Analyzing Effect of Social Capital on Performance of Taram City Olive Farmers Cooperatives

Yahya Safi Sis¹, Seyed Hamid Movahed Mohammadi², Yousef Hedjazi³

¹. Graduate Student of Agricultural Extension, University of Tehran, Karaj, Iran
². Assistant Professor of Agricultural Education, University of Tehran, Karaj, Iran
³. Professor in Agricultural Extension and Education, University of Tehran, Karaj, Iran

Corresponding author email: yahya.safi@yahoo.com

ABSTRACT: According to the studies, social capital is not so important among members of cooperatives especially in the cooperatives of which members have no family, kinship or friendly relation. The present research analyzes effect of social capital on performance of Taram City Olive Farmers Cooperatives. Statistical population of the present research includes ordinary members and managers of Olive Farmers cooperatives. This research studies 17 cooperatives due to cost and time limitation among 32 active cooperatives using random sampling. The number of members of these cooperatives is 338 which constitute statistical population of the research. To collect and measure information, two questionnaires (with validity and reliability confirmation) and interview were applied. Results obtained from path analysis show that variables of social integration, social awareness and infrastructural domain had the highest effect on performance of cooperatives respectively.

Key Words: Cooperative, Social capital, Social integration, Taram

INTRODUCTION

According to scientific studies of some scientists and presentation of some theories such as Limited Good Theory on which basis villagers regarded happiness and material benefits as limited in society, such theories condemned villagers to mistrust and lack of cooperation and participation. But some cases such as rural cooperative and joint cooperative during history have shown that spirit of cooperation has existed in rural societies since a long time ago and goal of the present research is to study and analyze social capital on performance of Olive Farmers Cooperatives. Social capital links two words of social relations and economic performance and is defined as a trust which people have and this trust prevents people in social groups from violating benefits of others for their own benefits and cheating (Amiri and Rahmani, 2006). Observations and studies in Taram City Olive Farmers Cooperatives indicate the presence of many problems in cooperatives of this district. Problems of these cooperatives are included in three social-economic, technical-communicative and infrastructural domains:

Social-economic domain problems: reduction of participatory sense of members, indifference of members to problems of cooperative, failure of the members to participate actively in cooperative department, lack of effective communication between members of the cooperative and the board of directors, limitation of cooperative's capital, problems of using credits and bank facilities, high bank loan installments and failure to make investment in olive processing industries.

Technical-communicative domain problems: weakness of management, weakness of training and shortage of educated personnel like experts and specialists, weak communication of cooperative with research and credit centers.

Infrastructural domain problems: the absence of suitable bed and infrastructure for activity of cooperative, the absence of plants and processing industries, problems of land consolidation and unsuitable lands.

Due to shortage of studies which investigate cooperatives in terms of social capital factors based on the cooperatives, it seems necessary to study effects of different concepts of social capital on structural and functional domains of cooperatives and performance of cooperatives. Considering that social capital is one of the main factors which lead to human and material development, its analysis in social-economic, technical-communicative and infrastructural domains of cooperatives can play increasing role in improvement of the cooperatives' performance.

Importance of studying concept of social capital has increased since formation of this concept by Bourdieu and Coleman, 1988 and studies by Putnam, 1993 especially his detailed study on regional governments in Italy.
(Collier, 1998). This concept was considered by researchers of social sciences in the past decades and analytical studies of social networks and their effect on economic growth, health, crime, educational performance and even usefulness of governmental policies have been conducted (Hong and Sporleder, 2007). Social capital is a multidimensional concept and is used for different purposes (Davis, 2005). This type of capital can promote social interactions, economic productivity and long-term performance with agricultural cooperatives (Allahdadi, 2011). Cooperatives are very ideal for increasing self-confidence of members, high productivity and agricultural expansion (Woldemariam, 2008). One of the main capitals of cooperatives which facilitate these interactions is social capital (Allahdadi, 2011). Concept of social capital is rooted in structure and content of relations and can be conceptually and operationally elaborated in different analytical levels and studied in individual, organizational, inter-organizational and social levels (Portes and Sensen, 1993). Cooperative section plays main role in development of the country as an institution which includes social capital in all levels mentioned above. Role of cooperation in formation and protection of all kinds of capital especially three kinds of physical, human and social capital is very important and will lead to economic development.

Colman, 1990 defines social capital as social structure relations which are as assets or resources which facilitate affairs by persons in special social system (Todeva and Knoke, 2001).

Bourdieu and wacquant, 1992 define social capital as a set of potential or actual resources which make people aware by institutional networks. It means that membership of people in groups causes them to possess collective capital.

Putnam, 1995 defines social capital as components of social organizations such as trust, norms and networks which allow participation for more effective teamwork to reach common goals. This definition is based on three main principles: trust, ethical and normative commitments and social networks. Trust which is the most important principle refers to foresight of others' actions and orientation of action selection by person. This concept emphasizes on feeling, belief and value of people (Teodosio et al., 2008).

Definition of trading companies by Leenders and Gabbay, 1999 will be very useful and valuable. They have defined social capital as a set of tangible and intangible resources for united trading actors who have social interactions and these resources facilitate their access to goals. This definition has been compared for agricultural cooperatives and can be applied for these cooperatives. In the present research, social capital is defined as follows: a set of normative, value, hybrid and knowledge networks or a set of tangible and intangible resources for constituents of cooperative which have social interactions and are created over time for facilitating access to the goals. Here, components of cooperative refer to its personnel and management. Regarding the conducted studies on effect of types of capital on social capital, one can refer to the following cases:

Amir Khani and Aghaz (2011) in their study entitled development of social capital due to human capital in National Petrochemical Company mention that human capital is effective on all factors of social capital and investment in people increases social capital and more social capital along with organizational trust and teamwork promotes performance of organization and formal supervision and economic incentives don’t have effect on social capital. Torabi et al. (2010) who studied effect of components of social capital on performance of animal and poultry cooperatives in Mashhad introduced variables of social participation, social integration, social trust, social awareness and also age and education as individual factors affecting performance of cooperatives. Abbasi et al. (2009) regarded two strategies of social security insurance for members and increase of social capital effective on performance of cooperatives and believed that powerful factors of cooperative section as capital, management, planning, human resources, marketing methods, innovation and use of technology. Azkia and Firoozabadi (2004) in their study on social capital in all tribal ownerships-based exploitation systems in Karkheh region concluded that intra-organizational social capital in exploitation systems plays effective role in increase of production, decision-making and production management participations. Intra-organizational trust along with trust and norm of intra-organizational action in tribal level have provided suitable opportunity for developmental planning and policymaking and production organizations in guidance, promotional and servicing dimensions. Sano, 2008 who studied effect of social capital on production management of production cooperatives, nongovernmental organizations and coastal villagers regarded variables of social capital as norms and values, participation, union, trust, social awareness and integration effective on management of these units and regarded promotion of these factors as the factor increasing income and capital and improving business.

Narayan and Prich, 1997 studied social capital in 87 villages of Tanzania and found that social capital links two concepts of capital (it increases incomes) and community (income of family not only depends on social capital of family but also depends on social capital of village) (Estes, 2004). This research seeks to analyze social capital and performance and factors affecting them in Olive Farmers cooperatives and studies effect of social capital on structural and functional domains of cooperatives and also effect of structural and functional domains and social capital on performance of cooperatives. The present research summarizes studies by Ahmadi Firooz Jaei et al., 2007, Torabi et al. 2010, Rostami, 2010, Kalantari et al., 2011, Sabatini, 2000, Bullen. 2007, Sano, 2008, Darvish, 2010, Kaasa, 2007 in which components of institutional trust, social trust,
social participation, social integration and social awareness were determined as components of social capital. To create Conceptual model of the research, the previous studies and new concepts which have not been studied so far were used and Conceptual model of the research was created as follows:

![Conceptual framework of study](image)

**MATERIALS AND METHODS**

This research is of descriptive-correlative type. This research relates to olive farmers cooperatives and its space domain is Taram city located in Zanjan Province. This research studies 17 cooperatives due to cost, time and access limitation among 32 active olive farmers cooperatives (there are totally 36 cooperatives of which 32 cooperatives are active and 4 cooperatives are inactive) using random sampling. The number of members of these cooperatives is 338. In the first stage, 181 people were selected as sample size using Morgan Table and in the second stage; accurate number of the studied people was selected from each cooperative (class) using stratified sampling and 148 ordinary members of cooperatives and 33 managing directors and members of the board of directors due to inaccessibility and reluctance of the directors to answer the questions were studied. Individual particulars, social capital, structural and functional domains and performance of cooperatives were evaluated by respondents with 78 items as Likert Scale and 7 open questions.

Data have been collected using structured interview technique and questionnaire instruments (by observing its validity confirmation). In this research, content validity method has been utilized to determine validity of the research instruments and the questionnaire was tested by professors and members of faculty board of Agricultural Promotion and Education Department of University of Tehran and employees of Zanjan City Cooperation Department to measure content validity. After necessary corrections, it was confirmed that the present questionnaire tested the desired cases of the research. To measure reliability of the questionnaire items, Cronbach's alpha test was used. Cronbach's alpha coefficients between 0.79 and 0.91 indicated acceptability of reliability of the studied constructs in research instruments. To analyze data, method of percent, have been used in descriptive statistics section. In inferential statistics, mean comparison test (Mann Whitney test) and finally joint multiple regression analysis and path analysis were applied using spss software, version 15.

In this research, individual-economic features, components of social capital and structural and functional domains are regarded as independent variables and performance of the cooperative is regarded as dependent variable.

**RESULTS AND DISCUSSION**

**Evaluating Performance of Cooperatives**

About 66.9 % of the members and about 87.9 % of the managers have evaluated performance of their cooperatives to be medium and strong (considering measurement of all dimensions with Likert Scale, the desired dimensions were summed and performance of cooperative was created) and totally 70.7% of managers and members evaluated performance of their cooperatives medium and strong. According to mean comparison test of Mann-Whitney, there is significant difference of opinions between these two groups in level of 1% and managers of the cooperative with rank mean of 134.48 evaluated performance of cooperatives higher than members of the cooperative with rank mean of 81.30.

Studying Effect of Independent Variables of Research on Performance of cooperatives (Dependent Variable)

Path analysis and joint multiple regression (Enter) were used to study effect of independent variables on dependent variable (performance of cooperative ) and relationship between the independent variables which had theoretical effect on the dependent variable was studied using path analysis method. In the next stage, relationship between each one of the independent mediating variables and other factors was studied to test direct and indirect effect of variables. According to Table 1 which shows results of this analysis , Fisher Statistic with numerical value of 25.057 (F=25.057) with confidence level of 99% was fully significant and indicated significant relationship between independent and dependent variables. Coefficient of determination of R² which refers to suitability of the model with numerical value of 0.609 indicates average rate of dependent variance which is explained by independent variables included in the model and indicates that 60.9% of the total
variations of dependent variable (performance of cooperative) is explained by the analytical model of the present research.

Table 1. Multiple Regression for Studying Effect of Independent Variables of Research on Performance of Cooperatives (Dependent Variable)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Std.Error</th>
<th>Beta</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>12.985</td>
<td>4.689</td>
<td>-</td>
<td>-2.769</td>
<td>0.006</td>
</tr>
<tr>
<td>social awareness</td>
<td>0.384</td>
<td>0.110</td>
<td>0.206</td>
<td>3.503</td>
<td>0.001</td>
</tr>
<tr>
<td>institutional trust</td>
<td>0.285</td>
<td>0.265</td>
<td>0.069</td>
<td>1.076</td>
<td>0.283</td>
</tr>
<tr>
<td>social trust</td>
<td>0.148</td>
<td>0.228</td>
<td>0.042</td>
<td>0.650</td>
<td>0.516</td>
</tr>
<tr>
<td>social participation</td>
<td>0.082</td>
<td>0.181</td>
<td>0.026</td>
<td>0.450</td>
<td>0.653</td>
</tr>
<tr>
<td>social integration</td>
<td>0.619</td>
<td>0.174</td>
<td>0.228</td>
<td>3.554</td>
<td>0.000</td>
</tr>
<tr>
<td>Technical –communicative domain</td>
<td>0.411</td>
<td>0.156</td>
<td>0.169</td>
<td>2.637</td>
<td>0.009</td>
</tr>
<tr>
<td>Infrastructural Domain</td>
<td>0.422</td>
<td>0.115</td>
<td>0.218</td>
<td>3.573</td>
<td>0.000</td>
</tr>
<tr>
<td>Social –economic domain</td>
<td>1.036</td>
<td>0.306</td>
<td>0.178</td>
<td>3.381</td>
<td>0.001</td>
</tr>
<tr>
<td>Background of membership in cooperative</td>
<td>0.483</td>
<td>0.175</td>
<td>0.158</td>
<td>2.758</td>
<td>0.006</td>
</tr>
<tr>
<td>Household size</td>
<td>0.039</td>
<td>0.172</td>
<td>0.014</td>
<td>0.227</td>
<td>0.821</td>
</tr>
<tr>
<td></td>
<td>$R^2$= 0.609</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significance at p<0.05, ** Significant at p<0.01

Some independent variables included in the model were affected by other factors and effect of these factors was studied through simultaneous multiple regression and its results are given in Table 2 and Figure 2. By measuring effect of mediating and independent concepts on performance of cooperatives and based on conceptual framework of the research, path diagram of the research was drawn as Figure 1. To test effect of independent variables on performance of the cooperative, direct and indirect effect of each factor was separately studied. According to Table 2, social integration with impact factor of 0.328, social awareness with impact factor of 0.250 and infrastructural domain with impact factor of 0.218 had the highest effect on performance of cooperatives.

Table 2. Studying Total Effect of Independent Variables of Research on Performance of Cooperatives (Dependent Variable)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>social awareness</td>
<td>0.206</td>
<td>0.044</td>
<td>0.250</td>
</tr>
<tr>
<td>institutional trust</td>
<td>0.069</td>
<td>0.049</td>
<td>0.118</td>
</tr>
<tr>
<td>social trust</td>
<td>0.042</td>
<td>0.004</td>
<td>0.046</td>
</tr>
<tr>
<td>social participation</td>
<td>0.026</td>
<td>0.004</td>
<td>0.030</td>
</tr>
<tr>
<td>social integration</td>
<td>0.228</td>
<td>0.100</td>
<td>0.328</td>
</tr>
<tr>
<td>Technical –communicative domain</td>
<td>0.169</td>
<td>-</td>
<td>0.169</td>
</tr>
<tr>
<td>Infrastructural Domain</td>
<td>0.218</td>
<td>-</td>
<td>0.218</td>
</tr>
<tr>
<td>Social –economic domain</td>
<td>0.178</td>
<td>-</td>
<td>0.178</td>
</tr>
<tr>
<td>Background of membership in cooperative</td>
<td>0.158</td>
<td>0.001</td>
<td>0.159</td>
</tr>
<tr>
<td>Household size</td>
<td>0.014</td>
<td>-</td>
<td>0.014</td>
</tr>
</tbody>
</table>

CONCLUSION

About 66.9% of the members and about 87.9% of managers evaluated performance of their cooperatives medium and strong. The present conclusion was in line with study by Sadighi and Darvishi Nia (2002) and not in line with studies by Amini and Ramezani (2006, A), Amini and Ramezani (2006, B), Amini and Ramezani (2006, C).

Social integration, social awareness, infrastructural domain, social –economic domain and technical-communicative domain had the highest effect on performance of the cooperative. This conclusion is in line with studies by Amir Khani and Aghaz (2011), Torabi et al. (2010), Abbasi (2009), Azkia and Firoozabadi (2004) and Sand, 2008.

Social integration is a very important component in performance of the cooperatives (educational return, information and market regulation, production function) and this component can be increased among members of olive farmers cooperatives by creating sense of cooperation, empathy, life satisfaction, security, respect of members for their beliefs and capacity of differences of this component among members of the olive farmers cooperatives. Considering that infrastructural domain and institutional trust are regarded as two important categories of cooperatives' performance, role of three factors of governmental policies and governmental departments and infrastructural services of government can be found and role of public sector in performance of cooperatives is very important and effective and the only way of synergy (a whole effect is greater than the sum of their individual effects) is creation of social capital and finally creation of capital and political voice in order to attract governmental support. Planners, policymakers, managers and authorities of cooperation section should apply policies for reinforcing the predicted performances of this section in the articles of association. Government should try to increase participation and interference to fulfill needs of cooperatives in its policies. All governmental policies should be applied based on conditions of each region to finance credits and inputs, do guaranteed shopping, insure products, train members and managers, exclude intermediates and brokers...
and general and irrelevant policies should not be enacted and notified. In general, the following recommendations are given:

External training (multilateral training of members and managers of cooperative by cooperatives, Cooperation Department, Agricultural Jihad and promotional organizations etc) and internal training (mutual learning), creation of network communication in individual level (social capital) and in institutional level (political capital), adoption of supportive policies of cooperation section (insurance of products, marketing, credits), infrastructural services (construction of roads and communication networks, processing industries, mechanized irrigation system, land consolidation, creation of products warehouse and safe sale market).

![Path diagram to measuring effect of mediating and independent concepts on performance of cooperatives](image)

**Figure 2.** Path diagram to measuring effect of mediating and independent concepts on performance of cooperatives

**REFERENCES**


Rostami F. 2010. Designing and explaining components of social capital development on agricultural higher education system, master’s thesis of agricultural education, University of Tehran.


