

# Research Paper: Analysis of Factors Affecting the Rearrangement of the Organizational Model of Rural Production Cooperatives in Iran

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## ABSTRACT

**Purpose:** This research aimed to identify the factors influencing the rearrangement of rural production cooperatives (RPCs), recognize the need for their expansion, and align their goals with the current situation to bridge existing gaps.

**Methods:** This research employed a descriptive-analytical method. Statistical populations consisting of managers and members of RPCs, as well as non-member villagers residing in the areas where 673 RPCs operate. To form a representative sample, 67 RPCs were selected, considering factors such as the number of provinces, the number of cooperatives, and the cooperative's activity status. 67 managing directors and 67 Chairmen of the Board of Directors were selected using a census method. In addition, Cochran's formula was applied to determine a sample size of 189 RPCs members. Furthermore, a cluster classification sampling method was employed to select 192 rural non-members for the study. Data were collected using documentary and field methods (researcher-designed questionnaire).

**Results:** The 26 factors categorized under "attraction of active cooperation of members" account for a cumulative variance of 17.42% regarding their influence on rearranging the organizational model of RPCs. Among the 11 elements comprising the second factor, "self-reliance," it is evident that having substantial working capital and initial cooperative capital will be pivotal in fostering self-reliance among RPCs. The third factor, labeled "legal acceptability," encompasses 16 items and contributes to 11.92% of the overall variance in rearranging the organizational model of RPCs. Twenty-seven items represent the fourth factor, "empowerment," of RPCs. The fifth factor, which involves "supporting and organizing cooperatives" during rearrangement, comprises 24 items.

**Conclusion:** The findings indicate that the five mentioned factors collectively account for 62% of the variance in rearranging the organizational model of RPCs.

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## 1. Introduction

Cooperativeism is a people-centric organizational approach purposefully crafted to enhance living standards and establish effective economic and social advancement mechanisms in urban and rural settings. It serves as a means of streamlining the intricacies of the market, fostering more profound interconnections among critical factors, and championing the values of solidarity and collaboration. Cooperativeism nurtures and safeguards the innate symbiosis between human communities and the environment (Brandão & Breitenbach, 2019). An exploration of local agricultural wisdom reveals the presence of notable instances of collective and cooperative endeavors within the realm of agriculture, as exemplified by practices such as “Boneh,” “Harathe,” and “Sahra.” The core philosophy underpinning cooperatives is collaboration, cooperation, active participation, and enhancing economic efficiency. Additionally, cooperatives are a structured platform for facilitating organized community engagement (Alimohammad et al., 2022). Agricultural cooperatives play a pivotal role in enhancing farmers’ economic prosperity and overall quality of life. They catalyze bolstering employment opportunities, fostering heightened productivity, and amplifying the volume of agricultural output. Moreover, these cooperatives actively engage rural residents in diverse cultural and social initiatives, thereby directly addressing poverty alleviation through their members’ economic and social advancement. Indirectly, they contribute to the augmentation of economic mobility and the cultivation of stronger social foundations within local communities (Attai & Izadi, 2014; Karim, 2014; Zheng et al., 2012; Wang et al., 2012). Agricultural cooperatives offer a multitude of benefits to farmers, including the promotion of advanced agricultural technologies, the reduction of food insecurity, and the alleviation of poverty (Manda et al., 2020). They also address critical shortcomings such as information limitations, low production capacity, high transaction costs, limited access to capital, and inadequate credit availability (Benson, 2014). These cooperatives empower small-scale farmers to participate effectively in the market.

RPCs are paramount institutions within Iran’s agricultural landscape, as Noroozian et al. (2018) emphasize. Their overarching mission revolves around elevating the knowledge base of rural inhabitants and optimizing the utilization of local resources. These cooperatives play a pivotal role in curbing the unchecked migration of villagers to urban centers, thereby contributing to a

more balanced and sustainable development paradigm that bridges the urban-rural divide. Their significance is underscored in the nation’s development blueprints as foundational pillars for advancing rural development (Haidari et al., 2016). The expansion of the agricultural sector, fostering public involvement, and mitigating investment risks in agriculture yield many benefits. These outcomes serve as pivotal sources of agricultural production and contribute significantly to the nation’s food security, as articulated by Faryabi and Ahmadvand (2017). Additionally, this multifaceted approach also reduces government expenditures related to agricultural production, further solidifying its importance in the overall economic landscape.

RPCs worldwide face challenges like funding shortages, limited scale, weak management, and regulatory unfamiliarity (Wang et al., 2012). Agricultural production cooperatives in Iran encounter various challenges, including a lack of dynamism in their structure, organizational rigidity, and limited innovation. Despite their growth, these cooperatives have not yet secured a significant foothold in the nation’s economy. In Iran, most agricultural activities following land reforms occur on small plots. Small-capital farmers are widely dispersed across the country, facing challenges in accessing credit, managing production, marketing, and acquiring agricultural inputs. Consequently, many farmers are compelled to sell their produce at minimal profits or even at a loss to intermediaries and moneylenders. To address this issue, these cooperatives are established, pooling land resources to promote rural development by actively involving all villagers and farmers (Khosravi et al., 2022).

The success story of the National Federation of Agricultural Cooperatives in South Korea, recognized as one of the world’s most successful production cooperatives, underscores the pivotal role of democratic member control and sustained organizational reform. Over the past six decades, this cooperative has continuously enhanced its operations and remains committed to ongoing improvement (Phuong et al., 2020). The advancement of production cooperatives necessitates making fundamental yet incremental changes within them. Achieving this objective relies on thoroughly examining cooperatives’ challenges and issues, coupled with active engagement with stakeholders to gather their valuable insights and opinions. Hence, this research seeks to identify the key factors influencing the rearrangement and restructuring of RPCs. The aim is to establish a vital foundation for revitalizing and transforming these cooperative entities.

In management science, “rearrangement” denotes the execution of changes or the restructuring of an organization to enhance efficiency, effectiveness, and, ultimately, profitability. It is a strategic approach to gain a clearer perspective on the organization’s future and ensure its continued survival. In simpler terms, restructuring can be driven by various strategic motivations. These include the desire to embrace new approaches, adapt to evolving environments, enhance global operations, or boost business performance through cost reduction and improved productivity (Arabiyoony et al., 2011). Organizations must proactively adjust and reorganize their tangible and intangible assets when circumstances demand it to sustain competitiveness. Achieving growth and profitability for an organization hinges on a series of strategic steps, including successfully identifying and selecting promising opportunities, astute choices regarding product and technology features, developing a well-suited business model, and the continued allocation of resources to nurture these opportunities. This advantageous growth fortifies the organization’s assets and propels its evolution along its trajectory. Achieving profitable and sustainable growth hinges on the organization’s adequate capacity to reallocate resources. Decentralizing organizational decision-making and situating managers closer to markets, customers, and emerging technologies becomes crucial for securing a sustainable competitive advantage (Zahra et al., 2006). When specific segments of the organization operate significantly beyond regulatory boundaries, technological advancements or innovations reshape the production process, substantial shifts occur in the hierarchical structure, new skills and capabilities are essential to meet current demands, and the retention or dismissal of employees (members) poses a substantial challenge, the necessity for rearrangement becomes increasingly apparent (Balogun & Johnson, 2004).

The application of life cycle theory in the context of social affairs and economic activities has yielded a diverse range of practical uses and insights. According to this theory, when an organization or economic enterprise reaches a saturation or peak stage and cannot initiate a new phase of development and activity, it invariably enters the decline stage of its life cycle. If not reversed, this decline will eventually lead to the organization or Cooperative’s exit from competition, much like numerous other entities. Therefore, for an organization or Cooperative to ensure its continued existence, it must embark on a new phase of its activities (Firouznia et al., 2017). Examining the structure and performance of rural production cooperatives (RPCs) reveals a notable oversight of the principles outlined in this theory during their transformation process. It is not an exaggeration

to assert that the failure to prioritize organizational innovations and the neglect to create new phases of transformation within these cooperatives have resulted in the persistence of RPC entities in villages, often with the backing of rural cooperative organizations. However, a substantial disconnect has emerged between the original goals and the actual status of these cooperative companies (Salman, 2022). As a result, this endeavor seeks to identify the factors that impact the restructuring of the organizational framework of RPCs.

## 2. Literature Review

Rural and agricultural development is a multifaceted endeavor to enhance rural communities’ quality of life and well-being. It encompasses efforts to boost agricultural and food industry productivity, alter land ownership and income distribution, enhance social mobility, and transform participation in decision-making processes. Moreover, it strives for a meaningful transformation in rural inhabitants’ mental and social structures. Given these objectives, RPCs are poised to play a pivotal role in developing rural areas (Fadaei & Falsoleiman, 2012). RPCs serve as platforms for the widespread participation of villagers in the village development process. They tackle the specific challenges villagers and farmers face through collaborative efforts and cooperation (Yu & Nilsson, 2021). In essence, the absence of an effective service system for providing necessary inputs and credits to farmers, along with the lack of a robust marketing system—both of which are key goals and principles of cooperatives (Birowo & Hansen, 2019)—can result in reduced production and income for villagers. Ultimately, this shortfall can hinder the efficient utilization of vital resources like water, land, and capital (de Bakker et al., 2020).

An examination of the research literature reveals that theories such as empowerment and capacity building, stakeholder analysis, and sustainable development constitute the primary theoretical foundations for this research. Leveraging these theories and drawing insights from previous studies, an initial list of factors influencing the rearrangement or restructuring of RPCs has been compiled. It is noteworthy that despite the review of relevant literature, there appears to be a dearth of independent research dedicated explicitly to elucidating the factors that impact the restructuring of cooperatives. Indeed, among the existing research studies, various factors influencing the enhancement of cooperative performance have been identified.

The research conducted by [Alimohammed et al. \(2022\)](#) revealed that policy-making, economic, legal, and educational factors hold the most substantial influence, surpassing technical and social factors. These findings shed light on the significant role of these aspects in fostering cooperative networks among agricultural production cooperatives in Alborz province.

In the study conducted by [Isizadeh Malekmian et al. \(2022\)](#), several crucial antecedents for developing rural cooperatives were identified. These include psychological development, fostering a conducive colleague environment, effective performance management, empowerment, institutional and government support, awareness and training, access to financial resources, infrastructural and technical capabilities, technology upgrades, marketing and sales strategies, proficient supply chain management, local community development, and a thorough understanding of the internal and external environment.

Additionally, in research by [Khosravipour et al. \(2022\)](#), socio-cultural, educational, economic, and managerial factors were underscored as pivotal influences on the development of RPCs. These insights emphasize the multifaceted nature of factors contributing to the growth and prosperity of such cooperatives.

In the study conducted by [Daneshmehr et al. \(2021\)](#) in Kurdistan province, it was discovered that RPCs faced various challenges and issues beyond social, cultural, and managerial concerns. These additional issues were attributed to the implementation of self-governance policies, including the impact of abrupt self-governance, self-governance without a comprehensive plan, and the withdrawal of government support.

On the other hand, research by [Shamsnejad et al. \(2021\)](#) revealed several key factors influencing cooperative inefficiency. These factors included the duration of cooperative activity, engagement in a second job, the salary received, and the managerial experience of the managing directors. Notably, these variables positively and significantly impacted cooperative inefficiency, indicating the complex interplay of factors in cooperative performance. Furthermore, the study indicated that certain factors negatively and significantly impacted cooperative profit inefficiency. These included the number of shareholders, the extent of coverage across villages, the distance of the cooperative from the city, the cooperative's central location within the province, the level of education of the managing director, and the number of training courses attended by cooperative managers. The findings underscore the potential for improving coop-

erative performance and efficiency through purposeful management, applying training and practical development activities, and recruiting managers with relevant fields of expertise. These strategic measures can contribute to the enhancement of cooperative effectiveness and profitability.

In their research, [Najafi et al. \(2018\)](#) identified that cooperative management exerts the most direct influence on the performance of RPCs. Furthermore, their study estimated that the optimal tenure for managing directors in these cooperatives is approximately four years. Among the various dimensions of cooperative management, the dimension of guidance was found to have the most significant impact.

[Arayesh \(2019\)](#) conducted research highlighting factors that deter farmers from joining agricultural production cooperatives, which were categorized and prioritized based on six mental models. The study recommends organizing training programs covering entrepreneurship, financial literacy, and cooperative principles to address this situation. Additionally, it suggests facilitating government support and exploring revenue-generating opportunities for the cooperative.

In the research conducted by [Moosaei and Moham-madi Mofrad \(2019\)](#), several key factors influencing the performance of RPCs were identified. These factors include enhancing members' sense of responsibility, fostering social solidarity and empathy, conducting training initiatives in consensus-building and member participation, and bolstering social trust. These insights shed light on critical elements that can contribute to the improved performance of such cooperatives.

[Balali et al. \(2018\)](#) conducted research that revealed several factors with a positive impact on the performance of cooperatives. These include recognizing cooperative duties and goals, empathy between members and cooperative management bodies, support and assistance from the cooperative administration, cooperative relationships with relevant organizations, strong unions in the region, cooperation among members, and legal government support. These factors collectively contribute to the enhanced performance of cooperatives.

In another study, [Rahbari and her colleagues](#) identified various influential factors in forming cooperatives for agricultural product production and distribution. These factors encompass individual, psychological, social, educational, economic, and environmental considerations,

underlining the multifaceted nature of elements shaping the development and operation of such cooperatives.

According to the research conducted by [Boozarjmehri and Hadizadeh Bazaz \(2013\)](#), government assistance in financial resources, infrastructure development, and establishing a supportive legal framework is a crucial strategy for enhancing the performance of cooperatives. The study also highlights the importance of addressing financial and credit-related challenges and maximizing the effective utilization of financial and human resources. Furthermore, the research underscores that creating the necessary infrastructure and regulatory environment and formulating sound government policies can provide a conducive environment for removing barriers and optimizing cooperatives' internal capabilities and external opportunities. This holistic approach can play a pivotal role in fostering the growth and success of cooperatives.

In their research, [Shahvali and Gheisari \(2012\)](#) propose several strategies to enhance the capabilities of cooperative members. These include distributing information resources and improving farmers' access to them, organizing regular training programs, and recognizing the untapped potential within the areas cooperatives serve to foster agricultural development.

Furthermore, [Baseri et al. \(2009\)](#) highlight the multifaceted benefits of production cooperatives. Their research indicates that such cooperatives can curtail migration, boost participation in production and social activities, attract labor from outside the household, shift attitudes from a traditional agricultural perspective to a more commercial outlook among members, and elevate social self-awareness. These findings emphasize the broader positive impact of cooperatives on rural communities and their members.

In their study on the role of agricultural cooperatives in poverty reduction, [Gava et al. \(2021\)](#) shed light on the situation of smallholder farmers in Bosnia and Herzegovina. They found that these smallholders face a heightened risk of rural poverty due to various social, structural, technological, and organizational barriers that leave them vulnerable to unfavorable market conditions. The study suggests that government support for collective actions among farmers, such as mulberry growers, can serve as a valuable intervention in rural development, effectively mitigating rural poverty.

In their examination of Brazilian agricultural cooperatives, [Junior and Wander \(2021\)](#) pinpointed a range of pivotal factors underpinning their success. These en-

compass the professionalization of management as a crucial aspect of human resources, effective corporate governance that aligns stakeholder interests, strategic management for handling risk, technology adoption, and market competition, a commitment to corporate social responsibility and sustainable development, adept transaction cost management in operational activities, and adept commercialization and marketing strategies. Collectively, these factors illustrate the multifaceted nature of influences contributing to the achievements of agricultural cooperatives in Brazil.

In their study evaluating farmers' perceptions of their cooperatives in Fujian, China, [Yu, and Nilsson \(2021\)](#) found that members' satisfaction with these cooperatives is linked not only to their assessments of the economic and social advantages but also to their awareness and appreciation of the environmental initiatives undertaken by the cooperatives. This suggests that a holistic evaluation encompassing economic, social, and environmental aspects influences members' overall satisfaction with their cooperatives.

[Zhao \(2020\)](#) highlights the crucial synergy between entrepreneurship and innovation within cooperative organizations. In this context, entrepreneurship and innovation are seen as mutually reinforcing elements essential for the continued success and sustainability of cooperative organizations in the contemporary, dynamic, and evolving business landscape. Furthermore, the study emphasizes that entrepreneurship and innovation are dynamic processes within entrepreneurial and innovative organizations. It underscores the significance of organizational culture and management style as influential factors in fostering entrepreneurial and innovative behaviors within these organizations. Recognizing and nurturing this interplay between entrepreneurship and innovation can significantly contribute to the competitiveness and adaptability of cooperative organizations in a rapidly changing environment.

[Al-Hamouli et al. \(2021\)](#) identify various factors influencing the success of board members in rural, productive, and agricultural cooperatives in Idmo, Egypt. These factors include economic considerations, social and cultural dynamics, managerial competencies, and personality traits. The combination of these factors plays a pivotal role in determining the effectiveness and achievements of board members within these cooperative entities.

[Nguyen Hong's study \(2017\)](#) on the sustainable development of agricultural cooperatives in Vietnam identifies several critical factors influencing the efficiency of

cooperative business activities. These factors include the availability of a skilled labor force, access to capital for business operations, dependence on external companies, and the models of production and consumption. These elements collectively contribute to the overall sustainability and success of agricultural cooperatives in Vietnam.

Yuliando et al. (2015) outline several influential factors contributing to strengthening tea farming cooperatives in Indonesia. These factors include effective collaboration between cooperatives and other relevant organizations and institutions, the successful commercialization of members' products, adding value to members' products, improved access to market information and financial resources, and the growth of cooperative membership. These elements collectively play a vital role in enhancing the resilience and effectiveness of tea farming cooperatives in Indonesia.

The research conducted by Muthyalu (2013) demonstrated that several factors influence the participation of farmers in the marketing activities of cooperatives. Being a member of a cooperative and having ownership of shares and land were identified as critical factors affecting farmer participation. Muthyalu suggests that members can compensate for this shortfall by purchasing more shares to address the challenge of insufficient capital within cooperatives. Additionally, the government can support cooperatives by allocating educational budgets, offering long-term loans, improving market infrastructure, and enhancing capacity-building initiatives within these cooperatives. These measures can contribute to the sustainability and success of cooperative marketing activities.

In their research, Espallardo et al. (2009) highlighted that costs within the economic factor play a significant role in influencing the satisfaction of cooperative members and ultimately contribute to improving cooperative performance.

Scrimgeour et al. (2006) identified a range of factors impacting the performance and success of cooperatives, including governmental, commercial, technical, perceptual, and social factors. These elements collectively shape the cooperative landscape and its achievements.

Krause et al. (2006) emphasized the importance of cognitive capital, precisely social awareness, as well as participation, cohesion, and increased social interactions as instrumental components in enhancing the performance of cooperatives. These elements contribute to improve-

ments in income, activity quality, product presentation, and overall work complexity within cooperatives.

Given the research background, it is evident that there has been a dearth of independent research dedicated to elucidating the factors influencing the rearrangement of the organizational model of RPCs in Iran. Consequently, this study addresses a fundamental question: What factors influence the rearrangement of the organizational model of RPCs in Iran?

### 3. Methodology

This research is applied in its purpose, employing a descriptive-analytical approach for its execution method. The research methodology combines both documentary and field-based data collection methods. The Coordinating Council for the land tenure system within the central organization for rural cooperatives has divided Iran's geographical area, encompassing 31 provinces and one region south of Kerman Province. This division was carefully structured, considering several factors, including regional uniformity, geographical proximity, homogeneity in climate, availability of water and soil resources, similarity in cooperative activities, shared cultural and social characteristics, and ecological considerations. As a result, Iran has been categorized into six distinct geographical regions based on these criteria. In this research, the deliberate division into six regions was the foundation for the selection process. Within each of these regions, the choice of provinces and counties took into account factors such as the number of provinces and cooperatives in the respective region. Consequently, one or two provinces were selected from each of the six regions (namely, Sistan and Baluchestan, Mazandaran, Qazvin, Esfahan, Fars, Khuzestan, East Azarbaijan, and Kurdistan). Similarly, within each selected province, one to five counties were chosen, resulting in a total of 28 counties that constitute the research areas. The research proceeded with selecting sample villages from the villages under the purview of 673 RPC. In the process of selecting these RPCs, specific criteria were taken into consideration. These criteria encompassed the cooperative's status as either active or inactive, the number of villages it served, the size of its membership, and the extent of agricultural land it cultivated. Of the 673 RPCs across the nine provinces, 67 cooperatives were chosen as samples. The statistical population for this research encompasses a diverse group, including members of the board of directors, managing directors, member villagers (who are members of RPCs), experts from trade unions and the government sector, and villagers who are not members of these cooperatives. These individuals re-

side within the operational areas of RPCs across the six regions and nine provinces under study. The sampling process involved selecting 67 members of the board of directors and 67 managing directors through a census approach. Additionally, a sample of 189 cooperative members and 192 non-member villagers residing within the cooperative's operational area was selected using cluster classification sampling, determined by Cochran's formula as a statistical sample. The research indicators were developed through an exhaustive review of prior studies and subsequently refined and validated through consultations with expert professors and specialists. Subsequently, the indicators served as the foundation for designing the research questionnaire. The questionnaire questions have been structured using a five-point Likert scale, which spans from "very low" (1) to "very high" (5) to assess the respondents' perceptions. A rigorous process was undertaken to ensure the validity and appearance of the research tool. Initially, the questionnaire was designed by a collaborative team of seven professors from various academic disciplines, including the Department of Rural Development, Agricultural Management, Geography and Rural Planning, and Agricultural Promotion and Education. Additionally, input was sought from 10 experts affiliated with the Central Organization of Rural Cooperatives of Iran and ten managing directors from exemplary and leading cooperatives. Based on the feedback and insights provided by these experts, the questionnaire underwent thorough review, revision, and refinement to ensure its content and appearance were robust and aligned with the research objectives. The content validity of the questionnaire was assessed based on the Content Validity Index ( $AVE = 0.5-0.68$ ), and it was determined to be optimal.

In order to verify the questionnaire's reliability, a pre-test involving the distribution of 30 questionnaires among the statistical population was carried out. The reliability of the questionnaire was determined using two measures: the Ordinal Coefficient Theta ( $\Theta$ ), which fell within the range of 0.75 to 0.91, and the Composite Reliability (CR), which was found to be in the range of 0.74 to 0.91. These reliability measures affirm the consistency and dependability of the questionnaire as a research tool. The research tool has demonstrated the necessary reliability, as the calculated validity and reliability coefficients indicate. R software was employed to calculate these coefficients in the data analysis process, while SPSS software was utilized for analyzing the research results. Principal component factor analysis with varimax rotation was employed to investigate the factors influencing the rearrangement of the organizational model

of RPCs. Ordinal logistic regression was also carried out as part of the data analysis process.

#### 4. Findings

The frequency distribution of respondents based on their province of residence, encompassing members, non-members, chairpersons of the board of directors, and cooperative managing directors, indicates that the highest number of respondents, constituting 23.7 percent of the sample, reside in Fars and Khorasan Razavi provinces. Following closely, Isfahan province is home to 10.8 percent of respondents, Sistan and Baluchestan houses 9.7 percent, and Khuzestan province accommodates 9.3 percent. Additionally, respondents from Mazandaran and East Azerbaijan provinces comprise 6.2 percent, those from Kurdistan province represent 5.4 percent, and individuals residing in Qazvin province account for 5 percent. The distribution of educational levels among the 515 respondents is diverse, with the majority having achieved significant educational milestones. Notably, 8.4 percent of the respondents hold master's degrees or higher qualifications, while 24.5 percent have completed bachelor's degrees. Graduate degree holders comprise 18.8 percent of the sample, and those with education levels up to a diploma comprise 26.2 percent. Furthermore, 13.6 percent have received less than a complete educational cycle, and 7.6 percent possess basic literacy skills. A tiny percentage, just 0.9 percent, falls into the illiterate category. Among the 515 individuals sampled, which includes members, non-members, board presidents, and managing directors, a significant majority of 478 people, equivalent to 92.8 percent, are married. This marital status breakdown further reveals that 93.7 percent of cooperative members, 88 percent of non-member villagers, and 97 percent of cooperative managing directors are married. Interestingly, the data highlights that all the heads of the board of directors in the cooperatives are married. On the other hand, when considering the percentage of unmarried individuals, it becomes evident that non-member villagers have the highest proportion of unmarried individuals, with 12 percent falling into this category.

The research findings have highlighted five critical factors for rearranging the organizational model of production cooperatives, as outlined in Tables 1 to 5. These factors, as articulated by the survey participants, encompass the following key elements: "Attracting active cooperation of members," emphasizing the necessity of actively engaging cooperative members in the restructuring process; "Self-Reliance," underlining the importance of fostering self-sufficiency within cooperatives to reduce de-

pendence on external resources; “Legal Acceptability,” underscoring the adherence to legal regulations and compliance as integral to the restructuring process; “Empowerment,” emphasizing the empowerment of cooperative members for active participation and decision-making; and “Supporting and Organizing Cooperatives,” emphasizing the pivotal role of providing support and organizational structure during the restructuring endeavor. To distill and gain a more comprehensive understanding of the numerous factors influencing the rearrangement of the organizational model within these cooperatives, the research employed exploratory factor analysis, utilizing principal component analysis coupled with varimax factor rotation. The calculations demonstrated that the data’s internal consistency was well-suited for factor analysis, with a favorable Kaiser-Meyer-Olkin (KMO) measure of 0.87. Additionally, Bartlett’s statistic yielded a highly significant result at the  $p=0.001$  level (465.3423). During the factor analysis process, they adhered to Keyser’s criterion; five factors were extracted, each possessing eigenvalues exceeding one. These factors were subsequently arranged based on their maximum variance contribution, as indicated in Table 8. The findings demonstrated that these five factors collectively accounted for approximately 62% of the total variance in rearranging the organizational model within RPCs.

About Table 1, the responses from the participants indicated that within the category of “Attracting active cooperation of members,” a total of 26 factors were identified. These factors collectively accounted for approximately 17.42% of the variance related to the factors influencing the rearrangement of the organizational model within RPCs.

Examining Table 1, it becomes evident that factors such as members’ trust in the board of directors, managing directors, and inspector of the RPC, as well as measures aimed at preventing family-based inheritance of board membership, exhibit the highest factor loadings. Following closely behind are elements related to transparency and accountability of cooperative managers. Elevating the cooperative’s capacity through handicraft development, offering essential services to members, enhancing product quality, and preventing agricultural land fragmentation are influential factors, with factor loadings ranging from 0.619 to 0.597. These factors hold the potential to significantly stimulate and attract active cooperation of members and play a crucial role in facilitating the rearrangement of RPCs in Iran. As per the responses provided by the participants, factors such as appointing competent and experienced individuals and assistants, along with ensuring insurance coverage for

both agricultural products and the villagers who are cooperative members, are noteworthy components falling under the category of “Attracting active cooperation of members.” Furthermore, alongside the abovementioned factors, ecological and physical aspects also hold considerable significance in engaging members in cooperative activities. These aspects encompass participatory management in water resources, integrated land management, land leveling, reduction of toxic and chemical fertilizers, provision of laboratory services, implementation of grazing projects, and ensuring the legal status of the managing directors. In summary, among the 26 items related to “Attracting active cooperation of members,” 14 were for the social category, four for economic factors, and seven for the ecological and physical categories. In this way, the results show that the cooperative as a group activity has more vital social aspects than its economic aspects. Social factors emerge as the predominant drivers in Attracting the active cooperation of members for the rearrangement of RPCs.

In Table 2, the second factor, “self-reliance,” highlights eleven fundamental factors that impact the rearrangement of the organizational model of RPCs. According to the input from respondents, factors such as the availability of substantial working capital and the initial cooperative capital are pivotal in fostering self-reliance within the cooperatives. These elements, with factor loadings of 0.789 and 0.781, respectively, exert the most significant influence on the overall dynamics of the self-reliance factor. Subsequently, the items related to securing credit and essential tools from the government (with a factor loading of 0.775), anticipating government grants (with a factor loading of 0.764), and accessing low-interest facilities and bank credit acquisition signify the reliance on cooperative managers on government support and their expectations from the banking system. Furthermore, two aspects of the responsibilities of cooperative managers, namely, distributing annual dividends to members and enhancing the transparency of financial matters within cooperatives, were highlighted by respondents as significant factors contributing to self-reliance within these cooperatives.

Furthermore, within the self-reliance factor, three aspects of the performance of RPCs have connections to environmental sustainability. These aspects include preventing the irrational exploitation of water and soil resources, mitigating damages from using pesticides and chemical fertilizers, and conserving, restoring, developing, and utilizing natural resource areas. These factors, with a factor loading of 0.594, highlight the significance of sustainable agricultural practices and environmental

preservation within the sphere of RPCs. Indeed, the last item in this factor highlights a government-dependent perspective among cooperative managers.

**Table 1.** Factor Matrix of the Primary Factors Influencing the Rearrangement of the Organizational Model of RPCs

Factor	Row	Item	Factor loading
Attracting the active cooperation of members	1	The trust of the members of the board of directors, the managing directors, and the inspector of the RPC	0.716
	2	Preventing hereditary membership of the board of directors	0.710
	3	Increasing the level of trust between the members and the board of directors, the inspector, and the managing directors of the RPC	0.706
	4	Increasing the level of trust of the members of the RPC in the rural cooperative organization (as a supervisory body) and other government agencies	0.679
	5	Transparency and honesty of the board of directors in performing duties and tasks	0.671
	6	Transparency and honesty of the board of directors in performing duties and tasks	0.663
	7	Accountability of the managing directors for tasks and duties	0.658
	8	Members' trust in the cooperative	0.647
	9	Members as a social support to rural production cooperative cooperative	0.634
	10	Improving the social relations of members	0.627
	11	establishing conversion industries next to agricultural fields	0.619
	12	Increasing the quality level of the production sector (fuel, water, fertilizer, poison, etc.) by using targeted subsidies	0.607
	13	Preventing the fragmentation of farmers' lands and properties due to division of hereditary lands or sale	0.602
	14	Increasing the quality of members' products	0.601
	15	Creating new opportunities for employment and entrepreneurship for members	0.597
	16	Employing trustworthy managing directors in the RPC	0.584
	17	The use of experienced and educated people in the management of the RPC	0.581
	18	The use of various types of insurance, such as agricultural products, social products, villagers and nomads, and commerce, to increase the social welfare of the members of the RPC.	0.572
	19	Optimum management of the integration of small and scattered lands of the members by maintaining their ownership and observing the cultivation model	0.569
	20	Establishment of cooperative water management in order to supply, distribute, maintain, protect, manage, and operate water and irrigation facilities through establishing a water management unit in the cooperative, forming groups of water users, planning and coordination for the proper use of water resources using modern irrigation methods, monitoring the division, distribution of water, operation, maintenance, and creation of new facilities.	0.563
	21	Equipping and renovating land through restoration and modification of traditional irrigation and drainage networks, development and construction of modern irrigation and drainage networks, promotion and implementation of pressurized irrigation systems, technical leveling and segmentation of agricultural lands, improvement and construction of access roads between farms, digging, equipping and electrifying agricultural wells	0.552
	22	Providing required laboratory services for water and soil	0.547
	23	Revival of uncultivated lands, favorable and underutilized public lands, private and national resources in the field of cooperative action, and neighboring lands after obtaining legal permits based on existing laws	0.532
	24	Reducing the use of chemical fertilizers and pesticides and using crop rotation	0.528
	25	Implementation of rangeland projects, exploitation of medicinal plants, support and protection of natural resources	0.509
	26	The managing directors working within the framework of the decisions of the board of directors	0.502

**Table 2.** Rotated component matrix of the second factor affecting the rearrangement of the organizational model of RPCs

Factor	Row	Items	Factor loading
Self-reliance	1	High working capital	0.789
	2	The initial capital of the cooperative	0.781
	3	Providing credits for cooperatives due to the importance of achieving the goals of cooperatives for the government	0.775
	4	Existence of financial and equipment grants from the government to the RPC	0.764
	5	Providing low-interest facilities with long-term installments by the banking system to the RPC	0.758
	6	The lack of strict rules in allocating facilities to the RPC to get guarantees and collateral	0.749
	7	Paying annual dividends to members	0.743
	8	Up-to-date accounting of the RPC	0.741
	9	Preventing environmental damage caused by the unreasonable use of water and soil resources in the field of operation of the RPC.	0.669
	10	Preventing environmental damage caused by the incorrect use of poisons and chemical fertilizers in the field of operation of the RPC	0.653
	11	Preservation, restoration, development, and exploitation of natural resources through technical and legal activities in the operation of the RPC	0.594



The findings presented in Table 2 can be interpreted from two distinct perspectives. Firstly, they underscore the critical significance of self-reliance for RPCs, highlighting that achieving self-sufficiency is essential for long-term stability and success. Secondly, the results also reveal the extent of cooperative managers' dependency on the government, suggesting a significant reliance on external support systems. Except for two items related to financial capital, the remaining four items in Table 2 highlight their importance for the self-reliance of cooperatives while also suggesting a government-dependent view among cooperative managers. The second factor, as indicated by its items, underscores some undeniable realities: Respondents perceive the economic sustainability of cooperatives as reliant on attracting internal capital (from members) and external capital (from government aid and banking facilities). Additionally, they emphasize the ecological sustainability of cooperatives through the physical protection of environmental resources like water and soil. These aspects hold significant importance in the rearrangement of RPCs organizational models.

Table 3 findings reveal that the 16 items categorized under "legal acceptability" constitute the third significant factor affecting the rearrangement of RPCs models. This factor contributes to 11.92% of the overall variance in the rearrangement process of these cooperatives, with item factor loadings ranging from 0.802 to 0.584. The items within this factor highlight the importance of utilizing legal mechanisms, the Cooperative Production Law, and its associated executive regulations. These legal ca-

pacities constitute a significant aspect of the rearrangement process, with a majority of the items (more than 56 percent) focusing on these aspects, and five items within this category have the highest factor loadings. Certainly, leveraging legal capacities to facilitate land consolidation, enhance infrastructure, streamline production chains, promote investment, and provide professional training for members is critical to RPCs functionality and mission fulfillment. Additionally, utilizing Article 6 of the Executive Regulations of the Law on Production Cooperatives and Land Consolidation to transfer government responsibilities to these cooperatives can help address existing gaps and ensure they effectively meet their objectives. Indeed, RPCs hold a significant legal standing, and their managers are well-versed in these legal capacities. However, the practical application of these capacities has been limited. Therefore, unlocking and effectively utilizing these legal resources are pivotal for the rearrangement and improved organization of these cooperative entities. By harnessing these legal capabilities, RPCs companies can better align their operations with their legal potential, resulting in more robust and efficient organizations. The respondents' strong emphasis on various aspects of legal acceptability within RPCs highlights the need for a targeted and pragmatic approach to reorganizing these entities. Decision-makers should focus on implementing specific legal capacities provided by the current regulations, such as strengthening infrastructure, enhancing vocational training for members, entrusting government projects to cooperatives, leveraging surplus resources from the Ministry of

Agriculture Jihad, and ensuring that RPCs receive preferential treatment in accessing government services. Additionally, fostering collaboration with the Ministry of Energy to optimize water resource management, institutionalizing stakeholder participation, establishing national and union hierarchies, and deploying specialized resources should be integral to the rearrangement effort.

Additionally, three items highlighted by the respondents emphasize the need to bolster supervisory and inspection mechanisms to prevent financial corruption and ensure managers are well-versed in their legal responsibilities. Furthermore, four items underscore the importance of reviewing and implementing bylaws to assess and enhance the management of these cooperatives.

**Table 3.** Rotated Component Matrix of the Third Factor Influencing the Rearrangement of Organizational Model in RPCs

Factor	Row	Items	Factor loading
Legal acceptability	1	Leveraging the provisions of Article 12 of the Executive Regulations of the Cooperative Production and Land Integration Law, efforts are made to bolster infrastructure, enhance the production chain, facilitate investment, and provide professional training for members. The Ministry of Agricultural Jihad has proposed these initiatives, leading to the approval of an executive regulation consisting of 18 articles by the Board of Ministers.	0.802
	2	Utilizing Article 6 of the Executive Regulations of the Cooperative Production and Land Integration Law to delegate governmental management responsibilities to RPCs.	0.795
	3	Using Article 10 of the Executive Regulations of the Cooperative Production and Land Integration Law to access the surplus facilities of the Ministry of Agricultural Jihad, organizations, companies, and institutions for RPC.	0.791
	4	Using Article 7 of the Executive Regulations of the Cooperative Production and Land Integration Law for legal, juridical, and banking systems to give priority to RPCs to receive services, credits, and facilities	0.786
	5	Using Article 7 of the Executive Regulations of the Cooperative Production and Land Integration Law to interact with the Ministry of Energy to improve the efficiency and productivity of agricultural water	0.784
	6	Mechanism to prevent financial corruption in RPCs	0.781
	7	The inspector's knowledge of the legal duties	0.709
	8	The board of directors' knowledge of the legal duties	0.704
	9	Using Article 9 of the Executive Regulations of the Cooperative Production and Land Integration Law with the cooperation of the Ministry of Energy in order to institutionalize the participation of users and apply integrated and coherent management in all stages of study, design, and implementation to create and organize the appropriate model of exploitation systems	0.701
	10	Reviewing and amending the regulations related to the activity of the RPCs	0.697
	11	Reviewing and amending the selecting criteria for the board of directors, confirming the qualifications of the board of directors, auditors, and managing directors	0.694
	12	Disentangling strict regulations and instructions for the operation of the RPCs	0.683
	13	Prominent framework of regulation for activities	0.675
	14	Using Article 5 of the Executive Regulations of the Cooperative Production and Land Integration Law to employ full-time and part-time labor in the RPCs	0.663
	15	Using Article 14 of the Executive Regulations of the Cooperative Production and Land Integration Law to have a coherent and coordinated network in the form of companies and unions from the county to the national level.	0.621
	16	Using Article 5 of the Executive Regulations of the Cooperative Production and Land Integration Law to employ managing directors who have agricultural degrees	0.584



**Table 4.** Rotated component matrix of the fourth factor affecting the rearrangement of the organizational model of RPCs

Factor	Row	Item	Factor loading
Empowerment	1	The degree of acceptance of the members of the plans of the RPC and the willingness to participate and invest in it	0.836
	2	Participation in marketing in the conversion of products	0.821
	3	Preparation, supply, production, and distribution of all agricultural inputs (fertilizers, poisons, seedlings, fuel, machinery, agricultural tools, animal and poultry feed, etc.)	0.802
	4	Participation of members in the general meetings of the RPC	0.783

**Table 4.** Rotated component matrix of the fourth factor affecting the rearrangement of the organizational model of RPCs

Factor	Row	Item	Factor loading
Empowerment	5	The willingness of members to get on roles like directors and inspections	0.775
	6	Participation of members in the decision-making of the RPC	0.773
	7	The existence of teamwork spirit among board members	0.771
	8	Promoting the teamwork spirit among the members of the RPC	0.768
	9	Creating a sense of affection instead of rivalry between the members of the board of directors	0.752
	10	Having ownership sense of the members of the cooperatives to rural production	0.741
	11	Creating a friendly and intimate atmosphere among the members of the RPC	0.739
	12	Increasing the cohesion of the local people	0.728
	13	Providing the condition for more interaction and coordination of the RPC with the public sector, private sector, and local institutions	0.711
	14	More significant interaction and cooperation of the RPC with local institutions	0.704
	15	Members' awareness of the principles of forming a cooperative	0.682
	16	Members' awareness of their duties in the cooperative	0.678
	17	The education level of board members	0.672
	18	The necessity of a change in the attitude of policymakers and planners toward exploitation systems	0.663
	19	Practical, skill, and professional training held for members	0.658
	20	Practical, skill, and management training held for the members of the board of directors, inspectors, and managing directors	0.611
	21	Acquaintance of the board of directors and auditor with financial and accounting affairs	0.572
	22	Informing users of the benefits of forming RPC and the benefits of group working	0.547
	23	Planning to improve the quality of service to the members of the RPC	0.539
	24	Planning to maintain the rural population in the operation of the RPC and prevent migration	0.528
	25	Planning to preserve and protect agricultural lands and prevent the change of use of agricultural lands, the field of operation of the RPC	0.511
	26	Planning to improve and expand the physical texture of the functional area of the RPC	0.509
	27	Planning to improve the quality of rural roads, the field of operation of the RPC	0.501



The findings presented in Table 4 reveal 27 items related to the empowerment and capacity building of RPCs. Out of these, 16 items are directly associated with the empowerment of these cooperatives. In comparison, the remaining 11 items stress the importance of planning and skill training to enhance cooperatives' capabilities and rearrangement. Given the significance of empowerment, it can be asserted that in the process of rearrangement of the organizational model of RPCs, the empowerment of these companies is regarded as both an objective and a means to achieve various goals. From another perspective, respondents' answers regarding the empowerment of RPCs can be categorized into three main groups: 1. Empowerment through active participation: This includes factors such as active involvement in investment in production and processing projects, participation in the supply and distribution of inputs, participation in general assemblies, involvement in management and decision-making processes, and fostering sincere and cohesive teamwork. It also involves interaction with

both public and private sectors and local institutions. 2. Empowerment through training: This category comprises elements related to training and education, including understanding cooperative principles, members' responsibilities, the importance of members' education, changing the attitudes of policymakers and planners within the exploitation systems, and enhancing professional skills. It also encompasses understanding the benefits of forming RPCs and the advantages of teamwork. 3. Empowerment through planning: This group focuses on planning-related aspects of empowerment. It involves improving the quality of service provided to members and addressing the stability and resilience of rural areas surrounding the cooperatives. This planning aims to stabilize the rural population, prevent land use changes, and enhance the overall well-being of rural communities. Hence, these empowerment methods should be taken into account by policymakers and decision-makers when rearranging the organizational model of RPCs.

**Table 5.** Rotated component matrix of the fifth factor affecting the rearrangement of the organizational model of RPCs

Factor	Row	Item	Factor loading
Support and organization of cooperatives	1	The government should provide more convenience and more activities for RPCs in the agricultural sector than the private sector	0.854
	2	The public sector should interfere less with the work of the cooperative	0.843
	3	Revise the RPC's organizational structure, processes, and programs with new ideas and insights, taking into account successful models of exploitation systems.	0.828
	4	Having proper legal support	0.787
	5	Modern machinery, equipment, and agricultural tools owned by the RPC	0.775
	6	Proximity of facilities, equipment, and resources of RPC to members' locations	0.773
	7	Having the necessary power to integrate agricultural lands	0.771
	8	Easy access of members to the location of the Cooperative	0.768
	9	Evaluate and update the organizational structure of the production system from the Ministry of Agricultural Jihad to the RPC	0.756
	10	The RPCs were transferred from the Ministry of Agricultural Jihad to the Rural Cooperative Organization in 2008, but the credits remained within the Water and Soil Department of the Ministry.	0.741
	11	Having comprehensive and long-term plans for cooperative activities	0.739
	12	The priority of handing over infrastructure technical affairs and implementing contracting projects to RPC is established under Article 5 of the Law on Cooperative Production and Land Integration.	0.718
	13	Timely preparation and adjustment of the balance sheet and profit and loss of the RPC	0.711
	14	Ensuring that the managing directors do not become the focal point of the RPC	0.702
	15	Increasing the level of responsibility of the board of directors and inspectors and managing directors to perform legal tasks and duties	0.693
	16	Enhancing the level of accountability of RPC members in fulfilling their legal responsibilities and duties	0.686
	17	Management of the optimal use of production factors and the implementation of the program of the Cooperative Production Law	0.672
	18	Eliminating redundant activities (such as the presence of consulting service firms, non-governmental agricultural service centers, etc.) in the operating area of the RPC and the delegation of responsibilities, such as granting licenses for the distribution of agricultural inputs by the Ministry of Agricultural Jihad to these entities.	0.664
	19	Individual opinions should not influence decisions regarding the activities of the RPC, and there should be a systematic approach with a clear strategy in place. This approach should remain consistent, and changes in policies, laws, and government approaches should not lead to drastic alterations in previous decisions.	0.658
	20	Timely holding of the general meetings of the RPC	0.631
	21	Reviving the Deputy of Production Systems in the Ministry of Agricultural Jihad	0.572
	22	Having a performance evaluation system for the board of directors, managing directors, and inspector in the RPC	0.557
	23	Continuous supervision and control of the rural cooperative organization on the activities of the RPC	0.542
	24	Inactive and semi-active RPCs should be either merged or dissolved	0.527



The results from Table 5 reveal that there are 24 items representing the role of “supporting and organizing cooperatives” in the rearrangement RPCs. Among the mentioned items, the first item raised by respondents with a factor load of 0.854 is “creating a platform for these cooperatives to play a role in the agricultural sector and facilitating the private sector.” The second factor identified under the “supporting and organizing co-

operatives” category, with a factor load of 0.843, is the “non-interference of the government in the affairs of cooperatives.” Indeed, creating a supportive platform and ensuring minimal government interference is vital for the success of RPCs, particularly in a competitive landscape alongside private and public sectors. These factors provide the foundation for these cooperatives to function effectively, innovate, and adapt to changing economic

conditions, ultimately contributing to their sustainability and success. The third item highlighted by the respondents within this factor, with a substantial factor loading of 0.828, underscores the concept of rearranging RPCs. It emphasizes the importance of revisiting and restructuring these cooperatives' organizational structures, processes, and programs. Similarly, the ninth item underscores the importance of evaluating and updating the organizational structure of RPCs, with a significant factor loading of 0.756.

Updating agricultural machinery, equipment, and tools, along with ensuring their proper distribution relative to the location of the members as well as empowering these cooperatives with the necessary capabilities for land consolidation, are key factors influencing the support and organization of cooperatives during their rearrangement. These factors, with factor loadings ranging from 0.775 to 0.768, emphasize modernizing equipment and ensuring efficient resource allocation in cooperative rearrangement. A separate group of items influencing the support and organization of cooperatives pertains to "optimal management of RPCs," encompassing items from rows 11 to 20 and 22 to 24.

Spearman's correlation coefficient was employed to assess the relationships between these variables, considering the type of scale used for these variables. This analysis will help determine the strength and direction of these relationships. The analysis results indicate a significant positive relationship (at the 1% level) between the factors of Attracting active cooperation of members, self-reliance, legal acceptance, empowerment, and sup-

porting and organizing cooperatives with the rearrangement of the organizational model of RPCs. This means that there is strong evidence (with 99% confidence) to support the notion that these factors are positively and significantly associated with the rearrangement of these cooperatives. According to the findings, in terms of the intensity of solidarity, the factors of empowerment, legal acceptability, attracting active cooperation of members, self-reliance, and support and organization of cooperatives are ranked from first to fifth, respectively (Table 6).

An ordinal regression model was employed to predict the most significant influencing factors on the rearrangement of the organizational model of RPCs (the dependent variable in the study), and the results are presented in Table 7. The final results of the software reveal the significance of various variables in predicting the variability of the dependent variable. Among these variables, empowerment, legal acceptability, and Attracting active cooperation of members play substantial roles in influencing the rearrangement of the organizational model of RPCs. The Wald coefficient indicates that empowerment has the most significant impact among these factors.

Cox coefficients ( $R^2=0.67$ ) and Nagelkerke's  $R$ -squared ( $R^2=0.81$ ) were employed to assess the extent to which the independent variables can account for the variability of the dependent variable. The results indicate that the variables of legal acceptability, Attracting active cooperation of members, and empowerment together can explain up to 84% of the rearrangement of the organizational model of RPCs.

**Table 6.** Results of correlation analysis test

Variable	Significance	Correlation coefficient	Rating
Empowerment	0.000	0.645	1
Legal acceptability	0.000	0.548	2
Attracting the active cooperation of members	0.000	0.512	3
Self-reliance	0.003	0.473	4
Support and organization of cooperatives	0.000	0.469	5



**Table 7.** Ordinal regression analysis of the predictive model of factors affecting the rearrangement of the organizational model of RPCs

Variable	B	Standard error	Parent Coefficient	Degree of freedom	Significance
Legal acceptability	0.321	0.116	5.57	1	0.003
Attracting the active cooperation of members	0.417	0.142	5.62	1	0.001
Empowerment	0.194	0.127	9.89	1	0.021



## 5. Discussion

In an era marked by rapid changes brought about by structural adjustment programs, cooperatives have emerged as vital organizations equipped to handle the economic and social complexities arising during various stages of adjustment. Cooperatives hold significant importance due to their unique qualities: they are public institutions that function as economic and commercial entities while embodying human and social values. Cooperatives serve as a means to represent the collective and collaborative efforts of their member constituents, all striving toward common objectives and contributing to the progress and development of the country. Indeed, assessing RPCs operations, identifying challenges and issues, and optimizing or rearranging these cooperatives can be viewed as a foundation for economic and social development. Therefore, this study aimed to identify and categorize the factors influencing the rearrangement of RPCs by surveying managers of these cooperatives, cooperative members, and non-member villagers residing within the cooperative's territory. The research findings revealed a total of 104 factors proposed by respondents as influential in the process of rearranging these cooperatives.

The factor analysis method was employed to categorize these 104 identified items into five distinct factors. Collectively, these five factors explain 62.06% of the variance in factors influencing the rearrangement of RPCs, as outlined in Table 8. Table 8 illustrates the factor related to "Attracting active cooperation of members," comprising 26 items that contribute to 17.4 percent of the variance in factors influencing the rearrangement of these cooperative companies. While the name of this factor might seem similar to "Supporting and Organizing

Cooperatives," a closer look at the items within each factor highlights the distinctions in their content and focus.

Indeed, its members' active engagement and optimal performance are fundamental factors for the success and sustainability of cooperatives, including RPCs. The consistency and durability of such organizations are intricately tied to their members' active involvement and commitment. The findings from the respondents, identifying the optimal performance of cooperative members as the primary factor affecting the rearrangement of RPCs, highlight the critical importance of member engagement and cooperation. Facilitating effective communication among members and fostering cohesive relationships within cooperatives are essential to rearrangement. A strong sense of unity and collaboration among members can significantly enhance the cooperative's performance and overall effectiveness. Certainly, emphasizing the cohesion of relationships and mutual trust among members is crucial for enhancing cooperative performance. Building and nurturing a solid organizational culture that promotes trust, satisfaction, and cohesion among members is essential. Creating a supportive environment that encourages open communication, interpersonal relationships, and participation in decision-making processes can significantly improve the cooperative's overall effectiveness. Members should feel valued and included, and their expectations should align with the cooperative's goals. By fostering a positive organizational culture and ensuring members have a voice in the cooperative's operations, cooperatives can strengthen relationships, enhance performance, and achieve their rearrangement objectives more successfully. These results are consistent with the research results of [Khosravipour et al. \(2022\)](#), [Zhao \(2021\)](#), [Yu and Nilsson \(2021\)](#), [Al-Hamouli et al. \(2021\)](#), and [Scrimgeour et al. \(2006\)](#).

**Table 8.** Summary of factor analysis and naming of factors affecting the rearrangement of the organizational model of RPCs

Factor	Factor	Number of items	Special Value	Variance percentage	Cumulative percentage
First	Attracting the active cooperation of members	26	6.79	17.42	17.42
Second	Self-reliance	11	4.27	13.74	31.16
Third	Legal acceptability	16	3.58	11.92	43.08
Fourth	Empowerment	27	3.41	10.27	53.35
Fifth	Support and organization of cooperatives	24	2.42	8.71	62.06
	Total	104		62.06	

The findings indicate that, following the factor of Attracting active cooperation of cooperative members, self-reliance within cooperatives emerges as the second most influential factor affecting rearrangement. Self-reliance explains 13.74% of the total variance in rearranging the organizational model of RPCs. Experience has demonstrated that successful cooperatives and organizations rely on their capabilities and resources, enabling them to effectively achieve their objectives and navigate through various life cycle phases. A review of research literature and field observations regarding cooperatives in Iran, particularly RPCs, reveals that many of these cooperatives suffer from significant deficiencies in terms of self-reliance. The research findings indicate that self-reliance is essential in various domains, and multiple factors contribute to its establishment. This self-reliance is achieved when these cooperatives collaborate as a network and function within a value chain framework. In this context, it is crucial for the performance goals, such as profitability, within the network of RPCs to be achieved. Centralized buying and selling activities should align with predetermined objectives and adhere to the principles and standards set for centralized transactions. It is worth mentioning that although the network of RPCs is integrated and continuous, because each of them is an independent legal entity, in the first place, their preference is to gain benefits and income for their group. In other words, the network of Economic continuity does not have the necessary adhesion due to its inherent nature. At the same time, the issue of stimulating demand is raised so that people go to cooperatives to buy shares, finance projects, and become involved in investment as cooperative members. This result is in line with the research results of Zhao (2021), Espallardo et al. (2009), and Krause et al. (2006).

As indicated in Table 8, the research findings highlight that legal acceptability constitutes the third most influential factor, explaining 92.11% of the overall variance in the rearrangement of RPCs organizational models. Recognizing and effectively utilizing the existing legal capacities within the scope of these cooperative companies is a crucial factor impacting the performance of these cooperatives, not only in the specific context but also within the broader realm of cooperatives in general. According to the respondents, the research results showed that there are many legal capacities for cooperatives, so these capacities should be implemented and realized. The results of this part of the research are in line with the research of Boozarjimehri and Hadizadeh Bazaz (2013), Yu and Nilsson (2021), and Al-Hamouli et al. (2021).

The empowerment of RPCs, represented by 27 items, is the fourth significant factor influencing the rearrangement of their organizational model. This factor accounts for 10.27% of the total variance related to the rearrangement of RPCs. As mentioned, the empowerment of RPCs encompasses three key areas: 1. Empowerment through active participation in investment in production and processing projects. 2. Empowerment through training, which enhances the skills and knowledge of cooperative members. 3. Empowerment through planning. Based on this, it is necessary that empowerment and capacity building, as one of the fundamental pillars of management rearrangement of RPCs, should be considered by decision-makers. This result is similar to the research results of Shahvali and Gheisari (2012), Zhao (2021), Al-Hamouli et al. (2021) and Muthyalu (2013). Supporting and organizing cooperatives by explaining 71.8% of the total variance of rearranging the organizational model of RPCs with 24 items was recognized as the fifth influential factor.

The restructuring, processes, and programs of RPCs are considered essential factors for their rearrangement. According to respondents, the current conditions of these cooperatives necessitate rearrangement to optimize their operations. This implies that cooperatives are most effective when established through the voluntary participation and active involvement of members, combined with their awareness, knowledge, and active management by members themselves. The cooperative economy method is based on principles of ethics, cooperation, consensus, and collective effort. It is interesting to note that your findings align with previous research conducted by Shamsnejad et al. (2021), Balali et al. (2018), Baseri et al. (2009), and Zhao (2021), which also emphasize the importance of these principles in the context of cooperatives.

The significant positive relationships found between the factors of Attracting active cooperation of members, self-reliance, legal acceptability, empowerment, and supporting and organizing cooperatives, and the rearrangement of the organizational model of RPCs suggest that these factors play a crucial role in the rearrangement process. This finding adds confidence to the importance of these factors in enhancing the performance and sustainability of RPCs, aligning with your earlier results. The ordinal regression model's results highlight the significance of empowerment factors, legal acceptability, and Attracting active cooperation of members as the most influential variables in predicting the rearrangement of the organizational model of RPCs. This further underscores the importance of these factors in driving

positive changes in the cooperative landscape and improving their overall performance and structure.

Considering the research findings and aligning with the principles of sustainable development theory, we can summarize the factors influencing in Figure 1.

Few countries have explicitly mentioned cooperatives in their constitution, and Iran, along with India, is one of the countries that has done so. Article 243 of the Indian Constitution, found in Part IX-B, comprehensively addresses cooperatives. It provides a detailed definition of cooperative societies and outlines various aspects of their functioning, including audit procedures, distribution of returnable surplus, board of directors' management, membership, and cooperative limits. India has taken a significant step by incorporating crucial elements of its cooperative sector within the constitutional framework (Ministry of Cooperation, 2011). In Iran, Article 43 and Article 2 of the Constitution underscore promoting the cooperative sector. It emphasizes creating employment opportunities and providing tools for anyone capable of working but lacking the means, primarily through cooperatives. This can be achieved through interest-free loans or other legitimate means that avoid wealth concentration and circulation solely among individuals or specific groups to prevent the government from becoming the predominant employer. In principle 44, the country's economic system is structured around public, cooperative, and private sectors. Iran's five-year economic, social, and cultural development plans, mandated by Article 138 of the Constitution and the annual government budget, emphasize the cooperative sector's role. However, despite the significant stature of cooperatives in Iran and extensive efforts made, the outcomes and policies implemented have not consistently met their intended objectives. Therefore, it is imperative to rearrange RPCs based on the factors identified in this research. RPCs

play a pivotal role as essential institutions for agricultural product manufacturing. These cooperatives, coupled with agricultural production systems, represent a significant facet of social transformation with direct implications for the livelihoods of rural farmers. Consequently, they catalyze agricultural progress, making cooperatives vital for advancing agricultural development. In certain instances, cooperatives face challenges such as government control (Develtere et al., 2008), inadequate financial resources (Zarafshani et al., 2010), weak managerial leadership (Lawless, 2006), regional and environmental disparities, as well as insufficient research in social, economic, and political domains. These challenges can hinder the effective functioning of cooperatives in their designated areas of operation. Consequently, there arises a clear need for rearranging the organizational model of these cooperatives to address these issues. Rearrangement holds significant implications for cooperatives, and when applied to the organizational model of RPCs, it can serve as a vital means to maximize their success and prosperity. As emphasized in this study, rearrangement plays a pivotal role in various aspects, including business expansion, streamlined marketing, cost reduction, capital attraction, income and savings growth, and overall enhancement of cooperative operations. It can also function as a localized, place-oriented strategy aimed at mitigating the challenges faced by rural communities.

In conclusion, based on the research findings, it is evident that the rearrangement of the organizational model of RPCs after more than five decades of their establishment is imperative for advancing the agricultural sector and, by extension, rural development in the country. We hope that with the identification of the key factors influencing this crucial issue, as revealed in this study, relevant authorities and managers will take heed of these results and take concrete steps toward realizing the rearrangement of RPCs.

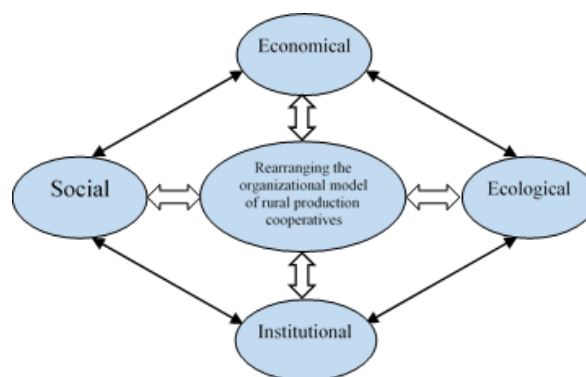


Figure 1. Factors affecting the rearrangement of the organizational model of RPCs

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## Conflict of Interest

The authors declared no conflicts of interest.

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