



Factors Affecting the Improvement of the Cooperatives Agricultural Education in the Lorestan Province, Iran

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Abstract

Keywords:

Improving, Cooperative, Agricultural Education, Lorestan Province

The purpose of this research was to explore the factors affecting the improvement of the cooperatives agricultural education in the Lorestan province, Iran. The population of study consisted of 832 members of agricultural cooperative in Lorestan province, Iran in which 260 people were selected as a sample size, using Krejcie and Morgan table. The results indicate that more than 66.92 percent of the agricultural cooperative members had Diploma and lower level education, while only 4.23 percent of them educated in MSc levels. In order to assess the factors improving the cooperatives agricultural education in the Lorestan province, 22 statements were designed and asked from members to show their opinions. Based on the results the statement of "the revision of the content presented, based on members " was assigned as the first priority.. In order to classify the factors improving the cooperatives agricultural education in the Lorestan province, factor analysis was used. Based on the results, 5 factors explained 72.56 percent of total variance of improving the cooperatives agricultural education in the Lorestan province. These 5 factors were named after loading variables as: facilitating access to resources, entrepreneurship development and success, the development of educational activities targeted, empowering learners, and the development of educational activities for managers.

1. Introduction

The International Cooperative Alliance defines a cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise". The seven internationally recognized cooperative principles are: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; provision of education, training and information; cooperation among cooperatives; and concern for the community (Ortmann and King, 2007). The United States (US) National Cooperative Business Association (NCBA, 2019) also emphasizes the unique characteristics of cooperatives relative to other (investor-oriented) businesses:

- Cooperatives are owned and democratically controlled by their members (i.e., those that use the cooperative's services or buy its goods) and not by outside investors. Members elect

their board of directors from their ranks. Major policy decisions are based on the one-member, one-vote principle, regardless of each member's investment in the cooperative.

- Cooperatives return surplus income (revenue over expenses and investment) to members in proportion to their use or patronage of the cooperative, and not proportionate to their investment or ownership share.

- Cooperatives are motivated not by profit, but by providing a service to satisfy members' requirements for affordable and quality goods or services.

- Cooperatives exist solely to serve their members.

- Cooperatives pay taxes on income retained for investment and reserves. Surplus revenues are returned, according to patronage, to individual members who pay taxes on that income.

Cooperatives have played an important role in the development of agriculture in industrialized

countries. Cooperatives have also played an important role in rural communities, where they are an integral part of the social fabric (Aref, 2011). Cooperatives are present in all the countries and in almost all the sectors, including agriculture, food, finance, health care, marketing, insurance & credit. A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

Agriculture continues to be the engine of economic growth in most developing countries. Strong cooperatives are able to overcome many of the difficulties faced by the farmers; wherein in a country like developing countries 85% are small and marginal farmers (Virendra Kumar and Wankhede, 2015). Agricultural cooperatives can be classified into service cooperatives or production cooperatives (Lerman, 2013). Production cooperatives involve farmers who operate the cooperative on jointly owned agricultural plots (Chambo, 2009).

Some of the problems faced by agricultural cooperatives have been, among others, poor management, lack of capital resources, inadequate training, extension and education programmes, lack of communication and participation among members, feudalistic characteristics of society, unclear and inadequate government policies on the development of agricultural cooperatives, high fragmentation of land holdings, and weak linkages among the activities of the cooperatives e.g., production, credit, marketing etc (Ghorbani et al, 2018; Prakash, 2003). Agricultural cooperatives greatly contribute to poverty reduction by offering an inclusive and democratic avenue for economic growth. Cooperatives are key economic players for improving food security. The challenge is to build self-reliant organizations that operate efficiently within a market economy and contribute to improving incomes, creating employment opportunities and integrating small producers (Ruete, 2014).

International organizations such as the United Nations (UN), the World Bank and the International Labour Organization (ILO) are convinced that agricultural cooperatives can play a vital role in achieving sustainable rural development (Adefila, 2014). ICA/ILO (2003) noted that co-operatives are by nature concerned with democratic and human values as well as caring for the environment. Furthermore co-operatives are catalysts for social organization and cohesion (Calkins and Ngo, 2005).

The agricultural production cooperatives have an important mission in agricultural sector, that include the improve productivity of the village,

preventing the migration of rural people to urban region and create balance in the development of rural areas. The agricultural cooperatives have a useful tool for working people and cooperatives play an important role in achieving sustainable development. And also cause to enhance rural people's ability to boost the development of rural areas (Taherkhani, 2007).

In Iran in 2018 year the numbers of 3857 new cooperative companies have been registered in the country for various business activities. On average, more than 11 cooperatives are formed and registered in the country each day and their operating status is being exploited. The total number of members of these cooperatives is 72324 members and the number of employees is 61986 person, with initial capital of about 889 billion Rial (Ebadzadehet al., 2018). Cooperative organizations plays an important role in improve the quality of work, especially in agricultural sector. Cooperative can be identified as an autonomous, association of persons united voluntarily to meet their common, economic, social and cultural needs and aspirations through jointly owned and democratically controlled enterprise (Salehi and Rasouliazar, 2019).

2. Materials and methods

The purpose of this research was analysis of the factors improving the cooperatives agricultural education in the Lorestan province, Iran. The population of study consisted of 832 members of agricultural cooperative in Lorestan province, Iran in which 260 people were selected as a sample size, using Krejcie and Morgan table.

In order to gathering the information, the questionnaires' was prepared and validated by the judgment of the experts in agricultural extension. The reliability of the main scales of the questionnaires' was examined by Cronbach Alpha coefficients, which ranged from 0.714 to 0.948, indicating the tool of study is reliable. The method of research was a correlative-descriptive. The data were analyzed by SPSS version 20.0. Appropriate statistical procedures such as frequency, percentage, mean, standard deviation and correlation coefficient were applied to analyze the data. In order to measure the factors improving the cooperatives agricultural education in the Lorestan province, different appropriate scales were developed and included in the final format of the questionnaire.

The responses to each item of the scales were obtained on a five-point continuum viz., very agree, agree, no idea, disagree and very disagree with the scores of, one, two, three, four and five, respectively. Then a total score was calculated for different scales by summing up the item's assigned

scores, which indicated overall score for factors improving the cooperatives agricultural education.

3. Results and discussion

3.1 Personal Characteristics

Results showed that the mean of the agricultural cooperative members' age was about 47 years old with a standard deviation of 6.54 years old. Table 1 shows the education levels of the agricultural cooperative members. The results indicate that more than 77.4 percent of the agricultural cooperative members had Diploma and lower level education, while only 4.23 percent of them educated in MSc levels.

3.2 Ranking the factors improving the cooperatives agricultural education

In order to assess the factors improving the cooperatives agricultural education in the Lorestan province, 22 statements were designed and asked from members to show their opinions. Based on the results, table (2) is provided. It presents the mean, standard deviation and then, items were ranked by using the coefficient of variation on respondents' views, and it also shows the frequency responses of entire population of study about each item. The statement "The revision of the content presented, based on members " is allocated as first priority. In this item, 61 person of respondents were very agree, 53 person were agree, 36 had no idea, 75 person were

disagree and 35 person were very disagree. Based on the results the items of facilitating access to resources and equipment for contacts and diversification of educational and productive activities based on their interests and needs assigned in the two to third priority, respectively.

3.3 Factors Analysis

In order to classify the factors improving the cooperatives agricultural education in the Lorestan province, factor analysis was used. In this term, 22 items were designed and evaluated the statements in the correlation matrix. Bartlett and Kaiser-Meyer-Olkin (KMO) tests were used to fit the data for factor analysis (Table 3). The KMO coefficient was equal to 0.896 which indicates perfect correlation between the data for analysis.

Table (4), shows the number of factors that are statistically significant for the analysis and mentioned 5 factors with eigen values greater than 1. Variables explained 72.56 percent of total variance and 27.44 percent of the remaining variance was related to factors that were not identified through factor analysis. These 5 factors were renamed after loading variables as: Facilitating access to resources, entrepreneurship development and success, the development of educational activities targeted, empowering learners, and the development of educational activities for managers.

Table 1. Frequency distribution of agricultural cooperative members based on personal characteristics.

Personal Characteristics	Frequency	Percent	Cumulative Percent
Age			
20-30	55	21.1	21.1
30-40	40	15.3	36.4
40-50	54	20.7	57.1
50-60	53	20.3	77.4
60-70	32	12.3	89.7
70-80	17	6.5	96.2
80-90	9	3.4	100
Education level			
Illiterate	47	18.08	18.08
Lower than Diploma	59	22.69	40.77
Diploma	88	33.85	74.62
BSc	55	21.15	95.77
MSc	11	4.23	100

Table 2. Statements improving the cooperatives agricultural education in the Lorestan province, Iran

Statements	1	2	3	4	5	Mean	Sd	CV	Rank
The revision of the content presented, based on members	35	75	36	53	61	3.12	0.53	0.29	1
Facilitating access to resources and equipment for contacts	35	58	34	56	77	3.32	0.56	0.31	2
Diversification of educational and productive activities based on their interests and needs	62	18	73	62	45	3.04	0.67	0.37	3
Using appropriate methods to empower learners.	75	16	68	34	67	3.01	0.8	0.44	4
Supplies to cooperatives.	15	52	41	74	78	3.51	0.8	0.44	5
Comments and ideas to improve the education provided to learners.	32	56	86	65	21	2.95	0.81	0.44	6
Establishing rewards for the best in education.	66	36	84	57	17	2.7	0.82	0.45	7
Suitable for training with practical equipment.	52	45	95	23	45	2.86	0.83	0.45	8
Visitors successful people in their field of expertise.	23	36	96	59	46	3.27	0.87	0.45	9
Providing incentives to attend classes.	52	85	75	31	17	2.52	0.9	0.49	10
Providing consultants to help learners at all stages.	31	95	69	35	30	2.76	0.9	0.49	11
Successful people use as an educator in the field of entrepreneurship.	38	65	16	94	47	3.18	0.9	0.5	12
Strengthen the entrepreneurial spirit in learners.	26	68	65	86	15	2.98	0.94	0.51	13
The exhibition of production in order to attract investors.	12	74	28	86	60	3.42	0.97	0.53	14
Facilitating access to information resources to initiate and continue production.	24	23	67	97	49	3.48	0.97	0.53	15
Quality improvement of educational facilities.	42	42	95	12	69	3.09	0.98	0.54	16
Improve the skills and expertise of executives through specialized courses.	94	5	65	65	31	2.75	1.08	0.59	17
Providing the initial capital after having extensive training.	75	26	23	103	33	2.97	1.11	0.6	18
Only to participate in training courses.	41	10	62	112	35	3.35	1.2	0.65	19
Using successful individuals as a consultant in the field of entrepreneurship.	25	35	95	95	10	3.12	1.26	0.69	20
Improving the quality of education provided.	14	45	94	94	13	3.18	1.26	0.69	21
Classes at the time and the season.	12	18	58	124	48	3.67	1.4	0.76	22

1=very agree, 2=agree, 3= no idea, 4= disagree and 5= very disagree

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.896
Bartlett's Test	7.126
Significance	0.000

Table 4. Initial Eigen values for determine the number of factors

Rank	Component	Initial Eigenvalues		
		Eigen values	% of Variance	Cumulative %
1	Facilitating access to resources	6.56	26.24	26.24
2	Entrepreneurship development and success	5.01	20.04	46.28
3	The development of educational activities targeted	3.12	12.48	58.76
4	Empowering learners	1.89	7.56	66.32
5	The development of educational activities for managers	1.56	6.24	72.56

Table 5. Improvement factors education in agricultural production cooperatives in the form of the main factors after the rotation factor

Factors	Statements	Factor loading
Facilitating access to resources	Facilitating access to resources and equipment for learners.	0.556
	After receiving extensive training to provide seed capital.	0.765
	Providing incentives to attend classes.	0.632
	Suitable for training with practical equipment.	0.698
	Providing necessary equipment cooperatives.	0.618
	The exhibition of production in order to attract investors.	0.615
	Establishing rewards for the best in education.	0.752
	Facilitate access to sources of information and continue working to start production.	0.523
Entrepreneurship development and success	Using successful individuals in the fields of entrepreneurship as a consultant.	0.614
	Providing consultants to help learners at all stages.	0.630
	Using successful individuals in the fields of entrepreneurship as a teacher.	0.781
	Visitors successful people in their field of expertise.	0.723
	Strengthen the entrepreneurial spirit in learner.	0.751
The development of educational activities targeted.	The opinions and views of learners to improve education.	0.652
	Only to participate in training courses.	0.854
	Diversification of educational and productive activities based on their interests and needs.	0.867
	The proposed revision of the content based on learners.	0.715
Empowering learners	Using appropriate methods to empower learners.	0.751
	Quality improvement of educational facilities.	0.856
	Improving the quality of education provided.	0.745
The development of educational activities for managers	Classes as holding during the appropriate season.	0.795
	Improve the skills and expertise of executives through specialized courses.	0.865

4. Conclusion and Recommendations

The purpose of this research was to explore the factors improving the cooperatives agricultural education in the Lorestan province, Iran. Results show that the mean of the agricultural cooperative members' age was about 47 years old with a standard deviation of 6.54 years old. Table 1 shows the education levels of the agricultural cooperative members. The results indicate that more than 66.92 percent of the agricultural cooperative members had Diploma and lower level education, while only 4.23 percent of them educated in MSc levels. In order to assess the factors improving the cooperatives agricultural education in the Lorestan province, 22 statements were designed and asked from members to show their opinions. Based on the results the statement "the revision of the content presented, based on members" was allocated as first priority. In this item, 61 person of respondents were very agree, 53 person were agree, 36 had no idea, 75 person were disagree and 35 person were very disagree. Based on the results the items of "facilitating access to resources and equipment for contacts and diversification of education" and "productive activities based on their interests and needs" was assigned in the two to third priority, respectively. In order to classify the factors improving the cooperatives agricultural education in the Lorestan province, factor analysis was used. In this item, 22 statements were designed and evaluated in the correlation matrix. Bartlett and Kaiser-Meyer-Olkin (KMO) tests were used to fit the data for factor analysis (Table 3). The KMO coefficient was equal to 0.896 which indicates perfect correlation between the data for analysis. Table (4), shows the number of factors that are statistically significant for the analysis and mentioned 5 factors with eigen values greater than 1. Variables explained 72.56 percent of total variance and 27.44 percent of the remaining variance was related to factors that were not identified through factor analysis. These 5 factors were renamed after loading variables as: Facilitating access to resources, entrepreneurship development and success, the development of educational activities targeted, empowering learners, and the development of educational activities for managers.

ACKNOWLEDGMENTS:

This paper is part of MSc thesis of Elahe Rashidipour graduate student of agricultural extension department, Shoushtar branch, Islamic Azad University. Thus, appreciate of professors and lectures of agricultural extension department.

References

1. Adefila, J. O. (2014). Farmers' Cooperatives and Agricultural Development in Kwali Area Council Federal Capital Territory Abuja, Nigeria. *International Journal of Humanities and Social Science*, 7(1), 161-169.
2. Aref, F. (2011). Agricultural Cooperatives for Agricultural Development in Iran. *Life Science Journal*, 8(1), 82-85.
3. Calkins, P and Ngo, A. (2005). The Impacts of Farmer Cooperatives on the Standard of Living of Cocoa Producing Villages in Cote d'Ivoire and Ghana. Canada: Society de Cooperation pour le Development International. Retrieved August 8, 2015 <http://socodevi.org/contenu/prospecteur/uploads/Cocoa-Cooperatives-and-Well-being-20051130.pdf>
4. Chambo, S. A. (2009). Agricultural Cooperatives: Role in food security and rural development. Moshi University College of Cooperative and Business Studies. Tanzania. Retrieved August 22, 2015 from <http://www.un.org/esa/socdev/egms/docs/2009/cooperatives/Chambo.pdf>
5. Ebadzadeh, H., Ahmadi, K., Mohamadnia, Sh., Abastaleghani, R., Abasi, M and Yari, Sh. (2018). Statistics of Agricultural Jihad. Deputy of Planning and Economic Affairs. Information and Communication Technology Center. Tehran.
6. Ghorbani, A., Mousaei, M., Arayesh, M. (2018). Identify Variables Affecting Rural Participation in Forest Cooperatives (A case study of Ilam city). *International Journal of Agricultural Science, Research and Technology in Extension and Education Systems*, 8(4), 199-210.
7. ICA/ILO. (2003). The role of cooperatives in designing and implementing poverty reduction strategies. Geneva.
8. Lerman, Z. (2013). Cooperative development in Central Asia (FAO Policy Studies on Rural Transition No. 2013-4). Retrieved August 8, 2015 <http://www.fao.org/docrep/018/ar425e/ar425e.pdf>
9. NCBA. (2019). The Report of National Cooperative Business Association. Retrieved August 19, 2019 <http://www.ncba.org/>
10. Ortmann, G.F and King, R.P. (2007). *Agricultural Cooperatives I: History, Theory and Problems*, Agrekon, 46(1), 40-68.
11. Prakash, D. (2003). Development of Agricultural Cooperatives-Relevance of Japanese Experiences to Developing Countries. Paper presented at the 14th ICA-Japan International Training Course on "Strengthening Management of Agricultural Cooperatives in Asia" held at IDACA-Japan on April 18 2000. Rural Development And

Management Centre 'The Saryu', J-102 Kalkaji, New Delhi 110019. India February 2003.

12. Ruete, M. (2014). Inclusive Investment in Agriculture: Cooperatives and the role of foreign investment. International Institute for Sustainable Development International Environment House 29, Chemin de Balexert, 5th Floor, 1219, Chatelaine, Geneva, Switzerland.

<http://www.iisd.org/sites/default/files/publications/inclusive-investment-in-agriculture-en.pdf>

13. Salehi, A., Rasouliazar, S. (2019). Determining the Factors Effective the Effectiveness of Agricultural Mechanization Cooperatives by Confirmatory Factor Analysis. *International Journal of Agricultural Science, Research and Technology in Extension and Education Systems*, 9(4), 189-197.

14. Virendra Kumar, K.G and H.C. Wankhede, 2015. Role of Cooperatives in Improving Livelihood of Farmers on Sustainable Basis. *American Journal of Educational Research*, 3(10), 1258-1266.