# Marketing Problems Faced by Potato Growers and Intermediaries in Punjab State

## Jobanpreet Singh, H.K. Mavi and Kashish Arora

Department of Economics and Sociology, Punjab Agricultural University, Ludhiana-141004, India

#### **Abstract**

Potato marketing in India is significantly hampered by severe constraints. Thus, this study is planned to identify various problems faced by the producers and different marketing functionaries in performing the marketing functions related to disposal of potato. Multistage random sampling technique was used to select respondents for the study viz. 80 farmers, 10 of each commission agent, wholesaler, retailer and 5 pre harvest contractor from different potato producing districts of the state. Among all the identified constraints, the major problems faced by farmers were high price fluctuation, problem in timely getting payment and lack of cooperative system in the village. From market intermediaries' point of view, the major problems were lack of quality produce and lack of transportation facilities during the peak season. The study pointed out the role of awareness generation, price incentives and better infrastructure facilities to the potato growers for encouraging them to emerging potato supply chains that could enhance the farmer's returns. To address marketing constraints, the price of potatoes should be guaranteed, more cold storage facilities should be developed, and better marketing facilities should be provided by the government. Various government and non-government organizations are taking many measures, but there is still a gap, thus more such efforts are required.

**Keywords:** Marketing related problems, Mean score technique, Likert scale method, Market intermediaries, Potato.

JEL classification: Q13, D40, A11, Q41

#### Introduction

Potato (Solanum tuberosum L.) is a staple vegetable and cash crop cultivated in most areas of the world and is considered a major food crop in India (Bajracharya 2017). In underdeveloped or developing countries, the rate of potato production has outpaced the growth rates of other major food crops. India is the world's fourth largest producer of potatoes. Uttar Pradesh ranks first in terms of production of potato from last three years with the production of 14.7 million tonnes in year 2020-21 from overall production of 51.6 million tonnes. West Bengal ranks second, Bihar ranks third, Gujrat ranks fourth, Madhya Pradesh ranks fifth and Punjab ranks sixth in the production of potato from last three years with an average production of 2.8 million tonnes and constitutes 5.5 per cent to the country overall production (Indiastat.com). Many years of potato research resulted in the development of a number of potato HYVs suitable for the country's varied agro-climatic areas. Furthermore, the invention of the "seed plot technique" for seed production in the North-Western Indo-Gangetic plains, as well as the

standardization of crop management procedures for diverse agro-climatic zones, were the driving forces behind India's extraordinary increase in potato production. However, this massive growth in potato production, combined with different marketing issues, has resulted in periodic gluts and depressed potato prices. Farmers face a number of challenges in potato production, marketing, and storage, including insufficient input supply, ignorance of improved potato production technology, high transportation costs, use of home-produced seed, lack of availability of sufficient good quality seed on time, irrigation issues, a lack of sufficient finance, a non-remunerative market price for the produce, a lack of sufficient storage space, and malpractices (Arneja et al 2009; Lal et al., 2011 and Katayani et al., 2017). Marketing is an essential component of the whole production plan. Indeed, the production and sales processes are practically inseparable. Efficient production ensures reduced per unit output costs, allowing a greater number of consumers to purchase it. On the other hand, a well-integrated, competitive, and efficient marketing system, makes this possibility a reality that benefits both the manufacturer and the consumer. Marketing has grown in prominence, particularly since the economy was

opened up as a result of WTO obligations. This necessitates a quick critical assessment of India's agricultural marketing system, which has traditionally been plagued by severe constraints such as high costs and margins, the presence of a large number of middlemen, storage and transportation bottlenecks, a lack of other marketing infrastructures, and so on (Gopalan and Gopalan, 1991).

After the production of the potato, the marketing of the crop is a challenging task. Every year, India wastes Rs. two trillion in fruits and vegetables due to post-harvest losses (Economic Times, Sept 1, 2013). Due to improper handling, lack of cold chains, and inadequate infrastructure facilities for handling and storing agricultural commodities as a whole, about 30 per cent of the fruits and vegetables grown in India were wasted annually. The presence of several intermediaries in the traditional supply chain, as well as weak backend infrastructure, has resulted in a 60 per cent increase in agricultural prices without providing any value (Hegde and Madhuri 2013). In this context, this paper presents some important potato marketing related problems faced by farmers as well as intermediaries and attempts to some policy measures to reduce the issue faced by the farmers while marketing of potato.

## **Data Sources and Methodology**

In order to evaluate market related problems faced by the farmers and other marketing functionaries, primary data were employed in the study. Data related to problem faced in the marketing of potato was gathered from farmers and different intermediaries' viz. wholesaler, commission agent, pre-harvest contractor and retailer. For primary data collection, multistage random sampling was used to choose respondents. Districts namely Patiala, Jalandhar and Ludhiana were selected purposively for the present study. In the next stage four blocks were selected from the selected districts. The blocks selected were Nabha from Patiala district, Jagraon and Khanna from Ludhiana district and Shahkot

from Jalandhar district. Furthermore, two villages from each block were selected randomly, a total 80 farmers, 10 of each commission agent, wholesaler, retailer and 5 contract farming firms were randomly selected.

The major problems faced by the farmers and various market intermediaries involved in the marketing of potato were identified. The respondents were asked to rank the given problems that they are facing according to the prevalence, into five categories. A score of 1 for not at all, 2 for very less frequent, 3 for more frequent, 4 for moderate and 5 for obvious were awarded to the identified problems and depending on the response, the mean score and mean per cent score (Singh *et al* 2021 and Meshram *et al* 2020) along with Likert scale (Malhotra, 2006 and Meyers et al, 2005) was calculated for all the problems and the problems were ranked.

#### **Results and Discussion**

Agriculture practices are totally dependent on nature and the commodities produced are highly perishable in nature. Crop production is full of risks and while harvesting and marketing of the produce various types of constraints have been faced by the farmers. Due to these constraints farmers are facing a huge loss. In our study, we tried to cover the marketing related constraints faced by the farmers and various marketing intermediaries involved in the marketing of potato.

# Socio-economic status of the potato growers

The socio-economic profile of both table and seed potato farmers revealed that about half of the sample farmers were in middle age group (41-60 years) and 55 per cent of farmers had an educational level of higher secondary to graduation. Around two third of the farmers had family size up to (4-6) members (Table 2). The operational land of table potato growers accounts 23.73 acres per farm and for seed potato growers it was 39.79 acres. The marketed surplus of table potato and seed potato accounted for 77.52 per cent and 77.27 per cent of total production respectively.

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Table I.	Selection	of potato	growers

Districts	Blocks	Villages	Respondents
Patiala	Nabha	Bhamarsi	10
		Tohra	10
Ludhiana	Khanna	Sehh	10
		Gohh	10
	Jagraon	Akhara	10
		Swadikalan	10
Jalandhar	Shahkot	Gatti peer baksh	10
		Gatti Raipur	10
Total	4	8	80

Table 2: Market-level problems perceived by Potato Growers

Problems	Mean Score	MPS	Rank
Remunerative prices	2.88	57.50	V
Lack of efficient Marketing	2.28	45.50	VII
Lack of cooperative market system in village	4.15	83.00	III
Lack of price information	2.76	55.25	VI
Problem in getting timely payment	4.45	89.00	II
High price fluctuation	4.56	91.25	I
High storage cost	3.10	62.00	IV

## Market Level Problems Perceived by Potato Growers

Horticulture crops are highly perishable in nature, after their production, the major challenge faced by the farmers was the marketing of produce. Various problems were faced by the farmers while marketing of produce. Table 2 reveals that while marketing of potato about 91 per cent of farmers perceived constraint related to high price fluctuation with mean score of 4.56, similar study conducted by (Reema et al 2020) whereas the author ranked this problem as the major problem with mean score of 2.66. Eighty-nine per cent of the respondents faced problem in getting timely payment with mean score of 4.45. Eighty three per cent of farmers reported that there is lack of co-operative marketing system in village, the similar study conducted by (Kumar et al 2019) reported that 50 per cent of the farmers faced the problem lack of co-operative market system in village and 62 per cent of farmers reported that high storage cost is also a major problem faced, the results are in correspondence with the study conducted by (Reema et al 2020). Further the table reveals that 57.50 per cent of the respondents received remunerative prices followed by 55.25 per cent who have lack of price information whereas lack of efficient marketing is a least mentioned constraint perceived by the producer in the marketing of potato.

## **Problems Perceived by Commission Agents**

Table 3 represents five problems perceived by the commission agent in the marketing of potato. Due in payment from other intermediaries was ranked first by the selected

respondents with mean score of 4.1. Lack of transportation facility during peak season ranked second with mean score of 3.3, the results are in correspondence with the study conducted by (Hameed and Sawicka 2017). Failing in assessment of demand with mean score of 2.6 was another major problem. Forty-two per cent of the respondents reported lack of quality produce as other major problem. Absence of storage facility is the least mentioned problem perceived by the respondents with fifth rank, the results are in correspondence with the study conducted by Hameed and Sawicka, 2017.

## **Problems Perceived by the Wholesalers**

Analysis of Table 4 reveals that in marketing of potato 82 per cent of respondents perceived constraints related to due in payment from other intermediaries with mean score of 4.10, followed by 78 per cent faced price fluctuation with mean score of 3.90, the results are in correspondent with the study conducted by (Sharma and Sharma, 1996; Malik et al 1995). Sixty-eight per cent of wholesalers reported that there is lack of transportation facility during peak season, the results are in correspondence with the study conducted by Naik and Patnaik, 1983. Sixty-six per cent of wholesalers reported that failing in assessment of demand is also a major problem faced. Further the table reveals that 42 per cent of the respondents face problem of absence of storage facility, the similar conducted by (Reddy et al 1995) stated that there is scarcity of cold storage followed by least 36 per cent who have lack of quality produce as problem.

Table 3: Problems perceived by commission agents

Problems	Mean Score	MPS	Rank
Lack of quality produce	2.1	42	IV
Absence of storage facility	1.8	36	V
Failing in assessment of demand	2.6	52	III
Lack of transportation facility during peak season	3.3	66	II
Due in payment from other intermediaries	4.1	82	I

MPS: Mean percent score

Table 4: Problems perceived by wholesalers

Problems	Mean Score	MPS	Rank
Lack of quality produce	1.80	36	VI
Absence of storage facility	2.10	42	V
Price fluctuation (high and low)	3.90	78	II
Failing in assessment of demand	3.30	66	IV
Lack of transportation facility during peak season	3.40	68	III
Due in payment from other intermediaries	4.10	82	I

Table 5. Problems perceived by retailers

Problems	Mean Score	MPS	Rank
Lack of quality produce	1.8	36	VIII
Absence of storage facility	1.8	36	VIII
Price fluctuation	4	80	I
High market fee	1.8	36	VIII
Non availability of water	3.5	70	II
Non availability of electricity	2.6	52	VI
Unhygienic condition	3.5	70	II
Inadequate market infrastructure	3.2	64	IV
High rent charges by market committee	2.4	48	VII
High commission charges by CA	3.2	64	IV

# **Problems Perceived by Retailers**

Retailers play a significant role in the marketing of the potato. Problems perceived by the retailers was presented in Table 5. Price fluctuation ranked first and is the major constraint perceived by the retailers, 80 per cent of respondents reported this problem, the similar study conducted by (Kaur et al 2020) where the authors reported that 93 per cent of the respondents faced the similar problem. Non-availability of water and unhygienic conditions rank second with mean score of 3.5. Inadequate market infrastructure and high commission charges by commission agents rank fourth with mean score of 3.2, the results are in correspondence with

the study conducted by Kaur *et al.*, 2020 followed by non-availability of electricity. Lack of quality produce, absence of storage facility and high market fee were least reported constraints with mean score of 1.8.

#### **Problems Perceived by Contractor Farming Firms**

The constraints perceived by the pre-harvest contractor are listed in Table 6. Analysis reveals that in marketing of potato 38 per cent of contractor firms perceived constraint related to lack of quality produce with mean score of 1.9, followed by 28 per cent perceived problem, selling of produce to another firm by farmer with mean score of 1.4. Twenty-six per cent of firms reported that there is violation of term

Table 6. Problems perceived by contract farming firms

Problems	Mean Score	MPS	Rank
Lack of quality produce	1.9	38	I
Price Fluctuation	0.9	18	V
Difficulty in meeting quality requirement	1.3	26	III
Lack of extension service	0.6	12	VII
Violation of term and condition by farmers	1.3	26	III
Selling of produce to another firm by farmer	1.4	28	II
Scarcity of transport vehicle during peak period	0.8	16	VI

and condition by farmers and difficulty in meeting quality requirement. Further the table reveals that 18 per cent of the respondents' experience price fluctuation followed by 16 per cent who have scarcity of transport vehicle during peak period whereas lack of extension service is a least mentioned constraint perceived.

## **Conclusions and Policy Implications**

Every individual involved in the marketing functions face some problems for the dispose of the produce. Potato growers and marketing intermediaries has reported various problems which they faced in the marketing of potato. The result revealed that the high price fluctuation is the major constraint reported by the farmers, followed by not getting the payment from the intermediaries after selling the produce. Lack of the co-operative marketing system in the village was another major problems reported by the farmers. Various problems reported by the wholesaler and commission agents were also identified. Price fluctuation was one of the major constraint perceived by both commission agent and wholesaler, followed by due in the payment from other marketing intermediary, transportation during the peak season etc. Contract farming firms also reported various problems, lack of quality produce is one of the major problem faced by the contract farming firms followed by selling of produce to another firm by farmer etc. Retailer also reported various problems such as price fluctuation, high market fee, non-availability of water etc. To address marketing constraints, the price of potatoes should be guaranteed, more cold storage facilities should be developed, and better marketing facilities should be provided by the government. Various government and non-government organizations are taking many measures, but there is still a gap, thus more such efforts are required.

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