



The Problems Faced by Fruit Growers to Market Access: A Case Study of District Neelum Azad Jammu and Kashmir

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ABSTRACT

The study has an imperative phase to see the sights which has had been important in the lives of masses while spending a reasonable time period of life in the plantation of fruit trees and expecting the margins in the long run. The fruit production in Pakistan is expanded and more than 21 varieties of fruits are produced in the country. The present study was conducted in, Neelum (two fruit villages Katha Peeran and Chanjath), one of the district of Azad Jammu and Kashmir. The data was collected through interview schedule while a sample size of 250 households was taken all the way through equal allocation by using probability sampling without replacement. The study drew attention to the problems faced by fruit growers towards the market access. The study concluded that fruit growers face numerous problems in the process of fruit growth. The rudimentary apathy evaluated so far is the absence of basic civic facilities i.e. awareness, sprays, fertilizers, market related issues and road access which might not be difficult task for the government to access such fertile area and support people for the revenue generation activity. However, there needs special attention i.e. provision of pesticides, protection of fruit trees and provision of new varieties of fruit trees and adequate irrigation facilities along with the packing and pricing factors which impeded the small scale fruit growers specifically and large scale fruit growers generally to access market and restrict the fruit growers to produce a reasonable revenue for their livelihood.

Keywords: Fruits, Growth, Agriculture, Gardening, Nutrition, Credit, Farming.

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INTRODUCTION

Pakistan rural economy relies on agricultural production. It is the chief supplier to Gross Domestic Product (GDP) both overtly and covertly. Natural environment has consecrated Pakistan with pleasant weather for promising and generous assortment of tasty fruits. Pakistan exported 268,741 tons of fruits worth US\$ 48.83 million during 2008-09. Pakistan has earned reasonable revenue of US\$48.83 through fruit products (268,741) during 2008-2009 [1]. Pakistan is bestowed with a wide range of agro-climatic conditions allowing Pakistan which is a country with spacious variety of agricultural conditions where 21 different types of fruits are grown. The market value of these fruits produced during 2006-07 is projected almost 97 billion revenue that is approximately 8% of agriculture value added in the year [2]. During the same period, Pakistan earned 11.3 billion revenue from outgrowth products, embodied virtually one% of the whole exports from Pakistan, and around 11% of the entire sum produced from export of all unprocessed farming freight [3]. Total area under fruits is 0.833 million hectares with the production of 6.011 million tons. Baluchistan shares 30 and 14% of the total fruit area and production of Pakistan, respectively during 2006-07 [2].

Pakistan is favorable to the produce of nearly thirty varieties of fruits and main agricultural fabric of Pakistan covers only 1.081 million hectares, which is barely a meagre ration of 7% produced from the country [4]. In Pakistan, facts indicate the annual utilization of fruit has risen from 28kg to 35 kg for the period of 1970-2000 [5]. WHO has designated a standard for daily fruit utilization of an individual i.e. 450g/day [6]. The standardized daily utilization of fruit is scarce in the general population of Pakistan which indicates that fruit growth is not sufficient. Out of the total exports of fruits, share of fruits were 53.443 tones valuing \$16.54 million which showed 43% increase over the 1999-2000 [7]. KPK has its uniqueness for producing the numerous varieties of fruit across Pakistan because of its environmental conditions which are served across the country. It is popular for the fruits like, apple, apricot, walnut,

pear, peach and almond etc. This region fulfils the highest ration, among provinces, and need of fruits in the country [6].

Agriculture in Pakistan has wide horizons where a considerable labor is available and by the help of labor revenue can be generated in terms of employment and better produce can be achieved for the export. It is possibly the opportunity and order of the day to revise the conventional methods and draw some modern lines with new produce to gain global attention and earn revenue for the country. An inconsistency in fruit produce is twice or thrice more than rice produce [8-10]. Baluchistan is well known for its fruit products in Pakistan where more than 70% production of apple is supplied from Baluchistan to the other provinces. During 1980s the area for fruit products has had been amplified overtly four times. Overtime data reveals that apple production has increased mainly due to visible increase in apple production area in Baluchistan [11].

Apple products are unique and significant among the different fruit yield globally and it has its origin in the Central and South-Western Asia [12]; while apple make up an essential element of the balanced diet [13] which are grown-up in moderate tracts (mountainous zones) of Punjab, Khyber Pakhtunkhwa and Quetta province of Baluchistan [12] and the apple producers are increasing day by day which constitute more than 7000 producers [14], ensuing unique arrays of preferred distinctiveness. The producers adapted to diverse climatic conditions which affect the production [15].

However, selling tasks are executed in a customary mode and marketplace which indicates that fruit produce would suffer the quality while the cost varies for the producers and customer's at large scale and it creates the gap [16, 17]. The role of middle man is significant because he takes advantage of both producers and customers and fixes his own prices to earn greater revenue [18]. In Pakistan, asymmetrical and stumpy yields elevates disquiet regarding the competence and effectiveness of fruit yield and specifically the selling and promotion networks while it is evident that effective functioning of market elevates the improvements in the yield which guarantees the steady escalation of the fruit industry. State may take some radical steps to resolve such issues while elevating the fruit yield by the provision of some new techniques with research and annexed services, improving assortments along with administrative practices while elevating the effectiveness of market [19]. However, it is necessary to comprehend and encourage the research and knowledge regarding the fruit yield and the problems arisen in the sector must be considered. In the global setup the crops growing of Pakistan is weary which is not good for an agricultural country. So, it is more important to evaluate the quality and growth of fruit yield and marketing procedures in Pakistan. In Pakistan, the fruit yield has various problems like stumpy yield with low quality which cannot be contrasted against many developing and under developing nations. It specifies and necessitates in sorting out the reasons of lower yield of fruits in Pakistan and taking some necessary steps to make improvements. There are ineffective marketing procedures in Pakistan so as the malfunctioning occurs while the differentiation of prices between customers and producers are diverging. Nevertheless, the middle man issues have grown disparities and lost the state of confidence, between seller and buyer, because middle men used to take disadvantage of the costs in terms of peripheral speculation which discourages the producers. Baluchistan is the major region in fruit produce but has underprivileged post-harvest and marketing networks which are consequent of higher post-harvest and transport losses [20-22].

Ineffective marketing procedure in Pakistan is the major cause of less and inadequate yield which leads to cost related disparities. The rapidly growing influence of the middleman has made the marketing procedures more complex and ultimately discouraged the producers and customers through high margins. The out dated traditional production and marketing margin has affected the production to the great extent. The ineffective and conventional methods and marketing procedures along with disparities in transport and hauling, elevated costs, lower margins with quality of yield and unavailability of micro credit facilities comprised overall inclination of fruit produce in the country [23].

Haleem *et al.* [24] evaluated the problems of fruit growers in Pakistan. Most of the fruit producers used to sell their fruit gardens to suppliers which is evident of market disparities that the suppliers or sellers earn revenue thrice times than the producers as the total revenue earned evaluated that seller received more than 80% surplus in the market and a large proportion of profit than the producers and agents who receive lowest margins [25]. Average yield of fruit in Pakistan is about 12.78 tons per hectare [26]. Ali [27] argued that traditional procedures of farming, old ways of collection which ultimately leads to malfunctioning of fruit produce and hence low yield. Greater deformities at the time of collection and lower standard of organic compounds are also important issues in fruit production [28]. According to Memon [29] lack of storage, transportation and infrastructure resulted about 40 percent of post-harvest losses. Defective marketing system was identified as one of the major problems faced by fruit growers [28]. According to Kim [29] lack of standardization is one of the main reasons that farmer consign their product to the yield collectors. Neelum is mostly landlocked with planes at higher altitude along the

Neelum River and it extends almost 200 kilometers to the north. The people are mainly associated with agricultural activities while ground water is available in abundance for the agri-based activities and water springs and streams fall into the Neelum River from peripheries. Neelum is bestowed with numerous fruit potential and it can be a major source of income. In Neelum, a variety of fruit is found i.e. apple, walnut, apricot and pear. Due to conventional methods of farming and cultivation, the fruit yield is in a close compact and has impact on the life standard while low yield has affected the earning of the families as well [31].

MATERIALS AND METHODS

The research employed quantitative research design to assess the problems of fruit growers in two selected villages of district Neelum. The data was gathered vigilantly all the way through primary and secondary sources while the whole process was taped through various necessary steps. However, the population of both UCs is scattered and cover a specific territory. *Chanjath* village is located in union council *Kundalshahi* and it contains 500 household among which 25% household, 125 fruit growers, were selected through random sampling for the study on the other hand *Katha-peeran* contains more than 500 households but the people living in far lung areas were found farmers but not fruit growers so exempting that area almost 500 household were found in the fruit enriched area among which 25% fruit growers were selected again 125 fruit growers which constitute 250 sample size and the fruit growers were selected on the basis of random sampling without replacement. The main objective of utilizing interview schedule was obvious to attain the demographic data about the fruit producers. However, through the use of interview schedule which comprised of demographic variables, the information was achieved. The tool was designed by the researcher and the data was collected carefully as the interview schedule consisted of variables i.e. age, sex, relationship with household, caste, level of education, family structure, marital status, total family members, income, amount of land holding, livestock, assets, settlement pattern, fuel, vehicles, size of the house and income group.

The strength is related to the degree or extent of a relationship between the variables. The term correlation is used to describe the strength of relationship between the variables. It reflects the interdependence between two variables. The measure of closeness is called coefficient of Pearson correlation. The Pearson correlation coefficient was calculated for the study of strength of relationship between the variables. The most common procedure to explore the significance of the factors involve in this study is logistic regression. It gives alternative explanation of the variables which is not possible through any other technique. It is carried out through a close group in which it is used as means to establish the relative importance of independent or explanatory variables to the dependent or responsive variables.

The equation is expressed as follows:

$$E(Y/X = X) = \frac{e^{B_0 + B_1 X}}{1 + e^{B_0 + B_1 X}}$$

RESULTS

Table 1: Cross Tabulation of Market Access with Demographic Variables.

| Market Access | Union Council | | | | | Total | |
|---------------|----------------|--------------------|-------------|------------|---------------|----------|-----|
| | Shahkot | | Kundalshahi | | | | |
| Yes | 59 (51.8%) | | 55 (48.2%) | | | 114 | |
| No | 66 (48.5%) | | 70 (51.5%) | | | 136 | |
| | Sex | | | | | | |
| | Male | | Female | | | | |
| Yes | 93 (81.6%) | | 21 (18.4%) | | | 114 | |
| No | 110 (80.9%) | | 26 (19.1%) | | | 136 | |
| | Age | | | | | | |
| | 16-25 | 26-35 | 36-45 | 46-55 | 55 and Above | | |
| Yes | 19 (16.7%) | 26 (22.8%) | 25 (21.9%) | 30 (26.3%) | 14 (12.3%) | 114 | |
| No | 21 (15.4%) | 28 (20.6%) | 45 (33.1%) | 26 (19.1%) | 16 (11.8%) | 136 | |
| | Marital Status | | | | | | |
| | Single | | Married | | Widow/Widower | | |
| Yes | 17 (14.9%) | | 92 (80.7%) | | 5 (4.4%) | 114 | |
| No | 27 (19.9%) | | 105 (77.2%) | | 4 (2.9%) | 136 | |
| | Occupation | | | | | | |
| | Farmer | Government Servant | | Laborer | 1 and 3 | 1 and 2 | |
| Yes | 49 (43.0%) | 7 (6.1%) | | 33 (28.9%) | 19 | 6 (5.3%) | 114 |

| | | | | | | |
|---------------------------|-----------------|-------------|--------------|--------------|---------------------|----------------------|
| No | 54 (39.7%) | 17 (12.5%) | 37 (27.2%) | 25 (18.4%) | 3 (2.2%) | 136 |
| Caste | | | | | | |
| | Mughal | Chaudhary | | Malik/Awan | | |
| Yes | 69 (60.5%) | 39 (34.2%) | | 6 (5.3%) | | |
| No | 63 (46.3%) | 64 (47.1%) | | 9 (6.6%) | | |
| Education Level | | | | | | |
| | Illiterate | Primary | Middle | Matric | Intermediate | Graduation and Above |
| Yes | 12 (10.5%) | 20 (17.5%) | 35 (30.7%) | 28 (24.6%) | 13 (11.4%) | 6 (5.3%) |
| No | 11 (8.1%) | 24 (17.6%) | 38 (27.9%) | 35 (25.7%) | 21 (15.4%) | 7 (5.1%) |
| Family Structure | | | | | | |
| | Extended Family | | Joint Family | | Nuclear Family | |
| Yes | 37 (32.5%) | | 52 (45.6%) | | 25 (21.9%) | |
| No | 38 (27.9%) | | 69 (50.7%) | | 29 (21.3%) | |
| Family Size | | | | | | |
| | 1-3 | | 5-7 | | 8 and Above | |
| | 37 (32.5%) | | 52 (45.6%) | | 25 (21.9%) | |
| | 38 (27.9%) | | 69 (50.7%) | | 29 (21.3%) | |
| Income | | | | | | |
| | Up to 5000 | 5001-10001 | 10002-15002 | | 15002-17002 | 17002 and above |
| Yes | 28 (24.6%) | 38 (33.3%) | 31 (27.2%) | | 15 (13.2%) | 2 (1.8%) |
| No | 26 (19.1%) | 49 (36.0%) | 43 (31.6%) | | 18 (13.2%) | 0 |
| Landholding Size | | | | | | |
| | Up to 5 Kanals | 6-11 Kanals | 12-17 Kanals | 18-23 Kanals | More than 24 Kanals | |
| Yes | 28 (24.6%) | 38 (33.3%) | 31 (27.2%) | 15 (13.2%) | 2 (1.8%) | |
| No | 26 (19.1%) | 49 (36.0%) | 43 (31.6%) | 18 (13.2%) | 0 | |
| Settlement Pattern | | | | | | |
| | Kacha | Pakka | Semi-Kacha | | Semi-Pakka | Wooden |
| Yes | 28 (24.6%) | 38 (33.3%) | 31 (27.2%) | | 15 (13.2%) | 2 (1.8%) |
| No | 26 (19.1%) | 49 (36.0%) | 43 (31.6%) | | 18 (13.2%) | 0 |

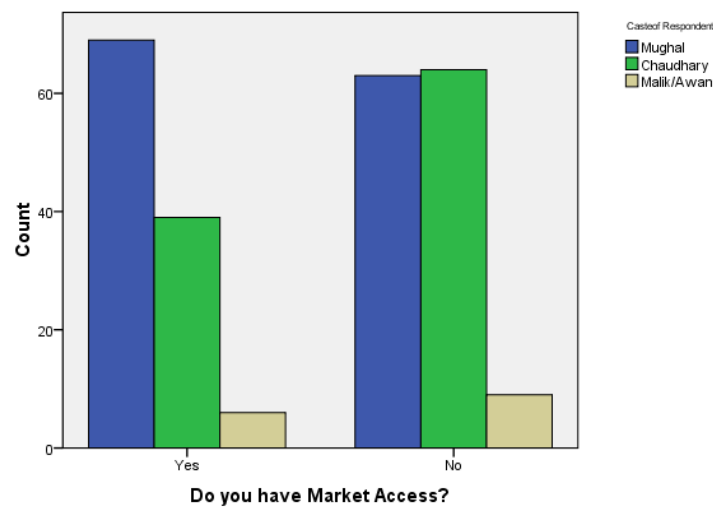
Table 1 showed that 52 percent of fruit growers from union council *Shahkot* had market access due to road although rough but had access to the market on the other hand 48 percent fruit growers of union council *Kundalshahi* had access to market without road and they had to carry their production to access market. Among the other 48 percent fruit growers from union council *Shahkot* had not market access because of low economic conditions while 51 percent of union council *Kundalshahi* had not any access to market and used to sell their products through middle man. Among the enumerated respondents 81 percent males access the market and take their production to the market while 18 percent females stated that they had access to market while 81 percent male respondents including 19 percent female respondents said that they had not any access to the market because of either rough road in *Kathapeeran* or had not road facility in *Chanjath*. Overall, fruit growers were deprived of market access either because of low economic conditions or had low quality of fruits.

The overhead table illustrates that 17 percent fruit growers in first age group had road access and in second age group 23 percent, in third age group 22 percent, in fourth age group 26 percent and in last group 12 percent fruit growers had access to the market on the other hand 15 percent fruit growers in first age group, 21 percent in the second age group, 33 percent in the third age group, 19 percent in the

fourth age group and 12 percent had not any access to the market because of road facility and the variation were found for different factors. In the above table, 15 percent fruit growers who had access to market were found singles while 81 percent were found married with children and 4 percent widows or widowers had access to the market. On the other hand 20 percent singles had not access to market, 77 percent married and 3 percent widows or widowers had not access to the market. Among the 114 respondents, 43 percent were found farmers, 6 percent government servants, 29 percent laborers, 17 percent were found engaged in farming and labor both while 5 percent were initiated both farming and doing government jobs who had access to the market. While 39 percent farmers had no road access, 12 percent government servants, 27 percent laborers, 18 percent fruit growers who carried out both farming and lobar and 2 percent fruit owners who were involved in both farming and government service were deprived of market facility.

The higher ration of Mughal Caste, 60 percent had market access while 46 percent had not market access, 34 percent fruit growers of Chaudhary caste had access while 47 percent had not on the other hand Awan Caste had overlapping figures as 5 percent had market access while 6.6 percent were found inaccessible.

Bar Chart



It is showed that the market access through educational level as 10 percent were found illiterate, 17 percent passed grade five, 31 percent passed grade eight, 25 percent matric pass, 11 percent intermediate and 5 percent graduates and post graduates were accessible to market. Among the 136 respondents had not market access as 8 percent illiterate, 18 percent passed grade five, 28 percent passed grade eight, 26 percent matric pass, 15 percent intermediate and 5 percent graduates and post graduates who had not access to market relatively. As 32 percent respondents from extended family, 46 percent from joint family and 22 percent from nuclear family had acces to market on the other hand 28 percent respondents from extended family, 51 percent from joint family and 21 percent from nuclear family system had not any access to market. Data indicated that 32 percent respondents form first category, 46 percent from second category and 22 percent from third category had access to market while 28 percent from first category, 51 percent from second category and 21 percent from third category did not access market. The income of the respondents who had access to market can be gauged from table as 25 percent fall in the lowest category, 33 percent found in the second category, 27 percent found in third category, 13 percent found in fourth category and 2 percent found in the last category while respondents who had not market access were found, 19 percent, 36 percent, 32 percent, 13 percent respectively where as in the last category no respondent was found.

However, those respondents who had market access were found 33 percent who have land up to five Kanals, 33 percent had 6-11 Kanals, 27 percent had 12-17 Kanals, 13 percent had 18-23 Kanals while 1, 8 percent had more than 23 Kanals land on the other hand fruit growers who did not have road access were found 19 up to five Kanals, 36 percent had 6-11 Kanals, 31 percent had 12-17 Kanals and 13 percent had 18-23 Kanals. The above table showed the settlement patterns of respondents, fruit growers who had market access and their settlement pattern was found as 25 percent in Kacha, 33 percent in Pakka, 27 percent in Semi-kacha, 13 percent in Semi-pakka while 1.8 percent had wooden houses. On the other hand the respondents who had not market access were found as 19 percent in Kacha, 36 percent in Pakka, 32 percent in Semi-kacha and 13 percent in Semi-pakka while no one had wooden house.

Statistical Analysis

The entered data was analyzed through statistical techniques in order to authenticate the data and produce the results on which the recommendations were made to ensure the remedies for proper solution of the problem under study. The logistic model is a regression model for ordinal dependent variables. Ordinal logistic model is used for categories and orders, as dependent variable of study is in categories and orders then researcher use the ordinal logistic regression.

Hypothesis: Market access is more likely concerned to better livelihood through road facility

Table 2: Classification Table

| Observed | | | Predicted | | |
|----------|----------------------------|-----|----------------------------|----|--------------------|
| | | | Do you have market access? | | Percentage Correct |
| | | | Yes | No | |
| Step 1 | Do you have market access? | Yes | 90 | 24 | 78.9 |
| | | No | 49 | 87 | 64.0 |
| | Overall Percentage | | | | 70.8 |

a. The cut value is .500

Table 3: Results of Logistic Regression

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---------------------|----------|--------|-------|--------|----|------|--------|
| Step 1 ^a | Earning | .044 | .059 | .574 | 1 | .449 | 1.045 |
| | Annual | .030 | .230 | .017 | 1 | .896 | 1.031 |
| | Revenue | .085 | .182 | .219 | 1 | .640 | 1.089 |
| | Quantity | 2.727 | .383 | 50.783 | 1 | .000 | 15.291 |
| | Road | 1.035 | .359 | 8.311 | 1 | .004 | 2.816 |
| | Constant | -5.436 | 1.014 | 28.729 | 1 | .000 | .004 |

a. Variable(s) entered on step 1: Earning, Annual, Revenue, Quantity, and Road.

Logistic regression model was employed and the results of analysis exposed that market access is important for earning livelihood because the exponential values indicated that earning, annual revenue generation and annual production were found closely consistent to the market access while the road facility is scarce so the results signified that market access is solely necessary for the efficient earning of fruit growers besides the annual increase in production and higher revenue generation whereas the market access has exponential value 2 which endorsed that market access is vague without road facility. The other values of earning correlates that earning can be increased through proper market access and reasonable revenue can be generated through it. The quantity of fruit growth is fifteen times higher which exposed that market access and quantity produced is directly proportional. So it is concluded that fruit growers needed exclusive market access though the earning would be increased through road facility and their production would be better for the revenue generation.

Table 4: Correlation between Market Access and Road Facility

| Variables | | Do you have Market facility? | Do you have road facility? |
|----------------------------|---------------------|------------------------------|----------------------------|
| Do you have Market Access? | Pearson Correlation | 1 | .032 |
| | Sig. (2-tailed) | | .613 |
| | N | 250 | 250 |
| Do you have road facility? | Pearson Correlation | .032 | 1 |
| | Sig. (2-tailed) | .613 | |
| | N | 250 | 250 |

It was implicit that road facility and market access are directly proportional to each other. Analysis of market access and road facility was found correlated which depicted that strong relationship was found between road facility and market access. The correlation revealed that road facility is extremely necessary to access the market.

Table 5: Correlation between Market Access and Quantity of Fruit Consumed at Home

| Variables | | Do you have Market facility? | How much quantity is consumed at home? |
|------------------------------|---------------------|------------------------------|--|
| Do you have Market facility? | Pearson Correlation | 1 | .462** |
| | Sig. (2-tailed) | | .000 |
| | N | 250 | 250 |

| | | | |
|--|---------------------|--------|-----|
| How much quantity is consumed at home? | Pearson Correlation | .462** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 250 | 250 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

The proposed axiom was analyzed that market access and consumption at home is correlated. The analysis revealed the strong relationship between the variables which shown significant value so the market access and quantity consumed at home both were the problems for farmers at the destination because market access was not available and home consumption naturally increases.

DISCUSSIONS

Potential Problems faced by the Fruit Growers

Benefit-cost analysis was explored by Ali [32] who showed that without bearing massive expense and legitimate advertising, proper development, investigative picking and pressing, adequate costs and current method for correspondence can't be achieved. Pakistan needed to confront both supply and request administration issues because of wasteful promoting framework. It was recommended that by the evacuation of superfluous business sector middle people and appropriate course, circumstance can be enhanced particularly if there should arise an occurrence of picking, pressing, stockpiling and taking care of fruits.

Farmers' perceptions and the argument of most profitable combination of varieties for improving productivity demands urgently a study of determining optimal feasible combination of varieties in Baluchistan. The preferred varieties of fruits are exported to many countries. Most of the population of Pakistan is living in rural area and they are mostly entrenched in ascribed statuses i.e. farming, low profile jobs and professions transcended from one generation to the other while emerging trends towards the achieved status were observed. As Downes and Stoeckel [33] articulated that auxiliary change is the methodology by which an economy is persistently changed after some time. This can consolidate movements to industry, hierarchical and business segment structures and the diverse means by which publicize individuals make fiscal development. Basic change is difficult to get in a solitary measure. It is typically measured with respect to the reallocation of capital and work transversely over commercial enterprises and ranges. The concept of ascribed status is more ideologically penetrated in the minds of people and reason behind ascribed status is lack of opportunities. Most of respondents were involved in low profile jobs in different department in government setting besides fruit growth due to problems in fruit growth indicated by Aujla *et al.* [34], the trends in the production, consumption and trade described existing fruit marketing system. The fruit marketing faces numerous problems in the process of farming and poor farmers used traditional and cheap fertilizers and pesticides that lead to low yield. Advance sale is also root cause of financial constraints. Scarcity of storage and transporting infrastructure can prevent the losses and the surplus can be generated. The middleman intervention is also a loss to the farmers besides packing and storage. The people have not access to market because of the inaccessibility of road. The market setting was quite traditional and orthodox methods were utilized for the packing and processing. It is difficult for the small scale grower to access adequately because growers become prey to middleman or low prices so as they do not have resources or facilities to access the market as acutely as large scale growers do have access.

Although, appropriate production practices, careful harvesting, and proper packaging and transport all contribute to good produce quality. In order to reduce post-harvest losses, Aujla *et al.* [35] stated that there is a need for better handling, packing and grading. Policy makers need to know more about the costs and benefits of investment for loss reduction. The extra cost afforded by the consumer in the form of multiple and poor grading can be reduced by proper packing and grading. In this connection, there is an urgent need to develop the confidence of both producers and retailers on grading. Beside this, quality cannot be improved after harvest, only maintained; therefore it is important to harvest fruits, at the proper stage and size and at peak quality. Immature or over mature produce may not last as long in storage as that picked at proper maturity. Long chain of intermediaries makes marketing operation less efficient and more costly, as each intermediary in the chain receives his share. The fruit growers were quite depressed about their participation in market procedures while government had not taken any step to make sure their presence while market channels were found very traditional.

Conversely, the fruit growers were found still practicing the traditional methods like using animal waste as natural fertilizer for their fruit trees which is collected from livestock and it was found more hazardous for the health of people. Ali and Laurence [32] proposed that further examination is required before authoritative judgments can be made about the effectiveness of the promoting framework in Pakistan.

Examination is required of the exchange expenses and dangers for makers and business sector mediators in a situation of poor transport and correspondences framework, poor security, a useless lawful framework for the authorization of assertions, and across the board open part debasement. Given such a domain, it is, on the other hand, shortsighted and farfetched to presume that the generally low share of the retail cost got by makers is the consequence of exploitative conduct by dealers, as has had a tendency to be the pattern in past studies. Absence of capital and constrained access to institutional credit lead makers to depend on generally high-cost casual credit sources and advances from natural product temporary workers. They were not using any type of fertilizer by and large but a low ratio of fruit growers used it occasionally because they were not found economically sound.

For the improvement of existing marketing situation, Muhammad and Zakir (2010) suggested: (i) access of cultivators to credit offices ought to be guaranteed. (2) Investment to set up natural product zone in the nation ought to be advanced. (3) Market charge ought to be used to build up very much composed advertising framework. (4) To store the organic product, picking, pressing, handling and transportation offices ought to be enhanced to stay away from the misfortunes to meet worldwide prerequisites. (5) The Government ought to set up agriculturist's business sector to minimize the part of go-betweens. Space and foundation may be given to set up such markets as private part activity. Adequate storage facilities and packing material as Usman *et al.* (2010) stated should be made available to growers for which private sector may be encouraged to step in. Unskilled labor should be trained to convert it to skilled one for which short courses on harvesting and post-harvesting techniques of fruit may be arranged under Fruits and Vegetables Development Project. Role of middleman should be minimized by creating direct contact among producers and consumers. Local markets should be established to avoid high carriage. The loans should be extended to citrus growers on easy terms and conditions to fulfill their urgent money need and avoid exploitation by various agencies. Govt. should also take appropriate steps against extra commission, taxes and high market fees being charged from the growers. The disparities of agricultural system are numerous but the bone of contention between the producer and consumer is middleman who is more dangerous for the producer. However, fruit growers were found prey to middle man because there is no proper market in the Neelum. There were problems of proper packing and cold storage facility is unavailable in the area so most of the fruit production is sold through middleman and especially the Walnut production at large which is provided to Tehzib and Royal Bakers in Islamabad.

Muhammad and Zakir (2010) concluded that in the neighborhood market when natural product was sold in open frame, every middle person got benefit and edge while including advertising expense into offering cost. With the end of the middle people advertising expense diminished and promoting edge and benefit expanded of the remaining functionaries. In addition, if purchaser bought natural product straightforwardly from maker both sides increased high benefit. If there should be an occurrence of pressed organic product, business sector got to be constrained as a result of less stuffed natural product was requested by shopper. The contractual worker got high benefit and edge amid offer of the natural product outside the Sargodha district when contrasted with the neighborhood market. No promoting expense was acquired by contractual worker when he sold natural product to the plant in pressed structure, and therefore, got high benefit when contrasted with other two cases.

The results of analysis exposed that market access is important for earning livelihood, odd values indicated that earning, annual revenue generation and annual production were found closely interrelated to the market access because the road facility is scarce so the results indicated that market access is solely necessary for the efficient earning of fruit growers besides the annual increase in production and higher revenue generation whereas the market access has exponential value 2 which endorsed that market access is vague without road facility. So it is concluded that fruit growers needed exclusive market access though the earning would be increase through road facility and their production would be better for the revenue generation

CONCLUSION

The structural deformities are more heinous especially in the agricultural sector of Pakistan. Beside the farmers, fruit growers also contribute a large proportion to the national income in the urban areas but not provided facilities simultaneously however, a significant ratio of facilities have had been acquired in the promotion of fruit production and market access. The situation in rural, landlocked area is quite different and fruit growers are left behind with grievances not only in fruit production but in every walk of life. Comparatively the situation of Azad Jammu and Kashmir is grimmer in fruit production and fruit growers living in far flung landlocked areas, already face the harsh winter conditions, faced a series of problems while have had greater potential for fruit production. Numerous varieties of fruit have had been produced in Neelum and especially in *Chanjath* and *Kathapeeran* where fruit growers were producing fruit at large scale but lack of adequate facilities hindered them to access local and national market. Provision of

adequate road facility can address their grievances to the great extent besides the structural changes on the part of government are needed. The fruit growers faced marketing problems including the transportation and market access issues, middleman marginality, unavailability of fertilizers and spray, lack of knowledge, poor irrigation management, unavailability of loans and technology. The access to market is sturdily allied with road facility and this connection yield fragmentation of different aspects of fruit growers i.e. revenue, annual production and earning. The entire effort was sought to explore the fragility of fruit growers. The following recommendations were proposed:

POLICY AND RECOMMENDATIONS

1. The fruit growers should be provided adequate metalled road so that they could access market efficiently.
2. Packing and processing facilities should be provided at the earliest so that their fruit could be accessed to market.
3. The fruit growers should be given participation in market procedures while market channels must be framed with the consent of fruit growers.
4. Fruit growers should be released from the danger of middleman so as they could decide at their own in the market.
5. Local fruit should be given the value as it deserves in the market and they must be included in prices allocation decision in the market.
6. Government must establish nurseries of free trees of different varieties and fruit growers must be supported financially by the government and other stakeholders.
7. The provision of trainings and workshops must be provided to the fruit growers on monthly basis.
8. The fruit growers must be provided participation in pricing index and allocation of several standards in the local market.
9. Government must revise the structure of agriculture department as well as market procedures to ease the poor fruit growers.
10. The government should provide adequate road, plants of new varieties, sprays, insecticides, knowledge and awareness, problem of middleman and proper market place in market. .

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