E-ISSN: 2278-4136  
P-ISSN: 2349-8234  
JPP 2018; SP5: 62-64

Rajnandini Kumari  
Dept. of Agriculture and Forestry, BFIT group of institution, Dehradun, Uttarakhand, India

Sudeep Pathak  
Dept. of Agriculture and Forestry, BFIT group of institution, Dehradun, Uttarakhand, India

Basant Pandey  
Dept. of Agriculture and Forestry, Tula’s institute, Dehradun, Uttarakhand, India

Amrita Singh  
Dept. of Agriculture and Forestry, Tula’s institute, Dehradun, Uttarakhand, India

Sumira Malik  
Dept. of Agriculture and Forestry, Tula’s institute, Dehradun, Uttarakhand, India

Correspondence  
Sumira Malik  
Dept. of Agriculture and Forestry, Tula’s institute, Dehradun, Uttarakhand, India

(Special Issue- 5)  
Advances in Agriculture and Natural Sciences for Sustainable Agriculture  
(October 12 &13, 2018)

Study of determinants regulating group performance of mushroom processing by women based SHGs in Garhwal

Rajnandini Kumari, Sudeep Pathak, Basanta Pandey, Amrita Singh and Sumira Malik

Abstract  
Women Self-help groups SHGs perform different function in development and empowerment of rural members through facilitation of motivation, skills, knowledge with expertise and training in sustainable agriculture. The factors determining the performance of rural women SHGs, engaged in mushroom cultivation and it’s processing for the improvement of their economic and social status were studied. The current studies reported that women of 28-35 years age groups with minimum high secondary school education showed efficient work performance. This eventually enhanced innovativeness, market perception and their product supply. The factors such as market perception, economic motivation, improving social status, innovativeness, cultivation and processing knowledge have supported the scoring in SHG group efficiency. The group performance was highly influenced by its member’s disciplinary attitude, cooperation and interaction tendency among them with motivation towards their goals. However, lack of transport facility and management in Garhwal area were hindering factors indicating their improvement and efficient training for the improvement of the rural women SHGs.

Keywords: Women self-help group, social economic development, Garhwal and Uttarakhand

Introduction  
Women self-help groups SHGs are a small group of rural women having a common goal of development at social and economic background. These SHGs get involved in socio-economic development activities through the sharing of knowledge, communication, motivation and expertise in specific areas with the marketing skills. In India, SHGs concept was first launched in 1976. The population of state of Uttarakhand is 70% and depends on agriculture. It is very hard for poor sectors to even generate their income from any other source as Uttarakhand is a hilly region. Inaccessibility to resources and vulnerability are major constraints and problems for the earning of livelihood and unemployment. This problem causes generation of poor or low income leading males to out migrate and then their families depends completely on women. The another constrain is due to bankers conservative approach towards women SHGs and their reluctant approach to support them financially. Furthermore, the third problem of transport and logistics has been a biggest challenge for the marketing platform.

The income generating activities of rural women SHGs through mushroom cultivation and it’s processing using value addition with marketing strategies supports increased employment and productivity in Uttarakhand. The Garhwal region is divided into Dehradun, Tehri, Pauri Garhwal, Uttarkashi, Chamoli, Rudraprayag and Haridwar. The major areas of Garhwal region near Dehradun were Vikasnagar and Sahaspur block. The Laxmipur and Adhluwala village comes under Laxmipur block and Badowala village were studied under Sahaspur block. Mushroom acts as raw materials resources for progressive and sustainable food processing industry. Thus, mushroom processing is an important microenterprise by women SHGs. The Government directed Women child welfare development WCWD involved Bagwan Gramodyog samiti BGS-NGO worker in promotion of women SHGs workers along with National bank for agriculture and rural development NABARD (3) and Support to training and employment program to women (STEP) program in promotion of women SHGs in these
these blocks. These villages under the Vikasnagar and Sahaspur blocks cultivated and processed mushrooms in form of biscuits, pickles, and Badi. These small sectors generated revenues and employments to the rural women SHGs. It also helped in ruling out migration from these areas. These small microenterprises by rural women SHGs has also contributed in rejuvenation in nascent functioning of food processing units in Uttarakhand. The food industry showed 20% growth in last 5 years and consumed food in rural households (1, 2). In previous studies, many women SHGs were supported and financed by different schemes (1, 6, 9). In recent data we reported the socio-economic factors such as age, education, optimistic attitude towards self-employment with economic motivation, innovative attitude and prior knowledge about processing contributed in empowerment of weak rural women. The group performance was influenced by their cooperation, interaction, motivation and disciplinary attitude and helped them in drawing better marketing and supply. The supply of refreshment during the training session was found to be one of the most positive factor to motivate SHGs for their regularity and enthusiasm. However, the transportation and logistics factor and improper management contributed as major constraints in low efficiency of Laxmipur village, Vikasnagar block’s women SHGs.

Material and Methods
The three villages Laxmipur, Adhwulara and Badowala under Vikasnagar, and Shaspur block were studied. Under Vikasnagar block total 40 SHGs groups where 30 SHGs and 25 SHGs from Laxmipur and Adhwula respectively perform mushroom cultivation and mushroom processing in form of Mushroom biscuits, pickles and badis. Similarly, in village Badowala under sahaspur block, out of 60 SHGs, only 30 SHGs works for mushroom cultivation and processing. The details are explained in Table No. 1. The average and percentage analysis has been performed to collect meaningful data. The information is collected through respondents from DRDA (Dehradun). The three groups were studied under these two blocks-

- **Group 1 - Mushroom cultivation and biscuit processing**
- **Group 2 - Mushroom cultivation and pickle processing**
- **Group 3 - Mushroom cultivation and Badi processing**

Results and Discussion

Mushroom Cultivation in Dehradun District

Mushroom cultivation and processing unit were the major source of income generation of SHGs. The distribution of mushroom cultivation and processing according to block has been presented in Table 1. The highest percentage of mushroom cultivation was found in Laxmipur (75%), Adhwula (62.5%) and Sahaspur (50%). The main activities were mushroom cultivation, mushroom powder biscuits, mushroom pickles and mushroom Badi processing units.

Socio-Economic Profile of Shgs

The socio-economic factors influencing group activities are explained in Table 2-

1. **Age and Income** - The women of age group 28-25 years showed highest performance. The women below 28 and above 35 years showed poor performance as they were involved in maintenance of their families and had no ample time to engage in livelihood earning from other sources. The women engaged in STEP scheme found below poverty line and their spouses moved outside for better earning and employment to support families. The rural women SHGs of 28-35 years showed better performance and established mushroom cultivation and processing units satisfactorily and earned higher income and generated employment for others as well for their livelihood.

2. **Market perception** - The degree of knowledge of rural women SHGs about the condition of market is called as market perception. According to table 2, highest market perception score was recorded by mushroom pickle processing unit (4) followed by mushroom biscuits and Badi processing units (3).

3. **Attitude towards self-employment** - The degree of negative or positive attitude towards self-employment in mushroom cultivation and processing was attained highest by mushroom pickle processing unit (5). The optimistic vision for self-employment was majorly attributed to this group’s women education and their accessibility to cultivation and processing protocols. They learned and practiced protocols easily and provided better economic output with low investment. This unit investment was low compared to biscuit and Badi units, thus the score of mushroom biscuits and Badi units were low.

4. **Knowledge about cultivation and processing** - The mushroom biscuit processing unit showed highest score of (5) as they had higher knowledge of processing and training skills. They were more trained comparative to mushroom pickle and Badi processing units which scored (3).

5. **Innovativeness** - The degree of embracing to new technology and idea creation is called innovativeness. The mushroom pickle processing unit showed higher score (3) as the women in this group were more educated and acquired latest technology and marketing idea earlier and easier comparative to other groups.

**Economic motivation** - The tendency of an individual to orient himself/herself towards profit maximization is known as economic motivation. The mushroom pickle processing unit scored highest (5), followed by mushroom biscuits (4) and mushroom Badi (3) processing units as their investments were high but profit earnings were low.

**Group performance indicators of SHGs**

The study of group characteristic such as group cooperation, motivation, interaction & disciplinary activity has major impact on group performance. The studies have been discussed in Table 3. In group cooperation, maximum score was achieved by Mushroom pickle group (4), as they have maximum group interaction score of (5) which shows interaction factor among respondents may contribute in group cooperation. These all member worked in a team and showed satisfactory scores. Furthermore, group motivation factor attributed to maximum score (5) in Mushroom biscuit processing unit & their group disciplinary activity score was recorded as highest (3) among all groups. The regularly record keeping, disciplinary behavior and motivation could be the criterion, which helped them to score well on an average.

**Facilitating and hindering factors**

Socialization, refreshment, an additional source of income and improved social status were major facilitating factors in group performance of the units. As explained in table (4) are the
most important factors for being together and working in
group and following others reported similar evidences in their
studies (4, 5, 7, 8, 10). The other hindering factors such as
transport facility and lack of management need special
measures to be considered by Uttarakhand government to
improve the programs and schemes under women SHGs
development in these areas.

Conclusion
The given research shows that different mushroom cultivation
and processing rural women SHG’s, such as mushroom
cultivation and mushroom pickles, mushroom pickle and
mushroom Badi processing units showed various
characteristic in the group character and socio-economic
criteria. The current study indicates the Women SHG’s
performance has been highly influenced by their age and
education status more than other factors. The important
character such as group cooperation, interaction, motivation
and discipline influenced group activity. It has been observed
that the age, market perception, economic motivation and
attitude for self- employment contributes positively in group
performance. If the women SHG’s get more theoretical
education, hands on training related to processing and
marketing skills, they could establish and perform better in
cultivation, processing and market in the these and other areas
of Uttarakhand.

Table 1: Blockwise distribution of mushroom cultivation and
processing SHGs in Dehradun, Garhwal

<table>
<thead>
<tr>
<th>Block name</th>
<th>Village under block</th>
<th>Total no. of SHGs</th>
<th>No. of SHGs in mushroom cultivation</th>
<th>% of mushroom processing SHGs in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vikasnagar</td>
<td>Laxmipur</td>
<td>40</td>
<td>30</td>
<td>75</td>
</tr>
<tr>
<td>Vikasnagar</td>
<td>Adhuwala</td>
<td>40</td>
<td>25</td>
<td>62.5</td>
</tr>
<tr>
<td>Sahaspur</td>
<td>Badowala</td>
<td>60</td>
<td>30</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 2: Average score of socio-economic characters of SHG
members.

<table>
<thead>
<tr>
<th>Character</th>
<th>Mushroom cultivation and biscuit processing</th>
<th>Mushroom cultivation and pickle processing</th>
<th>Mushroom cultivation and Badi processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market perception</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Economic motivation</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Attitude towards self-employment</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Knowledge about processing</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 3: Score of group characteristics of SHGs

<table>
<thead>
<tr>
<th>Character</th>
<th>Mushroom cultivation and biscuit processing</th>
<th>Mushroom cultivation and pickle processing</th>
<th>Mushroom cultivation and Badi processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group cooperation</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Group interaction</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Group motivation</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Group disciplinary behaviour</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4: Facilitating and hindering factors affecting SHGs

<table>
<thead>
<tr>
<th>Facilitating factor</th>
<th>No. of respondents</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional source of income</td>
<td>10</td>
<td>66.6</td>
</tr>
<tr>
<td>Self employment</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Socialization</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Improved social status</td>
<td>10</td>
<td>66.6</td>
</tr>
<tr>
<td>Financial benefits (NABARD)</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Refreshment</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>Hindering factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport and logistics</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Lack of management</td>
<td>10</td>
<td>66.6</td>
</tr>
</tbody>
</table>

References
1. Das R, Barman RN, Baruah PK. Performance of self-help
groups in Sonitpur district of Assam. Indian Journal
2. Kachru RP. Agro-processing Industries in India: Growth,
3. NABARD. Progress of SHG-Bank Linkage in India. National
4. Panda DK. Self- help through micro-finance: A paradigm
shift in Orrisa, India. International Journal of Rural
5. Panda DK. Assessing the impact of participation in
women self-help group based microfinance: Non
experimental evidences from rural households in India.
6. Rao MK. Organising and Implementing Income
generating Activities through Self-help Groups in
Fisheries and Agriculture, National Bank for Agriculture
7. Renjitha MH. Empowerment of rural women through
self-help groups: A critical analysis MSc Thesis, Division
of Agricultural Extension, Indian Agricultural Research
Institute, New Delhi, India, 2003.
Indian Journal of Extension Education. 2006; 42(1-2):66-70
9. Sarada O. Empowerment of Rural Women through SHGs
in Prakasam District of Andhra Pradesh -An Analysis.
MSc (Ag) Thesis, University of Agricultural Sciences,
10. Singh YK, K Aushal SK, Gautam S. Performance of
women self-help groups. International Journal of Rural