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Investigating the Success Factors of Poultry Growers' Cooperatives in Iran's Western Provinces

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Abstract: The general purpose underlying this study is to investigate the factors involved in the success of poultry growers' cooperatives in the provinces of Western Azarbayjan, Ilam, Hamedan, Khuzistan and Kohgilouyeh and Boweir Ahmad. Using the cluster sampling method and the Cochran's formula, 21 cooperatives and their members and mangers were selected from among 21 cooperatives with 1305 members. Statistical tests revealed that the concepts employed in the study enjoyed a high level of validity and reliability. The results indicate that the cooperatives studied have generally failed to achieve the objectives mandated in their constitutions which include their members' satisfaction. The results from path analysis showed that the following factors, in a descending order of importance, had the greatest effects on cooperative success: managers' technical skills, number of training programs attended, quality of training programs offered, members' participation in cooperatives' administrative affairs and managers' interpersonal human skills.

Key words: Cooperatives · Agriculture · Poultry growing · Success · Iran · West Azerbayjan · Ilam · Hamedan · Khuzistan · Kohguiloyeh and Bowerir Ahmd

INTRODUCTION

Man's greatest socio-economic achievements have only become possible through public participation and group collaborative work. Cooperatives account as one of the different legal forms of mobilizing communities' collaborative activities which, compared with other possible institutions, draw more heavily on the human aspects of social activities. Facts about the Iranian agricultural sector indicate that this sector is still in its weakest stage of infancy in terms of number of guilds established [1].

This paper is based on fieldwork and strives to study the characteristics of the work force of cooperatives as their most important "intra-organizational" component. Along these lines, such variables as "members' knowledge of cooperative philosophy and principles", "member participation in cooperative administration", "importance of labor training" and "cooperative managers' capabilities and technical skills" will be investigated as the most important factors involved in the success of cooperatives, which serves as the independent variable in the present study.

The findings of a number of studies on Iranian agricultural cooperatives including Aghajani Varzaneh, Safari Shali, Karami and Rezai Moghaddam, as well as Amini and Ramezani indicate the failure of these cooperatives to achieve their constitutional mandates [2-7].

With respect to the factors involved in the success of cooperatives, the findings in John et al indicate that members' knowledge of cooperative principles and commitment to these principles are the most effective parameters in a cooperative's success [8].

Amodo also maintains that members' enhanced knowledge of cooperative values and principles is one of the decisive factors in a cooperative's success [9]. Darvishinia, Amini and Ramezani and Cobia found members' participation in cooperative administration to be a major contribution to cooperatives' success [3,4,6,10,11]. US Department of Agriculture also emphasizes the importance of member participation in cooperatives' success, assuming participation to arise from members' knowledge of and commitment to cooperative principles [12]. Australian Agricultural Council stresses the direct relationship between members' participation and the

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cooperative's success, again taking member participation to rely on their knowledge and commitment to cooperative principles [13].

Sarsakhti Eraghi regards the human and management factor as the one with an undisputed effect on cooperatives' success [14]. Zhu and Leonard declared the inadequate management, individualistic attitude and ignorance of cooperative principles on the part of members as the barriers against cooperative success [15]. In addition to members' knowledge of cooperative principles and their commitment to them, Russoa *et al.* regard the human and management factor effective in cooperatives' success [16]. Bhuyan finds lack of commitment to cooperative principles and lack of powerful managers among members strong barriers to a cooperative's success [17].

Amini and Safari Shali and Amini and Ramezani found the training of all elements involved to be important in a cooperative's success while Bruynis restricted this to only managers and cooperative staff [3,4,6,18,19]. Rodrguz also found insufficient technical training as a serious limiting factor in the development of cooperative activities [19]. Findings of Aghajani Varzaneh, Amini and Safari Shali, Amini, Ramezani, Ahmadi, as well as Amini and Ramezani all indicate that training is indeed one of the most important factors effective in the success of cooperatives [2,3,4,6,18,20].

MATERIALS AND METHODS

Once a theoretical framework was formulated and the indexes were constructed, the management by objective, self-appraisal and rating scales methods were employed to evaluate the agricultural cooperatives under study [3]. Along the lines of the objectives of the present study, members and managers of the poultry growers' cooperatives in the western provinces of Iran were used as the statistical population. As cooperative managers comprised a small statistical population, all executive managers and cooperative board members were included in the statistical population. Moreover, since some members were not available to take part in this study, the views of 50 subjects from the population (40%) were ultimately used in our analyses. Also from among the 35 cooperatives operating in the provinces under study, only 21 were selected for study due to limitations in research funding available. The cluster sampling method was used in the selection of the cooperatives [21] and the Cochran's formula for the estimation of the statistical population [22]. Thus, from among 1305 members of 21 cooperatives, 171 subjects were selected for the study and the relative assignment formula was used for stratum assignment of the samples [23].

The two methods of documentary and field study were used for data collection. In the field study, the data were collected using the direct observation method consisting of both extensive and profound observations as well as the survey method. For this purpose, two types of (researcher) structured questionnaires were designed and used to evaluate the views of the cooperative managers and members.

In the present study, the success rate of the cooperatives in achieving their objectives, as the dependent variable and intra-organizational factors including management and human factors, as the independent variables, were used to determine the effect of the factors on the cooperatives' success. The correlation index construction was used to define and evaluate the effect of each of the above concepts on the success of the cooperatives under study. Using the constitution of the cooperatives, the poultry growers cooperatives were evaluated in terms of the five major components in their constitutions, namely "supplying the input requirements to members", "market regulation" and "providing technical, economic and training services". For other indices, a number of questions were designed that were capable of measuring the conceptual framework of the structure in question. The dependent variable and a number of the independent ones were themselves composed of a number of Likert scale and discrepancy variables, which were measured using the scaling and AHP methods to convert objective measures into subjective ones.

The validity and reliability of the indices used were tested both in the pilot study and after the completion of the study. The Cronbach's alpha coefficient was used for the reliability test and the Kaiser-Meyer-Olkin (KMO) coefficient was used for the validity test. Generally speaking, the questions designed for mangers and members enjoyed a high level of validity and reliability and showed the required adequacy in constructing the concepts required.

Finally, the regression method was used to determine the simultaneous interactions of background variables and the intra-organizational ones on the success of the poultry growers' cooperatives.

RESULTS AND DISCUSSION

In the first step, the cooperatives' achievement of their constitutional objectives was evaluated by the managers and members as a dependent variable, which

Table1: Evaluation of the services provided to members by poultry growers' cooperatives operating in the west of Iran

	Services									
	Training		Economic		Market regulation		Technical		Input supply	
Evaluation	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
None	3	1.4	31	14	29	13.1	53	24.0	92	41.6
Poor and very poor	158	71.5	166	75.1	157	71.0	135	61.1	86	38.9
Medium	56	25.3	17	7.7	30	13.6	28	12.7	32	14.5
Good and Very good	4	1.8	7	3.2	5	2.3	5	2.3	11	5.0
Total	221	100.0	221	100.0	221	100.0	221	100.0	221	100.0
Means comparison test	5.22		3.75		3.69		2.19		1.53	

Table 2: Success of the poultry growers' cooperatives operating in the west of Iran as evaluated by members and managers

	Members		Managers		Total	
Success	Quantity	%	Quantity	%	Quantity	%
Poor and very poor	163	95.6	45	90.0	208	94.2
Medium	7	4.0	5	10.0	12	5.4
Good and Very good	1	0.6	0	0.0	1	0.5
Total	171	100.0	50	100.0.0	221.0	100.0
Means comparison test						

comprised the five objectives of "supplying input requirements of the members", "market regulation", "and providing technical, economic and training services". The results are summarized in Table 1.

According to Table 1, most members and managers evaluated the cooperatives' performance in the areas mentioned poor and very poor. The results of the means comparisons revealed that these cooperatives invested more of their efforts in supplying inputs whereas their performance has been evaluated as very poor with regard to providing technical services and market regulation as well as economic, technical and training services, in a descending order. The weighted sum of the above structures was used to determine the success of the cooperatives as presented in Table 2.

The data in Table 2 reveals that over 94% of the members and managers evaluated the success of their respective cooperatives in achieving the constitutional objectives to be low and very low.

Following the evaluation of cooperatives' success, the independent variables affecting this success were evaluated. The results obtained are presented in Table 3.

The data in Table (3) shows that 63.8% of the members and managers had no knowledge of cooperative principles. The means comparisons indicate that no significant relationship exists between members' knowledge of cooperative principles and that of the managers.

Members' participation in cooperative administration was evaluated to be medium. Compared to members, managers gave a higher score to member participation than the members themselves; this difference was significant at 99% confidence level.

Technical skills of the managers was evaluated at a medium level. Members, compared with managers, gave lower scores to managers' technical skills than the managers themselves. This difference was significant at 99% confidence level.

In evaluating human interpersonal skills of managers, more weight is normally given to such traits as value system, human behavior and their ethical behavior. It is probably unreasonable therefore to base our judgment on managers' self-evaluation. Thus, we considered only members' evaluation of the mangers for this index. According to the results obtained, evaluation of managers' skills and management capabilities was at the medium and good levels. The results of the means comparisons revealed that managers' management skills had been evaluated to be higher than their technical skills.

The results on managers' and members' educational qualifications and training programs attended revealed that most members of poultry growers' cooperatives

Table 3: Evaluation of the independent variables of the present research and comparison of their means as evaluated by the members and managers of the poultry growers' cooperatives operating in the west of Iran as evaluated by members and managers

		Members		Managers		Total		Means comparison test		
		Quantity	%	Quantity	%	Quantity	%	Members	Managers	test
Understanding cooperative principles	None	108	63.2	33	66.0	141	63.8	111.0	111.1	ns
	Poor and very poor	63	36.8	13	26.0	76	34.4			
	Medium	0	0.0	4	8.0	4	1.8			
	Total	171	100.0	50	100.0	221	100.0			
Member participation in the cooperative affairs	Poor and very poor	58	33.9	3.0	6.0	61	27.6	100.0	148.7	***
	Medium	71	41.5	25.0	50.0	96	43.4			
	Good and Very good	42	24.6	22	44.0	64	29.0			
	Total	171	100.0	50	100.0	221	100.0			
Technical Skills of Managers	Poor and very poor	55	32.2	14	28.0	69.0	31.3	127.9	53.1	***
	Medium	72	42.1	17	34.0	89	40.3			
	Good and Very good	44	25.7	19	38.0	63	28.5			
	Total	171	100.0	50	100.0	221	100.0			
Interpersonal Skills of Managers[1]	Poor and very poor	23	13.5			23	13.5			
	Medium	68	39.8			68	39.8			
	Good and Very good	81	47.4			81	47.4			
	Total	171	100.0			171	100.0			
Education	Elementary and Guidance School	74	43.3	11	22.0	85	38.5	94.6	124.7	*
	High School and Diploma	77	45.0	24	48.0	101	45.7			
	Vocational Diploma and BS and Higher	20	11.7	15	30.0	35	15.8			
	Total	171	100.0	50	100.0	221	100.0			
Training	No training received	123	71.9	43	86.0	166	75.1	111.0	111.1	ns
	Training received	48	28.1	7	14.0	55	24.9			
	Total	171	100.0	50	100.0	221	100.0			
Training Quality	Poor and very poor	7	14.6	0	0.0	7	12.7	114.0	100.6	*
	Medium	18	37.5	1	14.3	19	34.5			
	Good and Very good	23	47.9	6	85.7	29	52.7			
	Total	48	100.0	7	100.0	55	100.0			

1- Interpersonal Skills of Managers have been evaluated from the member's point of view

*, ** and *** Significant at 90%, 95% and 99%, respectively

received only primary or high school education and that 75% of them never received any training. Managers in charge of cooperative management received less training than the members. This difference was significant at 99% confidence level. The quality of the training offered was also evaluated. The results indicate their relatively satisfactory quality.

The advantages of the cooperatives for the members, managers, organizations and the public were also investigated. Both members and managers had a good and positive evaluation of the advantages of cooperatives and recommended their existence.

The path analysis method and the multivariate regression technique were used to investigate the effect of independent variables on the success of cooperatives (dependent variable). The independent variables that were theoretically expected to bear any effect on the dependent variable were inputted into the model to investigate their possible relationships with the cooperative success. Each of the inputted independent variables, in turn, was affected by other factors whose effects were investigated through multivariate regression. The results obtained are summarized in Table 5.

According to Table 6, the value of Fischer statistic was quite significant at 99% confidence level, which indicates a significant relationship between the independent variables introduced into the model and the dependent one. The value of R2 is also indicative of an

Table 4: Evaluation of the advantages of the poultry growers' cooperatives operating in the west of Iran for members, managers, organizations and the public

	Members		Managers		Organizations	
Profitability for:	Quantity	%	Quantity	%	Quantity	%
Poor and very poor	19	8.6	3	1.4	8	3.6
Medium	38	17.2	40	18.1	51	23.1
Good and Very good	164	74.2	178	80.5	162	73.3
Total	221	100.0	221	100.0	221	100.0

Table 5: Multivariate regression to identify the factors involved in cooperatives' success

	Dependent Variable		
Independent Variable	Success	Participation	Managers' technical skills
Member participation in the cooperative affairs	0.3**		
Number of training courses offered	4.6***		
Managers' technical skills	0.6***	0.3***	
Age (Experience)	-3.4***	1.7**	
Formal education		1.4**	
Members investment in cooperatives		1.3***	
The advantages of the cooperatives for the members		1.4***	
Training Quality			0.51*
Interpersonal Skills of Managers			1.21***
Constant	17.37***	8.56**	15.74***
R	0.53	0.51	0.428
R^2	0.284	0.26	0.183
F	12.67***	13.38***	15.45***
df	132.00	193.00	140.00

*, ** and *** Significant at 90, 95 and 99%, respectively

Table 6: Explanation of the direct and indirect effects of independent variables on the final concept of the study (cooperative's success)

Variable	Direct Effects	Indirect Effects	Total
Member participation in the cooperative affairs	1.67		1.67
Number of training courses offered	3.56		3.56
Managers' technical skills	3.28	0.30 * 1.67	3.78
Age (Experience)	-2.21	0.15 * 1.67	-1.96
Formal education		0.16 * 1.67	0.27
Members investment in cooperatives		0.26 * 1.67	0.43
The advantages of the cooperatives for the members		0.24 * 1.67	0.40
Training Quality		0.14 * 3.28	0.46
Interpersonal Skills of Managers		0.41 * 3.28	1.34

average value of variance of the dependent variable explained by the independent variables introduced into the model. The value of R2 is normally rather low in social studies due to the vast number of factors involved and because it is typically difficult to identify and explain all these factors in a single study [21].

In order to accurately measure the effect of each variable on the success of cooperatives, the direct and indirect effects of the factors were independently evaluated as reported in Table 6.

The data in Table 6 indicates that managers' technical skills, number of training programs offered, quality of training, member participation and the interpersonal skills of the managers have the greatest effect on the success of cooperatives.

The results of the present study can be summarized as follows:

- The poultry growers' cooperatives in the west of Iran do not have a very successful record in achieving their objectives;
- Members and managers of these cooperatives possess little, if any, knowledge of cooperative principles and objectives;
- Member participation in cooperative administration is evaluated at a medium level. This factor directly affects their success with a factor of 1.67. The results obtained from path analysis shows that member participation depends on such variables as age, education, level of investment by each member, usefulness of the cooperative to members and the technical skills of the managers;
- The level of managers' interpersonal skills was evaluated to be higher than their technical skills. The results of path analysis showed that technical skill was positively effective in the cooperatives' success with a factor of 3.78 and interpersonal skills with a factor of 1.34. The findings of the present study also show that enhanced quality of training programs will lead to enhanced manager technical skills.
- The mean educational background of cooperative managers was found to be at high school level, which is undoubtedly inadequate for a technically demanding activity such as poultry growing which requires special capabilities. This is compounded by the observation that over one third of the members and more than half of the managers had never received any training in their field of activity. Through the intermediate concept of member participation, education was found to be positively effective in cooperatives' success with a factor of 0.27. The results of path analysis revealed that the quality of training programs could also affect cooperatives' success with a factor of 0.287.

RECOMMENDATIONS

The following recommendations can be formulated on the basis of the findings from the present study:

- Since the human force currently working for poultry growers' cooperatives fails to possess the quality level required for a job as technical as poultry breeding, it is essential to adopt long-term strategies and policies to enhance the quality of such workforce. Continuous training appropriate to the needs and demands of poultry breeders will be a must in order to empower these cooperatives.
- The success of cooperatives relies heavily on the skills of their managers. Since cooperative managers lack the technical and, in some cases, interpersonal skills required, training of managers will be necessary to guarantee cooperatives' success in achieving their objectives.
- Encouraging members to participate in administrative activities of the cooperatives will entail numerous benefits for them. Promoting member participation requires its own appropriate procedures. Raising awareness among members of the philosophy and capabilities of cooperatives may be achieved through official, casual and mass education.
- As we showed that member participation is a direct effect of managers' skills, it follows that managers should be taught and trained on public participatory methods in order for them to mobilize all members toward achieving their cooperative's objectives.

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