

## A Study on Sociometry in 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 proposed by Northway, 1940. Sociometric score, Percentage and Cumulative Percentage were calculated. Seven (07) key communicators were identified by the sample respondents. Three (03) key communicators 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 :** Key communicator, Sociometry, Sociogram.

Green revolution in India has brought changes in agriculture 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 are 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 the 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, Govt. of India; 2011). Key communicators or opinion leaders in the villages are the persons who can fill this gap of extension staff. The patterns of expressed choices can be represented graphically in the sociogram, which involves the use of some geometric figure to indicate each person (for example, a circle with a name in it) and connecting lines or arrows showing the direction of the choices (Jones, 2001). Judiciously use sociometric criteria to let the group members know enough about one another (Peter, 2010). At

this juncture it is opportune to study the sociometry in dissemination of agricultural information with the objective to find the key communicators involved.

### MATERIAL AND METHODS

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 psychosocial networks of relationships. Here in this study research 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 proposed by Northway, 1940. Statistical tools namely Sociometric score, Percentage and Cumulative Percentage were applied.

For the purpose of 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 out 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 (03), two (02) and one (01) 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 first, second and third choices. Based on the total sociometric scores obtained, the respondents were categorised into high, medium and low communicators based on the range of cumulative percentages i.e. low communicator (0 to 25 percentage) ; medium communicator (25 to 75 percentage) and high communicator (75 to 100 percentage).

#### Target sociogram

Target sociogram is a radial layout proposed by Northway in the year 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 (07) key communicators were identified by the sample respondents as represented in Table 1. Three (03) 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 between 0.83 to 22.50 (below 25 per cent), the probable reason might be that the few farmers consult them for agricultural and related aspects as their 2<sup>nd</sup> and 3<sup>rd</sup> preference or both.

The two medium communicators sociometric score cumulative percentage were 38.89 and 61.11 (between 25 to 75 per cent), this is probably because of the reason that the majority of the farmers consult them for agricultural and related aspects as their 2<sup>nd</sup> or 3<sup>rd</sup> preference and a very few farmers consult as 1<sup>st</sup> preference.

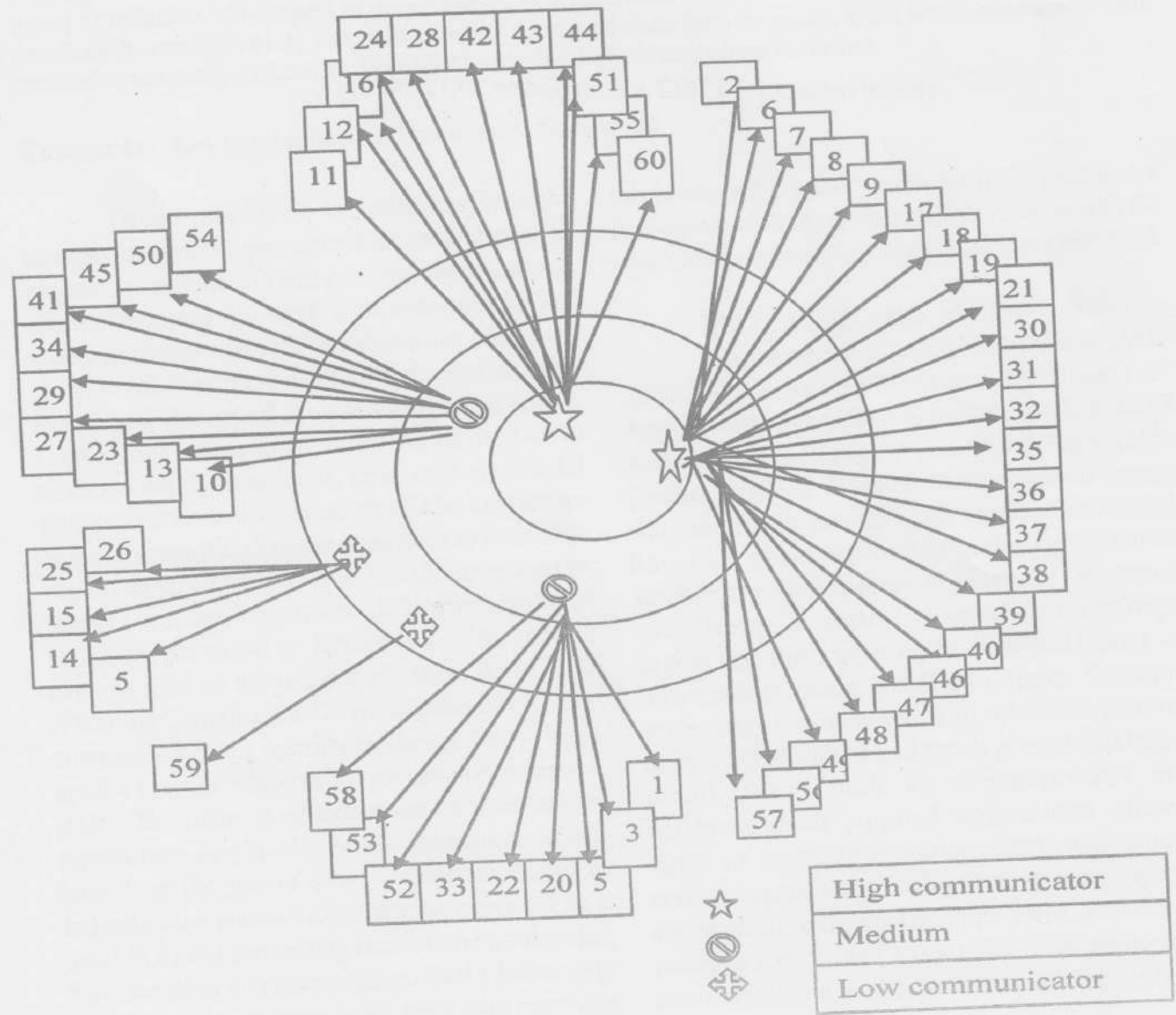
The two high communicators sociometric score cumulative percentage were 78.89 and 100 (above 75 per cent), this is probably because of the reason that the majority of the farmers consult them for agricultural and related aspects as their 1<sup>st</sup> preference, followed by 2<sup>nd</sup> and 3<sup>rd</sup> 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 1. Categorisation of key communicators based on sociometric scores

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

Fig. 1. Target sociogram of key communicators.



## CONCLUSION

From the study it can be concluded that farmers believe much on their fellow farmers or co-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, when ever extension personnel want 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 timely to large number of farmers.

## LITERATURE CITED

- Planning commission, Government of India 2011** Twelfth plan working group on disadvantaged farmers, including women .
- Jones D 2001** Socimetry in organisation development. *British journal of psychodrama and sociodrama*, Vol. 16, Issue. 1.
- Moreno J L 1938** Sociometry in relation to other social configuration. *Sociometry*, 1 : 342-374
- Northway M L 1940** A method for depicting social relationships obtained by sociometric testing. *Sociometry*, 3(2): 144-150
- Peter H 2010** Using sociodrama and sociometry to create group environments. *The group psychologist society for group psychology and group psychotherapy*, 20(20): 19-64

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