**Marketing Behaviour of Onion Growers**

**Abstract**

Successful onion cultivation not only requires knowledge, skill and accuracy in the production but also in the marketing. Therefore, marketing of onion seems as a special significance in the onion cultivation. Marketing is one of the post production activities, which consistently influences the extent and nature of growing as well as profits to onion growers. The study was conducted purposively because as these districts have largest area under onion in Maharashtra state. From Nashik and Solapur districts two tehsils namely Niphad and Madha were selected, to study the marketing behaviour of the onion growers. The study revealed that in the planning component of marketing behaviour majority of the onion growers (88.33 %) “always” study available resources and facilities in the area before onion cultivation, The study revealed that in the decision making component of marketing behaviour majority of onion growers (76.67 %) “always” used suggestions from progressive farmers. The study revealed that in the implementation of action plan component of marketing behaviour majority of respondents (93.33 %) “always” used wholesalers type market for selling onion produce, 82.50 per cent of respondents “always” used rabi season for onion cultivation, and 100.00 per cent of respondents “always” used sales by open auction method. The study revealed that in the review component of marketing behaviour 53.33 per cent of respondents “always” analysed the changes in market situation. It was observed that more than half of onion growers (65.83 %) had medium marketing behaviour. Keeping the facts in view, In planning component the onion growers always study available resources and facilities in the area before onion cultivation.In decision making component onion growers always used suggestions from progressive farmers. in the implementation of action plan component onion growers always used wholesalers type market for selling onion produce, rabi season for onion cultivation, sales by open auction method. in the review component onion growers always analysed the changes in market situation.

 **Keywords: *Onion, Nashik - Niphad, Solapur - Madha, Marketing.***

**Introduction**

Onion (*Allium cepa)* is one of the important commercial vegetable crops grown in India. It is widely grown in different parts of the country mainly by small and marginal farmers. It is used both in green and mature stage for salad and spice in a variety of flavoured dishes and soups. Due to its importance in cookery, it is called the Queen of kitchen by Germans. It has very good medicinal value. The export and perpetual demand of onion within the country made it annual supply of onions essential round the year (Kumar *et al.,* 2017).

 Onion is an important commercial crop of and it is

one of the oldest cultivated vegetables. It was originated in central Asia and is extensively cultivated all over the world, especially in China, India, The Netherlands, Pakistan, Bangladesh and Australia. India is the second largest producer of onion with an area of 1293 thousand ha and production of 21718 thousand MT. In India, Maharashtra is the largest producer of onion with about 471.66 thousand ha area and 6773.08 thousand MT of production with 22.05 t/ha productivity. (source- Department of Agriculture and Farmers Welfare)

 Onion is a very common crop grown all over India and consumed by every family either raw as salad or cooked in various ways in all curries, fried, boiled or baked. It is also used in processed form e.g. flakes, powder, paste, crush and pickles. Ripe onions contain 85-90 per cent water, 7-10 per cent carbohydrates, 1-2 per cent protein, 0.25 per cent fat, 0.4 per cent mineral matter, 0.18 per cent calcium, 0.05 per cent phosphorus, 0.7 per cent iron, 120 IU vitamin B and 0.41 per cent nicotinic acid. Primarily, the bulb is used as a vegetable but in some places the green onions are also cooked. Onion has great therapeutic value. They are stimulants and mild counter-irritant and used as herbal remedy for centuries in colds, coughs, bronchitis and many other diseases. It has been found beneficial in cardiovascular diseases, diabetes, cancer and respiratory tract diseases.

 Onion is produced in three seasons i.e. *rabi*, *kharif* and late *kharif* in our country. About 60 per cent production comes from *rabi* crop, while, *kharif* and late *kharif* crops contribute 20 per cent each. (Source- Agriculture Department, Government of Maharashtra) The *rabi* season crop of onion is harvested in April-May, while, *kharif* onion crop is available in the market during October to December. The *kharif* onion is produced in parts of Maharashtra,

Gujarat, Karnataka and Rajasthan. The major portion of *rabi* season crop is stored throughout the country. This stored material is available for domestic markets as well as for export from May to October. There is critical gap in supply of onion from October to December in the country and as a result of this prices shoot up.

The *kharif* crop plays an important role in fulfilling consumer’s demand and stabilizing the prices of onion in the country. If *kharif* crop is delayed or spoiled due to vagaries of monsoon, the prices increase very rapidly in October and remain high till January-February. *Kharif* onion, therefore, is most crucial in controlling market prices vis-a-vis making onions available to consumers. But at the onset of monsoon, the heavy showers, water stagnation and high incidence of diseases spoil the seedlings and restrict the healthy nursery production for *kharif* season. Therefore, *kharif* onion production through setts can be done to avoid the losses.

**Materials and Methods:**

**Study area:**

The study was conducted purposively in Nashik and Solapur districts, which have highest area under onion in Maharashtra state. Niphad and Madha were selected for present study based on larger area under onion as per 2022-2023 estimate and consultations with officials of the Department of Agriculture, Government of Maharashtra.

**Table.1 Sample selection plan for the study**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** |  **Name of selected villages** | **Number of selected respondents** |
|  | **Tehsil (Niphad), Nashik** |  |
| 1. | Davachwadi | 12 |
| 2. | Palkhed | 12 |
| 3. | Raulas | 12 |
| 4. | Vinchur | 12 |
| 5. | Lonwadi | 12 |
|  | **Tehsil (Madha), Solapur** |  |
| 6. | Dhavalas | 12 |
| 7. | Barloni | 12 |
| 8. | Gavalewadi | 12 |
| 9. | Kavhe | 12 |
| 10. | Kurdu | 12 |
|  | **Total** | **120** |

**Data Collection:** The data was collected by survey method by conducting personal interviews of sample farmers with the help of questionnaire prepared for study purpose. Data regarding planning component, decision making/action plan, implementation of action plan and review component of onion growers for the agricultural year 2023-24 was collected from the sample growers.

**Results and discussion:**

Table.2 Planning component of onion growers

|  |  |  |
| --- | --- | --- |
| **Sr.****No.** | **Marketing activities**  | **Respondents(n=120)** |
| **Always** | **Sometimes** | **Never** |
| **A.** | **Planning** | **Frequency****(percentage)** | **Frequency****(percentage)** | **Frequency****(percentage)** |
| 1. | Study available resources and facilities in the area before cultivation of onion in field. | 106**(**88.33) | 14(11.67) | 00(0.00) |
| 2. | Understand consumer needs beforecultivation of onion. | 85(70.84) | 34(28.33) | 01(0.83) |
| 3. | Decide the marketing channel that willgive maximum profit. | 36(30.00) | 78(65.00) | 06(5.00) |
| 4. | Collect required information aboutmarkets e.g. demand, quality and rates. | 71(59.16) | 39(32.50) | 10(8.34) |
| 5. | Use various resources for collectingmarket information. | 63(52.50) | 48(40.00) | 09(7.50) |

(\* Figures in parenthesis indicates percentages.)

 It was observed from Table 2. that majority of the onion growers (88.33 %) “always” study available resources and facilities in the area before onion cultivation, 70.84 per cent of respondents “always” understand the need of consumers before cultivation of onion, 65.00 per cent of them “sometimes” decided the marketing channel that will give maximum profit and 59.16 per cent of respondents “always” collected requires information about market demand, quality and rate of produce.

  **Conclusion :** keeping the above facts in view, the onion growers always study available resources and facilities in the area before onion cultivation, understand the need of consumers, decided the marketing channel, collected requires information about market demand, quality and rate of produce.

Table.3 Decision making / Action plan component of onion growers

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Marketing activities** | **Respondents(n=120)** |
| **Always** | **Sometimes** |  **Never** |
| **1.** | **Decision making/Action plan** |
| 1.1 | **Issues decided after planning** |
| a. | Selection of suitable variety for onion cultivation | 105(87.50) | 12(10.00) | 03(2.50) |
| b. | Management of markets | 40(33.33) | 76(63.33) | 04(3.34) |
| c. | Area allocation under onion  | 77(64.16) | 38(31.66) | 05(4.17) |
| d. | Cultivation technology to be followed | 44(36.66) | 67(55.84) | 09(7.50) |
| 1.2 | **Sources consulted while taking decision** |
| a. | Progressive farmers | 92(76.67) | 25(20.84) | 03(2.50) |
| b. | Family members | 86(71.66) | 33(27.50) | 01(0.84) |
| c. | Extension officers | 03(2.50) | 16(13.33) | 101(84.17) |
| d. | Agril. Research Station | 10(8.33) | 04(3.33) | 104(88.34) |
| e. | Krishi Vigyan Kendra (YCMOU/ Nashik/ Malegaon/ Khed) | 01(0.84) | 03(2.50) | 116(96.67) |

(\* Figures in parenthesis indicates percentages.)

 It was revealed from Table 3. that 87.50 per cent of them “always” decided the onion variety to be taken, 76.67 per cent of onion growers “always” used suggestions from progressive farmers and 71.66 per cent of onion growers “always” used suggestions from family members for decision making, 64.16 per cent of respondents “always” decided area allocation under onion crop and 36.66 per cent of them “always” decided cultivation technology to be followed.

**Conclusion :** keeping the above facts in view, the onion growers always decide the onion variety to be taken, used suggestions from progressive farmers and family members for decision making.

**Table 4. Implementation of action plan component of onion growers**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Marketing activities** | **Respondents (n=120)** |
| **Always** | **Sometimes** | **Never** |
| **1.** | **Implementation of action plan** |  |  |  |
| **1.1** | **Steps in implementing action plan** |  |  |  |
| a) | Cultivate onion variety as decided | 88(73.33) | 31(25.84) | 01(0.84) |
| b) | Seek advice of experienced personnel for solving problems | 72(60.00) | 46(38.33) | 02(1.67) |
| c) | Follow the marketing system as decided  | 35(29.17) | 72(60.00) | 13(10.84) |
| **1.2** | **Marketing activities performed** |  |  |  |
| **1.2.1** | **Type of market used for selling onion produce** |  |  |  |
| a) | Local traders | 04(3.33) | 02(1.67) | 114(95.00) |
| b) | Wholesalers | 112(93.33) | 01(0.83) | 07(5.84) |
| c) | Distant market | 05(4.16) | 43(35.84) | 72(60.00) |
| **1.2.2** | **Locale of market** |  |   |  |
| a) | Agril. Produce Market Committee, Lasalgaon | 15(12.50) | 04(3.33) | 101(84.17) |
| b) | Gadag (Karnataka) | 06(5.00) | 00(0.00) | 114(95.00) |
| **1.2.3** | **Grading of onion produce** | 91(75.83) | 17(14.17) | 12(10.00) |
| **1.2.4** | **Storage place** |  |  |  |
| a) | Own storehouse | 05(4.10) | 03(2.50) | 112(93.34) |
| b) | Traditional method (in chal) | 29(24.16) | 00(0.00) | 91(75.84) |
| **1.2.5** | **Onion export** | 03(2.50) | 00(0.00) | 117(97.50) |
| **1.2.6** | **Selling of onion produce after processing** |  |   |  |
| a) | Flex | 01(0.84 | 01(0.84) | 118(98.33) |
| **1.2.7** | **Onion cultivation season** |  |  |  |
| a) | *Kharif* | 65(54.16) | 04(3.34) | 51(42.50) |

**Table 4. contd….**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Marketing activities** | **Respondents (n=120)** |
| **Always** | **Sometimes** | **Never** |
| b) | Rangada | 43(35.83) | 16(13.33) | 61(50.84) |
| c) | *Rabi* | 99(82.50) | 06(5.00) | 15(12.50) |
| **1.2.8** | **Mode of transportation** |  |  |  |
| **1.2.8.1** | **Transportation of produce to market by** |  |  |  |
| a) | Truck | 98(81.66) | 16(13.34) | 06(5.00) |
| b) | Jeep | 88(73.33) | 13(10.83) | 19(15.84) |
| c) | Other | 67(55.83) | 12(10.00) | 41(34.17) |
| **1.2.8.2** | **Reasons for selecting particular mode** |  |  |  |
| a) | Available at doorstep | 86(71.66) | 28(23.34) | 06(5.00) |
| b) | Low cost | 90(75.00) | 25(20.83) | 05(4.17) |
| c) | It is easy to load and unload | 73(60.83) | 32(26.67) | 15(12.50) |
| d) | No other mode | 26(21.66) | 28(23.34) | 66(55.00) |
| **1.2.9** | **Time for sale of produce** |  |  |  |
| a) | After harvesting | 61(50.83) | 36(30.00) | 23(19.17) |
| b) | After drying  | 62(51.66) | 45(37.50) | 13(10.84) |
| c) | When prices are high | 88(73.33) | 29(24.17) | 03(2.50) |
| d) | When need of money | 95(79.16) | 23(19.16) | 02(1.67) |
| **1.2.10** | **Weighing of onion at the time of selling** | 85(70.83) | 33(27.50) | 02(1.67) |
| **1.2.11** | **Marketing channels** |  |  |  |
| a) | Farmers- Broker | 67(55.83) | 37(30.83) | 16(13.34) |
| b) | Farmers- Agril. Produce Market Committee | 80(66.66) | 18(15.00) | 22(18.34) |
| **1.2.12** | **Method used to sell onion** |  |  |  |
| a) | Sale by open contract | 00(0.00) | 00(0.00) | 120(100.00) |
| b) | Sale by open auction | 120(100.00) | 00(0.00) | 00(0.00) |

 (\* Figures in parenthesis indicates percentages.)

 It was observed from Table 4. that in the implementation of action plan component of marketing behaviour majority of respondents (73.33 %) “always” cultivate onion varieties as decided, 60.00 per cent of respondents “always” seek advice of experienced personnel for solving problems and 60.00 per cent of respondents “sometimes” follow the marketing system as decided, 95.00 per cent of respondents “never” used local traders, 93.33 per cent of respondents “always” used wholesalers type market and 60.00 per cent of respondents “never” used distant market for selling onion produce, 95.00 per cent of respondents “never” locale the gadag market and 84.17 per cent of respondents “never” locale the Agril. Produce Market Committee, Lasalgaon, 75.83 per cent of respondents “always” grading of onion produce, 93.34 per cent of respondents “never” used own storehouse and 75.84 per cent of respondents “never” used traditional method like chal for storage of onion produce, 97.50 per cent of respondents “never” export the onion, 98.33 per cent of respondents “never” make the flex, 82.50 per cent of respondents “always” used *rabi* season, 54.16 per cent of respondents “always” used *kharif* season and 50.84 per cent of respondents “never” used rangada season for onion cultivation, 81.66 per cent of them “always” used truck, 73.33 per cent of respondents “always” used jeep and 55.83 per cent of them “always” used other as the medium of transport, 75.00 per cent of respondents “always” low cost, 71.66 per cent of respondents “always” available at doorstep, 60.83 per cent of respondents “always” it is easy to load and unload and 55.00 per cent of respondents “never” no other mode reason for selecting particular mode, 79.16 per cent of respondents “always” sold their produce when need of money, 73.33 per cent of respondents “always” sold their produce when prices are high, 51.66 per cent of respondents “always” sold their produce after drying and 50.83 per cent of respondents “always” sold their produce after harvesting, 70.83 per cent of respondents “always” selling of onion at the time weighing, 66.66 per cent of respondents “lwaysa” used farmers- agril. produce market committee and 55.83 per cent of respondents “always” used farmers-broker marketing channels, 100.00 per cent of respondents “never” used sales by open contract and 100.00 per cent of respondents “always” used sales by open auction method.

**Conclusion :** keeping the above facts in view, in implementation of action plan the onion growers always cultivate onion varieties as decided, seek advice of experienced personnel for solving problems, used wholesalers type market, grading of onion produce, used *rabi* season for cultivation, used farmers- agril. produce market committee and sales by open auction method.

**Table 5. Review component of onion growers**

|  |  |  |
| --- | --- | --- |
| **Sr.****No.** | **Marketing activities** | **Respondents (n=120)** |
| **Always** | **Sometimes** | **Never** |
| **1.** | **Review** |
| a) | Documentation of market experiences | 15(12.50) | 104(86.66) | 01(0.84) |
| b) | Analysis of changed market situation | 64(53.33) | 41(34.17) | 15(12.50) |
| c) | Preparation of new action plan | 23(19.17) | 61(50.83) | 36(30.00) |

(\*Figure in Parenthesis indicates percentages.)

 It was revealed from Table 5. that 86.66 per cent of onion growers “Sometimes” documented the market experiences, 53.33 per cent of respondents “always” analyzed the changes in market situation and 50.83 per cent of respondents “Sometimes” prepared any new action plan.

**Conclusion:** Keeping the above facts in view, the onion growers Sometime documented the market experiences, prepared any new action plan and always analyzed the changes in market situation.

**Conclusion and recommendations**

keeping the above facts in view, In planning component, the onion growers always study available resources and facilities in the area before onion cultivation, understand the need of consumers, decided the marketing channel, collected requires information about market demand, quality and rate of produce. In decision making component, the onion growers always decide the onion variety to be taken, used suggestions from progressive farmers and family members for decision making. In action plan component,

the onion growers always cultivate onion varieties as decided, seek advice of experienced personnel for solving problems, used wholesalers type market, grading of onion produce, used *rabi* season for cultivation, used farmers- agril. produce market committee and sales by open auction method. In review component, the onion growers sometime documented the market experiences, prepared any new action plan and always analyzed the changes in market situation.

It was observed that in action plan of marketing component of marketing behaviour that majority of respondents used suggestions from progressive farmers as source for decision making. So, progressive farmers association can act at grass root level for providing market information and also it can conduct market research for effective marketing of onion.

It was revealed from review component of marketing behaviour that considerable per cent of respondents used to document their market experiences but only few were preparing new action plan. So, there is need to enhance the involvement of extension personnel for solving the constraints of preparing new action plans for marketing of produce.

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**References**

Dhakad Kamlesh, Choudhary S., Wankhede A. and Varma D.K. 2018. Study on entrepreneurial behaviour of sugarcane growers in Guna district (M.P.) *International Journal of Advance Research, Ideas and Innovations in Technology*. ISSN: 2454-132X, Impact factor: 4. 295.Volume*4, Issue 5.*

Fayaz S., Sathya Gopal P.V. and Prasad S.V. 2016. Impact of Entrepreneurial Behaviour on Farming Performance of Cotton Growers. *Indian Res. J. Extn. Edu*.16(2).

Ganapathi, R. 2015. A Study on factors affecting marketing of jasmine in Dindigul district. *Journal of Management Research and Analysis*. 2(4):238-242.

Koli, S. R. 2003. A Study of Onion Growers from Maharashtra. M.Sc. (Agri.) Thesis (Unpub.), MPKV, Rahuri.

Khandvi, R.C., Salame, S.P. and Wakle, P.K. 2013. Constraints faced by onion growers with regards to cultivation, storage and market. *Asian Resonance*. 2(4):105-109.

Kaur, A. and Sidhu, M.S. 2015. Marketing of potato in Jalandhar district of Punjab, *Indian Journal of Economics and Development.* 11(4): 823-832.

Kumar, R., Dhillon, A. and Kumar, N. 2017. A study of production and marketing of onion in Nuh district of Haryana. *Indian Journal of Economics and Development*, 16(2s) : 176-182.

Krishna Kumar Varma, Varma A., Ahirwar, K. and Tripathi, U.K. 2018. Analysis of the agri-business management behaviour of onion growers. Journal of Pharmacognosy and Phytochemistry 2018; 7(2): 1456-1459.*Library Herald.* 52 (3): 134-150.

Khanna, S. 2022. Marketing Behaviour of Onion Growers in Indore District of Madhya Pradesh. M.Sc. (Agri.) Thesis (Unpub.), JNKVV Jabalpur.

Rohini, A., Selvanayaki, S. and Selvi, P. 2015. Contract farming-an efficient marketing method of Ailanthus *excels*. *Indian J. Economics & Development*. 11(4):939-944.

Shaikh, S.H., Ghosh, M.K., Md.S. Arefin and Sultana, S. 2015. Farmers attitude towards using agro-chemicals in rice production: A case in Laxmipur district of Bangladesh. The Agriculturists, Vol.13(2):105-112.

Yashodhara, B. and Narsimha, N. 2012. Marketing Behaviour of Onion Growers in Chitradurga district of Karnataka. *Mysore Journal of Agricultural Sciences.* 46(4) : 874-879.