

**ADVANTAGES AND CONSTRAINTS
OF INNOVATIVE BUSINESS MODELS FOR FOOD SECURITY:
CASE STUDY IN SMOLYAN DISTRICT, BULGARIA**

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The market access has been often defined as a factor having the strongest impact on agricultural sector activity. Its importance is particularly critical for the small farms, which could not offer their production on the market through single and sporadic sales. They could overcome these weaknesses of their business through participation in cooperative marketing. This article goal is to establish the advantages and the constraints of cooperative business marketing model for food security in farms of Smolyan district, Bulgaria. Farmers expect some advantages from the participation in such cooperation form. Three are the main approved advantages: 1) better awareness of market requirements; 2) market access facilitation; 3) realization of higher profit from the activity. These advantages are expected as a result form the direct contact with the final consumers, without external mediators. The implementation of cooperative marketing has its challenges embarrassing its effective use. The main constraints are related to the efficiency of processes management and to the coordination of activities of different economic entities.

Keywords: farm management, risk, cooperation, business models.

Accesul pe piață deseori a fost definit ca un factor care a avut cel mai mare impact asupra activității din sectorul agricol. Importanța acestui factor este deosebit de critică pentru fermele mici, care nu și-au putut plasa producția pe piață prin vânzările unice și sporadice. Acestea puteau depăși slăbiciunile afacerii lor prin participarea la marketingul cooperativ. Scopul acestui studiu este de a stabili avantajele și constrângerile modelului de marketing cooperativ de afaceri pentru securitatea alimentară în fermele din regiunea Smolyan, Bulgaria. Agricultorii se așteaptă la unele avantaje în urma participării la o astfel de formă de cooperare. Principalele avantaje aprobate sunt: 1) o conștientizare mai bună a cerințelor pieței; 2) facilitarea accesului pe piață; 3) realizarea unui profit mai mare din activitate. Aceste avantaje sunt așteptate ca urmare a contactului direct cu consumatorii finali, fără mediatori externi. Implementarea marketingului cooperativ are provocările sale îngreunând utilizarea eficientă a acestuia. Principalele constrângeri se referă la eficiența gestionării proceselor și la coordonarea activităților diferitelor entități economice.

Cuvinte-cheie: managementul fermelor, riscuri, cooperare, modele de afaceri.

Доступ к рынку часто определяется как фактор, оказывающий наибольшее влияние на сельскохозяйственную деятельность. Это особенно важно для небольших ферм, которые не смогли разместить свою продукцию на рынке из-за единичных и спорадических продаж. Эти недостатки бизнеса можно преодолеть, участвуя в кооперативном маркетинге. Целью данного исследования является определение преимуществ и ограничений совместной модели бизнес-маркетинга для продовольственной безопасности на фермах в Смолянском районе Болгарии. Ожидаемые фермерами преимущества от участия в такой форме сотрудничества следующие: 1) лучшее понимание требований рынка; 2) облегчение доступа к рынку; 3) увеличение прибыли от деятельности. Эти преимущества ожидаются в результате прямого контакта с конечными потребителями без внешних посредников. Внедрение кооперативного маркетинга имеет свои

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проблемы, затрудняющие его эффективное использование. Основные ограничения связаны с эффективностью управления процессами и координацией деятельности различных экономических субъектов.

Ключевые слова: фермерское управление, риски, сотрудничество, бизнес-модели.

JEL Classification: M10, M11, M16, M19.

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Introduction. Farmers often have serious and complex problems, resulting from the dynamic marketing environment. Adopting management decisions is within conditions of risk and related to the output realization, which leads to decreasing efficiency of their activity. Knowledge of all marketing system functioning is necessary in order to improve not only the interaction between different marketing agents, but also the profitability of agricultural activity and the farms' viability [1].

The access to a market has been assessed as a main critical factor, determining the opportunity to develop agricultural activity. This is particularly valid for small farms, which have difficulties to insure market for their production and have insufficient market power [2]. Often they sell on lower prices than the big farms, which decrease their profitability within equal conditions and put their activity at risk. Farmers are subject to a necessity to search new ways of organizing their activity, in order to improve the results [3].

The concept of food security by Kotagama, H. et al. [7], from a national perspective, is based upon: availability (in adequate quantity, nutritionally balanced, of acceptable quality, culturally preferred and safe), accessibility (in terms of physical transport and economic affordability to purchase) to the nation's population. Food security also expects that food availability is reliable and resilient in such a way that food availability is assured at all times. Reliability of food supply although basically depends on weather and the biological character of food production, depends on market conditions in modern times, too.

There is also an emergence of thinking as reasoned by Rocha [8] that prevalence of negative externalities and public goods in the production and distribution of food as cause of food insecurity and justifies government intervention in the production and distribution of food to secure national food security. The negative externalities are such as over-exploitation and degradation of natural resources (water, soil, biodiversity, fish, and impact on climate change) and pollution due to the use of chemical materials etc. [8] explain further that although food itself is not a public good, as it is reasonably provided through markets given the possibility of excludability and the rivalry in consumption; 'food security' is a public good as every one in society enjoys without rivalry and exclusion the sense and benefit of food security. Food security provides public goods for a healthy, productive and harmonious society. It is linked to national security in the sense that in the event of extreme situations of war, assuring of food supplies becomes a critical issue. The acceptance of the paradigm that 'food security is a public good', justifies government intervention and support in the market to supply it.

Public goods have the characteristic of non-excludability and nonrivalry in consumption, which leads to market failure of production of such commodities. Private firms would produce staple foods and retain reserves of food only up to gaining private benefits and not to secure public benefits of food security as explained above. The theory of the second best suggests that when markets fail, government intervention could improve social welfare. However, the right form (least costly and most effective) of government intervention needs to be decided. The best intervention would be a policy that is targeted to the root cause of the market failure.

One of the major obstacles in enhancing food supplies in regions with predominant small farms structure is the lack of capacities of smallholder farmers. Farmers are often insufficiently integrated into the formal economy due to the limited access to infrastructure, information, capital, skills and technologies. Food farmers also increasingly compete for resources such as land, energy and water with emerging industries and biofuel production. At the same time, climate change and unsustainable production methods reduce land availability and productivity

There is a growing body of experience showing that "win-win" outcomes are possible through commercially innovative business models – ways of creating value within a market network of producers, suppliers and consumers – which involve small farmers and SMEs. These innovative business models for small farmers and SMEs must deliver essential services to producers and ensure reliable supply to buyers, while also addressing the high transaction costs and risks that buyers face when purchasing from large numbers of fragmented, cash-strapped small farmers and SMEs. This brief gives an overview of lessons learned about business models for including small farmers and SMEs in modernizing markets and agro-industries.

Methods and information

To study the public goods insurance, including the food security from agriculture, 30 farmers from Smolyan district have been interviewed. With reference to their food security, their production activity is concentrated in three typical for the region crops – beans, potatoes and sheep breeding. The mentioned production forms almost all the income from the agricultural activity and builds the image of the region. The appropriate conditions and the traditions of this production are popular among the local community and the consumers estimate these products as qualitative and natural. These productions have also strong impact on rural landscapes formation and for the insurance of public goods for the local population and the visitors.

Food security in the area requires small farms unification on the base of cooperative marketing. Cooperative marketing is every contract for marketing activity cooperation that could be realized under different forms. Farmers can cooperate also for increasing their market power in purchasing production factors. Thus, they succeed to negotiate more profitable prices, because the request's volume is bigger [5].

The common use of the available resources is a popular example for cooperative work. Other opportunity of cooperative work is the use of the same internet sites designer from local producers, which will present their products and the region of production to the target clients, through online tools [4].

Other form of cooperative marketing is the cross promotion – one producer promotes a definite product to other producers from the region and this way there is a diversity of delivered products and a warranty for the clients about the origin and the qualities of offered goods. Participation in organized events as fairs and bazaars, as well as during sport events, professional meetings etc. are also good opportunities for the farmers to present their output and to attract and convince clients in their products' quality.

Cooperative marketing aims:

- Improvement of activity efficiency;
- Share of available resources;
- Improvement of products' popularity;
- Access to the market;
- Impact on consumers.

For small business, the cooperative marketing insures market power for participating producers and creates opportunities for business development. Farmers could search for various ways to realize the above-mentioned and this approach for business realization is accompanied by lots of advantages and constraints [6].

Analysis of survey results

Agriculture in the region is small and fragmented, which is typical for mountain areas. The small production puts farmers in unfavourable position towards providers and mediators. The presence of big number of small farms hinders their management. Within these conditions, the participation in cooperative forms could create an opportunity for optimal use of resources and activity facilitation, through mutual support and coordination. From the surveyed entity there are a small number of producers, which are members of agricultural association. Barely 7% (Figure 1) declare to be active cooperative members and look for a profit on the base of common interest and similar problems solution, as agricultural producers. The interest in participation in agricultural associations is very low and could be explained by the lack of recognition of cooperatives as an effective structure from the farmers' side.

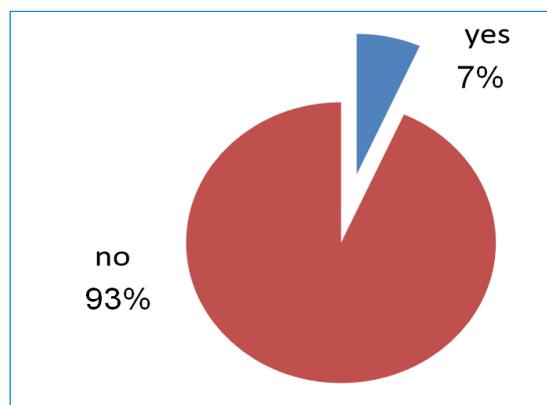


Figure 1. Share of members in agricultural associations

Source: Developed by the author.

Farmers use two main chains (more often combined) for their output realization – sell from the farm and retail sales (Figure 2). The wholesale markets are not a wanted form and there are not concluded contracts with processors, due to the small output volumes, therefore these forms of realization are inconvenient.

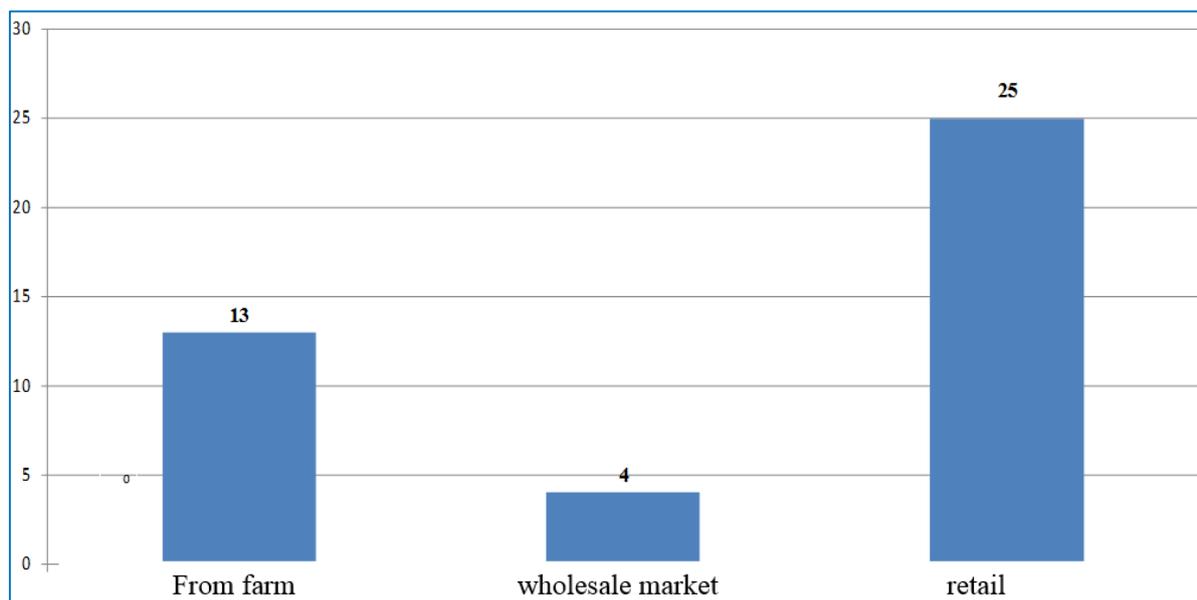


Figure 2. Output realization forms

Source: Developed by the author.

It was already mentioned that the region has convenient conditions for the development of certain productions – beans, potatoes and sheep breeding. Nevertheless, 1/3 of respondents approximately determine these products image as weak or insufficient (Figure 3), which is surprising in the background of the positive consumers opinion.

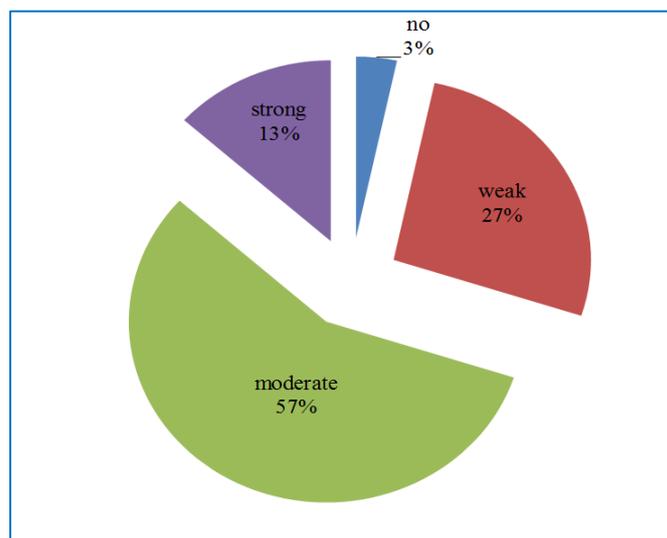


Figure 3. Local agricultural products image

Source: Developed by the author.

A considerable part of farmers assess the image of local products as high, which gives the opportunity to produce goods with clear identification of origin. This is proved also by the declared readiness from all respondents to participate in forms of cooperative marketing aiming the production and realization of products with registered origin (Figure 4).

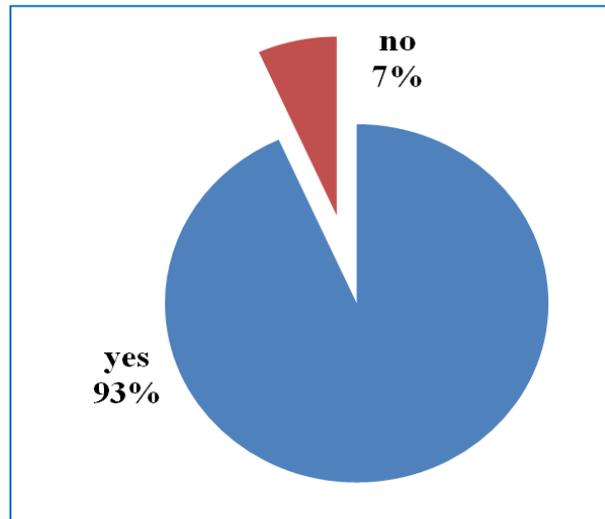


Figure 4. Willingness for participation in association for cooperative marketing

Source: Developed by the author.

The participation in association for cooperative marketing could lead to various profits for the farmers. These benefits could be grouped in two directions – farms integration improvement in the food chain and agricultural activity improvement.

Regarding to the improved integration (Figure 5), the farmers from the region expect from the cooperative marketing to insure the direct contact with the final consumers, without mediators. This will give them the possibility to be aware with consumers' requirements, on the one hand, and on the other hand they could offer their products with an emphasis on their specificity, thus presenting the advantages of their business and region. The way of realization is to offer local products with guaranteed origin. Interesting is the fact that most of respondents consider the cooperative marketing would not lead to increase of products' quality. Thus, the problems of local producers are related more to the guaranty for consumers than to the production quality. The clear products' identification will bring advantage especially in this area. The biggest part of interviewed persons does not conceive the opportunity of products' diversification as a result from the cooperative marketing. This is due to the specificity of natural climatic conditions of this area, which restricts the production opportunities to a small number. Nevertheless, the image of the region is built through these outputs and could be used for the enlargement of their marketing.

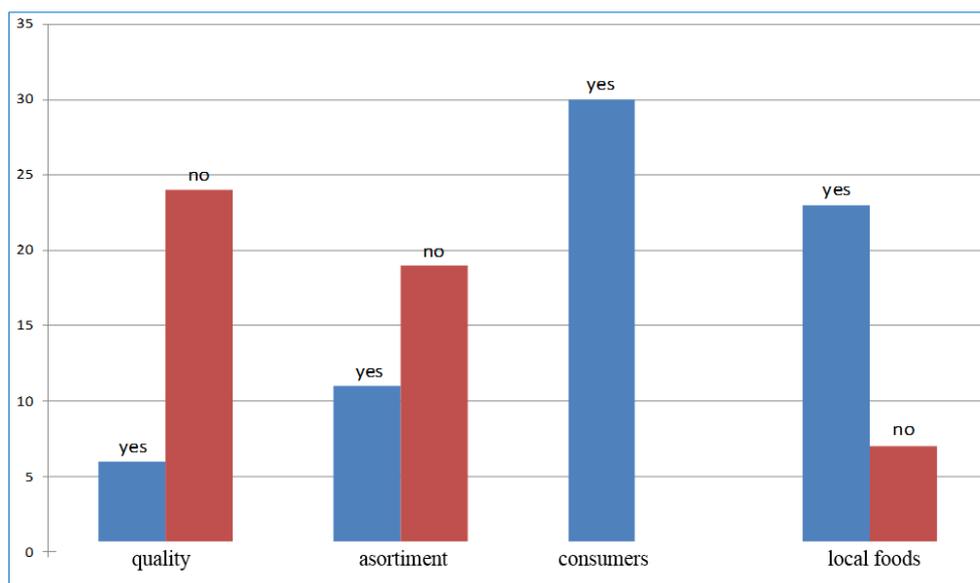


Figure 5. Impact of cooperative marketing on farms integration in the food chain

Source: Developed by the author.

The cooperative marketing can influence also the agricultural activity of farmers participating in this type of cooperation form. There are three basic benefits: 1) better awareness of market requirements; 2) market access facilitation; 3) realization of higher profit from the activity (Figure 6). A large part of respondents thinks that the cooperative marketing could insure opportunity to diversify their sources of income. This is realizable within the context of increasing the income share from agricultural activity in their total income, this share being insufficient until now. Respondents declare also that they do not expect any contribution of cooperative marketing regarding the more effective resource use and quality improvement of production activities.

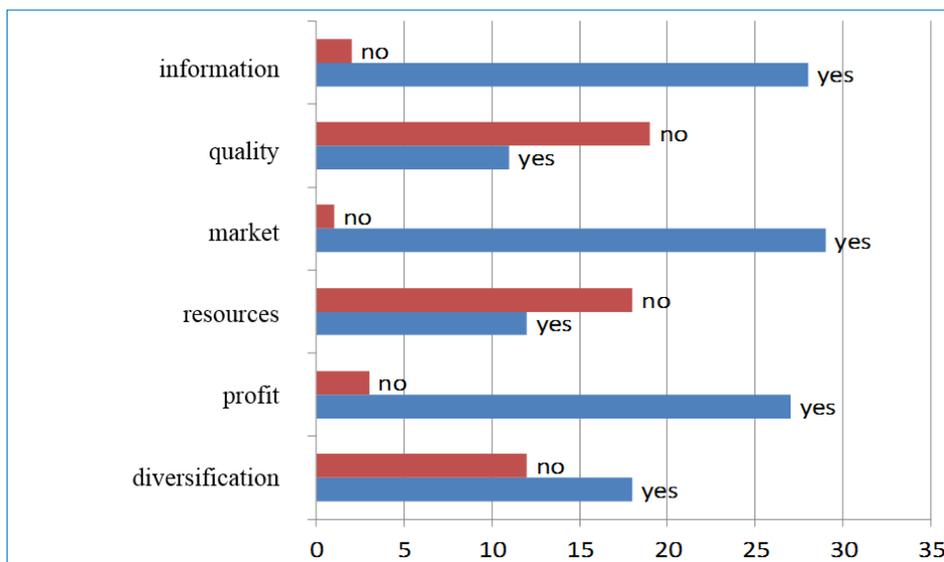


Figure 6. Cooperative marketing impact on agricultural activity

Source: Developed by the author.

The participation in association for cooperative marketing is possible only if some stimuli are available, which could motivate farmers to be part of such an union. Problems of agricultural producers are heterogeneous, but the most critical of them are related to the market [3]. This has been confirmed by the answers of interviewed persons, declaring that the main reasons to participate in the cooperative marketing are the facilitated market access, the more direct contact and communication with final consumers and the opportunity to resist to the competitive pressure (Figure 7). There is a probability for the expenses, connected to the production realization, to be diminished, due to the optimization process. It should be noted that farmers barely pay attention to benefits related to the easier access to financial funds. The reason for this fact is the small size of the business, hence the costs are covered by own funds. Often the main income of farmers is coming from other activity and is used for funding the agricultural activity.

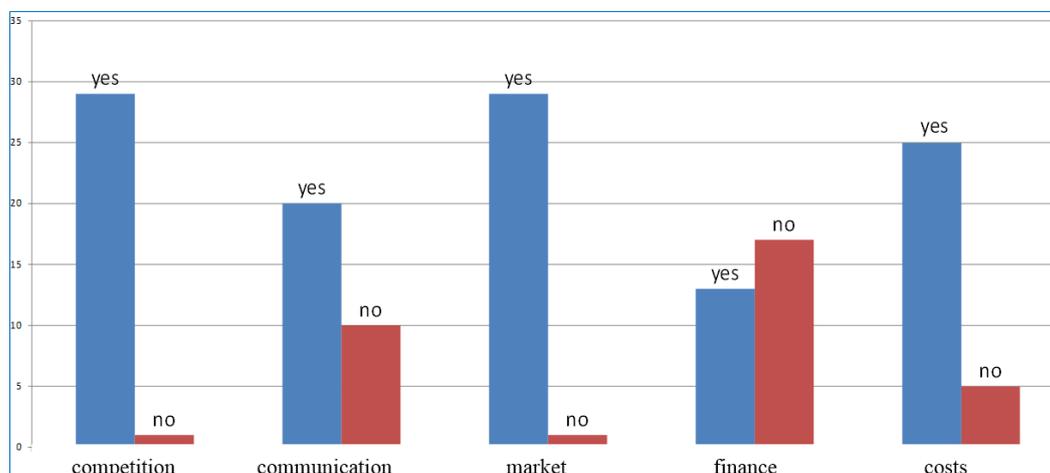


Figure 7. Which is the motivation for participation in cooperative marketing

Source: Developed by the author.

The participation in cooperative marketing has been embarrassed by some restrictions, putting under suspicion its successful functioning as a form of association. Respondents have mentioned 6 potential factors that would restrain their participation in cooperative marketing. The assessment was realized through a 4-degree scale, as the high mark means a stronger hindering role of a concrete factor. The amount of assessments from all respondents determines the overall evaluation for every factor, as the maximal value is 90 points. Six restrictions have been defined as potential stopping factors and the results show that each of them has extremely strong restraining impact (Figure 8). The most significant among these factors is the indisposition to cooperation because of the mutual lack of confidence. The reporting of such high marks for all the 6 factors shows that the probability to organize associations for cooperative marketing is very doubtful.

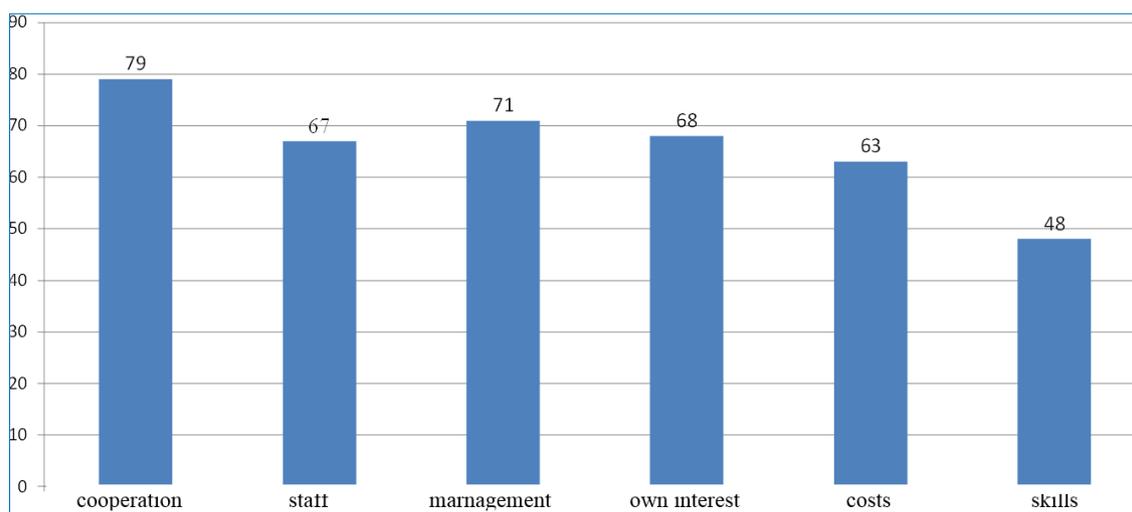


Figure 8. Which are the restraining factors to participate in cooperative marketing

Source: Developed by the author.

Conclusion

The carrying out of agricultural activity takes place within conditions of risk and insecurity, because the business environment factors have a dominant importance. This is in force especially for farmers from mountain areas, whose holdings have small sizes and are disadvantaged by unfavourable natural-climatic conditions. These factors create difficulties for the efficient farms' functioning, for their aims achievement and their vitality maintained in a long-term perspective. Farmers from these areas could barely be in competitive conditions with the producers of other regions, so the first ones are forced to look for new approaches in production management and agricultural products offering.

The cooperative marketing model is an opportunity for production activity organization and for products distribution through cooperation between farmers. The collaboration gives opportunities for better resource use and increase of activity efficiency. Agricultural producers could coordinate their actions related to the output and offer wider range of goods and bigger quantities on the market.

The associations for cooperative marketing could use the region advantages through offering products with clear identification of origin and guaranties. This will allow the positioning of products having unique qualities, differentiating them from other market goods. This way the massification of products could be overcome and concrete agricultural market segments will be covered, which do not manifest such price sensitivity as the mass consumer. The cooperative marketing implementation has its challenges, hindering its introduction and effective use. The main restrictions are related to the efficiency of processes management and the coordination of activities of different economic agents.

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