International Journal of Agricultural Management and Development (IJAMAD)
Available online on: www.ijamad.iaurasht.ac.ir
ISSN: 2159-5852 (Print)
ISSN:2159-5860 (Online)

Factors Affecting Farmers' Satisfaction: Case of Agricultural Production Cooperatives in Guilan Province, Iran

Mohammad Taleghani [1*] and Mehran Mehdizade [2]

Received: 21 December 2015,
Accepted: 08 November 2016

Abstract

The aim of this study was to identify and prioritize factors affecting farmers' level of satisfaction in agricultural production cooperatives of Guilan Province, Iran. To this aim, documentary studies were conducted, and 15 factors affecting farmers' satisfaction were identified. Next, they were prioritized byfield studies using a questionnaire. The statistical population consisted of members of agricultural production cooperatives in Guilan Province. The sample comprised 93 farmers who were recruited using the Cochran formula. The questionnaires were distributed among farmers from12 cooperatives using a mix of random and proportional sampling methods and 100 questionnaires were collected. The content validity of the questionnaire was established and its reliability was estimated to be 79 percent using a Cronbach's alpha. To prioritize the factors, the researchers calculated means cores by using SPSS. Results indicated that empathy and cooperation among members, giving advice and guidance to members in case of problems, as well as effective communication with the local community are, respectively, the three factors that have the strongest effect on farmers' satisfaction in the studied region. In addition, the results showed that satisfaction of the majority of the members of cooperative activities was at a moderate level.

Keywords:
agricultural production, cooperatives, effective factors; farmers' satisfaction

[1] Associate Professor, Department of Industrial Management, Faculty of Management and Accounting, Rasht Branch, Islamic Azad University, Rasht, Guilan, Iran
[2] M.A. in Industrial Management, Faculty of Literature and Humanities, University of Guilan, Rasht, Iran
** Corresponding author's email: m.taleghani454@yahoo.com*

INTRODUCTION

The agricultural sector has great importance in the global economy and the economy of the country because of its especial role in food security, higher percentage of employment, potential exchange, and gross domestic production (GDP). The achievement of national development without regard to agricultural and rural development as well as improvement of rural socioeconomic status is not possible. Most small beneficiaries are the beneficiaries of the agricultural sector; therefore, experts believe that rural productive activities based on cooperation can promote and improve economic efficiency. Production cooperatives in rural areas allow villagers' extensive participation in the rural development process and can solve farmers' professional problems in the fields of economic and social cooperation as well as synergies. Despite the need to develop, cooperative companies do not have a worthy place in the agricultural sector yet (Falahi & Gholinejad, 2014).

The ultimate goal of agricultural cooperatives is not to make money and profit like middlemen, traders, bankers, and manufacturers but is to maximize the real and net incomes of its members. Farmers of cooperative companies try to make agriculture profitable (Taleghani & Asadzadeh Manjili, 2014). At the same time, cooperative companies of rural production can be known as a new system of organization and special management that have the principles, foundations, structures, networks, relationships, rules of their own, and have a special place in the process of rural development (Pourseyed & Motaharpour, 2012). Case studies have shown that rural cooperatives have homogeneity and high compatibility with rural life, because selection from a coordinated and heterogeneous group will accelerate the functions and encompass popularity, collective action, and collective intelligence as the features of cooperatives (Saberifar, 2012).

The results of Saberifard's (2012) study showed that if the negative attitudes of people to form cooperatives are coped with through raising awareness in various fields and other effective factors including the characteristics of the individual or community, people's joining these companies will increase dramatically. Furthermore, Latifian (2006) introduced a lack of meeting farmers' needs and the lack of obligations against members as the most important factors leading to the failure of agricultural cooperative companies in attracting and organizing scattered human resources.

Sedighi and Darvishinia (2002) showed that the success of cooperatives has a significant relationship and strong correlation with members' satisfaction. The main results of the study of Ebrahimzadeh and Barimani (2006), involving a comparative analysis of cooperation and its place in the socio-economic system indicated that strengthening and consolidation of cooperation situation in economies requires more than a context provided for collective participation of different social groups in decision making, planning, implementation, and monitoring of corporate functions and that the role of governments is left limited to monitoring and supporting of this sector (Asadzadeh Mangili & Talghani, 2015).

Amini and Ramezani (2006) argued that co-operatives were weak in achieving the desired goals in the charter and meeting the expectations and demands of their members. The results of path analysis showed that knowledge about members, practice of cooperative union, the amount of other organizations' benefits from co-operatives, the participation of members in the cooperative, the amount of benefit reaped by members from the cooperative and managers' skills had the greatest impact on the success of cooperatives. Based on the results of Ahmadi Firouzjai et al. (2006), four components of social capital, information exchange with outside social system, trust in institutions, and network of formal relationships and awareness have accelerated and facilitated cooperation among members of producer cooperatives for the implementation of development programs.

Amini et al. (2008) emphasized that the most important socioeconomic achievements of people has been achieved through the partnership that has a legal form as compared to other forms of partnerships and is formed to orient human activities toward cooperative organizations. Flygare (2006) suggests that cooperative

associations are doing economic measures based on a participatory democracy and control; accordingly, loans to its members are necessary to pursue their interests.

John et al. (2001) showed that managers of cooperative companies in the United States evaluated three principles of minimum profit and better services, freedom of membership, and fairness and justice as the most important and affecting principles for the success of cooperatives. Trupo (2007) suggests that agricultural cooperatives increase agricultural incomes of producers in their activity area.

Michael Cook's research about the future of US agricultural cooperatives shows that cooperatives are certain types of trading companies seeking to establish mutual benefit users (members - customers). Inaddition, findings of Veran Pravel et al. (cited in Holloway, 2008) in their study on continuing education in the cooperative extension service indicate that cooperative organizations are consistent with applied educational institutions.

Since, according to numerous studies, members' satisfaction decisively affects the success of cooperatives, the purpose of the present study was to prioritize the variables affecting farmers' satisfaction with agricultural cooperatives as part of anattempt to achieve efficient and successful agricultural cooperatives.

MATERIALS AND METHODS

This study was an applied research study in terms of nature, a field research in terms of monitoring and control, and a survey research in terms of data collection.

It was conducted on agricultural production cooperatives in Guilan Province which had a total of 2,820 regular members. A mix of random and proportional sampling methods was used for taking samples from the population. The sample size was determined to be 93 farmers by Cochran formula.

The questionnaire used in this study consistedof three sections: (1) demographic questions, (2) farmers' participation in the activities of cooperative and, (3) factors affectingfarmers' satisfaction. The first section of questionnaire was related to demographic questions (8 questions); the second section was composed of five questions about extent of farmers' participation in the activities of cooperativeranging from "not at all" to "very high" scale; the third section of survey instrument was composed of 15 items. Respondents were asked to indicate the extent to which they agreed or disagreed with each item by using"0= no importance" to "5= the highest importance".

In order to ensure the content validity of the questionnaire, 10 experts were interviewed about the relationship between the proposed questions and its structure. The reliability of the measurements in the survey was tested usingCronbach's alpha (α). The reliability coefficient (α) of questionnaire was estimated to be α=0.79.

The data were entered into SPSS software package for processing and the necessary calculations; thus, the needed information was extracted by drawing frequency and contingency distribution table; and the possibility of describing the population and analysis of data and hypothesis has provided. According to research objectives, "Coefficient of Variation (C.V.)" was used to prioritize the underpinning factors. Then, to describe the distribution of farmers' satisfaction with cooperative activities by the members of the cooperatives, this amount by the distance of the standard deviation of Average ISDM was divided into four categories as follows:

A: Min ≤ A < Mean-St.d
B: Mean-St.d ≤ B < Mean
C: Mean ≤ C <Mean+St.d
D: Mean+St.d ≤ D ≤ Max

RESULTS

The descriptive results of farmers' individual characteristics showed that 81% of them were men and the rest (19%) were female, and the majority of farmers were married (90%) and the rest were single. Their mean age was 42 years and their educational level was mostly (22%) basic literary. Agriculture was the main occupation of most of them (53%); their mean experience in agriculture was 16 years; and their average monthly income was estimated to be $51.

The results showed that the mean total land and area under cultivation of farmers were 5.35 and 4.79 hectares, respectively, and on average, each of them had 3 years of membership in the cooperative. The average number of shares of each member was 1.4 shares and every farmer had participated in training courses for an average of 1.27 times.

To measure the degree of participation in cooperative activities, respondents were asked to answer five questions on a Likert typescale; those results are summarized in Table 2.

As shown in Table 2, the respondents were asked about the amount of participation in cooperative activities by five questions, and the results showed that the majority of members (41%) had a high level of manufacturing activities (planting and harvesting). In addition, the majority of members (27%) did not have regular and continuous presence in all meetings held by the cooperatives, and the participation of members (25%) in the training courses organized by the cooperative was average. Moreover, the results showed that the percentage of members (37%) who cooperated with the board and the other members of the cooperative to achieve the goals of the cooperative was moderate. Likewise, the majority of members (31%) did not have regular and continuous presence at the meetings focusing on decisionmaking about the productive activities by the cooperative.

In these relationships, A signifies low, B signifies relatively low, C signifies high, D signifies relatively high, Min is minimum, Mean represents average, St.D is standard deviation, and Max is maximum.

According to the results of Table 3, farmers' satisfaction with the cooperative activities of the members was predominantly classified in two middle categories (59%) and it can be interpreted that the level of satisfaction is medium.

To determine the factors influencing the rejection of modern irrigation systems, 15 items were included, and accordingly, farmers were asked to rate the importance of each factor with a score of zero (no importance) to five (highest importance) on the Likert scale. Table 4 below shows the priority of variables affecting farmers' satisfaction with the cooperative activities by the members. It should be noted that in order to prioritize, the coefficients of variation Y were used. It is evident that factors with higher im-

Table1
Mean of Variables Related to Respondents' Individual Characteristics

Variable	Age (years)	Money (US Dollar)	Agricultural work experience (years)	Total land (ha)	Area under cultivation (ha)	Membership experience (years)	Number of shares	Number of courses
Mean	42	205	16	5.35	4.79	3	1.4	1.27

Table 2
The Percentage of Farmers' Participation in the Activities of the Cooperative

Row	Kind of participation	Not at all	Very low	Low	Medium	High	Very high
1	Participation in productive activities (planting and harvesting)	1	3	10	30	41	15
2	Regular presence in meetings held by the cooperative	27	23	16	17	11	6
3	Participation in training courses organized by the cooperative	14	23	19	25	11	8
4	Collaboration with the board of directors and other members of the cooperative in order to advance the goals	2	4	15	38	32	9
5	Participation in decision-making of cooperative about productive activities	31	20	19	17	9	4

Table 3
Classifying the Extent of Farmers' Satisfaction with Cooperative Activities by the Members of These Cooperatives

The level of satisfaction	Frequency	Percentage	Cumulative percentage
Low	22	22	22
Relatively low	29	29	51
Relatively high	30	30	81
High	19	19	100
Total	100	100	

Table 4
Prioritized Factors Influencing Famers' Satisfaction with Cooperative Activities from the Perspective of Its Members

Row	The factors affecting rejection of modern irrigation systems	Mean	SD
1	Effective communication with the local community	3.26	0.645
2	Providing advice and guidance to members in their problems	3.19	0.647
3	Empathy and cooperation among members	3.35	0.744
4	Promoting and educational activities and informing needed by members	3.09	0.764
5	Providing credits and loans required for members	3.07	0.807
6	Effective communication with other cooperatives and unions	3.19	0.895
7	Using experts in the affairs of the company	2.97	0.881
8	Satisfaction with the performance of the board of directors	2.51	0.795
9	Incentive plan for members	2.45	0.883
10	Good working environment in terms of sanitation	2.42	0.831
11	Welfare and servicing affairs of members	2.54	0.979
12	Required infrastructure facilities (buildings, warehouses,...)	2.28	0.944
13	Access to new scientific and industrial devices and technologies	2.03	0.858
14	Providing adequate facilities in the field of marketing and export of goods and services	1.68	0.803
15	Implementation of health insurance for members	1.42	0.713

portance for farmers have a lower coefficient of variation. Previous results showed that five factors including effective communication with the local community, providing advice and guidance to members on their problems, empathy and cooperation among members, extension educational activities and information needed by members, and providing credit and loans are the most important variables influencing farmers' satisfaction with the cooperative activities in agricultural production cooperatives of Guilan Province.

DISCUSSION

As mentioned earlier, agriculture is the most important sector for sustaining growth and reducing poverty in Iran. Accordingly, agricultural production cooperatives which have manymembers play a key role in the development of the sector. In this paper, factors affecting farmers' satisfaction were prioritized, and it was determined that empathy and cooperation among members, providing advice and guidance to members in case of their problems, and effective communication with the local community are, respectively, the three factors that have the highest effect on farmers' satisfaction in the studied region. In this section, some arguments from other researchers are brought to the forth that may help verify the findings of the present study. Taleghani (2016) foundthat farmers' participation in decision- making processes had positive effect on increasing their cooperation and commitment which in turn enhanced their satisfaction. Hansen et al. (2002) found that trust among members, and trust between members of cooperatives are important predictors of performance and satisfaction. Elias et al. (2015) concluded that different communication means are necessary to maintain participation and farmers' satisfaction, which can influence the sustainability of the extension program.

CONCLUSION

The results of the present study showed that the literacy level of the majority of farmers in the studied areawas at the basic level and that the average number of training courses that members participated was mediocre. Therefore, it is suggested that the training courses held by cooperatives be in accordance with the level of members' education and the methods tailored to the educational needs of adults to help improve their knowledge, attitudes, and skills to be used, and that with improving the quality of courses, the background be provided to encourage membersto participate in training courses. According to the results of prioritization of the variables affecting the level of satisfaction with cooperative activities, educational-promotional programs and information required of members were determined as one of the variables with the high degree of importance, emphasizing the importance of education in the satisfaction of the members of the cooperative. In addition, the results suggested cooperative members' low-income playing a key role; accordingly, the financing and loans required by members can be seen as one of the variables affecting the level of satisfaction among the five variables of first priority. Moreover, due to members' low average area under cultivation (less than 5 ha), it can be concluded that the local farmers in this study, like other farmers in the country, are mainly smallholder farmers and do not have high financial power; and the need for financing and loan is one of the expectations that they have of their cooperatives.

It is, then, necessary for the board members and officials of cooperatives to pay sufficient attention to providing their members with the needed funds through financial institutions. The results showed that participation of members in the activities of planting and harvesting is high, but their presence at the meetings and decisions taken by the cooperatives is very low. Since participation of individuals at the meetings and decision making can result in more coordination between decisions and operational activities (planting and harvesting) and will cause planning to be done in accordance with the operational needs of cooperatives, it is appropriate to specify the sustained and regular attendance of members at meetings and decision making in relation to impact of participation in the success of cooperatives. The results of prioritizing variables affecting the level of satisfaction with the cooperative indicated that the first three variables in priority included effective communication with the local community, providing advice and guidance to members on the their problems, and creating unity and cooperation among members who all have the same gender. These variables clearly suggest that collaboration and communication in cooperatives are considered as one of the most important and influencing factors influencing farmers' level of satisfaction and consequently their success rate, andthat it is necessary, before the establishment of a cooperative, that its board members should consider this point carefully and pay sufficient attention to the importance of regional collaboration, empathy, and effective social communication between members that are deemed to be of the cooperative principles.

Finally, according to the classification of the level of members' satisfaction with the cooperative activities, the majority of farmers' level of satisfaction was moderate, and as mentioned earlier in the review of the literature, most previous studies in this area have shown that the level of satisfaction of the members with the cooperative activities is directly related to the success of cooperatives and that their satisfaction with cooperative activities is an important factor in advancing toward the cooperative goals. Therefore, it is recommended that the cooperatives in the studied area should take some measures to improve their members' satisfaction to the extent that are within the regulatory framework and articles of association of the cooperative and also considering the tools at their disposal. The factors that were placed in the first priorities included: effective communication with the local community, providing advice and guidance to members in case of their problems, empathy and cooperation among members, carrying out educational and promotional activities, and information required by members, and providing credits and loans required by its members.

ACKNOWLEDGEMENT

Authors gratefully thank the members of Guilan agricultural production cooperatives that shouldered the burden of participating in this survey.

REFERENCES

Ahmadi Firouzjani, A., Sedighi, H., &Mohammadi, M. A. (2006). Comparison of components of social capital of farmer that are member and non-member of rural production cooperatives. *Journal of Social Welfare, 6*(23), 93-111.

Amini, A. M., & Ramezani, M. (2006). Investigate the causes and the success rate of the poultry cooperatives in the provinces of Mazandaran and Golestan. *Journal of Agricultural Sciences and Natural Resources, 13*(2), 123-132.

Amini, A. M., ZeinalHamedani, A., & Ramezani. M. (2008). The assessment of internal component in the success of the poultry cooperatives in Tehran. *Journal of Science and Technology of Agriculture and Natural Resources, 12*(43), 285-295.

AsadzadehMangili, S., & Talghani, M. (2015). Investigate the effect of risk aversion of managers on improving product performance in market through the implementation of green marketing mix programs. *Bulletin of Applied and Research Science, 5*(1), 7-12.

Ebrahimzadeh, I., & Barimani, F. (2006). Comparative study of cooperation and its status in socioeconomical systems. *Geographical Research, 20*(4), 81-106.

Elias, A., Nohmi, M., Yasunobu, K., & Ishida, A. (2015). Farmers' atisfaction with agricultural extension service and its influencing factors: a case study in North West Ethiopia. *Agriculture Science Technology, 18*(1), 39-53.

Falahi, E., &Gholinejad, S. (2014). Identifying and ranking the factors affecting the satisfaction of farmers of product insurance program in Mazandaran province. *Agriculture Economic Research, 6*(1), 154-131.

Flygare, S. (2006). The Cooperative Challenge Farmer (Cooperation and the Politics of Agricultural Modernization in 21st Century Uganda).

Hansen, M. H., Morrow J. L., & Batista, J. C. (2002). The impact of trust on cooperative membership retention, performance, and satisfaction: an exploratory study. *International Food and Agribusiness Management Review, 5*(1), 41-59.

Holloway, G. (2008). Transation Costs, Cooperatives and Milk-Market development in the East-African Highlands. *Agricultural Economies, 23*, 279-288.

John, L., Adrian, J., & Green, T. W. (2001). Agricultural cooperative managers and the business environment. *Journal of Agribusiness Agricultural Economics Association of Georgia, 19*(1), 17-33.

Latifian, A. (2006). Evaluation of agricultural cooperatives in the Khorasan province in the organizing scattered human resources (suggesting the appropriate methods). *Journal of Humanities and Social Science, 5*(17), 119-144.

Pourseyed, S. B., & Motaharpour, M. (2012). The legal nature of public cooperatives. *Journal of Parliament and Strategy, 19*(7), 200-164.

Saberifar, R. (2012). Investigate the factors affecting the membership and participation of villagers in rural cooperatives. *Geography and Urban Regional Planning, 2*(4), 76-65.

Sedighi, A., & Darvishinia, S. (2002). The success of rural production cooperatives, Mazandaran Province, Iran. *Journal of Agricultural Science, 33*(2), 313-323.

Taleghani, M. (2016). Feasibility study of farmers' participation in the optimal management of the irrigation system (Case Study: The agricultural field of Guilan). *International Journal of Agricultural Management and Development, 6*(1), 61-59.

Taleghani, M., &AsadzadehManjili, S. (2014). *Pathology factors affecting the stability of the relationship between customers and industrial suppliers (Case Study: Wood Industry in Gilan Province)*. First International Conference on of Accounting and Management. 25 February. Tehran.

Trupo, P. S. (2007). Agricultural cooperation and horticultural produce marketing in South west Virginia. Blacksburg, Virginia.

How to cite this article:

Taleghani, M., & Mehdizade, M. (2016). Factors affecting farmers' satisfaction: Case of agricultural production cooperatives in Guilan Province, Iran. *International Journal of Agricultural Management and Development, 6(4), 489-495.*

URL: http://ijamad.iaurasht.ac.ir/article_526705_9a8ad6dcddd1b1d7318459cc857a869c.pdf