

# SUSTAINABLE LIVELIHOOD: A STUDY ON GARDEN MARKETERS OF CHAKWAL CITY

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**ABSTRACT:** *Garden marketer provides food for the urban market sale to satisfy the consumer's needs and the farmers themselves. The study was qualitative in nature and conducted on the Local farmers of Chakwal city associated with it. A major population of the locale was engaged in agricultural activities. Data collected from 100 respondents through participant observation and in-depth interviews revealed poor health and low social status assessed from their working and living conditions. Mechanized farming had reached the garden marketers too which was making it easier to have a sustainable livelihood.*

**Key words:** Farmers, Garden marketers, Urban agriculture, Modern agricultural technology

## INTRODUCTION

A garden marketer is a person who is engaged in agricultural activities [1]. Garden marketer is a person who is involved in all activities related to food marketing. Food marketing is a process that involved the exchange of food products to meet the needs of consumers and organizations [2]. Food marketing involves buying and selling of food products [3]. Agriculturalists are responsible for providing food for a rapidly growing world population. Garden marketers in Chakwal city were growing fruits and vegetables on land size from 1 canal to 10 canals. Their land sizes were smaller as compared to other farmers in different areas of Chakwal.

Agriculture refers to the skill and art of preparing the soil for production of food products, growing of crops and reproduction of livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets.[4] The word agriculture originated from the Latin term Ager Cultura meaning cultivation of field. The word comprises the sciences related to crop production and livestock farming, gardening, poultry, dairy farming, soil sciences, forestry etc. [5]. Agriculture contains growing of fruits and seeds, dairy farming, preparation of land and reproduction of livestock.

To practice agriculture in the city is always of great importance in all parts of the world. All agricultural production practices within the city provide food products for the urban market sale to satisfy the consumer's needs and the farmers themselves [6]. Agriculture in cities provides the opportunities for food production and marketing which are not available to people living in rural areas. Farmer grows fruit and vegetables near their home. They used the food products for their own use and surplus production of fruits and vegetables can then be sold in the markets [7]. Urban agriculture is production of food products found in the suburbs of the city. It also includes other applications and practices associated such as production and deliverance of inputs, and commercializing the related commodities. It is completely commercialized agriculture. Most of the world's population is dependent on agriculture sector. Agriculture sector is of great importance not only at national level but also globally. The human civilization is greatly dependent on the agriculture sector for its food, shelter and clothing. Agriculture performs a vital part as the providers of raw materials for the industrial sector[8]. The main fundamental task of agriculture sector is availability of food, clothing and

shelter. The interests of the state largely are subjected to the expansion of agriculture sector.

Pakistan's main natural resources are arable land and water. Pakistan acquires a very vital position among the major agriculture countries around the globe. The province Punjab has cultivated land area of 57% and 69% of the total cropped range of Pakistan[9]. It contributes in agricultural economy of country by providing a major share about 83% of cotton, 80% of wheat, 97% fine aromatic rice, 63% of sugarcane and 51% of maize to the national food production. Among fruits, mango accounts for 66%, citrus more than 95%, guava 82% and dates 34% of total national production of these fruits.[10] Total geographical area of the province is reported to be 50.98 million acres out of which 7.29 million acres of land is not available for cultivation. The total cultivated area of Pakistan is reported to be 30.86 million acres [11].

It is the prime sector of the Pakistan in regard with income and service generating. Agriculture sector is a basis of requirement for industrial commodities and supplies raw material for industries. For improvement of economic growth and decreasing poverty in Pakistan agriculture yield is mandatory. Agriculture is the main source of providing labor. In Pakistan 62 % of labor force is working on agriculture sector.

In general farmers are perceived to be less educated, illiterate persons who need directions for improved agricultural yield. The current agricultural technologies are essential to attain self-reliance in food production.[12] The rapid progress and improvement in the field of agriculture without utilizing the technical enhancement is likely for a confined time only through exploration of resources and expansion of area.

Chakwal is an arid area. Most of the population living there was linked directly or indirectly to agriculture sector. An approximate of 70 % of the population of Chakwal was engaged in farming practices. Agriculture was the main occupation of people of Chakwal[13].

Most of the emergent countries over the world are lately based on sector of agriculture. Therefore, the significant factors of poverty and food security are dependent over high degrees of the yield[14]. Modern agriculture enables world population to eat better and healthy food. Better production also enables to improve diets, availability of all foodstuffs, and assure access to high-protein foodstuffs. If new technologies for advance productivity will not apply on the farm the food system purely get worse. Especially it forced farmers and their families to live in poverty[15]. The farming

sector faces a remarkable challenge. FAO has estimated that foodstuff production must rise 70% by 2050 in accordance with global population growth and changing diets. On the other hand the agriculture sector is facing a lot of problems like insufficiency of fertile land and unavailability of water, and there are many major ecological problems, pollution, and climate change. Some people are of view that the solution of these problems lies in modern developments to improve productivity growth, as food security is the utmost objective of mankind [16]. The issues of the farming community have grown more complex pertaining deficiency of appropriate guidelines and suitable credit support.

**METHODOLOGY**

The research methodology used by the researcher was descriptive. The descriptive methodology used to describe the location and the characteristics of farmers of the area. Purposive sampling technique was used since the study was only focused on farmers. To obtain the basic data about the people of the field socio economics survey forms was designed which were helpful in gathering the information of farmers and was helpful in initial rapport building with respondents. Semi Structured Questionnaire was designed to gather qualitative data which was manually analyzed and presented in a descriptive form.

**RESULTS**

**Table 1: Land Size, No of Households, Annual Income And Fertilizer Used By Peasants.**

Landless farmers/ peasants				
No of respondents	Land size In Kanals	No Of H.H	Fertilizer	Annual income
3	1-3	5-6	natural	40000
4	4-7	6-10	chemical	41000-61000
7	8-10	11-15	Both	61000 And above
Total 14				

Table 1 shows that 3 % of the peasants were working on land size of 1-3 kanals. Their number of households was 5 to 6 family members. They were using natural fertilizer on their farm and their annual income was Rs. 40000. 4 % of the peasants were working on 4-7 kanals. Their household's number was 6-10. They were using chemical fertilizer on their farm and their annual income was Rs. 41-61000. 7 % of the peasants were working on 8-10 kanals. Their family size was 11-15 members. They were using both natural and chemical fertilizer and their annual income was above Rs. 61000.

Table 2 shows that 2 % of the small scale farmers with least out land were having the land of 1-3kanals. They were using natural fertilizer. Their family size was small with 5-6 family members and their annual income was Rs. 40000. 3 % of the small famers were having 4-7 kanals of land. They were using chemicalfertilizer on their farm. They were in the family size of 6-10 family members. Their annual income was Rs. 41000-61000. 6 % of the small farmers were having

land size of 8-10 kanals with annual income of Rs. 61000. They were using both natural and chemical fertilizer. They were in the family size of 11-15 family members.

**Table 2: Land Size, No Of Households, Annual Income And Fertilizer Used By Small Scale Farmers With Leas Out Land**

No of respondents	Land size In Kanals	No of H.H	Fertilizer	Annual income
2	1-3	5-6	Natural	40000
3	4-7	6-10	Chemical	41000-61000
6	8-10	11-15	both	61000 And above
Total 10				

**Table 3: Land Size, No of Household, Annual Income And Fertilizer Used By Small Farmers.**

Small Scale Farmers				
No of respondents	Land size in Kanals	No of H.H	fertilizer	Annual income
3	1-3	Up to 5	Natural fertilizer	40000
5	4-7	6-10	Chemical fertilizer	41000-61000
47	8-10	11-15	both	61000 And above
Total 55				

The table 3 shows 3 % of the small farmers were having land size of 1-3 kanals. Their family size was small with 5 to 6 family members. They were using natural fertilizer in their farm and the annual income was Rs. 40000. 5 % of the farmers were having land of 4-7 kanals. They were in the family size of 6-10 family members. They were using chemical fertilizer and their annual income reached Rs. 41000-61000. 47 % of the small farmers were having land size of 8-10 kanals. Their family size was 11-15 family members. They were using both natural and chemical fertilizer and their annual income was above Rs. 61000.

**DISCUSSION**

An estimated population of over 70 % in Chakwal was engaged chiefly in agriculture. Human civilization is greatly dependent on the agriculture for its food, shelter and clothing [8]. The main fundamental task of agriculture sector is availability of food, clothing and shelter. Most of the emergent countries over the world are lately based on sector of agriculture [14]. As compared to other laborers the income status of farmers was better. Hard working conditions and low standard of living made their social status low. Since, Agriculture is time consuming and laborious, working hours of farmers were very much elongated, spending whole day from dusk to dawn on farm during harvesting season. They were working even in poor hygienic conditions.

Farmers were also facing health risks and injuries due to extreme weather conditions and inefficient use of heavy machinery, chemicals, pesticides and fertilizers. Families of

the peasants were living along with them on field. The house was composed of a semi pakka structure with an open clay oven and basic furniture. Food was stored in an adjacent room if available else in the very living room. Insects and flies buzzed around the rotten veggies and fruits. Mostly farmers faced headache and body itching allergies due to the excessive use of pesticides and fertilizers. Due to extended working hours on farms in hot and sunny days dehydration, jaundice and typhoid was mainly complained by the famers. The use of tractors and heavy machineries caused injuries. One of the farmers told about the incident of death of a young boy who died as consequence of mishandling of the tractor driver. There were no medical facilities granted to the farmers. Farmers could only avail government hospitals and dispensary which were in quiet close proximity but were hardly equipped with any facilities. Since their income status was low they could not afford the medical facilities any better. The issues of the farming community have grown to be more complex pertaining deficiency of proper guidelines and suitable credit support [16]. Chakwal being from the Arid zones of Pakistanis mainly dependent on rain water hence is largely dependent on rain fed agriculture. Due to unavailability of water in the area as there were no dams and lakes in the city. Many homes had their own wells. Some farmers were using electric motors for drinking purpose and for irrigation of crops.

Summer season was the most suitable season for farming as in summer rainfall rate increased and farmers did not have to face the problem of irrigation. The monsoon season starts from the month of July to August. Wheat is the main monsoon crop. Mostly farmers preferred hot and summer season for cropping and farming. The level of rain was high in summer season which aided the farmers for their farming needs; they did not have to rely mainly over the water resources. In that case the farmers did not have to face the irrigation problems. Crops that required more water for growth were normally grown in the summer season especially rice and wheat which were the cash crops and required standing water for weeks. A few crops were grown in winter season, the Rabi crops mainly utilizing the already present moisture in the land for their growth. Barley, mustard and peas were grown in winter season. The land size in the cities was small as compared to other areas of Chakwal district. Farmers who were big landlords owned their land by inheritance and extended it by further purchase. Their land was cultivated by tenants. Land owners provide seeds and other expenditures to tenants. In return they provide labor and look after the crops and farms. Sharecropping is an agreement between tenant and a landowner. Tenant cultivates the crops on the land and half of the production is given to the land owner by share croppers or tenants. Some farmers who owned small land holdings or got land on lease by paying rent cultivate there land by themselves with the help of family members or hired workers.

Wheat and peanuts were the main crops grown by the farmers of Chakwal and main source of income for the farmers. Farmers were growing seasonal fruits and vegetables in their farms. White beans, garlic, onion melons, tomatoes and

sunflower were also commonly grown by the farmers. The sunflower seeds were used for extracting edible oils.

Though the literacy rate in Chakwal was 76 % yet formal education was not an issue for the small farmers[17]. Most of the farmers in the area were illiterate and rarely had awareness on educating their young ones. In the harvesting season more manpower was required and whole of the family members including their children were engaged in farms cultivating crops. Farmers complained that they could not send their children to school. Medium and large scale farmers could afford the educational expenses of their children.

The rapid progress and improvement in the field of agriculture without utilizing the technical enhancement is likely for a confined time [12]. Modern agriculture enables the world population to eat better and healthy food. Better production also enables to improve diets, availability of all foodstuffs, and assure access to high protein foodstuffs [14]. Tractor was the main vehicle used in any farm and it provided power to systemize agricultural activities. Majority of the work on farms was done by tractors. Tractors were used in the area for tillage; the activity of preparing the soil for cropping, like digging and over turning. Steel disk blades were attached to the tractors to cut the soil for plowing. Before sowing new seeds farmers used plough which cuts the soil to 1.5 feet deep. The farmers used eleven blades steel disk for making directions in the farm. The tractors were used by the small farmers to big landlords or even by tenants who were working on big landlord's farms. Tractor has replaced the old simple plowing devices which were driven by oxen. Plowing was once being done by hand, by using simple plowing tool *hal*. In bullock farming, plowing steel disk blades were attached with two bulls for plowing. The physical burden on farmers was decreased as they start using tractors. All of the farmers in the locale were using tractors even if they did not have their own. By renting out of leasing on installment they can get the tractor. The rent of the tractor was 1000 to 1200 rupees per hour. Land owners provided tractor to those tenants who were working on their farms.

Threshing machine was used by the farmers for separating the grains from the stalks and husks. Before the use of this machine the process of separating grains from the crops was done manually by the farmers by hitting the grains on the ground which was hard and time consuming which would take a day to complete. This laborious activity had been taken over by threshing machine. It made the procedure easy and fast especially in wheat crops. It was also available on a rent of three thousand rupees per hour.

When the wheat crop was fully grown, it was allowed to dry in the field and when ready, it was harvested. Harvesting was done by hand cutting the grain with a blade. Then farmers prepared a bundle of grains. The bundle was held together by simply wrapping a small bunch of grain stalks around the large bundle and tying them in a knot. Grain on the stalk was brought from the field and was fed into the machine by the farmers. The steel cylinder inside the machine rotated fast having teeth on it that struck the grain separating them from the stalk.

The first mechanical threshing was done with an open threshing cylinder driven by hand or a foot pedal. These machines were small, made of wood and grain from the field was fed in by hand. The grain went into a bin or bag and the straw either fell out of the tail. The use of thresher machine in agriculture provides a faster supply of food products in a market. Harvesting refers to the time when crops and food that is being grown are gathered. Farmers were using simple tool for harvesting wheat crop. Harvesting was done manually by using blade. Farm women who lived on their farms were also engaged in gathering food products from their farm. Harvesting machines were used by only few big landlords. If new technologies for advance productivity will not apply on the farm the food system purely get worse. Especially it forced farmers and their families to live in poverty [14].

### CONCLUSION

The results of the study show that farmers were living in a very poor condition. Their income and education level was low. They were facing many health problems. The use of modern technologies helps farmers in raising their income level. And also improves their production level. This ultimately aids the farmer in improving their living standards as well. Farmers in the locale were started using modern technologies for their ease. All of the farmers were engaged in using agricultural machines for better production.

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