

THE ROLE OF THE EXTENSION SERVICES FOR THE DEVELOPMENT OF THE SMALL-SCALE FARMS IN BULGARIA

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Abstract

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The small-scale farms are the main group that has an important role for the development of the agricultural and rural area in Bulgaria. This family business is officially engaged in one member of the family farm and required employment power by all others members. The small-scale farmers with agricultural education are very small. This type of farmers has mostly practical agricultural knowledge and experience and funds their investment costs with their own financial resources.

The goal of the present paper is to investigate the role of the extension services for the small-scale farmers. To achieve above goal was (1) to identify farmers' needs for information and knowledge, (2) to identify actors and their methods of exchange knowledge and (3) to present the processes of achieving knowledge and information among involved actors.

The result of the study shows that extension services provided by National Agricultural Advisory Service (NAAS) are actively used by small-scale farmers who participate in the Rural and Development Programme. Whereas, all others small-scale farmers use their own knowledge that they have from off-farming activities and receive knowledge by other informal consultancy services such as local agronomists or neighbor farmers. The small farmers rarely used knowledge and information by expert of the scientific institutions.

Key words: small-scale farms; extension services; agriculture; Rural and Development Programme; National Agricultural Advisory Service

Introduction

Bulgaria is characterized by high rate of small-scale farmers who mainly produce for their own consumption and partly for the market. The main reason to exist so many small farmers was the conducted land reform in the 90s, where land was restituted to pre-communistic owners in an extremely fragmented ownership structure (Noev and Swinnen, 2002; Kostov et al., 2004, Mathijs et al., 2004, Yovchevska, 2015). This fragmented ownership structure created two types of agricultural organizations: small number of relatively large scale farms with over 50 ha (2.27%), who cultivate almost 83.27% of utilized agricultural area (UAA) and many small-scale farmers with under 2 ha (83.16%), who cultivate only

around 4% of total UAA (Dirimanova, 2008; Yovchevska, 2016). Middle size farmers are rare in the country.

Small scale farming is not only a product of the land reform but has its traditional roots in Bulgaria. In the past, before collectivization process, land owners cultivated small plots that were enough to produce sufficient food to sustain their large scale households. During collectivization, owners worked small private plots (average size 0.38 ha) around the villages, which were 13% of the total agricultural land (Davidova et al., 1997; Yovchevska, 2017). In the present days, Bulgaria is characterized by many small scale farmers who use 203 930 ha of agricultural land or 5% of the total territory of the country. The average size of the farm land for small farms is 2.4 ha, compared with 12.1 ha on average for

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all farms. Between 2005 and 2010, land used by small farms decreased about 20%. However, there was a significant increase of the average size of the farm land per holding – 1.6 ha to 2.4 ha (Agrostatistic, MAF, 2010).

The aim of the present paper is to investigate the role of the extension services for the small-scale farmers. To achieve above goal was (1) to identify farmers' needs for information and knowledge, (2) to identify actors and their methods of exchange knowledge and (3) to present the processes of achieving knowledge and information among involved actors.

The research, also, will try to answer the follow research questions: (1) what kind of needs and demands do small farmers expect to be served by the advisory services?; (2) what is the role of the National Agricultural Advisory Services (NAAS) in co-operation with small scale farms?; and (3) what types of cooperation have been created by owners of small farms as a result of the co-operation with the NAAS?, with the purpose to describe and analyze the performance of the knowledge flow and identifying the best-fitting practices for advisory service.

Material and Methods

The South-Central planned region is the region with the highest number of small-scale agricultural farms and their number is 27 480 (32% of the total number for the country). In the other planned regions, the average number of small-scale agricultural farms is around 12 000-14 000 (12-14% of the total number for the country). The chosen district of study is Plovdiv because the average area of the farmland used is 4.2 ha. The most number of vegetables producers (48% for the country) are located in this area, followed by grape producers (33% for the country) and tobacco producers (55% for the country).

Four consultancy organizations were selected and interviewed for the purposes of the research in the study region: (1) NAAS, (2) two private consultancy companies and (3) one non-governmental organization. 15 small farmers who were participating in the Rural Development Program (RDP) were interviewed, as well as 2 small farmers who are not participating in any governmental and European programs.

The developed questionnaires were of two types. The first type of questionnaire was targeted at organizations providing consultancy services and the second type at the small-scale farmers. The questionnaires for experts at the consultancy services organizations included questions that were targeted at understanding how do they operate, assist to and consult the newly established small-sized and semi-subsistence agricultural farms. The questionnaires covered several sections:

short description of the farm production, ways and methods of information acquisition, knowledge and information types searched by farmers. The questionnaires to the small scale farmers were targeted at understanding in which programs do they participate, how do they search for information and knowledge who are their main consultants, what type of assistance do they get from the consultancy organizations, what agricultural knowledge do they have, and if they do not have any, how do they obtain it.

Results and Discussion

In the study, several groups of small scale farmers in Bulgaria were identified: (1) newly created farms by young people, (2) semi-subsistence farms and (3) small-scale farms that do not participate in any national and European programs. The limitation of the huge number of small-scale farmers was based of several criteria: the farmers to be of age up to 40, to be vegetables producers who grow at least two cultures and the size of the farm to be up to 4 economic units. Each group of the small-scale farmers has different their *need of knowledge, skills and information* and also use different forms of formal and informal advises.

The small-scale farms are established by young people for a period of 5 years and they are supported by 25,000 Euro in the measure 112 of RDP. This group of young farmers in the most of the cases does not have agricultural education and needs different types of advisory services. First of all, their needs are related to the development of business projects required to apply to measure 112 of RDP. This service is free of charge by the regional offices of NAAS but is paid if they use the services of private advisory firm. Then, they use various informal consultancies related to their productions by family members who are experienced in agriculture; by agronomists who work in the local agricultural pharmaceuticals stores or by neighbors, who are developing active agricultural activities. Frequently, they use accountants or accounting companies for keeping of tax and accounting documents and they pay for the services performed.

The semi-subsistence farms in Bulgaria produce mainly for domestic consumption and to supplement the income of their households but this farming type has economic potential for future development. The number of such small farms in the country is very high. They, usually, are not developed. They need to be restructured in order to be competitive at the Bulgarian and European market. This is the reason why a special measure, 141, was included in RDP, according to which assistance is provided for the income of farms that have the capacity and desire to restructure. The support will help the small farmers to overcome the difficulties in paying

their expenses related to the restructuring of the operations and will encourage their future development. According to the interviewed semi-subsistence farmers, who participated in measure 141, all of them have used the services provided by the regional office of NAAS in Plovdiv. They have used the experts of the office mainly for the preparation of the business plan required for the application process. They did not use other consultancy services related to their production. Mostly, they use advises for their production process by friends or family members who are agricultural producers, local agronomists, workers at the agricultural pharmaceuticals stores and seeds and fertilizers trade importers.

The number of *small-scale farms that do not participate in RDP* is high. One of the main reasons is they do not meet the requirements of the RDP measures they can apply for. Another reason is that a lot of the small-scale farmers do not wish to participate in any governmental and European programs due to the high transaction and administrative costs during the project implementation.

Therefore, the small-scale farmers from all groups in Plovdiv district are interested in agricultural innovation and implementation of the best agricultural practices. They are frequently visiting exhibitions, and looking for consultancies provided by the agricultural advisory offices or experts in the scientific field. But the main problem for them is not which innovation to implement but where to sell their production. Unfortunately, NAAS and the private consultants do not offer consultancies for realization and marketing of ready production.

There are several main *methods for obtaining information and knowledge* from the consultancy organizations used by the small-scale farmers was identified:

Face-to-face at the office of the consulting organization. This is the most frequently used method by the small-scale agricultural producers. They prefer to visit the consultancy organization on site and request the information they need or share the specific problem they need to solve with the expert.

Face-to-face at the agricultural farm. This method is actively used by the experts of the regional office of NAAS in Plovdiv and by the private consultants. The visits of the experts to the farms help them get acquainted with the activities performed; to assess the farm and to determine the improvements related to the maintenance of the soil in good agricultural and ecological state; to collect soil samples etc.

Over the phone. This method for consultancy services provision is used only if good relationships between the agricultural producer and the consultant are already established.

Internet. This method can be major source of information and is rarely used, depending on the age of the agricultural producer. Young farmers are actively using Internet for

information searches related specifically to their production activities. They are also regularly visiting the web page of State Fund "Agriculture" looking for information related to all programs that are proposed and the web page of NAAS. As long as the age of the agricultural producers is going up, the Internet space is rarely used or is not used at all.

Specialized magazines and literature. The specialized literature is actively used by the agricultural manufacturers. For example, Land Source of Income Foundation issued for its customers and small agricultural producers 16 booklets up to the end of 2010. Technologies and plant-protection activities of various agricultural productions are presented in these booklets. Many of the small-scale farmers buy specialized literature related to specific productions from the bookstore of Agricultural University Plovdiv and the information materials related to the application requirements of RDP, social and health insurance for agricultural producers, growing of permanent crops, modern livestock breeding practices etc. issued by NAAS.

Seminaries or open days organized by the regional offices of NAAS. The regional office of NAAS in the town of Plovdiv is frequently organizing different training seminars for its customers. They are actively using lecturers from the Agricultural University and the scientific institutions in the region. These seminars usually have a specified subject and the participants are small-scale agricultural producers. On such organized events the farmers do not only meet expert lecturers who are working in the same area as they are but also producers with same production or participation in similar measure. On such meetings the participants have the opportunity to establish contacts with other producers.

Rarely used methods for obtaining information and knowledge from the consultancy organizations used by the small-scale agricultural producers are:

Correspondence via post or e-mail. The correspondence between the agricultural producers and consultants is rarely performed via e-mail or post. Most of the producers prefer to visit the consultancy office or call the consultant over the phone.

Specialized TV broadcasts and other media. There are such specialized broadcasts and magazines in Bulgaria. They provide information about good agricultural practices and everything new that is happening in the field of Bulgarian and European agriculture. The agricultural producers are not using actively this type of information acquisition due to the limited time they have available.

The major consultancy organizations that provide consultancy services to the small-scale agricultural producers are: regional office of NAAS in Plovdiv and private con-

sultancy companies (Figure 1). In addition, the small-scale agricultural farmers use consultancy services provided by:

- experienced or acting local agronomists,
- agricultural pharmaceuticals stores located in the villages, where the agronomist-seller is able to fill in the plant-protection log books of the agricultural farmers of the village,
- neighbors – agricultural producers,
- family members with long years of agricultural experience,
- accountants or accounting companies,
- fertilizers, preparations, seeds, seedlings importers,
- markets, where they sell their production and acquire useful information,
- scientific institutes – NAAS invites agricultural producers to meetings with experts of the scientific units in order to be able to direct its customers to the right specialists.

So we can draw the conclusion, that the advisory services for the small-scale agricultural producers are performed mainly in the consultancy offices or at the field in the farms. The small-scale farmers have high level of trust to NAAS' experts and mostly prefer face-to-face method to obtain knowledge and information.

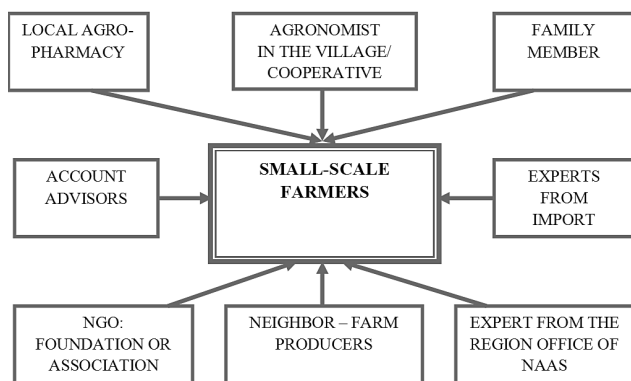


Fig. 1. Knowledge flow to small scale farms in Bulgaria

Source: own investigation

Conclusions

The small-scale farms are the main group that is of importance for the development of the agriculture and rural areas in Bulgaria. They usually rely on own financial resources for funding of running and investment costs. Also, they have low credit rating due to lack of assets that can serve as credit security and high risk of agricultural operation. The shortage

of own financial resources is restraining the investments in acquisition of land, agricultural equipment and diversification towards new operations. It is also an important factor that is limiting the application for investment programs for gratuitous financial support that require investments re-funding.

The small-scale farms sell their production mainly to the trade dealers and the livestock breeding farms sell to processing companies. Due to the high market power of the middlemen and processing companies, small producers do not get the best market price. The small batches and inconsistent production quality also worsen the market positions of such farms. The lack of skills and knowledge of the small-scale farms for performing of marketing researches and low awareness of the market situation worsens their market positions and reduces the abilities of the agricultural producers to respond promptly and adequately to the market tendencies.

The lack of organization of the small agricultural producers does not allow the farms to utilize the opportunities for European funding in the sector and to offer their ready production to the market together. The direct sales of small producers are performed through informal channels and the access to formal channels is limited due to the high requirements towards the production. A lot of the small-scale farmers believe that consumers in the country are ready to support them. The reasons are good production quality, good taste of the products and the concern of the producers for the environment. Also a lot of the people interviewed believe that they have contribution to preservation of the social life and improvement of economic situation in the rural areas.

The strengths of the small-scale agricultural producers in Bulgaria are that they are strongly motivated, flexible and independent in management of operations and decision taking; they have experience and tradition in the production process; they own production practices targeted to preservation of the natural resources; connection to local communities and preference to the life style of the rural areas; and established system for advices in agriculture, science and education. These strengths have positive influence over the viability and stability of small-scale farms and have strong contribution to the development of rural areas in Bulgaria.

The weaknesses of the small-scale farms are: low productivity, high costs, low competitiveness and income earned from the farm. This list of the weaknesses is long and it also includes the following: low level of production mechanization; inappropriate specialization of the production field; unfavorable age and educational structure of the farms' managers; insufficient qualified work force; low level of cooperation between producers; low level of integration between the agricultural and processing sector; insufficient

usage or search for information, consultancy services and training; difficult access to agricultural advice to farms located away from the municipal centers and underdeveloped system for technology transfer towards small-scale farms.

As a conclusion, the analysis shows that the weak points of the small-scale farms are the lack of specialized agricultural and agro-economic education of their owners and lack of qualified workforce. Due to the above *the improvement of access to and usage of information, consultancy services and training* is important necessity of the small-scale farms. Small-scale farms have needs of information, trainings and consultancy services in various areas related with innovations, production methods and farm management.

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