

Pesticide buying behaviour of the potato growers in Banaskantha district

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Received: 23 March, 2020

Accepted: 22 June, 2020

ABSTRACT

The study was conducted in Banaskantha district of Gujarat state to understand the pesticide buying behaviour of the potato growers by selecting a representative sample of 150 potato growers using multistage random sampling technique. The data regarding pesticide buying behaviour of the potato growers revealed that nearly three-fifths of the potato growers purchased pesticides well in advance at the time of potato planting. The most important sources for making pesticide purchase decision were; farmers' own experience, relatives and friends, pesticide dealers and progressive farmers. Important factors considered by potato growers while purchasing pesticide in descending order were: quality (better control) of pesticide product, attractive packing of pesticide and popularity of pesticide in farming community.

Potato (*Solanum tuberosum* L.) is one of the important cash crops in Banaskantha district of Gujarat state. Pest and disease infestations are common occurrences in potato cultivation. Potato crop is infested by a variety of fungal, bacterial and viral diseases. As regards pests, some pests attack the foliage while some attacks the tubers. Many of the diseases in potato are soil/seed borne and so once infected is very difficult to control them. Similarly viruses affect the seed quality and so has a chain of implications. Therefore, proper control of pests and diseases is of utmost importance for profitability.

Key words: Pesticide buying, potato, farmers

Pesticides utility has increased rapidly in recent years. Day by day the use of pesticides is increasing in potato cultivation to increase the production. The pesticide market in India is becoming highly competitive. The number of pesticide options available to a potato grower for controlling a pest. Potato grower's decision making on pesticide purchase, therefore becomes of considerable interest. Research on the buying behaviour of pesticides has been very limited in the study area. This study attempts to develop an understanding of the pesticide buying

behaviour of the potato growers in Banaskantha district.

MATERIALS AND METHODS

The study was undertaken in Banaskantha district of Gujarat state. Three talukas viz., Deesa, Dantiwada, and Vadgam were purposively selected considering the largest area under potato cultivation. Fifteen potato growing villages i.e. five from each taluka were randomly selected. Ten potato growers from each selected village were taken by random sampling technique for making a sample size of 150 respondents. Pesticide buying behaviour of the potato growers was assessed against three sub-heads viz., time of purchasing pesticides, contacts made for getting advice to purchase

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pesticides and factors considered by the potato growers for making pesticide purchasing decision. The data were collected with the help of structured pre-tested interview schedule. The present study was confined to ex-post-facto research design.

RESULTS AND DISCUSSION

Pesticide buying behaviour of the potato growers in Banaskantha district was assessed against three major areas viz., (i) Time of purchasing pesticides (ii) Contacts made for getting advice to purchase pesticides and (iii) Factors considered for making pesticide purchasing decision.

Time of purchasing pesticides

Time of purchase of pesticides is a crucial aspect of pesticide buying behaviour of the potato growers as the potato is the most chemically dependent crop. Table 1 represents the time of purchasing pesticides by the potato growers in the study area.

Table 1 Distribution of the potato growers according to their time of purchasing pesticides

Sr. No.	Time of purchasing pesticides	Frequency	Per cent
1.	Advance purchasing	92	61.33
2.	At the time of pest attack	39	26.00
3.	After some loss due to pest	19	12.67
	Total	150	100.0

The data in the table 1 reveals that nearly three-fifths (61.33 per-cent) of the potato growers purchased their pesticides well in advance before the time of potato planting followed by 26.00 per cent of the potato growers purchased pesticides at the time of pest attack on potato crop and 12.67 per cent of the potato growers purchased pesticides after some loss of crop due to pest attack.

Occurrence of blight disease in the potato crop is very common in the study area. Therefore protective spraying of pesticides is recommended to prevent the diseases to occur. Hence, majority of the potato growers had adopted the protective spraying of pesticides in

potato crop. This might be the probable reason for advance purchasing of pesticides by the potato growers in study area.

Contacts made for getting advice to purchase pesticides

For making decision to purchase pesticides, potato growers contact numbers of sources. The information sources contacted for making pesticide purchase decisions were studied and results pertaining to this are presented in Table 2. Table 2 Distribution of the potato growers according to their contacts made for getting advice to purchase pesticide

Sr.No.	Contact for getting advice to purchase pesticide	Frequency	Per cent	Rank
1.	Own experience	139	92.67	I
2.	Relative / Friend	129	86.00	II
3.	Pesticide dealers	126	84.00	III
4.	Progressive farmer	83	55.33	IV
5.	Mass media	48	32.00	V
6.	Agriculture officer	46	30.67	VI
7.	KVK scientists	44	29.33	VII
8.	Agriculture scientists	22	14.67	VIII
9.	Gram Sevak	12	8.00	IX
10.	ATMA personnel	6	4.00	X

It is evidence from the Table 2 that all the sources enlisted were contacted by the potato growers for getting advice for purchase of pesticides. However, those sources which were contacted by more than 50.00 per cent of the potato growers were considered to be most important. These most important contacts made by the potato growers in descending order of ranks were; own experience (92.67 per cent), relatives and friends (86.00 per cent), pesticide dealers (84.00 per cent) and progressive farmers (55.33 per cent).

The probable reason might be the easy accessibility of these contacts to the potato growers for getting advice for pesticide purchase.

These findings are supported by the observations of Pawar (2013) and Tank (2014). Factors considered for making pesticide purchasing decision Decision making is

influenced by various factors. Farmers while making decision regarding purchasing pesticides also consider some factors which contribute their decision making. Data regarding factors considered by the potato growers while purchasing pesticides are presented in Table 3.

Table 3 Distribution of the potato growers according to factors considered for making pesticide purchasing decision

(n=150)

Sr. No.	Factors considered	Frequency	Per cent	Rank
1.	Mode of payment (cash/credit) to seller	150	100.00	I
2.	Quality (better control) of pesticide	141	94.00	II
3.	Attractive packaging	139	92.67	III
4.	Popularity of pesticide in farming community	138	92.00	IV
5.	Guidance of dealers for purchasing pesticide	136	90.67	V
6.	Availability in local market	117	78.00	VI
7.	Availability of pesticide in small package	87	58.00	VII
8.	Reasonable price	52	34.67	VIII

A perusal of data presented in Table 3 indicates that mode of payment (cash /credit) to seller was the important factor considered by all the potato growers while purchasing pesticide and it ranked first. Other important factors considered by potato growers in descending order were: quality (better control) of pesticide (94.00 per cent), attractive packaging (92.67 per cent) and popularity of pesticide in farming community (92.00 per cent) and were ranked second, third, fourth and fifth, respectively. Whereas, guidance of dealers for purchasing pesticide (90.67 per cent), availability in local market (78.00 per cent), availability of pesticide in

small package (58.00 per cent) and reasonable price (34.67 per cent) were also reported important factors towards purchasing decision of pesticide and were ranked sixth, seventh and eighth, respectively.

CONCLUSION

It is concluded that nearly three-fifths (61.33 per cent) of the potato growers purchased pesticides well in advance at the time of potato planting. The most important sources for making pesticide purchase decision were; own experience (92.67 per cent), relatives and friends (86.00 per cent), pesticide dealers (84.00 per cent), progressive farmers (55.33 per cent), important factors considered by potato growers while purchasing pesticide in descending order were: quality (better control) of pesticide product (94.00 per cent), attractive packing of pesticide (92.67 per cent) and popularity of pesticide in farming community (92.00 per cent).

REFERENCES

- Pawar, S. J. 2013. Determination of farmers' purchasing behaviour about agrochemicals in horticultural crops in Banaskantha district of Gujarat. MBA (Agribusiness) Thesis, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar.
- Tank, G. D. 2014. Buying behavior of groundnut growers towards purchasing of groundnut seed in Banaskantha district of Gujarat. MBA (Agribusiness) Thesis, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar.