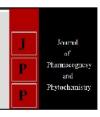


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A study on assessment of social capital in farmer interest groups (FIGs)

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Abstract

The present study was undertaken with an objective to find out the level of social capital in Farmers' Interest Group (FIG) using an index. The overall social capital index of the FIG were analyzed using three dimensions of social capital viz., Structural, Cognitive and Relational dimensions. The study revealed that the social capital Index was moderate and in the medium range as two-third (62%) of the respondents were in the range of 65.00-80.00 in the Structural Dimension Index worked out. Nearly two-third (61.10%) or majority of respondents of the study were in the range of 35.00-45.00 which was termed as 'high' in Cognitive dimension Index. Nearly fifty percentage (48.90%) were in the medium range of 28.00-32.00 in terms of Relational Dimension Index.

Keywords: Farmer interest group, social capital, structural, cognitive and relational dimension

Introduction

Around the globe it is evidenced that the social capital is extremely important for farming communities in developing countries where agricultural production highly depends on collective action, co-operation, reciprocity and inter-relations among farming households. Frank (2004) [1] had analyzed impact of social capital and found that six positive effects of social capital for society and the state which included reduction of transaction costs, facilitation of the dissemination of knowledge and innovations, promotion of cooperative and/or socially-minded behavior, benefits for the individual and social spill-over, less capital-intensive interventions, and a people-centered perspective. These positive effects of social capital are also central to any successful Rural Extension programs. Putnam (1995) [4] integrates various facets to define social capital in three dimensions, namely structural, cognitive and relational social capital, which was later endorsed by Nahapiet and Ghoshal (1998).

Social capital through farmer groups helps to bridge the gap by enhancing cooperation, coordination, and collective action and making market exchange easier. Membership in these farmers' groups enables individuals to have access to capacity building effort such as training and study tour as well as information pertaining to new agricultural technologies. The binding interrelationships among farmers affect groups' performance and the effectiveness of the social capital dimensions depends on the enabling environment, which includes the relationships among individual farmers, between farmer groups and the market. The effective functioning of marketing groups is based on the ability of groups to cooperate on the basis of trust between members (Lynn, 2000) [2].

Social capital may also indirectly impact agricultural productivity and economic sustainability, as well as regional social sustainability, since it affects the quantity of labor available either through the immediate and extended family or the social relationships available to the individual. The regional social sustainability may also be achieved by the role that farmers may play in the network of associations in rural areas of non-agricultural nature. Social capital among farmers, as built through community involvement, may also enhance social responsibility by promoting the use of sustainable agricultural farming practices and thereby contributing to environmental sustainable development. It can also enhance the access of farmers to other forms of capital required to sustain production levels and maintain livelihoods.

In India most of the farmers being small and marginal holdings, have limited capacity to mobilize credit, adopt latest technologies and to add value to their agricultural produce. Hence, to make them avail these benefits and to increase their income, the Government of India has launched an innovative program for organizing small and marginal farmers into Farmers interest groups, producer groups which will be federated into 'Famers producer organizations' to promote collective farming for credit mobilization, better adoption of technology and to

Correspondence C Sabarinathan Assistant Professor, Department of Agricultural Extension, PRIST University, Thanjavur, India facilitate effective forward and backward linkages. The success of the farmers groups mainly depends on social capital, which is the internal structure of the groups. The decline of social capital in farmers groups will affect the performance of farmers groups which has been understood as a reason for failure and success of farmers groups. Considering the importance of social capital in farmers group, the present study was undertaken with an objective to measure the accumulation of social capital among the members of farmer's interest groups with the help of variables related to structural, cognitive and relational dimension of social capital.

Methodology

The social capital index was measured under three dimensions namely structural, cognitive, and relational dimensions. In order to have a comprehensive idea about the level of social capital accumulated in groups a 'Social Capital Index' was planned to be developed for the study. The social capital index for individual dimensions and who listen social capital index involving all the three dimensions was also developed for the study. Hence, Structural dimension index, Cognitive dimension index and Relational dimension index based on which a social capital index was developed. The procedure is given below.

Structural dimension index

The scores obtained by an individual for six variables under structural dimension of social capital was summated. The following formula was used to find out structural dimension index

$$SDI = \frac{X_1 + X_2 + X_3 + X_4 + X_5 + X_6}{Total number of respondents} * 100$$

 X_1 - Group Cohesion, X_2 - Group Interaction, X_3 - Team spirit, X_4 - Accountability.

X5- Transparency, X6- Meetings and Attendance

Cognitive dimension index

The scores obtained by an individual for three variables under cognitive dimension of social capital was summated. The following formula was used to find out cognitive dimension index.

$$CDI = \frac{X_1 + X_2 + X_3}{Total number of respondents} * 100$$

 X_1 - Trust, X_2 - Norms X_3 - Reciprocity

Relational dimension index

The scores obtained by an individual for two variables under relational dimension of social capital was summated. The following formula was used to find out Relational dimension index.

$$RDI = \frac{X_1 + X_2}{Total \ number \ of \ respondents} * 100$$

X₁- Relationship, X₂- Decision making

Social capital index

After calculating Structural Dimension Index, Cognitive Dimension Index, Relational Dimension Index, social capital

index was calculated by summating three index values for which the following formula was used

$$SCI = \frac{SDI + CDI + RDI}{3} * 100$$

Data collection

Four farmer's interest groups were randomly selected from Kanjamalai Pulses and Millets Farmer Producer Company in Salem district based on consultation with officials of department of agriculture, horticulture and KVK scientists. Deliberate sampling was followed to identify the respondents wherein all the members in the selected FIGs were deliberately taken as respondents of the study which constitute a total of 90 respondents. The data was collected using a pre-tested and structured interview schedules.

Results and Discussion

Measurement of social capital accumulation in FIGs

Structural dimension of social capital is referred to the interpersonal formation of linkages between individuals or groups and comprised social interactions. Six variables namely group cohesion, group interaction, team spirit, accountability, transparency, meetings and attendance were assumed to fulfil the structural dimensional index. The data pertaining to these variables were collected and tabulated Using Cumulative frequency method, the responses were categorized into low, medium and high and tabulated below in table 1.

Table 1: Structural Dimension Index (n= 90)

S.No	Category	Frequency	Percentage (%)
1	Low	12	13.30
2	Medium	62	68.90
3	High	16	17.80

It is evident from table 1, that the social capital pertaining to structural dimension was moderate and in the medium range (68.90 per cent). The data pertaining to six variables of structural dimension revealed that the respondents, though were strong in group cohesion and group interaction which are fundamental for structure of FIG, there was some tentativeness in their response in team spirit, transparency and attendance in meetings as considerable number of respondents were tried to be in the middle of the path, which might have been the reasons for more number of respondents fell in the medium category of structural dimension index.

Since, structural dimension is the foundation for any group and if it is vulnerable, it will affect the very basic of the group and the activities which culminated in poor performance of the group. Hence, the group members should be properly motivated to keep the fundamentals intact. The leader of the FIG should be dynamic to get along with people and bring in team spirit, make the members attend the meetings regularly and to maintain transparency in the group which will transform the group into a vibrant and successful group.

Trust, norms and reciprocity were used to measure cognitive dimension. The data pertaining to these variables were collected and summated. The distribution of summated data was again categorized into low, medium and high using cumulative frequency method and the findings are given in the following table.2

Table 2: Cognitive Dimension Index (n= 90)

S.no	Category	Frequency	Percentage
1	Low	4	4.50
2	Medium	31	34.40
3	High	55	61.10

From the table 2, it could be inferred that nearly two-third (61.10%) of respondents of the study were in the range of 'high' in Cognitive dimension Index. This was followed by another one -third (34.40%) who were categorized into 'medium' level of Cognitive Dimension Index.

The responses to the questions related to three variables of cognitive dimension of social capital revealed that there was high to moderate trust, endorsement of majority of respondents, that the norms existed in the groups and high reciprocity was also seen among members of FIG. These responses clearly fit into the values of Cognitive Dimension Index which was high to medium.

Though majority of respondents were found in high category of cognitive dimension of social capital, the one-third of respondents who were in medium category are to be given laser beam focus to bring them to the higher level of Cognitive dimension. More number of meetings and opportunities for interactions could improve the cognitive dimension of social capital.

The variables related to relationship and decision making were used to calculate the relational dimension index and data was collected and summated. The distribution of data was again categorized into low, medium and high using cumulative frequency method and the findings are given in the following table.3

Table 3: Relational Dimension Index (n= 90)

S.No	Category	Frequency	Percentage
1	Low	19	21.10
2	Medium	44	48.90
3	High	27	30.00

From the table 3, it is observed that nearly fifty percentage (48.90%) were found in 'medium' category in terms of Relational Dimension Index. This was followed by 30.00 percentage of respondents and 21.19 percentage of respondents were found in high and low categories of Relational Dimension Index respectively.

The Index was dispersed among three categories which meant that the index was neither high nor less. It is also seen that considerable number of respondents were reported to be in low relationship category, 'not so closer' category, moderately agree category for the variables studied related to relational dimension and hence the existence of Relational dimension Index in all the categories of low, medium and high could be justified. More number of workshops should be conducted in FIGs by Department of Agriculture to insist on the importance of relationship and decision making in various activities.

Comparative analysis of three indexes revealed that majority of respondents were found to possess higher Cognitive Dimension Index when compared to other indexes. The Structural Dimension Index was found to be in the medium range whereas the Relational dimension Index was dispersed among three categories. Social Capital Index which is a composite index of all three dimensions namely structural, cognitive and relational dimensions was calculated and presented in the table 4.

Table 4: Social Capital Index (n= 90)

S.no	Category	Frequency	Percentage
1	Low	11	12.30
2	Medium	39	43.30
3	High	40	44.40

It is seen from table 4, that nearly two-fifth of the respondents equally present in high (44.40%) and medium (43.30%) categories respectively. It could be interpreted from the finding that there existed gap in social capital which needs to be improved. The respondents in low and medium categories can be brought to high category and to accumulate three dimensions of social capital through proper capacity building activities by the Department of Agriculture and other Government Institutions.

Conclusion and recommendations

Social capital accumulation is important for the functioning of any farmer collective. In order to assess the social capital in Farmer Interest Group, the present study was commissioned. In this study, the social capital was measured through three indices namely Structural, Cognitive and relational dimensions of social capital.

The social capital Index was moderate and in the medium range as two-third (62%) of the respondents were in the range of 65.00-80.00 in the Structural Dimension Index worked out. Remaining one third were found to be in the range of 80.00-94.00(17.80%) which was categorized as 'high' and in the range of 54.00-65.00 (13.30%) which was categorised as 'low' respectively. Nearly two-third (61.10%) or majority of respondents of the study were in the range of 35.00-45.00 which was termed as 'high' in Cognitive dimension Index. This was followed by another one -third (34.40%) who were in the range of 30.00-35.00 and categorised as 'medium' level of Cognitive Dimension Index.

Nearly fifty percentage (48.90%) were in the range of 28.00-32.00 in terms of Relational Dimension Index which was classified as 'medium'. This was followed by 30.00 percentage of respondents and 21.19 percentage of respondents were found in high and low categories respectively.

The study results revealed that the structural component of social capital namely group cohesion and group interaction, need to be further strengthened as significant number of respondents were found to be weak in these components. Team spirit, though found to be moderate, it needs further improvement. The state level training institutions like STAMIN, Kudimiyanmalai, need to be involved in arranging workshops for sharpening team building skills. Management specialist should be involved as resource persons. It was also found from the study that norms were not fully followed. Hence, the members should be thoroughly trained on maintaining and enforcing norms in the groups. The relational dimensions like relationships and decision making needs further improvement as the respondents were reported to be mediocre.

It was found from the study that cognitive domain of social capital was formed to be stronger than structural and relational domains. Future capacity building programs of FIGs need to be programmed with more inputs on structural and relational domains of social capital.

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