

## Are Agricultural Production Cooperatives Successful? A Case Study in Western Iran

<sup>1</sup>Kiumars Zarafshani, <sup>1</sup> Farough Rostamitabar,  
<sup>2</sup>Gholam Hossein Hosseininia, <sup>3</sup>Morteza Akbari and <sup>4</sup>Hossein Azadi

<sup>1</sup>Department of Agricultural Extension and Rural Development, Razi University, Kermanshah, Iran

<sup>2</sup>Deputy of Research, Education and Extension, Ministry of Cooperative, Tehran, Iran

<sup>3</sup>Department of Agricultural Extension and Education, Tehran University, Tehran, Iran

<sup>4</sup>Leiden Institute for Area Studies (LIAS), Faculty of Humanities, Leiden University, The Netherlands

**Abstract:** Agricultural Production Cooperatives (APCs) in Iran have nearly a forty-year history. In the last decades, the Ministry of Agri-Jihad has devoted a considerable amount of time and budget to promote and establish APCs in order to alleviate rural poverty. The purpose of this study was to assess the rate of APCs' success in Kermanshah province in Iran. Using stratified random sampling, 311 members were selected across six APCs. A researcher-made questionnaire was used to collect data. Results revealed that the members have positive attitude towards the APCs. However, they were not very satisfied with the management of the APCs. Also, the APCs were not successful in fulfilling their members' needs. Given the gradual decline of both cooperative membership and the number of cooperatives in Iran, a good understanding of APCs success factors is necessary because a cooperative's success may depend on it.

**Key words:** Agricultural production cooperatives • Cooperatives • Success • Development • Kermanshah

### INTRODUCTION

It is generally believed that successfully managed Agricultural Cooperatives have great potential in agricultural development in particular and rural development in general. The most important agricultural cooperative types in Iran are Agricultural Production Cooperatives (APCs). These cooperatives have nearly forty-year history and were established to increase the production of large number of small and fragmented production units that were the consequences of the 1962 Land Reform [1]. Despite their apparent growth in number, some APCs have been successful and some have been faced with a number of emerging issues and problems. Literature on the impacts of APCs in Iran clearly indicates that APCs have been effective in satisfying economic and technical needs of member-producers<sup>1</sup> [2,3] land consolidation [4, 5, 3] distribution of agricultural inputs and promoting agriculture related industry [6-8]. However, a more recent study by Amini and Ramezani [9] among poultry growers show that these cooperatives have failed to keep their member-producers satisfied. Although their study focused on western provinces in

Iran, this paper investigates factors contributing to the success of Agricultural Production Cooperatives (APCs) in western province of Iran. This analysis is important because as Torgerson [10] has pointed out, research is essential to learning about the success and failure of cooperatives. Moreover, an examination of the link between factors that influence the success of APCs is expected to reveal information that is crucial to improving the management of agricultural and non-agricultural cooperatives.

A number of studies have examined various key issues contributing to success and failure of agricultural cooperatives. For example, Hakelius [11] notes that a vital part of any cooperative organization is its members and their active participation in and loyalty to the cooperative are integral for its success. Unal *et al.* [12] findings among fishery cooperatives in Turkey revealed that financial, organizational, educational and legislative problems are fundamental reasons for failure of almost all fishery cooperatives. In addition, lack of interest from the membership was found to be essential in cooperative's success. Bhuyan [13] determined the "people" factor in cooperatives and argued that without active members'

<sup>1</sup>Those farmers who are members of the APCs.

**Corresponding Author:** Kiumars Zarafshani, Department of Agricultural Extension and Rural Development, Razi University, Kermanshah, Iran

participation and members' satisfaction, cooperatives cannot survive in the long run. Moreover, his analysis indicated that a good understanding of members' attitudes and behaviors is necessary because a cooperatives' success may depend on it.

Moreover, Dakurah *et al.* [14] noted that members' attitude towards their cooperatives is the single most important and significant predictor of their patronization behavior. In a study of farmer-owned cooperative organizations, Wadsworth [15] concluded that effective members' relations and communication between members and management are essential for a cooperative's success. Ozdemir [16] compared three types of agricultural cooperatives in Turkey and concluded that members' perception of democratic administration, awareness of cooperative principles and frequency of visits to cooperatives by managing directors are the key determinants of success among agricultural development cooperatives. Adhering to cooperative principles, Gunn [17] revealed that the impact of competition among agricultural cooperatives may be mitigated by the attachment that members have to cooperative principles and cooperation among cooperatives. Cooperative principles have also been challenged by cooperative members' heterogeneity in farm size, cultural background and farm technology and practices.

This heterogeneous membership according Hovelaque *et al.* [18] affects the relationship between agricultural cooperatives and their members, which in turn influences members' satisfaction towards cooperative management. Karantininis and Zago [19] suggest that if cooperatives do not develop new approaches to cope with member heterogeneity and disengagement, they will only attract unsatisfied and inefficient producers. Low level of satisfaction among cooperative members may demotivate them in collective action and thus cause cooperatives to fail. Abdelrahman and Smith [20] reported that some agricultural cooperatives in Sudan have not been successful. They attributed this failure to the lack of members' motivation in collective action.

Factors contributing to success and failure of cooperatives are not limited to those mentioned above; other explanations have also been offered. In a qualitative analysis of success and failure determinants of agricultural cooperatives in Central Kenya, Nyoro and Ngugi [21] noted that economic factors such as high-quality produce, appropriate skills and education of management committee and staff members contributed to the success of cooperatives. In addition, debt burden, wrangles, hostilities and vulnerability to competition were closely associated with unsuccessful cooperatives. The above mentioned discussion makes it clear that determinants of success among agricultural cooperatives are multifaceted. Therefore, the main objective of this study was to explore factors contributing to the success of Agricultural Production Cooperatives (APCs) in Western part of Iran. The specific objectives were to: 1) understand the members' attitudes towards the APCs; 2) comprehend the members' satisfaction towards the APCs' management; 3) determine the rate of success among APCs; and 4) the success differences among the APCs.

**Methodology:** A mixed-method approach including both quantitative and qualitative techniques [22] was used to assess the success of APCs. The study population consisted of all member-producers (in short members) in 18 APCs across Kermanshah Province in Western Iran. The cooperatives were selected for their geographical locations while mainly focusing on their success. Using a stratified random sampling, a total of 311 members from Zagros (n = 38), Nilofar (n = 35), Anahita (n = 70), Zahab (n = 52), Baharan (n = 51) and Talash (n = 65) were interviewed to assess their cooperatives in terms of internal and external success (Table 1).

A researcher-made questionnaire was used to collect data. The first part of the questionnaire was related to demographic characteristics of members. The second part of the questionnaire measured members' attitude toward APCs. Researchers have found that members' attitudes play a significant role in members' behavior toward their

Table 1: The study sample

Townships	APCs' name	Number of villages covered	Number of members	Covered area (ha)	Number of sample (n)
Kermanshah	Zagros	4	164	1563	38
Sarpol Zahab	Zahab	13	250	3460	52
Kermanshah	Nilofar	4	168	3042	35
Dalaho	Talash	3	220	881	65
Harsin	Baharan	5	235	2052	51
Kangavar	Anahita	11	330	3895	70
Total	40	1367	14893	311	

organization and also impact the performance of such organizations [13, 23]. Therefore seven items are proposed. The third part of the questionnaire measured members' satisfaction towards APCs. Cooperative literature has shown that without members' satisfaction, cooperatives cannot survive in the long run. Moreover, most studies consider satisfaction as an acceptable indicator of the achievement of objectives in a cooperative agreement. Therefore, nine items are proposed. The last part of the questionnaire used 53 statements to measure the dependent variable; i.e. success. A 5-point Likert's type scale (from 1= strongly disagree to 5= strongly agree) was used to measure "attitude", "satisfaction" and "success". To test for reliability, the questionnaire was pilot tested with a group of 30 members of cooperatives not targeted in the study. Cronbach's alpha was calculated on data received and resulted in a coefficient of 0.76, 0.87 and 0.88 for "attitude", "satisfaction" and "success" respectively.

**RESULTS AND DISCUSSION**

**Demographic Attributes:** Generally, about 80 percent of the Iranian farmers possess only 5 ha and more than 50 percent have even less than 2 ha while their farms are fragmented into more than 10 plots in average [24]. In this study, 95 percent of the members have less than 2 ha farmland. The average number of the APCs' members is 227 farmers and the estimated area covered by each APCs is 1975 ha that is fragmented into several plots.

Nearly 40% of members were female and 60% were male. More than half (52.1%) of the members hold only primary school followed by 22.2% who hold secondary school and only 5.1% had diploma. The average age of members was 42 years with average membership of 10 years.

**Members' Attitudes Towards APCs:** The members' attitude was measured by seven statements. To better understand the attitude, the five-point Likert's scale aggregated into three levels (negative, neutral and positive). Results revealed that 81 respondents (26%) rank their attitude towards the APCs "positive", 148 members (47.6%) rank their attitude "neutral" while 82 persons (26.4%) rank their attitude "negative" (Fig. 1).

**Members' Satisfaction Towards Apcs' Management:** The members' satisfaction towards APCs' management was determined by nine items which are ranked in Table 2.

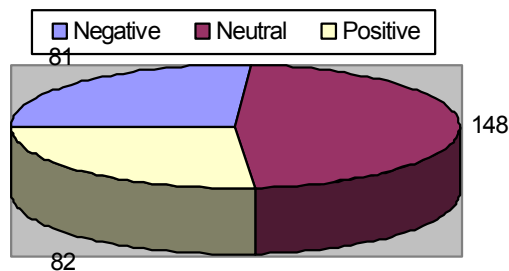


Fig. 1: Members' attitudes towards APCs

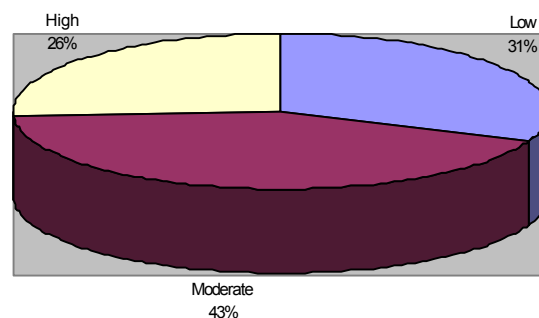


Fig. 2: Members' satisfaction toward APCs

Table 2: Mean rank distribution of the members' satisfaction towards APCs' management (Friedman test).

Satisfaction statement	MeanRank*	Rank
Educational level of managers	2.91	1
Experience of managers	2.69	2
Communicative relations among APCs' managers	2.57	3
Responsiveness of managers	2.51	4
APCs timely service	2.43	5
Law-obedience of managers	2.31	6
Managers' supervision in different stages	2.31	7
Financial supports	2.14	8
APCs' profits	2.05	9

\* Chi-Square = 24.290; P ≤ 0.05

As the table shows, the members are most satisfied with their managers' educational level and experience while they are least satisfied with the profits and the financial supports of the APCs from which they receive. These findings show that, in the members' view, the managers are knowledgeable and experienced enough to take the responsibility of the cooperatives. On the contrary, the members have not experienced much profit from the APCs and expect them to be more supportive financially.

Many studies [7, 9] show that many farmers are not active members in the APCs and mostly expect their cooperative to satisfy them by providing timely fertilizers and pesticides. US Department of Agriculture (1997) emphasizes the importance of the complete members' participation in the cooperatives' success and not only to

Table 3: Grading the APC's based on success rate

APC's	Success rate			Total
	Not Successful	Semi-successful	Successful	
Nilofar	6	16	13	35
Zahab	20	24	8	52
Baharan	29	19	3	51
Anahita	66	3	1	70
Talash	34	28	3	65
Zagros	18	17	3	38
Total	173	107	31	311

Table 4: Mean comparison of success among the APCs (ANOVA)  
F = 16.65; Sig. = 0.000

APC	Success†
Nilofar	16.97 a
Zahab	15.84 a
Baharan	12.37 b
Anahita	9.72 bc
Talash	11.58 b
Zagros	13.02 b

† Common letters show non-significant mean (estimated by LSD, P ≤ 0.05) Range: 0 - 30

receive special services from cooperatives. Australian Agricultural Council [24] also stresses the direct relationship between members' participation and the cooperative's success.

To better understand the members' satisfaction, five-point Likert's scale converted to three levels (low, moderate and high). As shown in Fig. 2, 26% of the respondents rank their satisfaction "high", 43% "moderate" and 31% "low". It means that the general satisfaction of the APCs' members is rather low.

This finding can be confirmed by the results of Amini and Ramezani [9] who indicate that cooperatives in Iran are generally failed in satisfying their members' expectations. Sar Sakhti [25] emphasizes on "human and management" issues as two main factors that influence the cooperatives' success. Dakurah *et al.* [14] and Zhu and Leonard [26] point to "unsatisfactory management" as one of the main barriers of the success.

**APC's Success:** The respondents were also asked to express their views on the APC's success. Table 3 shows that among the others, Nilofar and Zahab were chosen by their members as the most successful cooperatives whereas Anahita received the least success by its members. However, the general rate of the APCs' success still remains very low. In sum, 56% of respondents believed that the APCs were not successful in fulfilling the needs of member-producers.

In addition, ANOVA estimation was run to compare the APCs' success. Considering the possible range of the success (0-30), Table 4 shows that most of the APCs have not been successful in achieving their goals and satisfying their members.

However, there are some differences among the APCs that show different success rate. While Nilofar and Zahab

gain the highest success score (16.97 and 15.84, respectively), Anahita holds the least (9.72). LSD estimation shows that Anahita is the only cooperative which has significant difference with all of the APCs.

**Findings from Pra and In-depth Interview Study:**

In order to complement the quantitative findings of the survey, PRA techniques and in-depth interviews were used to appraise the main APCs' challenges. A group discussion was held with the PRA team to identify the challenges. The discussion revealed a list of problems which participants believe are happening in the APCs due to a few inappropriate conditions as follow:

- Weak coordination among farmers,
- Little support from government,
- High prices of inputs,
- Low financial power of farmers,
- land degradation and
- Inappropriate technologies.

**Conclusion and Recommendation:** The importance of cooperatives in social development, poverty alleviation, employment creation and participatory development has recently been highlighted by the United Nations [27]. Cooperatives provide a means by which disadvantaged groups can work together, share the risks and solve their common problems. Their role in agriculture has long been recognized as offering stability and security to small farmers who struggle alone to cope with competitive and fluctuating markets. Through cooperation, farmers may realize economies of scale in acquiring farm inputs improve their standards of production and marketing and jointly organize credit, transport, professional services and processing, creating off farm employment as well as funds to improve socio-economic services [28].

Cooperatives may then serve as a countervailing force in the marketplace to the large traders, increasing the bargaining power of the smaller farmers vis-a-vis large-scale agribusiness, so as to capture more value in Iran. According to international principles, cooperatives can avoid problems of dependence on large investors by raising capital as indivisible funds through internal accumulation. But in Iran, this practice is not popular, because many of farmers are smallholders and do not have financial supports. Additionally, most of the APCs' managers are not specialized in cooperatives' managerial issues and have unrelated expertise.

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