Production technology and availability of marketing facilities
Of Onion in Dewas district of Madhya Pradesh, India

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ABSTRACT:- The investigation entitled “A study on adoption and marketing behaviour of onion growers in Dewas District of Madhya Pradesh” was undertaken during the year 2013-14 in purposively selected Dewas block of Dewas district of Madhya Pradesh. Based on maximum area under onion grown in Dewas block, Amarpura, Khjuria, Anandpur dungariya, Lohari, Chhapri, Nagukhedi RHEO circle, six villages were selected for the study. From each village 25 farmers were selected by using purposively sampling procedure. Thus, the sample size for the study was 80. The major finding was draw on onion production technology and marketing behavior of onion growers are significantly differ, it shows that production technology is easily adopted by the farmers whereas marketing behavior it shows unimproved variation.

Key words:- Production technology, Marketing Facilities, Onion production

I. INTRODUCTION

An onion, today being compared with diamonds indicates its value for a normal household budget. Though price rise of all the essential commodities, inflation and depreciating rupee are making headlines these days but rise in the price of onion is catching everyone’s eye, as it is an essential ingredient in almost every food item prepared at Indian home daily.

A global review of area and production of major vegetables shows that onion ranks second in area and third in production of the total vegetables in the world. China is the first in area and production while India occupies second position in the production that exports to Dubai, Kuwait, Saudi Arabia, Middle East, Malaysia, Singapore, Bangladesh, Sri Lanka etc.

In the state, onion is grown in all the three seasons. However, it is predominantly a winter crop. Generally, the onion growers bring their produce to market for sale immediately after the harvest, because of lack of storage facilities and financial problems of onion growers.

Onion (Allium cepa L) is extremely important vegetable crop not only for internal consumption but also as highest foreign exchange earner among the fruits and vegetables. It occupies an area of 1064 thousand ha, with production of 15118 thousand tonnes. The export of onion during 2011 -12 was 13, 09,863.26 thousand tonnes with a value of Rs 1,722.85 crores.

Onion production plays an important role in contributing to the household food security. The vegetable being cash crop with nutritional value generates income for the poor households. Higher profits can be achieved by increasing the production of a particular vegetable throughout the year. Vegetable production is usually money spinning as compared to staple crops. The production of onion has a comparative advantage particularly under conditions where arable land is scarce, labor is abundant and markets are accessible. The production of cash crops like potato, onion etc. offers opportunities for poverty alleviation, because it is usually more labour. Hence, the generation of additional employment opportunities in rural areas where labour is abundant is made possible. Onion growers are adopting the improved technologies and practices for onion production because the increasing onion production contributes to commercialization of rural economy and creates many off-farm jobs.

In the light of these above facts, the present study that was undertaken with the following objectives.
II. OBJECTIVES OF THE STUDY
To assess production technology and availability of marketing facilities of onion growers.

Scope of the study:
In this study an attempt has been made to evaluate various aspects of onion production and marketing. The finding of this study could be gainfully utilized by the administrators, policy makers, scientists and extension workers to know about the status of onion growers and to make the cultivation of onion more profitable and economical.

Limitation of the study:
Due to the limitation of the time and other resources, the present investigation has been restricted to the selection of locale, sample size and the variables. Hence, the findings have to be viewed in the specific context of the conditions prevailing in the study area and cannot be generalized for wider geographical area. However, careful and rigorous procedures have been adopted in carrying out the research as objectively as possible. In spite of the individual bias made by the respondent farmers in eliciting the necessary responses, it is believed that the findings and conclusions drawn in the present study would form the basis for future research study.

Review Literature
A brief review of literature is an integral part of any investigation as it not only gives an idea on the work done in the past, but also provides the basis of interpretation and discussion of the findings. This investigation is designed to study the important aspects of production and marketing of onion. Effect was made to review the available literature having direct or indirect bearing on present study. For the sake of convenience, the available related reviews are presented under the following heads.

III. AVAILABILITY OF MARKETING FACILITIES PRODUCTION TECHNOLOGY
Waman et al. (1999) A survey was conducted to investigate adoption of 13 recommended cultivation practices by onion growers in Yeola tahsil, Nasik district, Maharashtra, India [n=150, 1995]. Results reveal that a majority of onion growers had a medium level of adoption of the recommended onion production technology. Level of education, size of family, interest in modern farming and sources of information were found to significantly influence adoption behaviour.

Shashidhara and Manjunath (2008) The study was conducted in Dharwad and Belgaum districts of Karnataka state during 2004-05 to find out the extent of adoption of eco-friendly management practices by vegetable growers, revealed that majority of the respondents were in medium level adoption of eco-friendly technologies. With respect to adoption on integrated nutrient management, majority of the respondents were not adopting the technologies viz., application of organic manures, selection of crops and cropping pattern, mixed cropping, inter cultivation practices, application of bio-fertilizers to soil and use of optimum inorganic fertilizers.

IV. AVAILABILITIES OF MARKETING FACILITIES OF ONION GROWERS
Meena et. al (2012) The present investigation was carried out to study the price spread and efficiency in marketing of onion. The study was conducted in Jodhpur and Nagaur which were selected on the basis of highest area and production of onion. A sample of 50 onion growing farmers from different land size categories were selected by probability proportion to number of farmers in each size group. Five intermediaries each, from the commission agents, wholesalers and retailers were selected randomly.

Narasimha and Yashodhara (2012) the study was conducted in Chitradurga district during 2010-11 to know the marketing behaviour of onion growers. The findings of the study depicts that the 51.25 per cent of onion growers sell their produce of onion one month after harvest and 48.75 per cent of onion growers sell onion immediately after harvest. Majority (53.75%) of the onion growers marketed to commission agents followed by traders (21.25%), wholesaler (16.25%) and village level traders (8.75%).

V. MATERIAL METHOD
1. Locale of the study:
The description of study location is essential so that researcher can correlate the finding with the prevailing conditions under study in particular location where problem is existed. The present study was conducted in Dewas block of Dewas district (M.P). Dewas is located at 220.58’ N latitude and 760.06’ E longitude at a height of 535 meter above the mean sea level in Malwa plateau.
2. Sampling techniques used:
   In the present study the sample were drawn through application of multi stage sampling method.

a) Selection of block:
   Dewas district comprises of 6 blocks out of which only one block, namely Dewas was selected purposively because, the block had maximum area under onion cultivation.

b) Selection of villages:
   A list of onion growing villages was prepared with the help of horticulture/extension officials of Block office. The total number of onion grower’s villages in block was 220. Out of which 4 villages were selected randomly and considered for study on the basis of larger area coverage.

c) Selection of respondents:
   A list of onion growers of each selected villages was prepared with the help of RHEOs/RAEOs. 20 onion growers were selected from each selected village through simple random sampling method. Thus the total comprised of 80 onion growers.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Selected Villages</th>
<th>Total No. of Onion growers</th>
<th>No. of selected respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amarpura</td>
<td>39</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Khajuriya</td>
<td>34</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Lohari</td>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Chhapri</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

Source: Senior Horticulture Department office office Dewas (M.P)

Variables and their measurement:
   Variables included in the study were selected on the basis of extensive review of literature and discussion with experts in the field. Measurement mechanism that was used to measure the variables for this study is presented below.
   A) Production technology,
   B) Availability of marketing facilities.

Instrument and method of data collection:
   The interview schedule was designed for collecting the relevant information of selected variables. The questions in interview schedule framed were simple, clear and directly related to the purpose of the study and arranged in logical sequence. The data were collected personally with the help of a pre-tested interview schedule from respondents in Indore block in order to be sure of the correctness in response. The respondents were personally contacted. They were assured that the information given by them would be kept confidential and it would only be used for the academic purposes.
   Practically, all the respondents had answered the questions fully, which was indicative of the fact that good rapport could be established between the investigator and respondents.

Processing and statistical analysis of data:
   Data collected were qualitative as well as quantitative. Qualitative data were converted in quantitative data. The quantitative data were tabulated on the basis of logical categorization method.

VI. RESULT AND DISCUSSION
   This chapter deals with the analysis and interpretation of data gathered on objectives of present study in the following manner:
Assess the production technology and availabilities of marketing facilities of onion growers.

**Assess the production technology and availabilities of marketing facilities of onion growers:**

Marketing behavior of onion growers was determined through direct questions asked to the respondents by the researcher. Categorization of marketing behavior of onion growers was done as improved, moderate and unimproved marketing behavior.

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Categories</th>
<th>Production technology</th>
<th>Availability of marketing facilities</th>
<th>Total (N=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unimproved (below 3)</td>
<td>08 (10%)</td>
<td>37 (46.25%)</td>
<td>45 (28.125%)</td>
</tr>
<tr>
<td>2</td>
<td>Moderate (3-4)</td>
<td>46 (57.5%)</td>
<td>22 (27.5%)</td>
<td>68 (42.5%)</td>
</tr>
<tr>
<td>3</td>
<td>Improved (above 4)</td>
<td>26 (32.5%)</td>
<td>21 (26.25%)</td>
<td>47 (29.375%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td>46.5</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td>2.082</td>
</tr>
</tbody>
</table>

(Significant at 1% level of probability)

The percentage distribution of the respondents according to their knowledge level is shown in the table. The perusal of data in the table reveals that majority (42.5 per cent) of the respondents possessed moderate level of knowledge, while 29.375 per cent of the respondents possessed improved level and 28.125 per cent possessed unimproved level of knowledge. Similar finding was reported by Mohapatra (1999) in study of onion cultivation.

In case of production technology of onion growers, majority (57.5 per cent) of the respondents possessed moderate level of knowledge, while 32.5 per cent possessed improved and 10 per cent possessed unimproved level of knowledge.

Similarly, in the case of availabilities of marketing facilities of onion growers, majority (46.25 per cent) of the respondents had unimproved level of knowledge, while 27.5 per cent had moderate level and 26.25 per cent had improved level of knowledge.

The table also presents the data regarding mean knowledge level of the farmers. The data indicated that mean knowledge level of total respondents was 42. The data also indicated that mean value of knowledge level of production technology of onion growers was higher (46.5) than the mean score (37.5) of knowledge level of availabilities of marketing facilities.

The 't' test was used for testing the significant difference of mean score of knowledge level of two variables (production technology and availability of marketing facilities of onion growers) in relation to their knowledge level.

The obtain value of 't' test is 22.90 is highly significant at .05 level of probability. Hence the hypothesis under this test was that production technology and availability of marketing facilities of onion growers differ in their degree of knowledge level. Hence, the null hypothesis was rejected and the original hypothesis that there is a significant difference between scores mean of both the variables was accepted. It can be stated that there is an impact of availability of marketing facilities of onion growers on improved marketing practices and system by farmer and government.

**Implications of the study**

The following implications emerged from the results of study:

1. Provision has to be made for profitable minimum support price for onion yield for greater motivation of farmers to take up onion production.
2. Strengthening information support for onion production and marketing practices.

**REFERENCES**


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