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To identify the production and marketing constraints affecting papaya growers and marketers in Lucknow district of Uttar Pradesh

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Abstract

Horticulture crops cover large varieties of fruits and vegetables, flowers, plantation/spice crops. Medicinal and aromatic plants, roots and tuber crops. Fruits are man's oldest food. Fruit cultivation is as old as human civilization itself. Cultivation of fruit is a very important factor contributing to the property of Nation. Fruits and vegetables are the prime source of vitamins and minerals without which human body cannot maintain proper health to resist the diseases. Indian Council of Medical Research (ICMR) had recommended the consumption of at least 92 grams of fruits per day and as much variety as the season permits (Anonymous, 2001a).

Papaya (*Carica papaya*) is the third most important fruit crop in India next to mango & banana. Papaya belongs to the genus *Carica* of the family Caricaceae with 48 species of all the species *Carica papaya L.* is the most important and best known. It is cultivated all over the world. The original home of papaya is Tropical America. It has been reviewed by Schroeder (1958), where archaeological, historical and biological information have been used to pin point the possible origin of papaya (Singh, 1990). The Dutch Traveller Linschoten in 1598 described fruit brought from the Philippines to Malaya and hence to India.

The design of the study is a prerequisite for any scientific investigation, so this chapter seals with the material and methods adopted for conducting the present study. The present research had been taken up in Lucknow district of Uttar Pradesh. The details regarding methodology adopted in selection of location, methods of data collection in the selection of the samples, the nature and source of data, and the various statistical analytical tools and techniques employed in achieving the objectives of the study.

Keywords: Papaya growers, production and marketing constraints, marketed surplus, marketing, agricultural activities, constraints

Introduction

Papaya fruit is very popular with the farmers in general because it requires less area per plant. Papaya is a very wholesome, refreshing and delicious fruit. Green fruits are diuretic and mildly laxative and are used as vegetables. It has a high nutritive and medicinal value. The ripened fruits are a rich source of carbohydrates, minerals (Ca, P and Fe), Vitamin (carotene, thiamine, riboflavin, *etc.*) fiber and ascorbic acid, in addition, papaya is a source of the digestive enzyme papain, which is used as an industrial ingredient in brewing, meat tenderizing, pharmaceuticals, beauty products, and cosmetics (Singh *et al.*, 2010). Thus, it is also used in the pharmaceutical industry, textile and garment cleaning paper and adhesive manufacture, *etc.* The ripe fresh papaya fruit is tasty and used as table fruit. It has a neutral taste that can be considerably improved by addition of flavours, rich fruits to make prepared to serve beverage (RTS), Tutty fruity, pickle, squash, jams and various preserves.

Global Papayas are produced in about 60 countries, with the bulk of production occurring in developing economies. Universal papaya production in 2016 was approximate at 13.05 million metric tons, rising at an annual rate of 5.35 percent between 2010 and 2016 (global production in 2016 was 9.26% higher than 2010, and 34.82% higher than 2002). Asia has been the leading papaya producing area, accounting for 52.55 percent of the global production between 2008 and 2010, followed by South America (23.09%), Africa (13.16%), Central America (9.56%), the Caribbean (1.38%), North America (0.14%), and Oceania (0.13%) Global papaya exports exhibited an upward trend over the period 2010 to 2016, although growth was somewhat erratic. Total exports in 2009 were estimated at 268,476 metric tons, a 31.5 percent rise over the volume exported in 2002, with an estimated value of about \$197.2 million (FAOSTAT 2012b)

Methodology

The design of the study is a prerequisite for any scientific investigation, so this chapter seals with the material and methods adopted for conducting the present study. The present research had been taken up in Lucknow district of Uttar Pradesh. The details regarding methodology adopted in selection of location, methods of data collection in the selection of the samples, the nature and source of data, and the various statistical analytical tools and techniques employed in achieving the objectives of the study.

Findings

Constraints in production of papaya

The constraints in papaya production are presented in Table 4.7 (a). Majority of papaya farmers were of the view that there was lack of improved and high yielding variety of the papaya crop in the region (80.00 per cent). Even if it were there, it was not available to them. Looking to this, there is a need to develop and make available improved and high yielding varieties of papaya crop in the study area. There is also a gap as far as the awareness and adoption of latest technical knowledge about the papaya crop is concerned in the study area. Majority of the papaya growers (75.00 per cent) faced this particular constraint. In view of this, effective and strengthened extension efforts are very much needed in the study area. Lack of recommended package and practices, particularly, doses of fertilizer, insecticides and pesticides

were perceived by 57.53 per cent of papaya farmers. Timely advice in this direction may improve the production of papaya in the study area, in particular.

Lack of sufficient soil testing facilities was also a major constraint as about 61.23 per cent papaya growers faced this problem. An immediate step should be taken at the level of government to establish soil-testing labs at panchayat level in order to estimate and apply appropriate doses of fertilizers in the papaya crop. This step will reduce the cost of cultivation on one side and will improve the soil fertility on the other side. About 10% respondents face the problem of sufficient water. These problem faced by few farmers because of use of drip irrigation system in cultivation of papaya. The scarcity of labour is another problem as 78.66 per cent of papaya farmers perceived it. This problem becomes more acute at the time of sowing, intercultural and harvesting stage of the crop. Consequently, the farmers have to pay higher wages in order to complete the work in time. About 42.66 per cent papaya farmers reported that they were not aware about the crop insurance scheme, lack of sufficient fund to purchase different inputs for papaya crop cultivation (56.23 per cent), generally faced by small category farmers. About 57.53 per cent papaya farmers reported that they were not aware about the name and quantity of needed insecticides and pesticides in case, their papaya crop was infested by any disease or pest. In such conditions, they were completely dependent on the shopkeeper who sold the insecticides/pesticides.

Table 1: Constraints in production of papaya

S. No.	Constraints	Number of Respondents		Ranking
		Yes	No	
1.	Problem about the latest technical knowledge of the crop	62 (77.50)	18 (22.50)	4th
2.	Lack of any improved hybrid varieties	65 (81.25)	15 (18.75)	3rd
3.	Problem of the recommended dose of different chemical fertilizer in this crop	50 (52.53)	30 (37.66)	7th
4.	Are there sufficient soil testing facilities in your areas	49 (61.23)	31 (38.76)	5th
5.	Problem of sufficient irrigation water for the Crop	8 (10)	72 (90.00)	10th
6.	Have you problem of availability of labour during the crop	63 (78.66)	17 (21.24)	2nd
7.	Problem of sufficient fund to purchase different inputs for crop cultivation	45 (56.23)	35 (43.76)	8th
8.	Do you face any problem in financing from the financial institution	50 (62.5)	30 (37.5)	6th
9.	Are you aware about the crop insurance of Crop	34 (42.66)	46 (57.53)	9th
10.	Whether you face problem of power cut and low voltage during the crop season	76 (95)	4 (5)	1st

N=80

Constraints in marketing of papaya

Marketing constraints of papaya are presented in table 4.7 (b) As much as 72.56 per cent farmers were not satisfied with the price received. About 75.00 per cent farmers felt that lack of awareness about the market information was also a problem. It may be suggested that the news about the prices and other aspects of papaya in the daily newspaper, television and radio should be disseminated in the study area. Lack of sufficient number of processing unit in the villages is the major problem faced by papaya producers (90.00 per cent) in the study area.

Papaya sector has potential to grow by improving productivity and production for which institutional credit is a must. Credit is needed for setting up of processing units, export credit, etc. Banks should provide credit to the farmers/processors/exporters for the purpose keeping in view the Banking Plans by NABARD

Problem of selling the small quantity of produce sometime become problem for papaya grower because of less quantity producer was not able to sell their produce in distance market due to transportation charge for less quantity. About 45

percent of papaya grower face the problem of transportation facility to sell their produce in distance market at high price. Involve of market middleman was the major problem in marketing of papaya in study area about 88.33% of grower

face these problem involve of middleman denied fare return to producer from there produce and 87.56% grower faced lack of storage and 80.00% grower face the small in Quantity.

Table 2: Constraints in marketing of papaya

S. No.	Constraints	Number of Respondents		Ranking
		Yes	No	
1.	Problem of low price of produce	58 (72.56)	22 (27.50)	5th
2.	Lack of transportation facilities and road from village to market	36 (45.00)	44 (55)	6th
3.	Whether you face problem because the quantity is small	64 (80.00)	16 (20)	3rd
4.	Lack of storage facilities in growing area	70 (87.5)	10 (12.53)	2nd
5.	Problem of involvance of middleman in Marketing	71 (88.33)	9 (11.66)	1st
6.	Problem of awareness about marketing news	60 (75.00)	20 (25)	4th

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