

Research Paper

ECONOMICS OF RABI ONION MARKETING IN SATARA DISTRICT: PROBLEMS AND PROSPECTS

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Abstract:

The present study was carried out in 2010-11 to determine the economics of onion marketing of onion in Satara district. The onion is one of the most important vegetable crop grown in India. At least 175 countries grow onions. India is second largest onion growing country in the world. The total area under cultivation of onion crop is 8,04,600 thousands hectares with total production of metric tonnes during the year 2008-09. The present study was carried out in during the year 2010-11 to determine the economics of onion marketing in Satara district. An attempt is made to estimate the various marketing costs and margins and the onion growers share in the consumer's rupee, marketing efficiency of onion and the problems face by the onion growers in the marketing of onion in Satara district of Maharashtra.

Key words: :- Economics, Onion , cost , Marketing, Problems, Prospects.

. For selection of the sample cultivators a list of rabbi onion growers along with their operational holding for each of the selected villages was prepared. A list of all the onion producing farmers from each selected village was prepared and classified in three groups i.e. small (below 2 ha), medium(2- 4 ha) and large (above 4 ha) based on land holding size of the farmers. 180 farmers from all selected village were selected randomly. Farmers in each size groups are in proportion to their number in universe all 60 small, 60 medium and 60 large category farmers were selected. The primary data were collected by survey method with the help of pre-tested schedule of questionnaires through personal interview.

Introduction:

Onion is one of the most important vegetable grown in India. Which is used either in raw or dehydrated form to add flavor and taste to Indian cuisine. Since onion has medicinal values, it is used in some pharmaceutical preparation also. The diverse agro-climatic conditions enable to India to produce onion in one or the other part round the year. At present, India stands second largest producer of onion in the world next only to China. (FAO, Production Year Book, 2008). At least 175 countries grow onions. According to the United Nations Food and Agriculture Organization. There are an estimated 6.7 million acres of onion in the world. Onion is commodity of mass consumption and is grown all over the country mainly by and marginal farmers as this is labour intensive crop for India. Onion is consistent earner of foreign exchange and the exports on onion and onion products reach several destinations (Kulkarni and Prema, 1997). The production of onion is 75.15 lakh MT. accounting for 8.9 percent of the total vegetables production in India (2008-09).

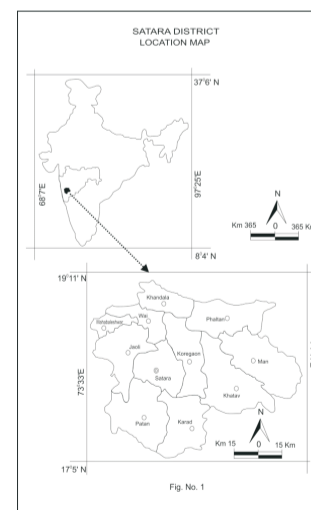
Most of the onion produced in India comes from the States of Maharashtra, Gujarat, Uttar Pradesh and Karnataka. Though onion is also grown in Orissa, Tamil Nadu, Madhya Pradesh and Bihar. Maharashtra State accounted for 31.17 percent of the total production in the country in (2009-10).

In Maharashtra fresh onion starts coming in market in September-October in Satara district. It continues from October to April-May in Nashik, Ahmednagar, Solapur and Pune district and overall major districts in Maharashtra. In

Satara district has area under onion cultivation 13,826 hectares during the year 2008-09. In Satara district Man, Phaltan, Khatav and Khandala tahsils leading of onion producers.

Study Area:

The Satara district is situated in west part in Maharashtra state. This district consists eleven tahsils covering 1739 villages. The total area extent is of 10,480 sq. km. extending from 17° 5' to 18° 11' north latitudes and 73° 33' to 74° 54' east longitudes. This district is confined by Pune district to north, Solapur district to east, Sangli district to south and Ratanagiri district and Raigarh districts to west (Fig.1). Satara district has a typical landscapes due to variations in relief, climate and vegetation. The variation of relief ranges from the pinnacles and high plateau of the main Sahyadrians range having heights over 1200 meters above mean sea level to the subdued basin of Nira river with an average height of about 600 meters above mean sea level. The climate ranges from the rainiest in the Mahabaleshwar region which has an average annual rainfall of over 6000 mm to the driest in Man, Phaltan, Khandala and Khatav tahsils where the average annual rainfall is about 500 mm. The vegetable about cover to varies from the typical monsoon forest in the west parts. Rice, jowar, bajra, onion, potato, ginger, fruits, vegetables, sugarcane and pulses are mainly cultivated in the district.



Objectives:

The present study has been undertaken with the following specific objectives.

- 1.To find out the cost and returns of onion production of recommended cultivation practices by the growers.
2. To find out the problems faced by the production and marketing of rabi onion growers.
- 3.To find out prospects of onion cultivation in study region.

Data Base and Methodology:

This study is based on primary data collected from onion growers of Satara district. Sampled area was selected for study due to a major onion growing area. A list of onion growers was collected from Agriculture Extension department and out of that list 180 onion growers were randomly selected for interview. Onion producing farmers from each selected village was prepared and classified in three groups i.e. small (below 2 ha.), medium (2- 4 ha.) and above (4 ha.) based on land holding size of the farmers. The required primary data pertaining to cost, yield, prices and expenditure for the year 2010 -11 were collected from selected onion growers.

Cost and return per hectare of onion production:

Cost of production means the expenses incurred per unit of output. The items of cost that go into the cost of production are both fixed cost remains fixed in the short run, it is in the variable cost or operation cost that the farmers have some scope to make economy.

Kumbhar (2000) studied economic of production and marketing of rabbi onion in Pune district. The major items cost of cultivation were seeds, hired human labour, manures, bullock charges, fertilizer and rental value of land. Mohaptra and Romeo (2007) studied that the average per hectare cost of cultivation of onion in Bolangir district of Orissa. Shah (1999) conducted was study on an economic evaluation of onion production and its marketing in Maharashtra. The analysis of cost structure revealed that total cost of onion production was found much higher in rabbi season compared to that during Kharif season. This find true for all categories of onion producers.

Market price of input that were prevailing at the time of their use were considered for working out of cost of cultivation. The gross return was calculated on the basis of market price of the produce at the time when the produce is ready for sale. Net returns Rs. Ha. was calculated by deducting the cost of cultivation from the gross income

$$\text{Benefit Cost Ratio} = \frac{\text{Net Returns (Rs./ha.)}}{\text{Cost of Cultivation (Rs./ha.)}}$$

It is seen from Table.1 that at the overall level in Satara district Man, Phaltan, Khandala, Khatav, Koregaon, Wai, Satara, Patan, Jaoli, and Karad tahsils the per hectare cost of cultivation of rabbi onion. It is evident percentage share of the total variable cost is Rs. 93500.19 (i.e. 91.09%) and fixed cost of production is Rs.9136.85 (i.e. 8.90%) to total cost of production.

Table.1
Cost and returns from onion production per quintal/ha.2010-11(all cost considered)..

Sr.No	Cost items	Total production cost Rs./ha.	Total production cost Rs. / ha. in %
A	Variable cost	93500.19	91.09
1	Land preparation	3177.72	3.09
2	Seeds	6318.17	6.15
3	Nursery raising	1165.15	1.13
4	Manures	7500.47	7.30
5	Fertilizers	7619.02	7.42
6	Pesticides	5800.17	5.65
7	Irrigation	4900.92	4.77
8	Transplanting	5200.25	5.06
9	Weeding and hoeing	3950.55	3.84
10	Harvesting and curing	6850.20	6.67
11	Repairs and maintainance	1760.10	1.71
12	Interest on variable cost @ 10% for six months	3855.90	3.75
13	Transportation and marketing cost	35401.57	34.49
B	Fixed cost	9136.85	8.90
1	Depreciations	1160.80	1.13
2	Rental value of land	6874.73	6.69
3	Land revenue	69.80	0.06
4	Interest on fixed costs @ 10% for six months	1031.52	1.00
C	Total cost of cultivation C= (A+ B)	102637.04	100.00
D	Returns		
	Production in quintal / ha.	258.50	-
E	Gross Return @ Rs. 589.70	152437.45	-
F	Net Return ha.(E - C)	49800.41	-
G	Cost of production per quintal/ha.	397.04	-
	= (C ÷ D)		

Land preparation (3.09%),seeds (6.15%), nursery raising (1.13%), manures(7.30%), fertilizers(7.42%), pesticides(5.65%), irrigation (4.77%), transplanting (5.06%), weeding and hoeing (3.84%), harvesting and curing (6.67%), repair and maintained (1.71%), interest on variable cost (3.75%) and transportation and marketing cost (34.49%) cost of total production. Among the different items of cost, the rental value of land, bullock charges, machine charges, total hired human labor charges, seeds, manures, fertilizers, plant protection and irrigation cost were the major items of cost of cultivation in all small, medium and large farmers.

Total cost of cultivation

Net Return

Gross Return

The average net returns obtained by onion growers amounted to Rs.49800.41 per hectare with gross returns of Rs. 152437.45 per hectare. The average yield per hectare onion production 258.50 quintal. The comes cost of production rabbi onion per quintal Rs. 397.04 and net profit per quintal Rs.192.66. The Cost Benefit Ratio comes to about 1:1.48. It is definitely an encouraging return to the farmers only four to five months.

The farmers in groups were asked to estimate the cost depending on their practices and experiences and their net profits based on the price they generally received. Being are of farm profitability from practices, time and location of production and marketing and supply and demand situation in market. These finding are in conformity with the finding of Jat and Jain (2008) and Nikam (2008).

Per quintal price

Cost of production

Net Return

Price spread of onion incurred (Per quintal Rs.)

For the marketing of onion the important channel were identified (1) Producers-consumer(2) producer-howcker-shopkeeper-consumer (3) producer-wholesaler-retailer-consumer.

It was observed Table.3 data presented reveals that producers share in consumers rupee 78.68 percent by selling fresh onion. The wholesalers and retailers are taking away

the major share of 5.37 percent and 8.76 percent of consumers price without investing any penny in the marketing process. The onion growers did not have any control over the market due to the absence of coordination and integration among themselves. All the expenses in the marketing process are incurred by the producers practically the retailers or buyer charges paid to mandi are also charged from the producer.

Table 3
Price spread of onion

Sr. No	Particulars	Rs. quintal	% Share to consumer Rupee
A Farmers sale price			
1	Producers sale price	589.70	76.83
2	Marketing cost paid by producer	136.95	17.84
3	Net price received by producer	452.75	58.98
B Marketing costs			
1	Wholesaler commission (@ Rs. 7%)	41.27	5.37
2	Retailers / Buyers charges paid to the mandi (@Rs.2%)	11.79	1.53
3	Market fee and transportation	20.00	2.60
4	Hamali charges	10.00	1.30
C Retailers purchase price			
		672.76	87.65
D Retailers margin (@ Rs. 10%)			
		67.27	8.76
E	Miscellaneous charges (Packing, handling etc.)	27.50	3.58
E Consumers purchase price or Retailers sale price		767.53	
F Producers share in consumers rupee (Rs.767.53 – Rs. 589.70)		177.83 per quintal	

Source: Based on field work 2010-11

Marketing efficiency of onion:

Table 4
Marketing efficiency of onion

Sr.No	Particular	Rs./ quintal
1	Value of sold	767.53
2	Total marketing cost	136.95
3	Retailer margin	67.27
4	Marketing efficiency	2.75

Source: Compiled by Researcher

Marketing efficiency is an indicator of effectiveness of the marketing system with which it operates. For analyzing the marketing efficiency, modified method as suggested by the Aharya and Agarwal (1999) was used. The marketing efficiency index was worked out and is presented in Table.4.

It is obviously clear from the data depicted in Table.4 marketing efficiency was estimated by using below formula. R.P.

$$M.E. = \frac{T.M.C. + R.M.}{R.P.} - 1$$

T.M.C. + R.M.

Where,

M.E. = Marketing efficiency

R.P. = Retailer sale price

T.M.C.= Total marketing cost

R.M. = Retailer margin

The marketing efficiency of onion worked out to 2.75 which is quite low. This is so because of high marketing margins and marketing costs. Similar finding noticed by Suryawanshi (2005) in his study onion storage and marketing of Ahmednagar district.

Constraints in production and marketing of onion:

The selected farmers were contacted opinion survey for analyzing the constraints in production as well as in the marketing of onion. They expressed number of constraints which are listed in Table.2, reveals that the high price of seed, fertilizers, pesticides and fungicides were the main problem expressed by 86.11 per cent of the sampled onion farmers in production followed by non-availability of funds from institutional sources 53.88 per cent, high wage rate of labour

92.77 per cent, on-availability of good quality of seed 68.88 per cent, and ignorance of severe infestation of insect-pest disease control 60.00 per cent. Non-availability of adequate storage facilities of onion was the main problem expressed by 63.33 per cent of the sample farmers did not store onion on their

Table 2

Constraints faced by the sample farmers in production and marketing of onion

Sr.No	Constraints relating	No of sample farmers expressed the problem	Percent to total NO = 180
A Production			
1	Non-availability of good quality seed	124	68.88
2	High price of seed, fertilizers, pesticides and fungicides	155	86.11
3	High wage rat of labour	167	92.77
4	Ignorance of severe infestation of insect-pest disease control	108	60.00
5	Non-availability of funds from institutional sources	97	53.88
B Marketing			
1	Lack of transportation	137	76.11
2	High charges of transportation	166	92.22
3	Lack of road	67	37.22
4	Lack of market yard	129	71.66
5	Traders collusion	55	30.55
6	Malpractices by traders	135	75.00
7	Higher market charges	142	78.88
8	No correct weighing	87	48.33
9	Lat payment	77	42.77
10	Lack of credit facilities	109	60.55
11	Lack of packing material	131	72.77
12	Price fluctuation and crashes	169	93.88
13	Lack of price information	119	66.11
14	Lack of storage in market yard	155	86.11
15	Non-availability of adequate storage facilities	114	63.33

Source: Based on field work. 2010-11

farm due to lack of storage structure followed by price fluctuations and crashes 93.88 per cent. Various types of malpractices such as deducting certain amount of quantity extra (karda) etc. were common in almost all markets. The problem of collusion (secret agreement) between commission agents and the buyers (outside traders) during the auction was also reported 30.55 per cent of the sample farmers. Problem of higher market charges was reported by 78.88 per cent of total sample farmers. The problem of cheating in weighing by the traders was 48.33 per cent of sample farmers. Undue delay in receiving payment after the sale of their produce was reported by 42.77 per cent of sample farmers. Problem of getting credit to meet the marketing cost was also reported by 60.55 per cent of sample farmers. About 86.11 per cent of farmers felt there is need for temporary storage facilities in the market because some times farm produce could not be sold on the same day due to low price or lack of adequate number of buyers in the market. About 66.11 per cent of the total sample of onion growers felt there should be same system where by in addition to Television, Newspaper, Radio information about the prices prevailing in other markets could reach the farmers. The main source of price information for farmers was through neighbors/fellow farmers or by personal visits. Lack of packing material of onion was reported by 72.77 per cent of sample farmers. Unremunerative prices during the peak season and lack of storage facilities were reported to be the important constraints by onion growers. Besides high price of seed, fertilizers and pesticides, costly transportation and market charges, inadequate skilled labour and lack of information about arrivals and prices in the major consuming markets were main problems reported by onion producers.

Future Thrust:

In the prevailing scenario, to enhance the cultivation

of onion in Satara district. The following efforts by various promoting agencies should be taken.

1. The physiographic affects on onion cultivation in the study region. To minimize the regional imbalances and to develop onion cultivation in the study region. It is essential to provide adequate water resources in eastern part of the Satara district.

2. Before the transplantation of onion soil testing is essential to avoid the high dosage of fertilizers.

3. Training needs of onion growers.

4. Study could be taken up to compare with the recommendations made by the Agricultural Universities and private organizations.

5. Development of suitable marketing strategy for onion growers.

6. The yield and price risks were more in study area. Therefore there is a need to encourage the farmers to take up the measures like crop insurance policy.

7. The State government should give due attention for providing proper approach roads to the villages and also providing storage facilities to help the farmers to store the onions.

8. The present study was carried out in only one district of the State. So it needs to be replicated on larger samples covering all the onion growing areas of Maharashtra of the state. So that the internees drawn can be generalized to a graded extent.

9. The focus of this investigation was only on production and marketing aspects of onion, so study may be taken up on other, important aspects, with large sample size and more variables such as indigenous technological aspects. Study of possibilities of export and communication behavior of onion growers.

10. The government may formulate an appropriate policy to invest in research and development for enhancing the yield of these crops. Major investments shall be made to improve marketing system and in supportive infrastructure was recommended to facilitate marketing and trade of onion. There is strong need to establish for collaboration between private and public research and development programs to improve management practices particularly, the efficient use of available technology for timely and efficient production.

11. The APMC are not providing the information required by the farmers directly to them. Hence there is a need to develop a system of market information utilizing modern information communication techniques. So that the farmers are provided with the required market information at the village itself so as to make appropriate decisions with respect to production and marketing. Plans including post harvest management, storage, sorting, grading, drying, packing and processing and sale of agriculture commodities

12. The onion seed and storage place should be treated before storing and sowing to avoid the infection pest and diseases.

13. There is need for survey and diagnosis of lands suitable for onion and development of area specific farming, system model in cluster approach.

14. There is also need for integrated research for post harvest handling, packaging, transportation, storage and quality control of perishable commodities.

15. There is need to increase adoption and judicious use of available resources especially seeds, plant protection, techniques and non-cash input like planting layout, time and method of fertilizer application, manure application, irrigation turns, harvesting and curing. The farmers should be encouraged to grow onion crop by support price policy and creating cold storage facilities at reasonable rates for

onion.

Conclusion: