

Production Pattern of Temperate Fruits in Himachal Pradesh

A Study of District Shimla

K. Sikander, C. Vishal

Professor, Department of Economics, Himachal Pradesh University, Summer Hill, Shimla

Research Scholar, Department of Economics, Himachal Pradesh University, Summer Hill, Shimla

ABSTRACT

The research was conducted to understand the production pattern of different temperate fruits under different farm size and will try to reveal the production picture of different crops which throws light on different end use of temperate crops including Government selling, Domestic consumption and Open market. Study was conducted in Jubbal & Kotkhai block of district Shimla which was randomly divided into 10 panchayats and data of 200 farming households of different farm size was collected through interview and after analysing the information it was discovered that 97.00 percent of all crops is produced for open market with 1.34 percent for government and 0.77 percent for domestic consumption.

Key Words- Domestic Consumption, Farm Holding, Government Selling, Open Market, Temperate Fruits.

INTRODUCTION

Farm production is the resultant of transformation of various resources such as human labor, bullock power, mechanical power, water for irrigation, seeds, manures and fertilizers, insecticides and pesticides and cultivation practices etc. As these all factor inputs are costly and scarce, the case for their efficient use is self-evident. Moreover, farm resource endowment and extent of their use on farms has a direct bearing in determining the overall level of crop production. However, profits of farm is determined by the selling these crop produce in open market but every farm produce is not sold in the open market and is a result of same resource therefore has got big relevance from total production point of view as it not only determines overall production but also efficiency of resources. Study was conducted on marketing and trade of Indian apples and based on secondary sources of data collected from Himachal Pradesh Horticultural Produce Marketing and Processing Corporation (HPMC) it explains that 97 percent of total apple production was marketable surplus of which 90 % of the marketable surplus is sold outside the state and remaining 7 % within the state (**Sharma, 2003**).

Therefore, it becomes necessary to study the production pattern of study area for temperate fruits in order to reveal the actual production picture of the farms. From the study one will try to reveal that out of total temperate fruits production how much is done for open market and how much is sold to the government. However, it is not necessary to sell every product in the open market or to the govt therefore farmers do keep some of the output for domestic consumption which however will not give any returns to farmer but is a result of same resources therefore study will also reveal the domestic consumption status of different crops.

MATERIALS AND METHODS

The present study has been conducted in district Shimla of Himachal Pradesh and out of ten blocks (Mashobra, Basantpur, Theog, Chiragon, Rohru, Jubbal&Kotkhai, Nankhari, Chopal, Chiragon, Narkanda, Rampur) in district Shimla we have selected Jubbal&Kotkhai block for the purpose of our study of which list of panchayats of Jubbal&Kotkhai is prepared and after that the process of multistage stratified random sampling we have Randomly selected 10 different panchayats from the block and prepared the list of villages coming under these panchayats and randomly selected two villages from each panchayat ,therefore 20 villages are selected from block and 10 respondents/Farmers of different categories (Marginal, Small & Medium) from each village has been randomly selected. However, the study is primarily based on primary data hence preliminary field visit has been made to get an idea or overview of the farming system, traditions, customs, communication network, historical background and set of questions has been developed during the first visit which has enabled us to develop a questionnaire. In order to achieve the objectives of study, personal interview, face-to face association with farmer respondents and observation method has been adopted to collect the relevant information and with the help of the simple tabular analysis based on means, percentage and frequency etc., has been used in order to found the answers of the objectives being framed in the paper.

RESULTS AND DISCUSSION

Apple Production Pattern:

Apple is one the most important horticulture crop which does not occupy large land area but also very strong source of cash income. When observed the Table 1.1 from overall point of view it can be found that total production per hectare is Rs.7,37,306.97 out of which open market production is Rs.7,22,526.81, domestic consumption Rs.4,468.01 and Government purchasing is Rs.10,312.15 which is 98.0,0.61 and 1.40 percent of the total production per hectare.

Table 1.1
Production Pattern of Sample Households inApple crop

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	8066.73 (1.36)	6287.15 (0.82)	3715.33 (0.50)	4468.01 (0.61)
2.	Government Purchasing	7828.07 (1.32)	9430.72 (1.23)	10718.04 (1.45)	10312.15 (1.40)
3.	Open Market	575219.78 (97.31)	749844.15 (97.95)	726628.82 (98.05)	722526.81 (98.00)
4.	Total Production	591114.57 (100.00)	765562.02 (100.00)	741062.19 (100.00)	737306.97 (100.00)

Note: Figures in table is percentage analysis of column total.

Coming to size wise analysis the total production per hectare for marginal, small and medium farmer is Rs.5,91,114.57, Rs.7,65,562.02 and Rs.7,41,062.19 which shows erratic trend with the increase in farm size. However, from open market production point of view it can be concluded that more than 97.00 percent of production of total production per hectare is sold in open market across all the farm size and also shows increasing trends with the increase in farm size from percentage point.

Almonds Production Pattern:

An almond is also an important fruit crop and details of the production on the given crop are shown in table. Taking the overall position first, it can be observed from the Table 1.2 that the total production is Rs.1,50,331.26 i.e., total per hectare production. In this crop, 96.17 percent of total crop is open market production whereas 3.83 percent for domestic consumption with zero percent to government.

Table 1.2
Production Pattern of Sample Households in Almonds Crop

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	7251.63 (6.05)	7065.19 (4.42)	5146.85 (3.40)	5756.29 (3.83)
2.	Government	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3.	Open Market	112517.20 (93.95)	152630.60 (95.58)	146388.15 (96.60)	144574.97 (96.17)
4.	Total Production	119768.82 (100.00)	159695.79 (100.00)	151535.00 (100.00)	150331.26 (100.00)

Note: Figures in table is percentage analysis of column total.

While analysing production from farm size point of view it can be observed that total production per hectare for marginal, small and medium farmers is Rs.1,19,768.82, Rs.1,59,695.79 and Rs.1,51,535.00. It can also be observed from the table that more than 90.00 percent of crop is open market production across all the farm size with showing increasing trend with increase in farm size from percentage point of view whereas from absolute level it is erratic.

Pattern of Cherry Production:

Cherry being an important horticulture crop can be analyzed from overall and farm size point of view for their production. The Table 1.3 illustrate that overall production is estimated to be Rs.1,49,299.59 per hectare. The per hectare open market production is Rs.1,41,633.21 which is 94.84 percent of the total production per hectare. However domestic production per hectare is Rs.7,666.38 which is 5.13 percent of total and with regards to Government it is Rs. zero per hectare of total production.

Table 1.3
Production Pattern of Sample Households in Cherry Crop

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	4384.25 (3.65)	8063.53 (6.23)	8220.46 (5.00)	7666.38 (5.13)
2.	Government	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3.	Open Market	115869.50 (96.35)	121436.77 (93.77)	156188.73 (95.00)	141633.21 (94.87)
4.	Total Production	120253.75 (100.00)	129500.30 (100.00)	164409.19 (100.00)	149299.59 (100.00)

Note: Figures in table is percentage analysis of column total.

Coming to the size wise analysis, the total production had an increasing trend with the increase in farm size. It is worked out to be about Rs.1,20,253.75, Rs.1,29,500.30 and Rs.1,64,409.19 for marginal, small and medium farms respectively. The open market production has increasing trend with increase in farm size in absolute terms but in percentage term trends are erratic. However, for Government the per hectare production of total production is zero in all size of farms.

Production Pattern of Pears.

It is important fruit crop both from production and revenue point of view. The details of production on the Pears crop are shown in Table 1.4. Taking the overall position first, it can be observed from the table total production per hectare is Rs.1,96,205.12 of which open market production is Rs.1,87,342.08, domestic consumption Rs.8,863.04 and for government is Rs zero.

Table 1.4
Production Pattern of Sample Households in Pears Crop

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	13259.73 (6.14)	11735.24 (5.45)	7984.61 (4.17)	8863.04 (4.52)
2.	Government	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3.	Open Market	202596.38 (93.86)	203786.88 (94.55)	183263.57 (95.83)	187342.08 (95.48)
4.	Total Production	215856.11 (100.00)	215522.12 (100.00)	191248.18 (100.00)	196205.12 (100.00)

Note: Figures in table is percentage analysis of column total.

As between the farm sizes, the total production per hectare decreases with the increase in farm size. It works out to be Rs.2,15,856.11, Rs.2,15,522.12 and Rs.1,91,248.18 on marginal, small and medium farms respectively. The open market production has increasing trend with increase in farm size in percentage term but in absolute terms trends are inconsistent. As far as domestic consumption is concern it has decreasing trends both in percentage and absolute terms with increase in size of farm.

Apricot Production Pattern:

Apricot production analysis is given on Table 1.5. It can be noticed from the table that overall Apricot production per hectare is worked out to be Rs.1,30,934.52 per hectare. Here, it can be observed that majority of production is for open market which account for 95.06 percent of the total production. Whereas domestic consumption and Government is concern share is 4.94 and zero percent of total production per hectare.

Table 1.5
Production Pattern of Sample Households in Apricot Crop

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	4013.55 (4.44)	6572.72 (5.25)	6997.98 (4.90)	6473.85 (4.94)
2.	Government	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3.	Open Market	86409.39 (95.56)	118561.82 (94.75)	135829.72 (95.10)	124460.66 (95.06)
4.	Total Production	90422.94 (100.00)	125134.55 (100.00)	142827.70 (100.00)	130934.52 (100.00)

Note: Figures in table is percentage analysis of column total.

As regards the production in different size groups, the production tends to increase with the farm size. It is Rs.90,422.94, Rs.1,25,134.55 and Rs.1,42,827.70 on marginal, small and medium farms respectively. The open market production has an increasing trend in absolute terms while it has an erratic trend in percentage terms with increases in farm size. However domestic consumption is concern it shows increasing trend in absolute terms while in percentage terms trends are erratic with the increase in farm size.

Production Pattern of All Crops.

The information regarding total production per hectare is provided inTable 1.6 for all crops. Total production had been calculated by adding the value of production for all crops viz., Apple, Almonds, Cherry, Pears and Apricot.Taking first overall position,it can be seen from the table that total production of all crops is Rs.6,45,054.00 of which 97.89 percent is open market production and the rest 0.77 and 1.34 percent is for domestic consumption and for government.As far as size wise analysis is concern the table reveals that total production per hectare for marginal,small and medium farm is Rs.4,85,227.22, Rs.6,61,280.44 and Rs.6,53,799.87 which is showing erratic trend with increase in farm size. However, it can be observed from the table that 97.89 percent of production is for open market across all the size of holdings.

Table 1.6
Production Pattern of Sample Households in All Crops

Sr. No.	Particulars	(in Rs. Per Hectare)			
		Marginal Farmers	Small Farmers	Medium Farmers	Overall Farmers
1.	Domestic Consumption	7901.07 (1.63)	6710.85 (1.01)	4246.03 (0.65)	4963 (0.77)
2.	Government	5998.83 (1.24)	7794.25 (1.18)	9076.57 (1.39)	8644 (1.34)
3.	Open Market	471327.87 (97.14)	646775.35 (97.81)	640477.28 (97.96)	631447 (97.89)
4.	Total Production	485227.77 (100.00)	661280.44 (100.00)	653799.87 (100.00)	645054 (100.00)

Note: Figures in table is percentage analysis of column total.

CONCLUSION

Production works on the principle of resource utilization and allocation which determines output and further leads to profit after selling the same product in open market but it does not mean that the product not sold in open market is not part of production because it is a result of same resource which determines the cost of overall production. From the study it was discovered that 97.00 percent of all crops produce is sold in open market with only 1.34 and 0.77 percent for government and domestic consumption. It was also revealed from the study that apple is the only crop among all the other crops where farmers are selling 1.00 percent of their produce to the government and reason for the same is that government is providing minimum support price which it is not providing in other temperate fruits. As far as percentage of domestic consumption is concern it is very less in apple crop as compare to other temperate fruits. Therefore, it leads to the conclusion that all temperate crops are commercial in nature as mostly are sold in open market however government purchase of other temperate fruits is concern it is suggested to provide a minimum support price to other temperate fruits also which could motivate the farmers to divert their production to other crops hence could optimize resource allocation.

REFERENCES

- 1) Heady, E.O. and H.R. Jensen, "Farm Management Economics", **Prentice Hall**, 1954.
- 2) Johl, S.S. and Kapur, T.R., "Fundamentals of Farm Business Management", **Kalyani Publishers**, New Delhi, 1987.
- 3) Sharma, L. R., "Marketing and Trade of Indian Apples", **Acta Horticulture-** 696, pp.569-573, 2003.