To study the profile and determination of farm women in decision making process in vegetable cultivation in Panagar block of Jabalpur District (M.P.)

Tarni Sahu and Dhaneshwari Sahu

Abstract
Women’s contribution to the farming sector in respect of operation and decision making has largely. Farm women play key role in all agricultural operations. This study analysed role of farm women in decision making process in vegetable cultivation in Panagar Block of Jabalpur district (M.P.) India. The main objective of the study was to ascertain the extent of role of farm women in decision making process in vegetable cultivation. The study revealed that more number of farm women found to have medium decision making process in vegetable cultivation i.e. (45.83%) followed by the low decision making (37.50%) and high decision making (16.67%) in vegetable operations respectively. Highest decision making process in vegetable cultivation found in weeding practice of vegetable followed by seed sowing, seed treatment, plant protection practice and application of manure and fertilizer.

Keywords: Farm women, vegetable cultivation, decision making process

Introduction
Women make essential contributions to the agricultural and rural economies in all developing countries. Their roles vary considerably between and within regions and are changing rapidly in many parts of the world, where economic and social forces are transforming the agricultural sector. Rural women often manage complex households and pursue multiple livelihood strategies. Their activities typically include producing agricultural crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and marketing, caring for family members and maintaining their homes. Many of these activities are not defined as “economically active employment” in national accounts but they are essential to the well-being of rural households. Decision making is the process of consciously choosing courses of action from available alternatives and integration of them for the purpose of achieving the desired goal. It is well known fact that the success of rural development process largely depends the participation of people at large irrespective of sex. The problem of involving women’s participation in the development process are now catching the attention of planners and policy maker because of increasing imbalance generation out of development process.

In vegetable cultivation, decision making always remained associated with the female women utilization relating to various aspects in the study area, yet their involvement in this process has not been recognized. It was evident from vegetable cultivation, the joint decisions by male and female partners of the household are important.

Material
The present study was carried out in Jabalpur district of Madhya Pradesh. The Jabalpur district comprises of 7 blocks i.e. Sihor, Patan, Majholi, Shahpura, Panagar, Jabalpur and Kundam. Out of which one block i.e. Panagar was selected purposively for the study because this block having maximum number of vegetable growers as compared to other blocks of the district.
Panagar block covering 210 villages, out of which 6 villages were selected randomly for study purpose. The selected villages were Umariya, Padari, Tagar, Panagar, Mahagma and Khamariya. For the selection of respondents, a list of farm women from each selected village was prepared and from the list, 120 farm women were selected from all 6 villages by random sampling method. Thus, 120 farm women constituted the total sample size (n) of the study. Only 13 independent variables have been taken for study and one dependent variable decision making process in vegetable cultivation.

### Table 1: Profile of farm women (n=120)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td>Young (Up to 35 years)</td>
<td>39</td>
<td>33.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle (36 to 55 years)</td>
<td>51</td>
<td>41.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Old (Above 55 years)</td>
<td>30</td>
<td>25.00</td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td>Illiterate</td>
<td>12</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary education</td>
<td>38</td>
<td>31.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle education</td>
<td>30</td>
<td>25.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher secondary education</td>
<td>32</td>
<td>26.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>College</td>
<td>08</td>
<td>06.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General</td>
<td>24</td>
<td>20.00</td>
</tr>
<tr>
<td>3.</td>
<td>Caste</td>
<td>Other Backward caste</td>
<td>84</td>
<td>70.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Schedule caste / Schedule tribe</td>
<td>12</td>
<td>10.00</td>
</tr>
<tr>
<td>4.</td>
<td>Family</td>
<td>Nuclear family</td>
<td>83</td>
<td>69.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joint family</td>
<td>37</td>
<td>30.84</td>
</tr>
<tr>
<td>5.</td>
<td>House type</td>
<td>Kaccha</td>
<td>26</td>
<td>26.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pakka</td>
<td>48</td>
<td>40.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mixed</td>
<td>46</td>
<td>38.33</td>
</tr>
<tr>
<td>6.</td>
<td>Size of land holding</td>
<td>Marginal (Up to 1.00 ha.)</td>
<td>04</td>
<td>03.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small (1.01 to 2.00 ha.)</td>
<td>15</td>
<td>12.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (2.01 to 5.00 ha.)</td>
<td>62</td>
<td>51.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Large (Above 5.00 ha.)</td>
<td>39</td>
<td>32.50</td>
</tr>
<tr>
<td>7.</td>
<td>Occupation</td>
<td>Solely Vegetable Production</td>
<td>41</td>
<td>34.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vegetable + labour</td>
<td>56</td>
<td>46.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vegetable + shop+other work</td>
<td>23</td>
<td>19.17</td>
</tr>
<tr>
<td>8.</td>
<td>Annual income</td>
<td>Low (Up to 50,000)</td>
<td>39</td>
<td>32.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (50,001 to 1,00,000)</td>
<td>51</td>
<td>42.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (Above 1,00,000)</td>
<td>30</td>
<td>25.00</td>
</tr>
<tr>
<td>9.</td>
<td>Material possession</td>
<td>Low (1 to 10 score)</td>
<td>51</td>
<td>42.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (11 to 20 score)</td>
<td>60</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (21 to 30 score)</td>
<td>09</td>
<td>07.50</td>
</tr>
<tr>
<td>10.</td>
<td>Social participation</td>
<td>Low (1 to 05 score)</td>
<td>28</td>
<td>23.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (06 to10 score)</td>
<td>62</td>
<td>51.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (11 to 14 score)</td>
<td>30</td>
<td>25.00</td>
</tr>
<tr>
<td>11.</td>
<td>Information seeking behavior</td>
<td>Medium (9 to 16 score)</td>
<td>44</td>
<td>36.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (17 to 24 score)</td>
<td>21</td>
<td>17.50</td>
</tr>
<tr>
<td>12.</td>
<td>Economic motivation</td>
<td>Low (1 to 8 score)</td>
<td>26</td>
<td>21.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (9 to 16 score)</td>
<td>60</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (17 to 24 score)</td>
<td>34</td>
<td>28.33</td>
</tr>
<tr>
<td>13.</td>
<td>Market orientation</td>
<td>Low (1 to 2 score)</td>
<td>40</td>
<td>33.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medium (3 to 4 score)</td>
<td>43</td>
<td>35.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High (5 to 6 score)</td>
<td>37</td>
<td>30.83</td>
</tr>
</tbody>
</table>

The present study, the determination of farm women in decision making process in vegetable cultivation was determined by index developed. It refers to selection of action from different alternatives. The responses were recorded on 4 point continuum as no, low, high and very high and weightage of 0, 1, 2 and 3 were given respectively. The scale consist of 13 statements. The theoretical range of score was 0 to 39. The total score indicated the degree of decision making of vegetable production practices.

**Result and Discussion**

The profile of farm women were analyzed and presented in Table 1. The study revealed that highest percentage of the farm women belonged to middle age (41.67%) group of 35 to 55 years. This might be due to that the farm women of this age group were more involved in horticulture and agriculture operations than other age group. Similar results were reported by Warkade (2010) [8]. Regarding the level of education, majority of farm women were primary school level. Such findings might be on account of the limited availability of education facilities and time or perhaps the women could not afford to have higher education. This study finds support by Pal and Haldar (2016) [3]. The majority of vegetable growers (70.00%) were belonged to other backward caste. This finding finds support with the work of Chayal et al. (2013) [2]. The majority of vegetable growers (69.16%) were belonged to nuclear type of family. This finding finds support with the work of Thakur (2013) [4]. The higher percentage of the vegetable growers (40.00%) were living in pakka house type. This finding finds support with the work of Thakur (2013) [4]. The study shows that higher percentages of farm women (51.67%) were having medium land holding. The finding is supported by Singh (2017) [5]. The higher percentage of the farm women (46.67%) were vegetable+labour as their main occupation. This finding finds support with the work of Thakur (2013) [4]. As regarding to annual income higher percentage of farmers (42.50%) were having medium annual income (Rs. 50,001 to 1,00,000). The finding is in line with the work of Singh (2017) [5]. Half of the total farm women (50.00%) had medium material possession.
This finding is supported by Thakur (2013) [7]. The higher percentage of farm woman (51.67%) were having medium social participation. This finding is in accordance with the results obtained Rai (2011) [4]. The higher percentage of farm women (45.83%) had low information seeking behavior. This finding is supported by Samdaria (2011) [6]. Half of the total respondents (50.00%) had medium economic motivation. This finding is supported by Singh (2017) [8]. The higher per cent of farm women (35.84%) had medium market orientation. This finding is supported by Chouhan (2013) [1] and Thakur (2013) [3].

### Table 2: Distribution of farm women according to with extent of decision making process related to vegetable operations (n=120)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Never</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Land preparation</td>
<td>96 (80.00%)</td>
<td>10 (08.33%)</td>
<td>08 (06.67%)</td>
<td>06 (05.00%)</td>
<td>0.36</td>
<td>XI</td>
</tr>
<tr>
<td>2.</td>
<td>Selection of seed</td>
<td>60 (50.30%)</td>
<td>18 (15.00%)</td>
<td>30 (25.00%)</td>
<td>12 (10.00%)</td>
<td>0.95</td>
<td>VI (a)</td>
</tr>
<tr>
<td>3.</td>
<td>Selection of variety</td>
<td>58 (48.33%)</td>
<td>25 (20.83%)</td>
<td>19 (15.84%)</td>
<td>18 (15.00%)</td>
<td>0.97</td>
<td>V</td>
</tr>
<tr>
<td>4.</td>
<td>Selection of seed quantity</td>
<td>55 (45.83%)</td>
<td>30 (25.00%)</td>
<td>20 (16.67%)</td>
<td>15 (12.50%)</td>
<td>0.95</td>
<td>VI (b)</td>
</tr>
<tr>
<td>5.</td>
<td>Seed treatment</td>
<td>35 (29.16%)</td>
<td>32 (26.66%)</td>
<td>28 (23.34%)</td>
<td>25 (20.84%)</td>
<td>1.35</td>
<td>III (a)</td>
</tr>
<tr>
<td>6.</td>
<td>Nursery management</td>
<td>70 (58.33%)</td>
<td>25 (20.83%)</td>
<td>14 (11.67%)</td>
<td>11 (09.17%)</td>
<td>0.71</td>
<td>VIII</td>
</tr>
<tr>
<td>7.</td>
<td>Seed sowing</td>
<td>22 (18.33%)</td>
<td>11 (09.17%)</td>
<td>42 (35.00%)</td>
<td>45 (37.50%)</td>
<td>1.91</td>
<td>II</td>
</tr>
<tr>
<td>8.</td>
<td>Manure and fertilizer application</td>
<td>65 (54.16%)</td>
<td>10 (8.33%)</td>
<td>18 (15.00%)</td>
<td>27 (22.50%)</td>
<td>1.05</td>
<td>IV</td>
</tr>
<tr>
<td>9.</td>
<td>Irrigation</td>
<td>70 (58.33%)</td>
<td>15 (12.50%)</td>
<td>21 (17.50%)</td>
<td>14 (11.67%)</td>
<td>0.82</td>
<td>VII</td>
</tr>
<tr>
<td>10.</td>
<td>Weeding</td>
<td>08 (06.67%)</td>
<td>18 (15.00%)</td>
<td>25 (20.84%)</td>
<td>72 (60.00%)</td>
<td>2.36</td>
<td>I</td>
</tr>
<tr>
<td>11.</td>
<td>Plant protection</td>
<td>50 (41.66%)</td>
<td>15 (25.00%)</td>
<td>18 (15.00%)</td>
<td>37 (30.84%)</td>
<td>1.35</td>
<td>III (b)</td>
</tr>
<tr>
<td>12.</td>
<td>Storage</td>
<td>85 (70.83%)</td>
<td>12 (10.00%)</td>
<td>10 (08.33%)</td>
<td>13 (10.84%)</td>
<td>0.59</td>
<td>IX</td>
</tr>
<tr>
<td>13.</td>
<td>Marketing and transportation</td>
<td>80 (66.66%)</td>
<td>12 (10.00%)</td>
<td>20 (16.66%)</td>
<td>08 (06.66%)</td>
<td>0.63</td>
<td>X</td>
</tr>
</tbody>
</table>

The data of Table 3 shows the mean and rank order of decision making of different practices of vegetable cultivation. The mean of decision making in different vegetable practices reveals that a high mean 2.36 was found in weeding practice of vegetable which was ranked I, followed by in decision making in seed sowing (1.91) ranked II, an equal mean of decision making in seed treatment and plant protection practice (1.35) ranked III, application of manure and fertilizer (1.05) ranked IV and an equal mean of decision making in seed selection and deciding the selection of seed quantity (0.95) ranked V.

Thus, it can be inferred from the data that higher mean was observed in decision making of weed practice followed by seed sowing, seed treatment, plant protection practice, application of fertilizer and manure and selection of seed and its quantity.

### Table 3: Distribution of farm women according to their extent of decision making

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No ( 0 score)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Low (1 to 9 score)</td>
<td>45</td>
<td>37.50</td>
</tr>
<tr>
<td>3.</td>
<td>Medium (10 to18 score)</td>
<td>55</td>
<td>45.83</td>
</tr>
<tr>
<td>4.</td>
<td>High (19 to 26 score)</td>
<td>20</td>
<td>16.67</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>120</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The data Table 3 indicate that higher percentage of the vegetable growers (45.83%) play medium role in decision making, followed by low role indecision making (37.50%) and high role in decision making (16.67%). While none of the respondents belonged no category of decision making. Thus, it can be concluded that higher percentage of respondent (45.83%) play medium role in decision making.

### Conclusion

Higher percentage of the farm women had moderate participation in decision making process, as related to vegetable operations. Study reveals that relative higher mean of decision making in different vegetable production practices was found in weeding, followed by seed sowing, seed treatment, plant protection, application of fertilizer and manures and quantity of seed. They were rarely involved in decision making regarding nursery management, field preparation, selection of variety, irrigation, storage and marketing measures as it required more scientific knowledge and skill.

### References