetables and squashes are grown mostly in summers. Prominent among them are tomato, brinjal, lady’s finger, cucumber, ridged gourd, bitter gourd etc. Bulb vegetables like onion and garlic are cultivated in winters. Out of all the vegetable crops grown in the region, coriander, spinach and radish are the most popular choices that are grown all the year round.

(viii.) Use of Fertilizers

Fig 3. Monthly Income of Farmers

![Monthly Income of Farmers](image1)

Fig 4. Size of Landholdings of Farmers

![Size of Landholdings of Farmers](image2)
Vegetable farming needs a highly fertile soil for speedy growth of crops with assured high yield. The farmers engaged in cultivation of vegetables do not leave their land fallow even for a few days. Under such circumstances, a large amount of fertilizers are needed to maintain the fertility of the soil. Out of the total 20 farmers interviewed, almost all of them used chemical fertilizers like urea, ammonium phosphate, ammonium sulphate, calcium nitrate, single superphosphate, potassium nitrate etc. However 8 farmers are also using organic fertilizers like farmyard manure, compost and animal-dung manure. Apart from the use of fertilizers a few farmers also use oxytocin injections to boost plant growth. All the 20 farmers also make liberal use of toxic insecticides, pesticides and herbicides to maximum possible extent in order to increase crop production.

(ix.) Distance Travelled by Farmers (Farm to Market)
Vegetables are highly perishable in nature. Therefore the cultivation of vegetables is generally concentrated around towns and cities, so that they can be transported to the market immediately after harvesting in their fresh form. In case of the vegetable market of Tanda, the above statement holds true. Out of the total 20 farmers under study, 8 farmers are located within 2 km radius from the vegetable market, 8 farmers lie in the next 2 to 4 km distance band and only 4 farmers have to travel more than 4 km to come to the market to sell their produce. This data reveals that a majority of the farmers interviewed (80%) belong to villages lying within a radius of 4 km from the market. Their number decreases as the distance from the market increases. However, with the development of efficient means of transportation and communication, the number of vegetable growing farmers coming to the market will increase further.

(x.) Mode of Transporting Vegetables
Different means of transportation are used by the farmers to transfer vegetables to the Tanda market. Among the farmers under study, bicycles were used by 8 of them to transfer their produce to the market, 5 farmers used tractor trolleys, 4 farmers used cycle cart or rickshaw for transporting their vegetable to the market. Jeep trailer, scooter and bullock cart was also used by a few farmers to bring their produce to the market. Most of the respondents were marginal farmers and the load they had to transport to the vegetable market ranged between 25 kg to 50 kg. Therefore, they preferred bicycle as mode of transporting vegetables. Most of these farmers belonged to low or middle income group. Therefore, the use of bicycles helped them to save the fuel costs of automobile vehicles. Tractor trolleys are used by those farmers who have large landholdings with huge bulk of vegetables to be transported to the market. This mode of transport is also used by big farmers who have to travel comparatively longer distance to bring their produce to the market. Usually bulky vegetables like potatoes, radish, carrots, cauliflowers etc. are transported on tractor trolleys from farms to the market. Some nearby farmers who bring vegetables in sizeable amount to the market use cycle-carts and rickshaws as means of transportation. The use of bullock cart in this region has become very rare; nevertheless one farmer still brings his produce to the vegetable market on it.

![Fig 5. Distance Travelled by the Farmers to the Vegetable Market](image)

![Fig 6. Types of Vehicles used by Farmers](image)
(xi.) Problems Faced by Farmers
The main problems which these vegetable growing farmers have to face are:

a) Continuous fluctuations in vegetable prices make this profession unreliable for the farmers. When vegetable prices surge, the farmers cultivate that particular vegetable in plenty in order to garner rich profits but when most of the farmers grow that particular vegetable crop the wholesale price plunges to its low. A constant imbalance between supply and demand results in the sharp fluctuations in the vegetable prices.

b) Sometimes the commission agents make secret agreement among themselves to fix low procurement prices, which leads to low costing of farmers’ produce.

c) There is a serious dearth of procurement policies of the government in case of vegetables. This adds to the uncertainty of profitable marketing of vegetable crops.

d) The farmers who sell their produce themselves in the market do not have proper infrastructure to exhibit their produce and they have sit on the roadside to sell their produce, sometimes in unhygienic conditions.

e) The inclement weather sometimes poses obstacles in the proper marketing of vegetable products. At times it leads to rotting of vegetables, causing serious loss to the farmers.

4. CONCLUSION
The above results reveal that about 65% of the total farmers are in the category of mature farmers (40 to 60 years of age). The reason for a big proportion of farmers belonging to this category is that most of them inherited this profession from their ancestors. More than 70% of the farmers are either illiterate or have education up to matriculation standard only. The farmers can easily get themselves trained in horticultural profession, even if they have little formal education. Half of the farmers (50%) have a family size of 5 to 6 members (medium sized families). Although most of the vegetable growing farmers own small to medium landholdings, but still a majority of them are earning a handsome amount of money per month (more than Rs. 10,000). Most of the farmers believed that growing vegetable crops was more profitable than the cultivation of cereal crops, since by growing vegetables they could earn money all the year round. Farmers with medium and small landholdings (3 to 6 acres) are more engaged in this profession of growing vegetables. At present, both seasonal and non-seasonal vegetables are grown by the farmers due to the availability of good quality hybrid seeds of early season variety, main season variety and late season variety. Almost all the farmers used chemical fertilizers like urea, ammonium phosphate, ammonium sulphate, calcium nitrate, single superphosphate, potassium nitrate etc. A few farmers also used oxytocin injections to boost plant growth. Some farmers are also using organic fertilizers like farmyard manure, compost and animal-dung manure. All the farmers also make liberal use of toxic insecticides, pesticides and herbicides to maximum possible extent in order to increase crop production. A majority of the farmers interviewed (80%) belonged to villages lying within a radius of 4 km from the market. Their number decreases as the distance from the market increases. Cycles, rickshaws, carts and jeep trailers are used by local farmers for transporting their farm produce to the market. The farmers coming from greater distances use tractor trolleys to transfer bulky vegetables to the market. The main problems faced by the farmers are fluctuating prices of the vegetables, low procurement prices of commission agents, lack of government regulating policies, lack of opportunities for direct selling and inclement weather.

REFERENCE