### PROBLEMS FACED BY ORGANIC FARMERS IN HILLY AREAS OF UDHAMPUR DISTRICT IN JAMMU REGION

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### ABSTRACT

The present study was conducted in hilly areas of Udhampur district to find out the problems faced by the farmers involved in organic farming. Five villages namely Kothri, Ladda, Lasari, Gorimiti and Manote in Panchari block were selected purposely. Ten farmers from each village were selected randomly making a total sample size of 50 farmers. The analysis of data revealed that 82 percent of the farmers were not aware about vermi-composting. It was also revealed that all the respondents were having no information and knowledge about bio-fertilizers. Apart from this 69 per cent of the farmers were lacking in information of compost making practices on scientific lines. Regarding the utilization of different sources of information, 91 per cents farmers showed their concern about frequent visits of extension functionaries of line departments in far flung areas. More than 80 per cent of the farmers were of the view that they gain majority of farm related information from progressive and fellow farmers. It was suggested that information on organic farming in vernacular language should be made available to the farmers in far flung areas.

### INTRODUCTION

Organic farming is a concept of living in synergism with mother nature. This concept is not new and our ancestors have been found following natural farming since the time immemorial. The term organic in relation to farming was first used by Northbourne (1940) in his book "Look to the Land". Northbourne was not simply referring to organic inputs such as compost but rather to the concept of managing a farm as an integrated whole system (Pratap, Tej and Vaidya). Many farmers in the developing countries may have been practicing organic agriculture by tradition based on their indigenous method of production. However, the international food standards set by Codex Alimentarus in association with IFOAM and FAO define organic agriculture as a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. Organic farming emphasizes restricting the use of chemical inputs whether it is inorganic fertilizer or pesticide and instead relies more on an integrated approach of crop management practices making use of cultural, biological and natural inputs. Addition of organic manure such as Farm Yard Manure (FYM), recycling of organic waste through composting, green manure biofertilizers and vermi composting constitute important components for plant nutrient management in organic farming (Dinesh et al.). Concept of organic farming is catching up fast with Indian farmers and entrepreneurs especially low productive rainfed regions with the increasing realization that overall farm profits are more under organic farming due to low input cost and premium on organic produce (Chhonkar). Jammu and Kashmir State has three distinct agro-climatic zones viz; sub-tropical, intermediate and temperate. Intermediate and temperate zones are comprised of hilly and scattered terrain. The farmers in these regions are also practicing organic farming. Keeping in view the farmers' involvement in organic farming, a study was conducted in Udhampur district of Jammu region with the objectives to study the level of awareness of the farmers regarding organic farming, to study perception of the farmers regarding organic farming. to study the source of information utilized by the organic farmers and to study the constraints faced by the farmers involved in organic farming

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#### **RESEARCH METHODOLOGY**

The present investigation was conducted in the purposively selected Udhampur district of Jammu division of Jammu and Kashmir State. From the selected district Pancheri block was undertaken purposively keeping in view the prevalence of organic farming in the block. Entire area under Pancheri block is temperate and scattered. Majority of the farmers especially in far flung areas are practicing organic farming. From the selected block, five villages were selected keeping in view the abundance of organic farming in these villages. From each selected village, 10 farmers practicing organic farming were selected randomly thereby constituting 50 organic farmers. Data for the study was collected through personal interview technique on an appropriate instrument and collated accordingly using appropriate statistical measures.

### RESULTS AND DISCUSSION

The results have been presented under the following heads:

### Distribution of the respondents on the basis of awareness regarding organic farming:

The respondents were categorized into three categories i.e. high, medium, and low on the basis of the calculated mean and standard deviation of the awareness score obtained by the respondents.

 
 Table 1: Distribution of the respondents on the basis of awareness regarding organic farming

| S. No. | Awareness<br>category | Frequency | Percentage |
|--------|-----------------------|-----------|------------|
| 1.     | High                  | 14        | 28.00      |
| 2.     | Medium                | 26        | 52.00      |
| 3.     | Low                   | 10        | 20.00      |
|        | TOTAL                 | 50        | 100.00     |

A perusal of data incorporated in Table 1 reveal that majority of the respondents (52 percent) had medium level of awareness regarding organic farming. It was followed by 28 per cent of them having high level of awareness of the respondents had low level of awareness with regards to organic farm-

#### ing.

## Awareness of the respondents regarding different domains of organic farming:

A perusal of data presented in Table 2 makes it vivid that the respondents had a fairly high degree of awareness regarding the concept of organic farming (MPS 94.67) followed by the concept of vermicompost (MPS 81.34), importance of green manuring in organic farming (MPS 44.67), role of crop rotation (MPS 34.67) and awarenrees regarding resistant varieties (MPS 30,67) which were assigned I, II, III, IV and V ranks in the hierarchy. Besides, the awareness regarding organic mulches (MPS 28.67), cultural weed management practices (MPS 28.00), biological pest control (MPS 12.67), bioherbicides (MPS 9.34) and bio-pesticides (MPS 8.00) was found to be poor among the respondents.

Table 2: Awareness of the respondents regardingorganic farmingn= 50

| S. No | ). Awareness domain              | MPS   | Rank |
|-------|----------------------------------|-------|------|
| 1.    | Concept of organic farming       | 94.67 | Ι    |
| 2.    | Role of crop rotation            | 34.67 | IV   |
| 3.    | Importance of green manuring     | 44.67 | Ш    |
| 4.    | Biological pest control          | 12.67 | VIII |
| 5.    | Cultural weed management methods | 28.00 | VII  |
| 6.    | Organic mulches                  | 28.67 | VI   |
| 7.    | Bio-herbicides                   | 9.34  | IX   |
| 8.    | Bio-pesticides                   | 8.00  | Х    |
| 9.    | Resistant varieties              | 30.67 | V    |
| 10.   | Vermicompost                     | 81.34 | П    |

MPS: Mean Percent Score, n: Sample size

### Perception of the respondents regarding organic farming:

Data presented in Table 3 reveal that high level of positive perception was found among the respondents with regards to the fact that organic farming improves the soil fertility (MPS 84.00) followed by cost effectiveness of the organic farming practices

Table 3: Perception of farmers regarding organicfarmingn=50

|                         | 0   |       |      |  |
|-------------------------|---|-------|------|--|
| S.No. Indicator MPS Ran |   |       |      |  |
| 1.                      | Improves soil fertility                                       | 84.00 | Ι    |  |
| 2.                      | Reduce dependence on inorganic fertilizer                     | 62.00 | Ш    |  |
| 3.                      | Increase crop productivity                                    | 6.00  | VIII |  |
| 4.                      | Reduced health hazards associa-<br>ted with inorganic farming | 8.67  | VII  |  |
| 5.                      | Increase in moisture retentiazon of soil                      | 54.00 | N    |  |
| 6.                      | Cost effectiveness  | 78.00 | Π    |  |
| 7.                      | Environment friendly  | 24.00 | VI   |  |
| 8.                      | Consumers choice  | 41.34 | V    |  |

MPS: Mean percent score, n= Sample size

(MPS 78.00), reduced dependence on the inorganic fertilizers (MPS 62.00), increase in the moisture retention of the soil due to organic farming (MPS 54.00) and consumers choice of organic products (MPS 41.34) which were assigned I, II, III, IV and V ranks respectively by the respondents. Besides poor level of perception was reported with respect to environmental friendly attribute of the organic farming (MPS 24.), reduction in health hazards due to organic farming (MPS 8.67), and increase in crop productivity (MPS 6.00) and were assigned VI, VII and VIII ranks respectively by the respondents.

### Sources of information utilized by the respondents with regards to organic farming:

It is evident from the data presented in Table 4 that progressive farmers of the area were the prime source of availing information regarding the organic farming by the respondents (MPS 86.00), followed by the neighbours (MPS 80.67). Whereas the respondents were found having utilized very poorly the extension functionaries (MPS 18.67) radio (MPS 14.67) and Television (MPS 1.34) for getting information with respect to the organic farming. Besides, none of the respondents reported newspaper ever consulted as a source of information for organic farming. The findings are in concordance with the study conducted in Bareilly, Almora and Rampur (Chander Mahesh *et. al*) it was found that 80 per cent of the farmers who listened programmes on organic farm-

ing on Radio retained information in their memory to 50 per cent.

Table 4: Source of Information utilized by the withregards to organic farmingn= 50

| S. No. | Source of information                 | MPS   | Rank |
|--------|---------------------------------------|-------|------|
| 1.     | Radio                                 | 14.67 | IV   |
| 2.     | TV                                    | 1.34  | V    |
| 3.     | Newspaper                             | 0.00  | VI   |
| 4.     | Extension functionaries/<br>AEO, JAEO | 18.67 | Ш    |
| 5.     | Neighbours                            | 80.67 | II   |
| 6.     | Progressive farmers                   | 86.00 | Ι    |

MPS: Mean Percent Score, n= Sample size

### Constraints faced by the respondents in organic farming:

Data presented in Table 5 reveal that with respect to the input related constraints lack of knowledge about resistant varieties was found to be the most severe constraint (MPS 96.67) by the respondents followed by lack of awareness about bio-fertilizers (MPS 92.67) and lack of knowledge about biopesticides (MPS 90.67) which were assigned I, II and III ranks, respectively by the respondents. Lack of knowledge about compost making on scientific lines (MPS 68.67) was found to be the constraint of medium order by the respondents. Lack of technical aspects of vermicompost was however found to be less severe constraint by the respondents (MPS 30.67). Further, with regards to the information related constraints, less frequency of visit of extension functionaries (MPS 90.67) was reported as the most severe constraint encountered by the respondents in organic farming followed by lack of training on organic farming (MPS 78.00) and non-availability of relevant literature (MPS 58.67) and were assigned I, II and II ranks by the respondents. Besides, with respect to the IPM related constraints, weeding problems and attack of insect pests were found to by the less sever constraints by the respondents with MPS 37.34 and 28.67 respectively. In addition to it, hilly terrain and non availability of transportation facilities (MPS 96.67) and small and fragmented size of holdings (MPS 94.00) have also been found to constrain is in organic farming.

| Table | Table 5: Constraint faced by the respondents in organic farming |       | n=50 |  |
|-------|---|-------|------|--|
| S.No. | Constraints<br>Input related                                    | MPS   | Rank |  |
| 1.    | Lack of awareness about bio-fertilizers                         | 92.67 | II   |  |
| 2.    | Lack of technical aspects of vermi-compost                      | 30.67 | V    |  |
| 3.    | Lack of knowledge about resistant varieties                     | 96.67 | Ι    |  |
| 4.    | Lack of knowledge of bio-pesticides                             | 90.67 | Ш    |  |
| 5.    | Lack of knowledge about compost making on scientific lines      | 68.67 | IV   |  |
|       | Information related constraints                                 |       |      |  |
| 1.    | Lack of training on organic farming                             | 78.00 | П    |  |
| 2.    | Non-availability of relevant literature                         | 58.67 | III  |  |
| 3.    | Less frequency of visit of extension functionaries              | 90.67 | Ι    |  |
|       | IPM related problems  |       |      |  |
| 1.    | Weeding problems  | 37.34 | Ι    |  |
| 2.    | Attack of insect-pests  | 28.67 | П    |  |
|       | General constraints   |       |      |  |
| 1.    | Small and fragmented size of holding                            | 94.00 | П    |  |
| 2.    | Hilly terrain and no transport facility                         | 96.67 | Ι    |  |

MPS: Mean Percent Score, n= sample size

# Correlation of the personal characteristics of the respondents with the level of awareness and degree of constraints faced

A perusal of data presented in Table 6 reveal that age, education and extension contact of the farmers has a positive and significant correlation with the level of awareness of the farmers regarding organic farming. It implies that as age, education and extension contact increase the level of awareness also increases. Whereas, family, type, family size and size of land holding of the respondents had no relationship with their level of awareness regarding organic farming.

Besides, age, education, and extension contact of the respondents had a significant but negative correlation with the degree of constraints encountered by the respondents regarding organic farming. It implies that, age, education and extension

| Table 6: Correlation of the personal characteristics with the level of awareness and degree of constrain | its |
|--|-----|
| faced  |     |

| S. No. | Personal Characteristics | Correlation coefficient<br>Level of awareness | Degree of constraints |
|--------|--------------------------|---|-----------------------|
| 1.     | Age                      | 0.744*  | -0.656*               |
| 2.     | Education                | 0.782*  | -0.745*               |
| 3.     | Family Type              | 0.036NS                                       | 0.098NS               |
| 4.     | Family size              | 0.073NS                                       | 0.193NS               |
| 5.     | Size of holding          | 0.037NS                                       | 0.076NS               |
| 6.     | Extension contact        | 0.762*  | -0.782*               |

\*Significant at 5% level, NS: Non Significant

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contact advances, the degree of constraints declines. Contract to it, family, type, family size and size of land holding of the respondents had no relationship with their level of awareness regarding organic farming.

### Suggestions of farmers for the promotion organic farming:

- Organization of farmer training programmes in remote areas
- Extension functionaries should visit farmers' fields frequently to provide knowledge and technical guidance on various aspects of organic farming
- Literature on organic farming in vernacular language should be made available to farmers.
- Programmes on IPM should also be organized in remote areas
- Awareness programmes on biofertilizers and vermi-compost should be conducted in far flung areas.

### CONCLUSION

It can be concluded from the study that majority of the respondents (52 percent) had medium level of awareness regarding organic farming followed by 28 percent of them having high level of awareness whereas, one fifth of the respondents had low level of awareness with regards to organic farming. A high level of positive perception was found among the respondents with regards to the fact that organic farming improves the soil fertility followed by cost effectiveness of the organic farming practices, reduced dependence on the inorganic fertilizers, increase in the moisture retention of the soil due to organic farming and consumers choice of organic products. The progressive farmers of the area were the prime source of availing information regarding the organic farming by the respondents followed by the neighbours. Lack of knowledge about resistant varieties was found to be the most severe constraint by the respondents followed by lack of awareness about bio-fertilizers and lack of knowledge about biopesticides, less frequency of extension functionaries, lack of training on organic farming, non-availability of relevant literature, hilly terrain and non availability of transportation facilities were the prime constraints affecting the organic farmers. Age, education, and extension contact of the farmers has a positive and significant correlation with the level of awareness of the farmers regarding organic farming. Besides, age, education, and extension contact of the respondents had a significant but negative correlation with the degree of constraints encountered by the respondents regarding organic farming.

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