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**PROBLEMS IN THE EXTENSION WORK AND FARMERS' NEEDS
IN SERBIA**

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**Paper prepared for presentation at the 113th EAAE Seminar
“THE ROLE OF KNOWLEDGE, INNOVATION AND HUMAN CAPITAL
IN MULTIFUNCTIONAL AGRICULTURE AND TERRITORIAL RURAL
DEVELOPMENT”, Belgrade, Republic of Serbia
December 9-11, 2009**

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PROBLEMS IN THE EXTENSION WORK AND FARMERS' NEEDS IN SERBIA

Abstract

In the paper, the authors analyse problems in the extension work and farmers' needs on the basis of the empirical sociological survey that comprised attitudes of all the agricultural extension workers in Serbia. The survey has been conducted by the authors during 2008 in all of the extension offices in Serbia using the semi-structured questionnaire. The analysis reveals the regional specifics of the farmers' needs and the problems that the advisors face in daily work, as well. According to the survey results there are three types of problems that are mutually connected: 1. general crisis of the agricultural sector, 2. problems regarding characteristics of farm holdings and farmers population in Serbia and 3. problems that are related to extension organization. Farmers' needs analysis points to four dominant needs of farmers in Serbia: 1. farm management, 2. help in establishment of farmers' cooperatives, 3. plant protection and 4. information and advice regarding the agricultural policy.

Key words: agricultural extension, problems in extension work, farmers' needs

Introduction

Agricultural extension in Serbia is facing the essential reforms that have to be made. At the moment, Serbian Ministry of Agriculture, Forestry and Water Management is working on the Law on Agricultural Services and the Strategy of Development of Agricultural Extension. During the last several years reforms of extension service have had very slow pace and this may be the consequence of the inertness of the government to start dealing with the crucial reforms in the extension sector, but also the consequence of the extension services themselves to introduce reforms in their own work (see Janković and Čikić 2008). Having in mind the importance of participation of extension staff in the future reforms, the authors of this paper have conducted an empirical survey (by using semi-structured questionnaires) on the role of agricultural stations in agricultural extension in Serbia (Province of Vojvodina and Central Serbia), comprising the attitudes of all of the extension staff in all agricultural extension offices (agricultural stations) in Serbia (Vojvodina: 13 agricultural stations with 72 advisors; Central Serbia 21 agricultural stations with 134 advisors). In the absence of such and similar research in Serbia, these results could be one of the elements for the creation of adequate policy in the agricultural extension, if, of course, the government is able to appreciate such analysis. In that sense, we believe that considering the extension staff's opinion on many issues regarding the reforms of "their" extension organization would be very motivating for them and might be the one of several conditions for success of the future reforms of Serbian extension. Regardless to all of the shortcomings in organization, extension programs, human resources and technical aspects

of Serbian extension, the authors of this paper consider the human resources in Serbian extension as very important in agricultural development and development of family farms in Serbia. Due to low level of farmers' education, lack of information and knowledge regarding new technologies and market situation, agricultural extension is very important factor for future farm modernization in Serbia.

Extension service in Serbia is addressed to family farms and these services are free of charge for them. Other extension suppliers (private extension companies, NGO, etc) are almost non-existent. Within this broad target group the government aims most of extension activities to more commercial family farms (so-called "selected farms" – within the program period of three years) whose number in Vojvodina is approximately 3500 and in Central Serbia approximately 5000 farms (see Janković and Čikić 2008). Extension work includes mostly individual visits to these farms, but other types of communication and extension methods to these, but also to other (non selected) farms¹. The authors' research of extension in Vojvodina shows that advisors have selected farmers with whom they have already had better communication and cooperation in the previous period (we assume that the same conclusion can be made for the advisors in Central Serbia). This points to certain homogeneity of the selected farms with respect to their interest for extension support. This actually confirms the well-known bias of advisors who prefer to work with farmers with whom the cooperation is easier, mostly better-off farmers, who initiate cooperation by themselves, who are more interested in extension support and who have more financial means to apply the advised technology or organization of farm production². In Serbian context it is understandable that this target group is pretty small. But, in the concepts of state organized and financed extension, potential help to as many farmers as possible is important because the extension is the obligation of the state. It is "first because of its duty to create social justice and social equality and secondly, because an adequate supply of food and further development aims cannot be attained unless the mass of agricultural producers can be activated" (Albrecht et al. 1989: 37). According to this fact, one can expect neglecting of other farmer groups (usually small, less commercial and less interested in extension support), especially in

¹ Some data from the System of information in agricultural extension service of Vojvodina, that was created by the authors for the purpose of monitoring of extension activities for the Province Secretary of Agriculture, Water Management and Forestry, reveal that advisors in Vojvodina spend around 30% of their working hours engaging themselves with "non-selected" farms, as well. Besides farm visits that are mostly reserved for the selected farms, other farmers enjoy extension support through mass media, lectures, field days, phone, fax, mail and other types of extension communication (see Petrović 2007).

² "In laymen's terms we could say that change agents, like most human beings, associated themselves most with those who were on the same wavelength, and with whom they got along best. In doing so, they also tended to become more familiar with the problems and issues faced by such farmers, leading to further efforts to cater for their needs, rather than for the needs of others" (Leeuwis and van den Ban 2004: 137)

Vojvodina where – compared to Central Serbia – the land and other resources are more in favour of intensive model of agricultural production³.

Problems in extension work with farmers in Serbia

Based on a qualitative analysis of the advisors' opinion about the most important problems they face in everyday extension work with farmers, we may conclude that – according to the survey results – some regional differences in the context of problems in extension work do exist and that there are three types of problems that are mutually connected: 1. general crisis of the agricultural sector, 2. problems regarding characteristics of farm holdings and farmers population in Serbia and 3. problems that are related to extension organization.

According to the qualitative analysis, extension workers in Central Serbia more often emphasise problems that are mostly related to age structure of the farmers, traditional farming and small scale agriculture. This can be understood if we have in mind the average size and number of plots in Central Serbia⁴ (5 plots, the average size of a plot 0.74 ha) compared to Vojvodina (3 plots, the average size of a plot 1.25 ha) (Bogdanov and Božić 2005: 96). Compared to Vojvodina, ageing process is more intensive in Central Serbia with significant share of the oldest members on the farms (over 65 years=24.3%), higher share of mixed farms and lower share of non-agricultural farms (Božović and Bogdanov 2005: 83). Also, in Central Serbia share of population on farm holdings with the lowest education is higher than in Vojvodina (Ibid. p. 85).

When asking advisors about the most important problems they face in everyday extension work with farmers, advisors in Vojvodina seem to be more critical to the organization problems in extension, which is very interesting since the extension service in Vojvodina is decentralised and under authority of Province Secretary of Agriculture and it is undoubtedly considered as more organized, modernized and financially stronger in comparison to extension organization in Central Serbia⁵. Rural

³ Target group strategies are some of important issues in extension (see, van den Ban and Hawkins 1996; Albrecht et al. 1989; Leeuwis and van den Ban 2004; Rölling 1988) that are linked to the aims that government wants to achieve with a certain extension policy (see more, Brent and Adams 1999; Adams 2001).

⁴ According to Census 2002.

⁵ If we compare the satisfaction of the way in which the extension work is organized in the agricultural stations, the opinion of advisors from Vojvodina and Central Serbia is pretty similar: in Vojvodina – 34% totally satisfied, 54.3% partially satisfied, 5.7% not satisfied at all, 5.7% do not know; in Central Serbia -36.6% totally satisfied, 58.8% partially satisfied, 3.1% not satisfied at all, 1.5% do not know. If we take into account all of the extension workers in Serbia, majority seems to be just partly satisfied (57.2%) with the organization of extension work in their agricultural stations. That fact tells us a lot about the necessity for reforms, especially in the management of the whole extension service.

areas in Vojvodina are also in infrastructural sense, land policy and modernization more developed due to historical background and economical conditions of Vojvodina as the most developed region in Serbia.

Table 1 - Advisors' opinion regarding the most important problems they face in everyday extension activities.

	Problems related to the farms / farmers' characteristics	Problems related to the extension organization
Extension staff in Central Serbia	<p>Farmers' characteristics</p> <ul style="list-style-type: none"> - old farmers population - traditional habits in agriculture; seeking advice after the harm has already been done - low educational level and lack of knowledge in modern technologies - low application of science and expert advice; 	<p>Extension organization</p> <ul style="list-style-type: none"> - small number of advisors; lack of equipment and laboratories; lack of cars - lack of permanent education of advisors; - due to bad and unstable finance, lack of motivation of advisors - lack of adequate management of the extension service; advisors are in charge for many other duties, including administrative tasks; no strict division between extension and other work/tasks
	<p>Financial situation on farms</p> <ul style="list-style-type: none"> - inability to apply the advice due to lack of money; low effects of the extension help due to low prices of products and high input prices; unstable agricultural policy; problems with selling the products; low motivation to apply the advice - lack of money for farming; lack of subsidies, credits for inputs and investments 	
	<p>Farm characteristics</p> <p>-small scale agriculture, old mechanization and buildings; bad infrastructure in rural areas</p>	
	<p>Huge lack of trust of farmers in the government, its institutions and policy; reflection of this fact on extension service (perceiving them as represents of the government's interest; blaming advisors for bad policy, unstable market; bad parities and high input costs); hard work on creation of trust between farmers and extension service</p>	
Extension	Problems related to the farms / farmers' characteristics	Problems related to the extension organization

	<p>Financial situation on farms</p> <ul style="list-style-type: none"> - lack of finance for inputs in agricultural production and investments; bad and unstable agricultural policy - lack of finance to apply what has been advised by the extension service 	<p>Extension organization</p> <ul style="list-style-type: none"> organization and management problems lack of finance for extension activities overload with non-extension tasks
	<p>Farmers' characteristics</p> <ul style="list-style-type: none"> - traditional farming - lack of the basic record on farm (economic and other indicators) 	
	<p>Lack of farmers' trust in extension due to its link with agricultural policy and government interests</p>	

Source: Petrović, Ž, Janković, D. and Jovana, Čikić (2008). Empirical survey "The role of agricultural stations in agricultural extension in Serbia"

Farmers' needs in extension in Serbia

In the survey we assumed that it may be very important to analyse the estimation of Serbian agricultural advisors regarding the needs that farmers would have during the next five years in the area of their extension activity.

Farmers' needs should be the basis for establishment of adequate extension service, regardless if the service is state-organised or has other type of organization (finance and delivery). It should also be noted that extension services in developed countries have passed through the process of evolution from the transfer of technology model, to the service based dominantly of farmers' needs⁶.

Estimations of all advisors point to four dominant needs of farmers in Serbia: 1. farm management, 2. help in establishment of farmers' cooperatives, 3. plant protection and 4. information and advice regarding the agricultural policy (see Janković and Čikić 2008).

The results reveal regional specifics of advisory needs – in Central Serbia these are mostly in fruit growing and plant protection, whereas in Vojvodina besides farm management and plant protection, farmers' need for information regarding the

⁶ It would be naïve to believe that all extension services in developed countries serve only the farmers' needs, but their long tradition, development and pluralism in extension have averted them from serving the government interests and oriented them more to what farmers need from such service. This is mostly true in extension services where farmers play a key role in determination of goals and extension programs.

agricultural policy measures is significant⁷. The regional differences exist due to the already mentioned higher level of modernization of farms in Vojvodina, with more intensive (mostly) crop production, better mechanization and overall orientation of Vojvodina region to more intensive agricultural production (even in fruit growing which is more the attribute of Central Serbia). The significance of farmers' cooperation is higher in Central Serbia due to different type of production (fruit, vine, berries) compared to dominant crop production of individual farmers in Vojvodina who are, obviously, more interested in agricultural policy, government subsidies and help with investments (buildings, high value mechanization etc.) partially because of two sources of finance (Provincial Secretary and Ministry of Agriculture)⁸.

Table 2 - Farmers' needs in extension in Serbia in the next five years (estimation from the side of agricultural advisors).

Farmers' needs in extension	Central Serbia %	Vojvodina %	Republic of Serbia %	Ranking Republic of Serbia
Farm management	16.33	24.17	18.87	1
Farmers' cooperation	12.35	5.83	10.24	3
Fruit growing	10.36	3.33	8.09	6
Plant protection	9.56	17.50	12.13	2
Crop farming	8.76	7.50	8.36	5
Animal husbandry	8.37	4.17	7.01	8
Organic production	8.37	4.17	7.01	9
Vegetable production	6.37	3.33	5.39	11
Agricultural policy	5.98	17.50	9.70	4
Soil analysis, plant nutrition	5.18	7.50	5.93	7
Irrigation	3.98	0.83	2.96	12
other	4.38	4.17	4.31	10
TOTAL	100.00	100.00	100.00	--

Source: Petrović, Ž, Janković, D. and Jovana, Čikić (2008). Empirical survey "The role of agricultural stations in agricultural extension in Serbia"

⁷ These results are partly comparable with similar survey of the same issue (see Meier 2000; Boland 1996). Even more valuable information would be to analyze the farmers' needs in extension with farmers themselves, but in absence of such in Serbia it is possible only to suppose that advisors (as experts with much experience) are capable to estimate well what might be the basis for the future extension programs.

⁸ Data from the analysis of selected approximately 3500 farms in Vojvodinian extension reveal that average farm size is around 16 ha of land in property, with 19 ha of the leased (tenured) land that is far higher than official statistics (around average 3.5 ha of property land). This also shows that selected farms are mostly better-off farmers with more commercial production.

Conclusions

From the analysis it is evident that there are certain regional differences in extension problems and that certain differences in farmers' needs in Serbia do exist, as well. Farmers' needs differ due to different modernization level, structure of agricultural population and production, characteristics of farms and historical background and development levels of the two regions that have been surveyed. Similar problems in extension service are present and they are mostly related to the general lack of trust in the government that reflects itself on the extension service and their work. Extension services in both of the surveyed regions have similar problems regarding finance, management, technical support and overload with non-extension activities of the advisors (but advisors in Vojvodina emphasize those problems more than advisors in Central Serbia). This should be the indicator for the government to start dealing with these problems in order to create adequate support for farmers even if this implies greater investments of economic, human and social capital into the service. Without essential reforms of the extension service one can expect that farmers won't be optimally supported and also that extension staff (due to low motivation and working conditions) could even leave the service what will be the huge loss for the government and for farmers in Serbia.

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