

Constraints in production and marketing of onion in northern Karnataka*

Onion is an important commercial vegetable crop. About 82.02 million tonnes onion is produced in the world from 8217 thousand hectares of area. India is one of the major onion producing country with a production of 14.84 million tonnes from an area of 1.01 million hectares. In Karnataka, major onion growing districts are Dharwad, which stands in first position with the production of 7,02,500 tonnes and area of 35,129 hectares, Bijapur district with the production of 2,80,480 tonnes with an area of 14,024 hectares (Anon., 2012) and Belgaum with the production of 45840 t with an area of 2837 ha. Onion poses more problems as compared to other agricultural commodities due to its high degree of perishability. The arrivals and prices of onion are also difficult to predict. There are low prices when arrivals are in large quantity and high prices in the lean season. In this regard, present study was conducted with an objective to know the constraints faced in production and marketing of onion in Northern Karnataka.

The primary data on production and marketing constraints were collected by surveying 90 samples, which includes (30) farmers, traders/wholesalers (30) and retailers (30) by using well-structured and pre-tested schedule. The samples were collected from four different APMC's of Northern Karnataka namely Hubli, Belgaum, Bijapur and Raichur. The tabular presentation technique was employed to know the problems faced by the

farmers, traders/ wholesalers and retailers regarding production and marketing of onion in study area. This technique was used to analyze the data elicited through opinion survey from the sample respondents.

Acute index analysis: The acute index was worked out by multiplying the rank assigned for particular problem with the frequency of expression of that problem by sample farmers/ traders / retailers, divided by the total number of sample farmers / traders / retailers chosen for the study.

$$\text{Acute index} = \frac{\text{Rank of } i^{\text{th}} \text{ problem} \times \text{Frequency of expression of respondents of } i^{\text{th}} \text{ problem}}{\text{Total number of sample respondents}}$$

In the present study, the ranks chosen for less acute problem was 1, followed by acute (2), medium acute (3) and highly acute (4).

The problems faced by sample farmers in onion production are presented in Table 1. It was found that majority of sample respondents felt non-availability of labour as highly acute problem (3.50) because the onion crop is a labour intensive crop. There was a problem of availability of labour during peak time of harvesting and some of labour related operations. Similar results were found in case of Chandrashekhar, (2007) and Waman and Patil (2000). Similarly, majority of respondents opined that the rainfall distribution problem as medium acute (2.90) because distribution of rainfall was uneven, followed by management problem (2.50) as many farmers had lack of training in managing the crop. The credit problem was found to be medium acute problem (2.30) as majority of the farmers were possessing own funds. Mohapatra, (1999) also found same results. Among all the sample farmers majority of respondents expressed resource availability as acute problem (1.86). However, the production problems such as capital availability (1.50), irrigation (1.20) and power supply (1.26) were felt less acute by most of the sample farmers.

The problems faced by sample farmers in marketing of onion are presented in Table 2. The price fluctuation problem was found to be highly acute for most of the sample farmers as compared to other marketing problems of onion. The results are in line with the findings obtained by Waman and Patil (2000). During high prices in market, farmers produced more onion to

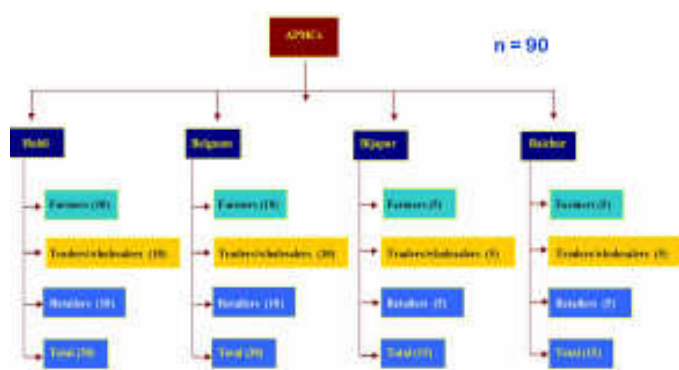


Fig 1. Flow chart showing the samples collected from the different APMCs of Northern Karnataka

Table 1. Problems faced by sample farmers in production of onion

| Problems | Less acute | Acute | Medium acute | Highly acute | Acute index |
|----------------------------|------------|-----------|--------------|--------------|-------------|
| Non-availability of labour | 0(0.00) | 3(10.00) | 9 (30.00) | 18 (60.00) | 3.50 |
| Rainfall distribution | 9(30.00) | 3(10.00) | 18(60.00) | 0(0.00) | 2.90 |
| Management problems | 9(30.00) | 0(0.00) | 18(60.00) | 3(10.00) | 2.50 |
| Credit problem | 9(30.00) | 3(10.00) | 18(60.00) | 0(0.00) | 2.30 |
| Resource availability | 3(10.00) | 18(60.00) | 9(30.00) | 0(0.00) | 1.86 |
| Capital availability | 21(70.00) | 6(20.00) | 0(0.00) | 3(10.00) | 1.50 |
| Power supply | 18(60.00) | 6(20.00) | 6(20.00) | 0(0.00) | 1.26 |
| Irrigation problem | 27(90.00) | 0(0.00) | 3(10.00) | 0(0.00) | 1.20 |

Note: Figures in parentheses indicate percentage to the group total

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Table 2. Problems faced by sample farmers in marketing of onion

(n=30)

| Problems | Less acute | Acute | Medium acute | Highly acute | Acute index |
|---|------------|----------|--------------|--------------|-------------|
| Price fluctuations | 9(30.00) | 3(10.00) | 0(00.00) | 18(60.00) | 2.90 |
| Storage problem | 6(20.00) | 0(0.00) | 18(60.00) | 6(20.00) | 2.80 |
| Grading, | 6(20.00) | 3(10.00) | 18(60.00) | 3(10.00) | 2.60 |
| Commission charges | 9(30.00) | 0(0.00) | 18(60.00) | 3(10.00) | 2.0 |
| Transportation problems | 6(20.00) | 3(10.00) | 18(60.00) | 3(10.00) | 2.50 |
| Availability of market information | 18(60.00) | 3(0.00) | 9(30.00) | 0(0.00) | 1.70 |
| Distance of markets | 18(60.00) | 3(10.00) | 9(30.00) | 0(0.00) | 1.70 |
| Mutual understanding between commission agents and traders | 18(60.00) | 6(20.00) | 6(20.00) | 0(0.00) | 1.60 |

Note: Figures in parentheses indicate percentage to the group total

get more price for their produce. In the process arrivals will be more, hence the farmers will face market glut situation. For most of the sample farmers storage problem was found to be medium acute as space problem existed for storing the onion. The transportation problem was medium acute because of poor road conditions and lower frequencies of vehicles for transportation. Mohapatra, (1999) also found similar results. The commission charges problem was found to be medium acute as it reduced the producers share in consumer rupee. The sample farmers opined the problems such as availability of market information, distance of markets and mutual understanding between commission agents and traders was found to be less acute as compared to other marketing problems.

The problems faced by traders in marketing of onion are presented in Table 3. The acute index was found to be high for space problem as expressed by traders compared to other marketing problems. Majority of the agricultural commodities are bulky in nature and more particularly the space problem existed for onion crop. Most of the sample farmers grow not only onion, but also majority of other agricultural crops. Hence, while bringing the produce to the market, adjusting the space for these commodities became more problematic for traders. The

storage problem was found to be medium acute because watch and ward problem became problematic during untimely rain, hence traders have suffered heavy losses. Shah, (1999) also found similar results in their study. The storage problem was due to urgent need of money for meeting family requirements, unawareness about storage facilities and for meeting the loan requirements. As onion crop is perishable in nature, the storing of onion became serious problem for traders particularly during untimely rain. The market fee was found to be acute problem as traders have to give 2 per cent market fee for the produce. The fluctuations in arrivals and capital assets problems were found to be acute. Some of the traders opined that high market cess, workers problem and electricity problems as less acute.

The problems faced by retailers in marketing of onion are depicted in Table 4. The retailers found workers problems as highly acute because the workers working in market require more wages but more wages, are obtained by workers working in non-farm sector. Also the wage provided in the market was found to be very less. Here also retailers expressed storage facility problem as highly acute. The arrivals coming to the market were heavily dependent on price factor. Hence, whenever there were more fluctuations in prices of onion more fluctuations in

Table 3. Problems faced by traders-wholesalers in marketing of onion

(n=30)

| Problems | Less acute | Acute | Medium acute | Highly acute | Acute index |
|--------------------------|------------|-----------|--------------|--------------|-------------|
| Space | 3(10.00) | 0(0.00) | 9(30.00) | 18(60.00) | 3.40 |
| Fluctuations in arrivals | 0(0.00) | 21(70.00) | 9(30.00) | 0(0.00) | 3.00 |
| Market fee | 3(10.00) | 21(70.00) | 3(10.00) | 3(10.00) | 2.90 |
| Storage facilities | 3(10.00) | 3(10.00) | 21(70.00) | 3(10.00) | 2.80 |
| Capital assets | 6(20.00) | 21(70.00) | 3(10.00) | 0(0.00) | 1.90 |
| High market cess | 21(70.00) | 0(0.00) | 9(30.00) | 0(0.00) | 1.60 |
| Workers | 24(80.00) | 0(0.00) | 3(10.00) | 3(10.00) | 1.50 |
| Electricity | 24(80.00) | 0(0.00) | 6(20.00) | 0(0.00) | 1.40 |

Note: Figures in parentheses indicate percentage to the group total

Table 4. Problems faced by retailers in marketing of onion

(n=30)

| Problems | Less acute | Acute | Medium acute | Highly acute | Acute index |
|--------------------------|------------|-----------|--------------|--------------|-------------|
| Workers | 0(0.00) | 0(0.00) | 9(30.00) | 21(70.00) | 3.70 |
| Storage facilities | 9(30.00) | 0(0.00) | 3(10.00) | 18(60.00) | 3.00 |
| Fluctuations in arrivals | 0(0.00) | 6(30.00) | 24(80.00) | 0(0.00) | 2.80 |
| Capital assets | 9(30.00) | 0(0.00) | 21(70.00) | 0(0.00) | 2.40 |
| Space | 9(30.00) | 3(10.00) | 18(60.00) | 0(0.00) | 2.30 |
| Market fee | 18(60.00) | 3(10.00) | 9(30.00) | 0(0.00) | 1.70 |
| High market cess | 9(30.00) | 21(70.00) | 0(0.00) | 0(0.00) | 1.70 |
| Electricity | 24(80.00) | 6(20.00) | 0(0.00) | 0(0.00) | 1.20 |

Note: Figures in parentheses indicate percentage to the group total

arrivals were observed. The capital asset problem was found to be medium acute for retailers as most of the retailers found lack of capital to purchase machineries (weighing machine) and equipments. Similar findings were observed in case of Mishra, *et al.* (1995). The retailers observed market fee and electricity problems as less acute. But, the high market cess was found to be acute problem for most of the retailers as every retailer has to pay market cess depending on the produce marketed.

From the study it could be concluded that for farmers non-availability of labour was found to be major problem (3.5 acute index) during the production of onion. The price fluctuation problem was found to be highly acute (2.9 index) during marketing of onion. The spacing problem was found to be highly acute (3.4 index) as expressed by traders/wholesalers during marketing of onion. The retailers expressed that workers problem was highly acute (3.70 index).

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