Attitude of Farmer towards Organic Farming in Jabalpur District of Madhya Pradesh, India

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ABSTRACT

The study was conducted in Jabalpur district of Madhya Pradesh to study the attitude of farmers towards organic farming. In Jabalpur district there are 7 blocks, out of which Jabalpur block was selected randomly and Sihora block was selected purposively for the study because of having maximum registered farmer under organic farming as compared to other block. Thus, total 120 respondents form the sample size. The results indicates that majority of the organic were having favourable attitude towards organic farming.

Keywords
Attitude of farmers, Organic farming, Sample size

Introduction

Since ages agriculture has been the life of Indian people meeting the basic need of food, clothing and shelter. Indian agriculture is diverse and extensive sector involving a large number of factors. It has been one of the remarkable success stories of post-independence through the association of green revolution technologies. Organic farmland has grown in 178 countries and the total organic area increased to almost 57.8 mha managed by over 2.7 million producers (International federation of organic agriculture movements survey-2018). Total area under organic certification process in India is 3.56 million hectare (2017-18) registered under national programme for organic production.

This includes 1.78 mha (50%) cultivable area and another 1.78 million hectare (50%) for wild harvest collection. Among all the state, Madhya Pradesh has covered largest area under organic certification, cultivated area 7.84 lakh hectare and production 3.91 lakh ton in Madhya Pradesh (NPOP survey.
Knowledge has been found to be an important factor contributing to adoption of recommended practices by the farmers and farmers’ attitude and skill also depend on knowledge. However, the empirical evidences on knowledge and attitude possessed on organic cultivation practices are much limited. The attitude of farmers towards organic farming has direct bearing on adoption of organic cultivation practices. Therefore, the present study on Attitude of farmer towards organic farming in Jabalpur district of Madhya Pradesh was carried out.

Materials and Methods

The present study was conducted in Jabalpur district of Madhya Pradesh. In Jabalpur district there are 7 blocks, out of which Jabalpur block was selected randomly and Sihora block was selected purposively for the study because of having maximum registered farmer under organic farming as compared to other block. Jabalpur and Sihora block have three cluster (Each cluster have 50 farmers) out of which 80% farmers were selected from proportionate random sampling for the study. From Jabalpur block, 40 respondents and from Sihora block 80 respondents were selected for the present study. Thus, total 120 respondents form the sample size. The data were collected using survey method through a pre-tested interview schedule and responses were recorded. Collected data were then tabulated and analysed using percentage, rank order and \( \chi^2 \) test.

Results and Discussion

Profile characteristics of the farmers with their attitude towards organic farming

Regarding profile characteristics data presented in Table 1 reveals that out of total organic farmers, 50.00 per cent were of middle age group, 29.17 per cent were educated up to middle school, 55.00 per cent were having medium level of social participation, 33.33 per cent were having large size of land holding, 53.33 per cent had nuclear family, 55.00 had medium annual income, 51.67 were having high livestock possession, 62.50 per cent had medium extension participation, 58.33 were having medium level of utilisation of information source, 60.83 per cent were having medium mass media exposure, 57.50 per cent were having medium innovativeness, 65.84 per cent were having medium knowledge level, 62.50 per cent were having medium adoption level. Table 2 indicates that out of total organic farmers, 70.00 per cent were having favourable attitude followed by 23.33 were having natural attitude towards organic farming whereas only 6.67 per cent of the farmers were having unfavourable attitude towards organic farming. Hence, on the basis of the data it can be concluded that majority of the organic farmers i.e. 70.00 per cent were having favourable attitude towards organic farming.

Association between profile characteristics of farmers and their attitude towards organic farming

Table 3 shows that the association between various attributes of farmers like socio-personal economic, psychological and communicational characteristics with the attitude towards organic farming were worked out, which showed that age, education, social participation, size of land holding, type of family, annual income were found to be non-significantly associated with attitude towards organic farming whereas livestock possession, extension participation, information source, mass media exposure, innovativeness, knowledge level and adoption level were found to be significantly associated with attitude towards organic farming.
Table 1: Profile characteristics of the farmers with their attitude towards organic farming

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Categories</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal and socio-economic variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Young (up to 35)</td>
<td>39</td>
<td>32.50</td>
</tr>
<tr>
<td></td>
<td>Middle (36 to 55)</td>
<td>60</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td>Old (above 55)</td>
<td>21</td>
<td>17.50</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Illiterate</td>
<td>32</td>
<td>26.67</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>18</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>35</td>
<td>29.17</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>13</td>
<td>10.83</td>
</tr>
<tr>
<td></td>
<td>Graduation/ Above</td>
<td>22</td>
<td>18.33</td>
</tr>
<tr>
<td>Social participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (1 to 4 score)</td>
<td>38</td>
<td>31.67</td>
</tr>
<tr>
<td></td>
<td>Medium (5 to 8 score)</td>
<td>66</td>
<td>55.00</td>
</tr>
<tr>
<td></td>
<td>High (9 to 12 score)</td>
<td>16</td>
<td>13.33</td>
</tr>
<tr>
<td>Size of land holding</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Marginal farmer (up to 1 ha)</td>
<td>08</td>
<td>06.67</td>
</tr>
<tr>
<td></td>
<td>Small farmer (1.01 to 2 ha)</td>
<td>39</td>
<td>32.50</td>
</tr>
<tr>
<td></td>
<td>Medium farmer (2.01 to 4 ha)</td>
<td>33</td>
<td>27.50</td>
</tr>
<tr>
<td></td>
<td>Large farmer (above 4 ha)</td>
<td>40</td>
<td>33.33</td>
</tr>
<tr>
<td>Type of family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuclear family</td>
<td>64</td>
<td>53.33</td>
</tr>
<tr>
<td></td>
<td>Joint family</td>
<td>56</td>
<td>46.67</td>
</tr>
<tr>
<td>Annual income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (up to Rs.53,000)</td>
<td>19</td>
<td>15.83</td>
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<tr>
<td></td>
<td>Medium (Rs.53,001 to 74,000)</td>
<td>66</td>
<td>55.00</td>
</tr>
<tr>
<td></td>
<td>High (above Rs.74,000)</td>
<td>35</td>
<td>29.17</td>
</tr>
<tr>
<td>Livestock possession</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Low (up to 2 animals)</td>
<td>24</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>Medium (3 to 4 animals)</td>
<td>34</td>
<td>28.33</td>
</tr>
<tr>
<td></td>
<td>High (above 4 animals)</td>
<td>62</td>
<td>51.67</td>
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</tr>
<tr>
<td>Extension participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (8 to 13 score)</td>
<td>19</td>
<td>15.83</td>
</tr>
<tr>
<td></td>
<td>Medium (14 to 18 score)</td>
<td>75</td>
<td>62.50</td>
</tr>
<tr>
<td></td>
<td>High (19 to 24 score)</td>
<td>26</td>
<td>21.67</td>
</tr>
<tr>
<td>Information source</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Low (9 to 15 score)</td>
<td>22</td>
<td>18.33</td>
</tr>
<tr>
<td></td>
<td>Medium (16 to 21 score)</td>
<td>70</td>
<td>58.33</td>
</tr>
<tr>
<td></td>
<td>High (22 to 27 score)</td>
<td>28</td>
<td>23.34</td>
</tr>
<tr>
<td>Mass media exposure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (1 to 6 score)</td>
<td>33</td>
<td>27.50</td>
</tr>
<tr>
<td></td>
<td>Medium (7 to 11 score)</td>
<td>73</td>
<td>60.83</td>
</tr>
<tr>
<td></td>
<td>High (12 to 16 score)</td>
<td>14</td>
<td>11.67</td>
</tr>
<tr>
<td>Psychological variables</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Innovativeness</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (9 to 21 score)</td>
<td>23</td>
<td>19.17</td>
</tr>
<tr>
<td></td>
<td>Medium (22 to 33 score)</td>
<td>69</td>
<td>57.50</td>
</tr>
<tr>
<td></td>
<td>High (34 to 45 score)</td>
<td>28</td>
<td>23.33</td>
</tr>
<tr>
<td>Knowledge level</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Low (18 to 30 score)</td>
<td>22</td>
<td>18.33</td>
</tr>
<tr>
<td></td>
<td>Medium (31 to 42 score)</td>
<td>79</td>
<td>65.84</td>
</tr>
<tr>
<td></td>
<td>High (43 to 54 score)</td>
<td>19</td>
<td>15.83</td>
</tr>
<tr>
<td>Adoption level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low (18 to 30 score)</td>
<td>27</td>
<td>22.50</td>
</tr>
<tr>
<td></td>
<td>Medium (31 to 42 score)</td>
<td>75</td>
<td>62.50</td>
</tr>
<tr>
<td></td>
<td>High (43 to 54 score)</td>
<td>18</td>
<td>15.00</td>
</tr>
</tbody>
</table>
Table 2 Distribution of respondents according to their attitude towards organic farming

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Attitude</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Unfavourable (10 to 23 score)</td>
<td>08</td>
<td>06.67</td>
</tr>
<tr>
<td>2.</td>
<td>Natural (24 to 36 score)</td>
<td>28</td>
<td>23.33</td>
</tr>
<tr>
<td>3.</td>
<td>Favourable (37 to 50 score)</td>
<td>84</td>
<td>70.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>120</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3 Association between profile characteristics of farmers and their attitude towards organic farming

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Independent Variables</th>
<th>Chi-square value</th>
<th>Table value</th>
<th>Significant/ Non-significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td>3.76</td>
<td>3.84</td>
<td>Non-significant</td>
</tr>
<tr>
<td>2.</td>
<td>Education qualification</td>
<td>0.39</td>
<td>3.84</td>
<td>Non-significant</td>
</tr>
<tr>
<td>3.</td>
<td>Social participation</td>
<td>0.36</td>
<td>3.84</td>
<td>Non-significant</td>
</tr>
<tr>
<td>4.</td>
<td>Size of land holding</td>
<td>0.13</td>
<td>3.84</td>
<td>Non-significant</td>
</tr>
<tr>
<td>5.</td>
<td>Type of family</td>
<td>0.52</td>
<td>3.84</td>
<td>Non-significant</td>
</tr>
<tr>
<td>6.</td>
<td>Annual income</td>
<td>0.12</td>
<td>5.99</td>
<td>Non-significant</td>
</tr>
<tr>
<td>7.</td>
<td>Livestock possession</td>
<td>15.11</td>
<td>5.99</td>
<td>Significant</td>
</tr>
<tr>
<td>8.</td>
<td>Extension participation</td>
<td>6.82</td>
<td>5.99</td>
<td>Significant</td>
</tr>
<tr>
<td>9.</td>
<td>Information source</td>
<td>8.04</td>
<td>5.99</td>
<td>Significant</td>
</tr>
<tr>
<td>10.</td>
<td>Mass media exposure</td>
<td>7.41</td>
<td>3.84</td>
<td>Significant</td>
</tr>
<tr>
<td>11.</td>
<td>Innovativeness</td>
<td>12.94</td>
<td>5.99</td>
<td>Significant</td>
</tr>
<tr>
<td>12.</td>
<td>Knowledge level</td>
<td>6.57</td>
<td>5.99</td>
<td>Significant</td>
</tr>
<tr>
<td>13.</td>
<td>Adoption level</td>
<td>34.31</td>
<td>3.84</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 4 Constraints faced by farmers in adoption of organic cultivation practices

<table>
<thead>
<tr>
<th>SN</th>
<th>Constraints</th>
<th>F</th>
<th>%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Increase in labour due to being time consuming and slow process.</td>
<td>76</td>
<td>63.33</td>
<td>IV</td>
</tr>
<tr>
<td>2.</td>
<td>Regular information is not available regarding use of bio-fertilizers</td>
<td>84</td>
<td>70.00</td>
<td>II</td>
</tr>
<tr>
<td>3.</td>
<td>Lack of technical knowledge regarding organic farming</td>
<td>64</td>
<td>53.33</td>
<td>VI</td>
</tr>
<tr>
<td>4.</td>
<td>Inadequate marketing facilities for produce</td>
<td>98</td>
<td>81.67</td>
<td>I</td>
</tr>
<tr>
<td>5.</td>
<td>Low production compared to inorganic farming</td>
<td>70</td>
<td>58.33</td>
<td>V</td>
</tr>
<tr>
<td>6.</td>
<td>Inadequate availability of input like vermin-compost, bio-fertilizer and organic manure</td>
<td>78</td>
<td>65.50</td>
<td>III</td>
</tr>
</tbody>
</table>

Constraints faced by farmers in adoption of organic cultivation practices

Table 4 shows the constraints faced by the farmers in adoption of organic cultivation practices. It is clear from the data that majority of the farmers faced constraints like inadequate marketing facilities for produce (81.67%) followed non-availability of by regular information regarding use of bio-fertilizers (70.00%), inadequate availability of input like vermin-compost, bio-fertilizer and organic manure (65.50%), increase in labour due to being time consuming and slow process (63.33%), low production compare to inorganic farming (58.33%), lack of technical knowledge regarding organic farming (53.33%).

It was clear that majority of the organic farmers were having favourable attitude towards organic farming. It was also found that livestock possession, extension participation, information source, mass media exposure, innovativeness, knowledge level and adoption level were found to be significantly associated with attitude towards organic farming.

An understanding of the attitude of farmers and description of constraints faced by the respondents may serve as a feedback to the planers, policy makers, extension personnel, scientist and development agencies to make suitable strategy to take stock of the situation and to design and popularize such balanced policy that would be in line with the existing needs of the farmers, and at the same time protecting the environment.

References


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