

## **Level of knowledge Possessed by the farmers of organic farming in Satna, District Madhya Pradesh**

**SUNITA KUSHWAHA<sup>1</sup>, Y.K. SINGH<sup>2</sup> AND BEENA SINGH<sup>\*3</sup>**

M.Sc. (Ag. Ext.)<sup>1</sup>, Associate Professor (Agr. Ext.)<sup>2</sup>, Ph.D (Research Scholar)<sup>3</sup>  
Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya  
Chitrakoot, Satna (M.P.) India

### **ABSTRACT**

Knowledge of organic agriculture are a challenge for some stakeholder, including limited resources to farmers on Block Rampur Bagelan District Satna MADHYA PRADESH. Survey of limited resource farmers and non-farmers in his region, was conducted to identify their knowledge. Recently survey of knowledge level of farmers divided into three categories, First one is Complete knowledge, second is Partial knowledge and third is No knowledge

**Key Words :** Organic farming, Farm yard manure, Vermi-compost, Green manure, Compost and bio-fertilizer

### **INTRODUCTION**

Organic agriculture in India has its roots in traditional agricultural practices that evolved in countless villages and farming communities over the millennium. Organic agriculture is a holistic production and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adopted system.

Organic farming is gaining gradual momentum across the world. Growing awareness of health and environmental issues in agriculture has demanded production of organic food which is emerging as an attractive source of rural income generation. Organic agriculture has made a credible performance during the past ten years. Both, the 11th plan document on organic sector and the report of the National Commission on farmers have recommended it as a tool for second green revolution in the country in particular for agro-eco zones comprising rain fed areas, hilly areas and areas experiencing ecological backlash of green revolution. The agriculture sector in India has made enormous stride in the past 50 years. The Green Revolution has been the milestone of India's agricultural achievement, transforming country from the stage of food deficiency to self-sufficiency by use of high yielding varieties and higher level of inputs of fertilizers and pesticides. During the post Green Revolution period, the production of food grains has increased four-folds, from 50.82 million tons in 1950-51 to 265.57 million tons on 2013-14

The present research work has been undertaken with a point of view to determine the

“knowledge and extent of adoption of organic farming practices by the farmers in the villages”, selected for popularizing and diffusing the organic farming of Madhya Pradesh, Bhopal. The department of Agriculture has launched a massive programmed of organic farming throughout the state to reduce the increasing cost of chemical fertilizers and pesticides. This will effect upon cost of benefit ratio of various crops. At present time in Indian states are grow large areas of organic farming. In below the table mention of Total area of states, percentage of share in organic farming, total production of organic produce, total yield percentage and according to production rank of states.

| <b>Table 1 : Percentage of organic farming area of some Indian states</b> |                |          |                     |            |       |      |
|---|----------------|----------|---------------------|------------|-------|------|
| Sr. No  | State          | Area     | Percentage of share | Production | Yield | Rank |
| 1.  | Andhra Pradesh | 47456.17 | 0.86                | 3685.44    | 0.05  | 10   |
| 2.  | Gujarat        | 41978.94 | 0.76                | 9859.58    | 0.23  | 12   |
| 3.  | Kerala         | 15790.49 | 0.28                | 12277.72   | 0.78  | 15   |
| 4.  | Meghalaya      | 288.23   | 0.01                | 9654.38    | 33.56 | 11   |
| 5.  | Madhya Pradesh | 432129   | 7.79                | 83404.75   | 0.192 | 3    |

Organic agriculture can become low cost, sustainable option of farming in the country, particularly by the small farmers in rain fed areas and helps to improve their food and income security. It helps to produce and supply adequate safe and nutritious food to the producers and consumers of the nation. Environmental benefits, health aspects and farmers empowerment are other important factors influencing farmers to shift to organic agriculture. Some of the important benefits of organic farming are Organic fertilizers are completely safe and does not produces harmful chemical compounds.

India is a second big producer and consumers of produced food. At present time Indian food storage capacity has increase, to construction of cold storage, ware house etc. India is a sovereignty country. India mainly exports organic processed food products, organic rice, beverages and other cereals and millets to US, Canada, Europe, and South East Asian countries. India is 10th leading country in the world in terms of organic certification. There are 6.5lakh producers and 362 exporters who are associated with organic production and exports in India.

## METHODOLOGY

The present study was conducted in Rampur baghelan blocks stana district . Rampur baghelan block four organic farming villages – matha, aber, dandiya, gududaer purposely selected. All total data 120 respondents were selected purposely each village 30 respondents. The data were collected with the help of interview schedule. When farmer were asked to rate their knowledge of organic practices using a three – point Likert scale of 1-3, where 1 was complete knowledge, 2 was partial knowledge, and 3 was no knowledge. Calculate data were tabulated and calculation like %.

## RESULTS AND DISCUSSION

More than 54 per cent of respondents have partial knowledge of organic farming, 39 per cent of respondents have complete knowledge and 7 per cent of respondents has no knowledge. 80 per

| <b>Table 2 :</b> |   |                      |                     |                |
|------------------|---|----------------------|---------------------|----------------|
| Sr. No.          | Knowledge level   | Complete knowledge % | Partial knowledge % | No knowledge % |
| 1.               | Knowledge of organic farming  | 39                   | 54                  | 7              |
| 2.               | Knowledge of farm yard manure   | 80                   | 19                  | 1              |
| 3.               | Knowledge of farm yard manure preparation   | 71                   | 24                  | 5              |
| 4.               | Knowledge of quantity of farm yard manure used in one acre                                    | 73                   | 22                  | 5              |
| 5.               | Knowledge of how many days farm yard manure prepare   | 75                   | 20                  | 5              |
| 6.               | Knowledge of farm yard manure quantity of nutrient content in soil and water holding capacity | 18                   | 53                  | 29             |
| 7.               | Knowledge of farm yard manure reduce fertilizer toxicity                                      | 42                   | 43                  | 15             |
| 8.               | Knowledge of farm yard manure prize in market   | 90                   | 3                   | 7              |
| 9.               | Knowledge of Vermi-compost  | 30                   | 59                  | 11             |
| 10.              | Knowledge of preparation method of Vermi-compost  | 24                   | 29                  | 47             |
| 11.              | Knowledge of Vermi-compost raw material such as pits size, earthworm, water content etc.      | 19                   | 24                  | 57             |
| 12.              | Knowledge of how many days Vermi-compost prepare  | 20                   | 25                  | 55             |
| 13.              | Knowledge of quantity of nutrient content in vermin-compost                                   | 4                    | 25                  | 71             |
| 14.              | Knowledge of market value of Vermi-compost  | 40                   | 5                   | 55             |
| 15.              | Knowledge of quantity used in Vermi-compost 1 acre  | 32                   | 12                  | 56             |
| 16.              | Knowledge of compost  | 4                    | 28                  | 68             |
| 17.              | Knowledge of preparation method compost   | 2                    | 15                  | 83             |
| 18.              | Knowledge of benefit of compost in soil   | 3                    | 14                  | 83             |
| 19.              | Knowledge of green manure   | 1                    | 10                  | 89             |
| 20.              | Knowledge of which crop are used in green manure  | 2                    | 7                   | 91             |
| 21.              | Knowledge of preparation method of green manure   | -                    | 4                   | 96             |
| 22.              | Knowledge of effect of green manure in soil   | -                    | 4                   | 115            |
| 23.              | Knowledge of bio-fertilizer   | 5                    | 4                   | 91             |
| 24.              | Knowledge of bio-fertilizer effect in soil  | 2                    | 23                  | 75             |
| 25.              | Knowledge of method of using in bio-fertilizer  | 3                    | 14                  | 83             |

cent of respondents have complete knowledge of farm yard manure, 19 per cent of respondents have partial knowledge, and 1 per cent of respondents has no knowledge. 71 per cent of respondents have complete knowledge of farm yard manure preparation, 24 per cent of respondents have partial knowledge, and 5 per cent of respondents has no knowledge. More than 73 per cent of respondents have complete knowledge of farm yard manure quantity used in one acre, 22 per cent of respondents have partial knowledge, and 5 per cent of respondents has no knowledge. More than 75 per cent of respondents have complete knowledge of how many day farm yard manure prepare, 20 per cent of respondents have partial knowledge, and 5 per cent of respondents has no knowledge. 53 per cent of respondents have partial knowledge of quantity of nutrient content in soil and water holding capacity of farm yard manure, 29 per cent of respondents have no knowledge, and 18 per cent of respondents has complete knowledge. 43 per cent of respondents have partial

knowledge of farm yard manure reduce fertilizer toxicity, 42 per cent of respondents have complete knowledge, and 15 per cent of respondents has no knowledge. 90 per cent of respondents have complete knowledge of price of farm yard manure in market, 3 per cent of respondents have partial knowledge, and 7 per cent of respondents has no knowledge. 59 per cent of respondents have partial knowledge of vermi-compost, 30 per cent of respondents have complete knowledge, and 11 per cent of respondents has no knowledge. 47 per cent of respondents have no knowledge of preparation method of vermi-compost, 29 per cent of respondents have partial knowledge, and 24 per cent of respondents have complete knowledge. 57 per cent of respondents have no knowledge of vermi-compost pits size, water content, earthworm etc. 24 per cent of respondents have partial knowledge, and 19 per cent of respondents have complete knowledge. 55 per cent of respondents have no knowledge of how many days vermi-compost prepare. 25 per cent of respondents have partial knowledge, and 20 per cent of respondents have complete knowledge. 71 per cent of respondents have no knowledge of quantity of nutrient content in vermi-compost. 25 per cent of respondents have partial knowledge, and 4 per cent of respondents have complete knowledge. 55 per cent of respondents have no knowledge of market value of vermi-compost. 40 per cent of respondents have complete knowledge, and 5 per cent of respondents have partial knowledge. 56 per cent of respondents have no knowledge of quantity of vermi-compost used in one acre. 32 per cent of respondents have complete knowledge, and 12 per cent of respondents have partial knowledge. 68 per cent of respondents have no knowledge of compost. 28 per cent of respondents have partial knowledge, and 4 per cent of respondents have complete knowledge. 83 per cent of respondents have no knowledge of compost preparation method. 15 per cent of respondents have partial knowledge, and 2 per cent of respondents have complete knowledge. 83 per cent of respondents have no knowledge of benefit of compost in soil. 14 per cent of respondents have partial knowledge, and 3 per cent of respondents have complete knowledge. 89 per cent of respondents have no knowledge of green manure. 10 per cent of respondents have partial knowledge, and 1 per cent of respondents have complete knowledge. More than 91 per cent of respondents have no knowledge of which crop used in green manure. 7 per cent of respondents have partial knowledge, and 2 per cent of respondents have complete knowledge.

96 per cent of respondents have no knowledge of preparation method green manure. 4 per cent of respondents have partial knowledge. 96 per cent of respondents have no knowledge of effect of green manure in soil. 4 per cent of respondents have partial knowledge. More than 91 per cent of respondents have no knowledge of bio-fertilizer. 5 per cent of respondents have complete knowledge, and 4 per cent of respondents have partial knowledge. More than 75 per cent of respondents have no knowledge of effect of bio-fertilizer in soil. 23 per cent of respondents have partial knowledge, and 2 per cent of respondents have complete knowledge. More than 83 per cent of respondents have no knowledge of method of using of bio-fertilizer. 14 per cent of respondents have partial knowledge, and 3 per cent of respondents have complete knowledge.

### **Conclusion :**

Analysis of data researchers concluded that total number of respondents (54.00) per cent have complete knowledge of farm yard manure, (30.00) per cent of respondents have complete knowledge of vermi-compost. (4.00) per cent of respondents have complete knowledge about compost. (1.00) per cent of respondents have completed knowledge green manure. And (1.00) per cent of respondents have complete knowledge of bio-fertilizer.

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