Aims & Scope (Economics)

Article

MAXIMIZING FARMER'S INCOME IN ALBANIA: EXPLORING THE IMPACT OF COOPERATIVES IN AGRICULTURE

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Abstract. Vegetable farming is a highly intensive production operation that requires significant investments. Although it can provide high levels of profits, recent developments have shown that actual profitability margins for vegetable growers are low due to several reasons such as low yield level, high production costs, lack of partnership in producer-buyer relations, limited access to agricultural input markets, and high prices for consumers. Studies have shown that there are different options for selling vegetable products in the market. While some farmers sell their products on the street, most of the vegetable producers use more than one alternative for selling their produce. A large number of farmers sell their products in local markets, to wholesalers, and in some cases to exporting companies. Furthermore, studies show that vegetable producers earn about 20 All from their activity on the farm, while other actors in the supply chain earn about 35 All for operations like transport, storage, etc., which are performed for a short period of time. The length of this supply chain and the significant number of actors involved in it are major problems for vegetable producers. They are not part of the supply chain, and horizontal cooperation between them is necessary. Through this type of cooperation, farmers become active participating actors in this supply chain, with all the benefits that derive from it.

Keywords: supply chain, vertical integration, horizontal cooperation.

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Introduction

The agriculture sector plays a vital role in the economy of most developing countries. However, its contribution has been decreasing over the years, and it is estimated to be around 18.63% of the GDP in 2022. More than half of the population lives in rural areas, and agriculture is the primary source of income for them. Although there has been an increase of around 3% per year in agriculture production during the last five years, small-sized farms and farmland fragmentation remain major barriers to production and marketing. The growth of the agriculture sector is below the national average and far from its potential. The sector faces several challenges, including migration from rural areas, limited land ownership and small farm sizes, difficulties in product marketing, outdated irrigation and drainage systems, obsolete technologies, weak farmer organizations, and insufficient agro-processing capabilities. The government has implemented various policies to increase agricultural production. These policies include irrigation development, production input subsidies, farm credit, and institutional development.

Vegetable farming is a highly intensive operation that requires significant investment from producers. While the profits in this industry are high, recent developments have revealed that actual profitability margins for vegetable growers are low. This is due to a number of factors such as low yield levels, high production costs, limited access to agricultural input markets, lack of partnership in producer-buyer relations, and higher prices for customers. It is worth noting that these challenges apply to both open and protected environments, such as greenhouses of various types, although profits are generally higher in greenhouses.

Literature Review

The agriculture sector is a very important sector in the economy of most developing countries as one of the economic sectors which are a source of income for workers with an estimated 60 to 70 percent in developing countries (Nguyen et al., 2015). One of the role of the agricultural sector as meeting basic needs or food, the increasing population will automatically make food consumption will also increase so as to improve the economy for farmers. Improving agricultural productivity should be a priority. This can be achieved by enhancing agricultural technology and management, including groundwater and post-harvest management.

This means that changes in the production structure moved far ahead of those in the implement structure of the workforce. Though productivity is generally considered as the most important determinant of competitiveness, it is not to be taken for granted that if one country produces at a lower cost than another country, that country can sell in the other country's market (Skreli., et al 2009).The ratio of worker productivity in agriculture to non-agriculture is registering a decline despite widespread application of improved farm technology in agriculture (Dr. Rabi N. Patra., et al 2013). In spite of remarkable GDP growth and substantial diversification in production structure at the macro level in recent years, little has changed in the villages. Rob Lawson et al., (2008) conducted a study in New Zealand to see how farmers create value through cooperation. They found that over 80 per cent of the traders at the markets were involved in some form of cooperative activity, reinforcing the idea of markets as community-based activities with high levels of interdependence amongst participants. Cooperation could be identified in different categories and increased over the length of time of trading at the market but could not be directly related to performance or the reasons traders offer for doing business at the market. A survey of farmers' market members was undertaken and findings are reported with descriptive statistics and exploratory analysis to profile aspects of cooperation amongst stallholders. The categorization of cooperation methods offers traders ways in which they might seek to more formally organize joint efforts.

The cooperative company is just one of the many institutions by which society organizes economic activities in the most practice and efficient way. The main points of departure in a cooperative organization are that membership is voluntary and open to all and that it produces services in the interests of its members (Samuli Skurnik, 2002). The cooperative form of company and entrepreneurship is in extensive use throughout the world. Today, cooperation has an important social role to play in the organization of economic relations.

Methods

The main objective of the study would be to understand and evaluate the current situation of the agro-processing industry in such a context as to analyse the issues facing the strategic leadership, seeing it from the perspective of the strategy of vertical integration and horizontal cooperation as well. Furthermore, it intends to bring out and evaluate the role of all the actors that figure in the chain of values. Based on this chain of values, conclusions might be formulated around the strategies that might be utilized to stimulate internal cooperation and build partnerships through the organization and functioning of clusters.

On the benefit of realizing the objectives of this study are developed two questionnaires, one with vegetable farm managers and one with managers of processing and conserving industry. In the centre of this study was the identification and analyse of different variables on the benefit of creating strategies of improving management of value chain in the vegetable filiere, increasing the role and participation of farmers on it.

Results and Discussion

Over the last ten years, there has been little to no change in the structures of vegetable production. This is due to the fact that vegetable producers are uncertain about introducing new production structures and garden plants, as they lack sufficient knowledge about them.

Survey results show that as to this period the plants cultivated in dense vegetation are tomatoes and pepper1. According to the survey results, out of the 24 hectares of vegetables planted (sample study), tomatoes make up approximately 73% of the total area, while the species of pepper constitute only about 5% of the area. Together, tomatoes and peppers make up 78% of the total area. The survey results confirm this assertion, which is evident from the chart data provided below. We believe that it is necessary to further diversify the vegetable production structure, especially with regards to certain types of garden plants that have market demand and whose added value is increasing.

As part of a study, I was interested in learning about the future trends in vegetable production. In order to do so, we asked vegetable producers if they believed that the production structure would change by 2023. The results showed that approximately 56% of the interviewees answered yes. This indicates that vegetable producers, especially those who grow plants in greenhouses, have been experimenting with incorporating a variety of other garden plants into their production structure, including those that were previously less or never cultivated.

It is worth noting that vegetable production has been on the rise in recent years. When it comes to constructing production structures, it is crucial to know who should advise farmers and where to seek advice. As a result, farmers were asked about the source of information they received regarding the construction of vegetable structures. The survey results are as follows (Fig. 1).

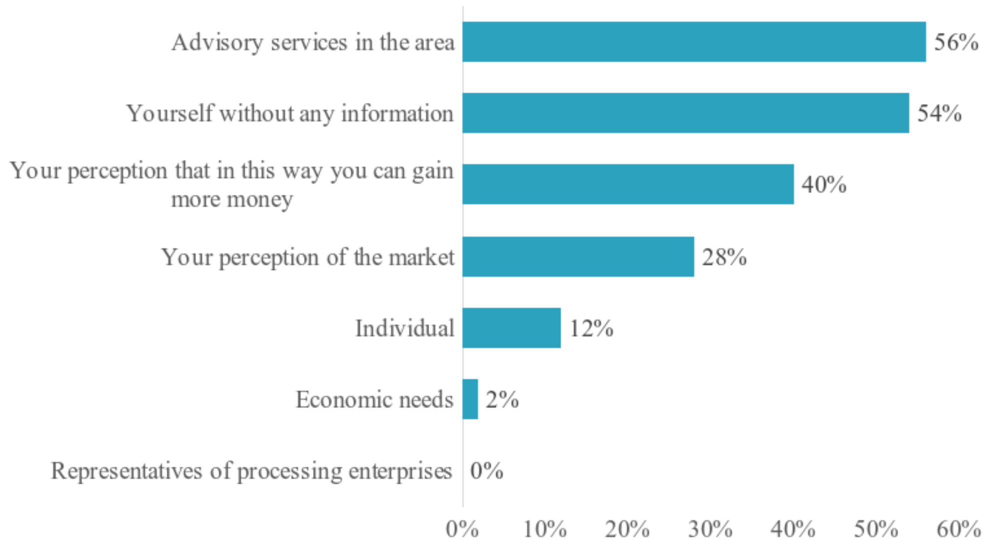

Figure 1. The information regarding the construction of production facilities for vegetable producers

Based on the data provided, it can be concluded that vegetable producers rely on various sources of information when constructing production structures. The local advisory service is the most commonly used source of information, with 54% of the producers doing it themselves and 56% seeking assistance from the local advisory service. It is important to note that producers have limited knowledge about the market, as only 28% of respondents based their decisions on market information when constructing their production facilities. The fig. 1 also shows that none of the respondents had been in contact with processing enterprise industry representatives, which indicates that vertical integration with back direction is difficult to achieve. This could pose a problem in providing safe markets for vegetable producers.

Production is undoubtedly the main component of the vegetable supply chain. However, the chain cannot be considered complete without taking other links into account, through which the product passes before it reaches the end consumer. In light of this, the respondents were asked whether they had received any consultation on vegetable treatment and, if so, by whom.

The data above shows that around 47% of respondents have consulted local advisory services while 38% have sought help from different experts. In Albania, the distribution of production, especially vegetables, faces many challenges (Fig. 2).

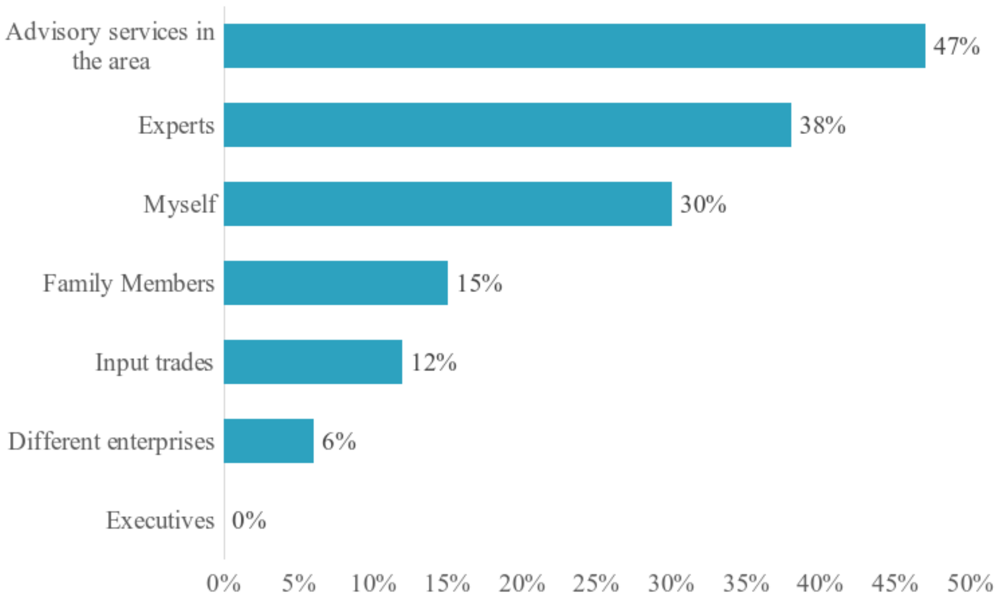

Figure 2. Information about consultancy services for the treatment of vegetables

To understand this situation better, the participants were asked if they have ever contacted any third-party for vegetable sales and the quantity sold through these channels. The survey results are as follows:

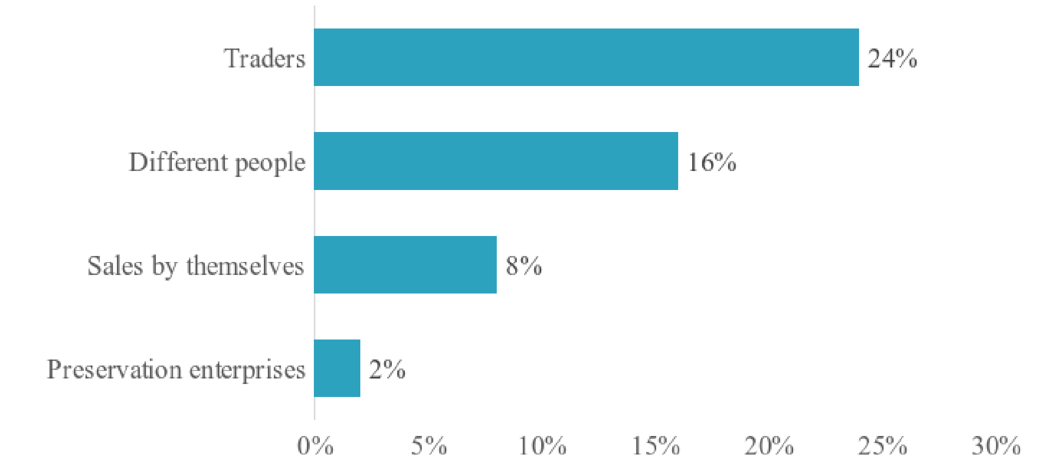

Figure 3. Information about contacts with the third party

Based on the data presented in Fig. 3, it is evident that some of the respondents did not answer the question. Among those who did respond, around 24% of them had contacts with different traders, while 16% of vegetable producers had informal contacts with different people. It is noteworthy that in such informal contacts, the contract system did not seem to be effective.

The methods used for selling vegetables are undoubtedly a crucial element in improving management in the supply chain. To address this issue, the participants were asked a series of questions. The table below shows the questions asked during the interview.

From the above data, it is evident that around 82% of respondents have confirmed that they sold their products in the market themselves. This is connected with wholesale markets that exist in multiple districts of the country. However, it is important to note that we are mainly referring to vegetable producers in greenhouses and not producers in open fields. Despite this, even in the case of selling their produce, producers are facing various challenges due to the lack of cooperation among themselves, fragmentary supply, absence of partnership among producers in markets, etc. These challenges are affecting their profitability levels.

It was found that only 14% of agro-industry companies purchase vegetables directly from the producers (Fig. 4).

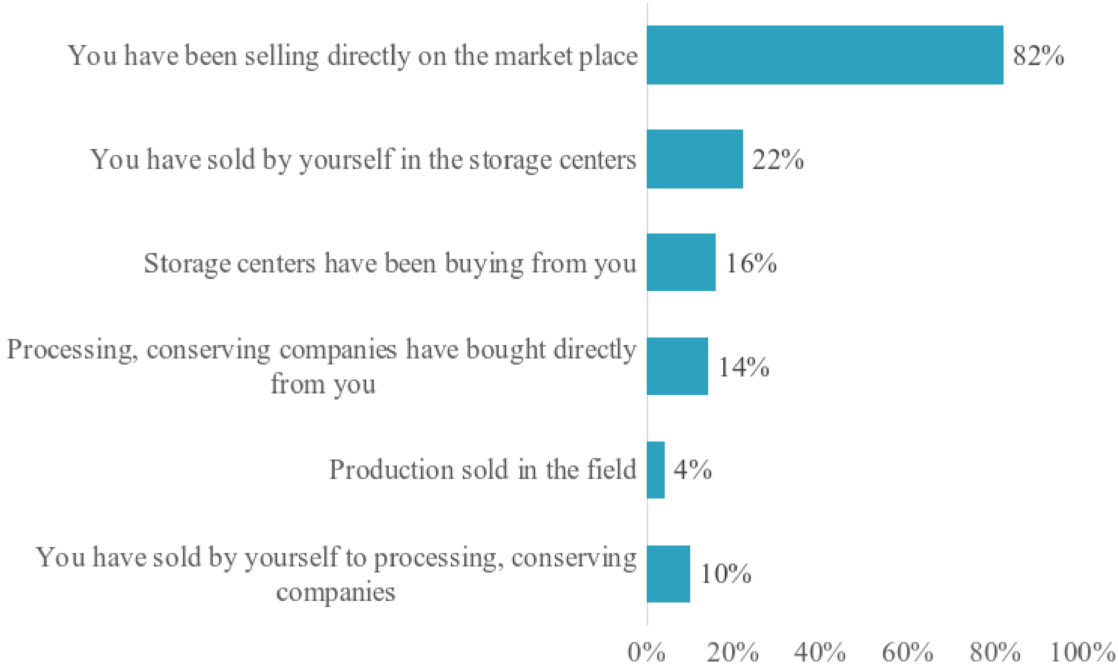

Figure 4. Information about the alternatives available for selling vegetable production

Additionally, there is a lack of communication and collaboration between the vegetable producers and the processing and conservation industry. Based on these findings and the data presented in the table, we can conclude that:

- Vegetable processors believe that it is more profitable for them to import raw materials for processing instead of sourcing them locally.
- National statistics indicate that approximately 40% of the raw materials used in the vegetable processing industry are imported.
- Unfortunately, the current contractual links between vegetable producers and processing and conservation industries are not functioning properly. This has resulted in a severe lack of information available to vegetable producers.
- As a result, they are not considered as partners in the markets due to the low level of cooperation.
- Additionally, the effectiveness of supply chain management in improving the situation is very low.

After analyzing the responses of the participants regarding their methods of selling products in the market, we can draw a general conclusion represented in Annex's Fig. 6, which shows the value-added supply chain in the study region.

As depicted in Fig. 6, there are various options available for farmers to sell their produce in the market. It is evident that a small number of farmers sell their products on the street. However, this kind of sale is not recommended since it is mainly for farmers who produce limited quantities for their own consumption. Most vegetable producers use multiple channels to sell their products. For instance, a significant number of farmers who were interviewed sell their produce in local markets, to wholesalers, and in special cases, to exporting companies.

Let's analyze the positive and negative characteristics of different ways of selling tomatoes based on production data.

Figure 5. Information about the alternatives available for selling vegetable production

Based on the data presented in Fig. 5, it is evident that vegetable producers earn approximately 0.18 EUR/kg or 20 ALL/kg (60-40) from their farm activities. On the other hand, other participants in the supply chain earn roughly 0.33 EUR/kg or 35 ALL/kg (95-60) for their services such as transportation, storage, etc., which are performed for a short duration. Therefore, it is apparent that the number of actors involved in the supply chain and its length is a significant issue for vegetable producers.

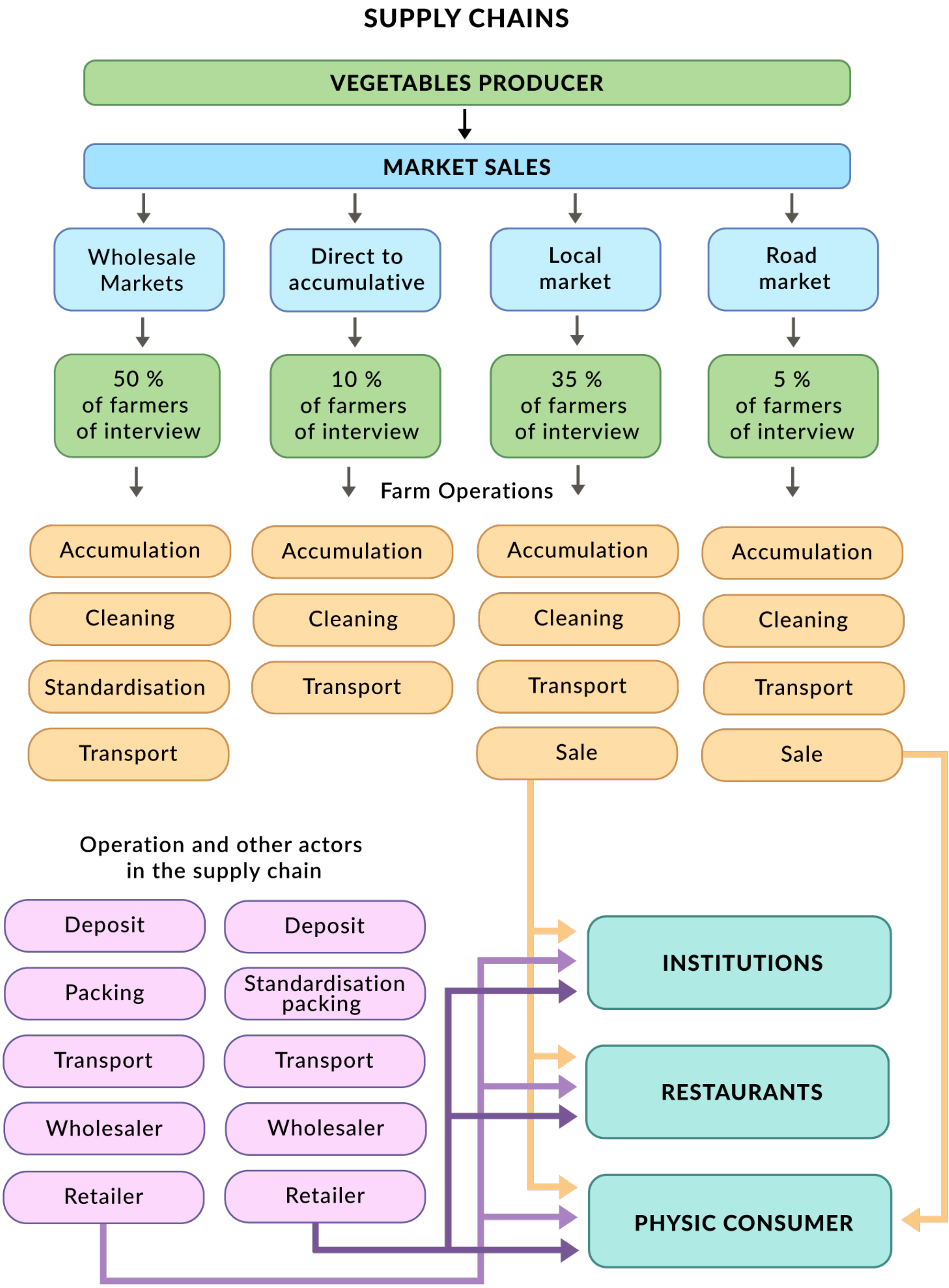

Figure 6. Value added supply chain in the study area

After analyzing the above comments and evaluating the business environment in Albania, we conclude that the vegetable supply chain should follow the diagram in Fig. 7 (Vegetable Supply Chain) as shown in the annex.

Based on the information provided in Fig. 7 and the comments given above, it is evident that the role of wholesalers is being fulfilled by marketing co-operatives of vegetable producers. When farmers become members of a cooperative, they become active participants in the value chain and are able to enjoy all of the benefits that come with it.

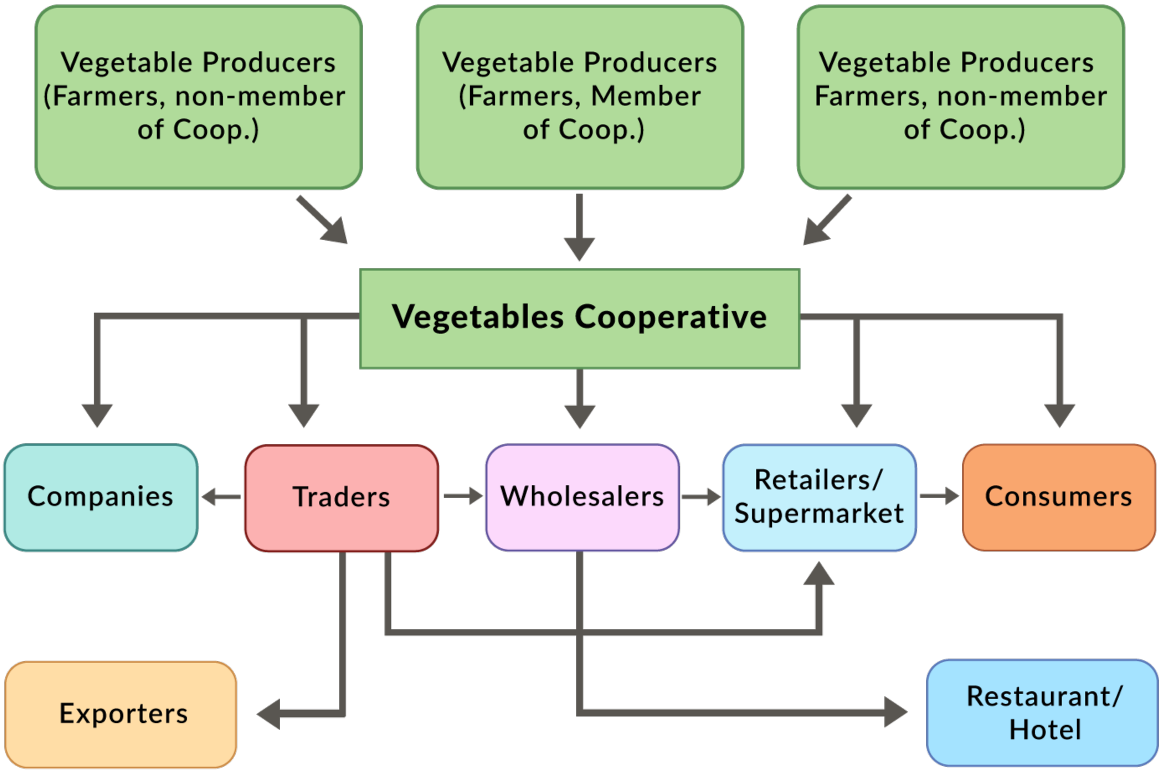

Figure 7. Vegetable supply chain

Based on the strategies proposed, we believe that organizing vegetable producers into supply and marketing cooperatives is advantageous for increasing the added value of their products. Additionally, this helps ensure that vegetable producers have control over the added value of their products.

If we take into account the various levels of value added along the value chain that exclude production, we can infer that joining a cooperative as a vegetable producer would be a highly profitable alternative. This is especially true for vegetable producers as it helps to streamline the value chain by eliminating intermediaries. We would like to highlight the advantages of this integration type, including enhanced partnership among vegetable producers in the market, better control over various links in the value chain, and increased economic benefits for vegetable producers.

The claims made above are based on the idea that cooperatives act as a connecting point between producers and retailers, as shown in Fig. 8 (The Purchase-Sale Relationship for Fresh Vegetables: The Role of the Cooperative), which can be found in the annex. The information provided in Fig. 8 illustrates how the purchase and sale relations between producers, cooperatives and retailers are organized. It also explains the role played by cooperatives in improving the cooperation between actors, the concentration of the offer, and other related areas. The role of cooperatives in improving supply chain management is also suggested for other reasons. As previously mentioned, it is crucial for retailers to establish stable relationships with their primary suppliers. This is because suppliers can vouch for the safety and quality of the products that they provide, while traders may not be able to guarantee the same level of quality and safety. This is due to the fact that traders typically purchase from multiple manufacturers, which can lead to variations in product quality.

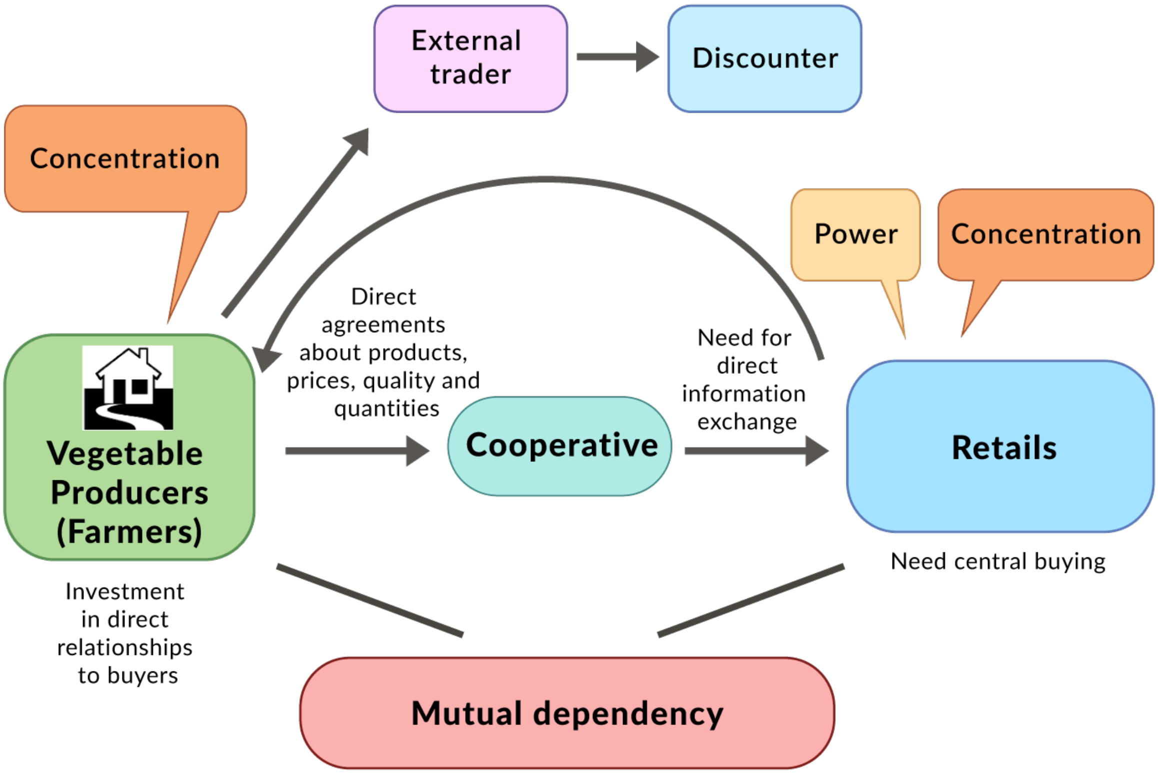

Figure 8. The Purchase-Sale Relationship for Fresh Vegetables: The Role of the Cooperative

We do not consider wholesale as a viable strategy for selling fresh vegetables to major supermarkets in today's markets. Retailers cannot afford the expenses of going to wholesale markets and purchasing small quantities of products from different suppliers. Therefore, a streamlined value chain is necessary, and cooperatives can play a crucial role in this. It is evident that the objective in this scenario is to increase market power. However, this move also affects non-cooperative producers who are given two options for distributing their products. They can either enter into a special commercial agreement with wholesalers or use the cooperative to sell their merchandise.

Conclusion

Prior to the 1990s, Albania had a strong vegetable production industry. However, after the 90s, the industry experienced a significant decline in production. This situation had a negative impact on the vegetable production structures and related areas. Unfortunately, for almost a decade, there was little or no change in the production structure.

The phenomenon is mainly related to the uncertainty of the vegetable production sector in introducing vegetable plants that they have little knowledge about. Greenhouse vegetable producers have tended to involve a great number of other vegetable plants in their production structures, some of which are less or not at all cultivated.

Based on survey data, vegetable producers rely on various sources of information when creating production structures. The most important source of information tends to be consulting services in the area.

It's worth noting that few producers base their construction of production structures on market information due to their lack of knowledge about the market.

The methods used to sell vegetables are undoubtedly an essential factor in addressing the challenges related to improving the supply chain. However, there are limited connections with businesses in the processing and preservation industry. Additionally, only a small number of agro-industry companies are interested in buying directly from the producers.

Many vegetable producers use multiple channels to sell their products. For instance, a significant number of farmers interviewed sell their produce directly in local markets, wholesale markets, and occasionally to exporting companies.

To expand the range of products, it is essential to diversify the vegetable production structure. This is especially important for vegetable plants that are in high demand and can increase in value.

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