**RESEARCH NOTE**

**Socio-metric Study for Dissemination of Agricultural Information**

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**ABSTRACT**

The study was conducted during 2011-2012 in the adopted village of Agricultural College, Naira, Srikakulam District of Acharya N.G. Ranga Agricultural University, Andhra Pradesh. Sociometry was applied to probe the key communicators in dissemination of agricultural information. Sixty (60) farmers were sampled for the study. The respondents were asked from whom they seek advice or suggestion in matters related to agriculture in general. Their responses were noted and key communicators were identified and diagrammatically depicted using target sociogram technique. Sociometric score, Percentage and Cumulative Percentage were calculated. Seven key communicators were identified by the sample respondents, of which three were grouped under low communicators category, followed by two each in medium and high communicator categories. Two high communicators with cumulative percentages 100.00 and 78.89 occupied the central circle indicating the power of influence with respect to dissemination of agricultural information. Two medium communicators with cumulative percentages 61.11 and 38.89 occupied the second circle from the centre. Three low communicators with cumulative percentages 22.50, 10.56 and 0.83 occupied the third circle from the centre.

**Key words:** Sociometry; Sociogram; Key communicator;

Green revolution in India has brought changes in agricultural sector. Not only change in outputs i.e. production and productivity but also a change in inputs i.e. seed, fertilizers, pesticides, farm machinery, methods of cultivation, etc. Since green revolution there had been a lot of changes in farm inputs and this trend is continuing even today. Continuous changes in farm inputs is due to environmental, situational, economic and social factors. However, farmer should be kept aware of these scientific changes from time to time. The person engaged to convey scientific messages to farmers is extension personnel. The ideal ratio of extension personnel to farmer is 1 : 500 but the average ratio in the present situation is 1:1500 (Planning Commission, GOI; 2011). Key communicators or opinion leaders in the villages are the persons who can fill this gap of extension staff. At this juncture it is opportunistic to apply sociometry analysis in dissemination of agricultural information with the objective to find the key communicators involved.

**METHODOLOGY**

The study was conducted during 2011-2012 in the adopted village (Allikam) of Agricultural College, Naira, Srikakulam District of Acharya N.G. Ranga Agricultural University, Andhra Pradesh. Ex-post facto research design was used for the present investigation. Sociometry has two main branches namely research sociometry and applied sociometry. Research sociometry is action research with groups exploring the socio-emotional networks of relationships using specified criteria. Research sociometry is concerned with relational patterns in small (individual and small group) and larger populations, such as organizations and neighbourhoods. Applied sociometrics utilize a range of methods to assist people and groups review, expand and develop their existing psycho-social networks of relationships. Here in this study, research sociometry was applied to probe the key communicators in dissemination of agricultural information.

Sixty farmers were sampled for the study. The respondents were asked from whom they seek advice or suggestion in matters related to agriculture in general. Their responses were noted and key communicators were identified and diagrammatically depicted using target sociogram technique proposed by Northway, 1940. Statistical tools namely Sociometric score, Percentage and Cumulative Percentage were applied.
For the purpose of this study, Sociometry was operationalised as an inquiry into the evolution and organisation of groups and the position of individuals within them. While sociogram is the systematic method for graphical representation of individuals as points or nodes and the relationships between them as lines with arrows at one end. Key communicators are the persons in a social system who are sought for information and advice in aspects of agriculture.

Identification of key communicators: For the purpose of identification of key communicators, each respondent was asked to give their first, second and third choices of the persons whom they consulted in the village for advice in the matters of agriculture and related aspects. All the consulted persons were called as key communicators. Weightages of three, two and one were given for first, second and third choices respectively. For each of the key communicator, sociometric score was calculated by summing up all the weightages of the first, second and third choices. Based on the total sociometric scores obtained, the respondents were categorised into high, medium and low communicators using the range of cumulative percentages i.e. low communicator (0 to 25 %); medium communicator (25 to 75 %) and high communicator (75 to 100 %).

Target sociogram: Target sociogram is a radial layout proposed by Northway in 1940 to emphasize choice status. It is indicated by concentric circles with the most chosen person as the centre and patterns of relationships shown in the usual way with arrows. It is so called as target because concentric circles are pre-established to resemble a bulls-eye target and the symbols are placed in the appropriate circle. Key communicators in the central circle are more central in the sense that they were chosen more often and at the edge were chosen less often. For this purpose first choice of the respondents were considered. The high communicators were placed in the central circle, followed by the medium communicators in the second circle and low communicators in the third circle from the centre. Symbols were used to depict different key communicators as represented in the sociogram.

RESULTS AND DISCUSSION

Seven key communicators were identified by the sample respondents as represented in Table 1. Three key communicators were grouped under low communicators category, followed by two each in medium and high communicator categories. The three low communicator’s sociometric score cumulative percentage ranged from 0.83 to 22.50 (>25%), the probable reason might be that only few farmers consult them for agricultural and related aspects as their 2nd and 3rd preference or both. The two medium communicators sociometric score cumulative percentage were 38.89 and 61.11 (25 to 75 %), this is probably because majority of the farmers consult them for agricultural and related aspects as their 2nd or 3rd preference and a very few farmers consult as 1st preference. The two high communicators sociometric score cumulative percentage were 78.89 and 100 (<75 %), this is probably because majority of the farmers consult them for agricultural and related aspects as their 1st preference, followed by 2nd and 3rd preferences.

Based on the first preferences of the respondents a sociogram was developed as depicted in Fig. 1. Two high communicators with cumulative percentages 100.00 and 78.89 occupied the central circle indicating the power of influence with respect to dissemination of agricultural information. Two medium communicators with cumulative percentages 61.11 and 38.89 occupied the second circle from the centre. Three low communicators with cumulative percentages 22.50, 10.56 and 0.83 occupied the third circle from the centre.

<table>
<thead>
<tr>
<th>Identified key communicator</th>
<th>Preference (No.)</th>
<th>Sociometric score of key communicator</th>
<th>%</th>
<th>Cumulative %</th>
<th>Communicators Category</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>1 1 1 3</td>
<td>0.83</td>
<td>0.83</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>9 14 35</td>
<td>9.72</td>
<td>10.56</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>8 12 43</td>
<td>11.94</td>
<td>22.50</td>
<td>Low</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>7 15 59</td>
<td>16.39</td>
<td>38.89</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>25 3 80</td>
<td>22.22</td>
<td>61.11</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>11</td>
<td>9 13 64</td>
<td>17.78</td>
<td>78.89</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>24</td>
<td>1 2 76</td>
<td>21.11</td>
<td>100.00</td>
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</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60 60 360</td>
<td>100.00</td>
<td></td>
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</tr>
</tbody>
</table>
CONCLUSION

From the study it can be concluded that farmers believe much on their fellow farmers in matters of agriculture and related aspects. They feel that fellow farmers i.e. key communicators give suggestions based on practical knowledge and experience. So, whenever extension personnel are to disseminate information to the farming community it is always beneficial to disseminate it through the key communicators.

Moreover, it is difficult to channelize the information from one extension personnel to 1500 farmers in a stipulated time; this shortage of extension personnel could be filled by trained key communicators. Hence, key communicators come in a way of disseminating the agricultural information in time to large number of farmers.

REFERENCES


