



Off-Farm and Non-Farm Activities Development in Rural South-Eastern Bosnia

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Abstract Agriculture represents about 9% of the Bosnian gross domestic product and employs almost a fifth of the labor force. Agriculture is no more sufficient to ensure the development of Bosnian rural areas; where lives around 61% of the population. Diversification issue can be considered in terms of resources (land, labor or capital), location (on-farm or off-farm) and output (farm or non-farm). The paper aims at analyzing income-generating activities diversification in rural south-eastern Bosnia with a focus on motivations and barriers. It discusses the main factors affecting off-farm and non-farm activities development, including policies, and provides some recommendations. The paper is based on an extended secondary data analysis and semi-structured interviews, conducted in March-April 2012, with 104 households' heads from Foca, Rogatica, Han Pijesak, Vlasenica, Sekovici, Milici and Bratunac municipalities. Almost a half of the surveyed households characterized themselves as mixed (46.1%), 41.3% as farm, and 12.6% as non-farm. Income is generated mainly from agricultural products sale (76%), off-farm activities (52.9%) and pensions (44.2%). Motivations for engaging in off- and non-farm activities are not always purely financial and also reflect societal changes. In the last five years, 21.6% of the households started new income-generating activities - mainly related to services provision and on-farm processing - but gave up while 22.6% of them still deal with new activities. The main barrier is the lack of financial resources (39.7%) and time (12.1%). Weak business skills are also a limiting factor. Development of new activities raises farmers' income and contributes to a healthy, diversified and viable rural economy. Public institutions need to make sure that policies in place, whether sectoral or broader, do not put obstacles in the way of diversification and improve rural planning and services delivery. Creating an enabling environment for diversification requires the efforts of many public and civil society actors.

Keywords non-farm, off-farm, motivations, barriers, Bosnia

INTRODUCTION

Agriculture share in GDP was 8.1% in 2011 (EC, 2012). According to the Labor Force Survey for 2012, the agricultural sector employs 167,000 persons *i.e.* 20.6% of the total labor force (ASBiH, 2012). Rural areas (81%) lag behind in terms of socio-economic development and still face many problems. Around 61% of the total population can be classified as rural. Agriculture provides a source of income for about 50% of the total population of the country. The Agro-food processing industry is recovering following a decade of under-investment and its share in GDP is increasing (about 8%) (Kurbanova et al., 2011).

Despite its declining gross value added, agriculture continues to have an important influence on the rural economy (OECD, 2006). Generally speaking, as an economy grows the non-farm economy also grows in importance within the rural economy (Valdés et al., 2008).

It is clear that nowadays agriculture is not sufficient to insure the sustainable development of rural areas that's why rural economy should be diversified (Antonelli et al., 2009; Haggblade et al., 2007; OECD, 2006). The framework provided by OECD (2009) considers the issue of farm household diversification by differentiating between activities in terms of resources (factors of production: land, labor or capital), location (on-farm or off-farm) and output (agricultural or non-agricultural) (Fig. 1). The major row differentiation between activities is made on the basis of the location of the activities, either on-farm or off-farm. Within each location, diversification activities are further differentiated as to the type of output, whether: agricultural production (*e.g.* growing crops or raising livestock); continuation (*e.g.* processing of food or providing contracting services to other farmers); or other (OECD, 2009).

OBJECTIVE

The paper aims at analyzing off-farm and non-farm activities development in rural south-eastern Bosnia with a focus on motivations and barriers.

LOCATION		FACTORS OF PRODUCTION			
			LAND	LABOR	CAPITAL
		ON-FARM	Within agriculture, including specialty crops, organic and biomass production	Agriculture-related <i>e.g.</i> direct sales and contracting (fencing, crop harvesting, etc.)	Agriculture-related <i>e.g.</i> processing of farm products including cheese
		Other <i>e.g.</i> forestry, wind-turbine, recreation, and aquaculture	Other <i>e.g.</i> handicraft, farm tourism, contracting (snow clearing, etc.)	Other <i>e.g.</i> biomass energy generation, wood processing	
	OFF-FARM	Agriculture <i>e.g.</i> land rented to other farmers	Agriculture-related, <i>e.g.</i> employment on another farm	Agriculture, <i>e.g.</i> purchase of additional farmland	
		Other <i>e.g.</i> land rented to others for forestry, wind turbine	Other <i>e.g.</i> school teacher, nurse, government official	Other <i>e.g.</i> investment income, pensions	

Source: Adapted from OECD, 2009.

Fig. 1 A framework for classifying farm household income diversification activities

METHODOLOGY

The paper is based on an extended secondary data analysis and field research. The field survey analyses the diversification of activities by farm households in Bosnia. Semi-structured interviews were conducted in March - April 2012 with 104 households' heads randomly chosen from seven undeveloped and mid-developed municipalities: Foca, Rogatica, Han Pijesak, Vlasenica, Sekovici, Milici and Bratunac. Semi-structured interviews (SSI) were conducted in local languages. The checklist prepared for SSI included 40 questions dealing, among others, with types of households (farm, mixed, non-farm), household structure, employment and income for households' members, microfinance and access to loans and diversification of income-generating activities.

The average age of households' heads is 46.9 (age range: 29-67). Almost all interviewees (93.2%) were men. Average number of household members is 4.3. About a tenth of the household members (8.5%) are illiterate while only 8.85% of them have high education. The highest percentage of the surveyed households have income from 5,000-15,000 BAM (67.3%) while more than 12% have good or quite good income (more than 15,000 BAM, Bosnian Convertible Marks). The general poverty line in Bosnia and Herzegovina (BiH) is 2,857 BAM per capita and per year (ASBiH, 2008). Taking into account this criterion, more than 50% of surveyed households are the under poverty line.

The various factors enhancing or limiting farm household diversification into off- and non-farm activities are discussed in this paper. In the light of available evidence on the role of agriculture and farm household diversification in the Bosnian rural economy, some initial policy implications are drawn and some recommendations provided to speed up the pace of Bosnian rural economies diversification.

RESULTS AND DISCUSSION

Almost a half of the surveyed households characterized themselves as mixed households with diversified income-generating activities. The livelihood strategy for about two fifths of the surveyed households is focused on agriculture. The high percentage of mixed and non-farm households means that rural economy is diversified but the high percentage of farm households clearly shows that agriculture is still important in livelihood strategies of the rural population in south-eastern Bosnia. Mixed households have better education level compared with farm and non-farm households. Furthermore, their members accept easier new technologies and other innovations in rural areas and they are more engaged in social life within the community. In the case of mixed and non-farm households, income is mostly provided from salaries of full time employees that deal with the off-farm sector. Nevertheless, the percentage of households relying on income from farm activities is quite high. In fact, a large number of households indicated primary agricultural production as a main or an additional income (51.9%) while only 15.4% do not have any farm income (Table 1). A large share of income from farm shows that agriculture is still the main activity in rural areas of south-eastern Bosnia and it characterizes households with lower education level and older members. This is at least to a certain extent due to the fact that because of the civil war many big companies - that employed large number of people from rural areas of south-eastern Bosnia - were destroyed or closed so that rural people are obliged to insure their subsistence dealing with agriculture. For the same reason the percentage of pension income is high as many of the rural people were retired after the civil war after engagement in army and also because almost a third of the surveyed household members (29.3%) are over 50 years.

Among the reasons for which many households did not start any new income-generating activities can be mentioned the lack of financial resources or time and the difficulty to find suitable markets. Other barriers include: high taxes, lack of experience, difficulties in finding partners, complicated administration issues, etc. (Fig. 2).

The most frequent businesses that the surveyed households have tried out are related to wild fruit and herbs collection (19.2%) and services provision on equipment and machines (15.4%). Activities related to rural tourism are not enough developed. New processing and packaging

activities regard dairy products, meat, strawberries and cereals. Other new farm income-generating activities include: wood processing, piglet breeding, sheep breeding, beekeeping, dairy products sale and raspberry growing.

Table 1 Types of households, income sources and new income-generating activities

Specification	Percentage of the surveyed households
Type of household	Mixed: 46.1% Farm: 41.3% Non-farm: 12.6%
Income sources	Sale of agricultural products: 76% Off-farm activities: 52.9% Pensions: 44.2% Other: wages, providing services on equipment and machines, social programs and help, family and friends, renting land and property.
New income-generating activities in the last five years	Did not develop any activity or start a new business: 55.8% Started but gave up: 21.6% Still deal with new activities: 22.6%

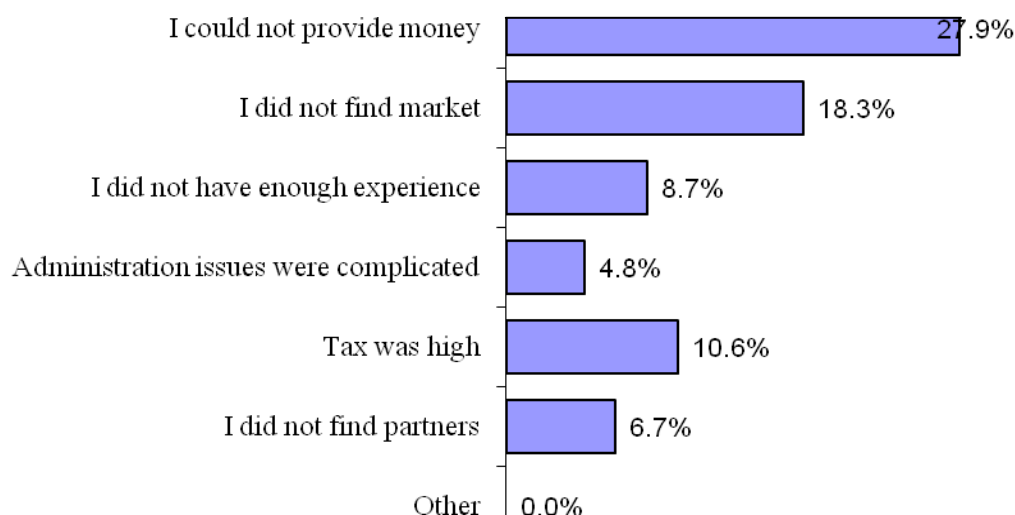


Fig. 2 Main problems and constraints faced by rural households in their attempts to develop new farm, non-farm and off-farm income-generating activities

Financial reasons are key constraints in starting up households' own business activities and diversification of livelihoods. Taking into consideration that money is the main problem, one way to cope with this problem is to get a loan. Almost twenty eight percent (27.9%) of the surveyed households have never applied for a loan mainly for the lack of collaterals. Others applied for loans for many reasons: construction and maintenance of buildings (24.0%), buying animals (12.5%), buying machines and equipments (11.5%), buying seeds and fertilizers (4.8%), etc.

Many factors influence the diversification of farm households into non-farm activities, including government intervention. If governments want to foster diversification, they would need to make sure that policies in place, whether sectoral or broad, do not put unintended obstacles in the way of diversification. Providing the services needed to foster business in rural areas - such as telephone and internet coverage, training and information - also help to create an environment conducive to diversification (OECD, 2009). Prerequisites for encouraging private investments include improving the business climate, and providing business development and financial services

suited to the needs of rural entrepreneurs. Acquiring a labor force with appropriate skills is crucial (IFAD, 2010).

As for human capital, the major part of respondents stated that they possess certain skills, especially in food processing. Some of them mentioned also fruit production, beekeeping, organic production and animal husbandry. Older members of households have more experience in collecting wild fruits and mushrooms and producing medicinal and aromatic plants. Strengthening the rural people's capabilities to take advantage of opportunities in the rural non-farm economy is essential. Education and skills are particularly important (IFAD, 2010).

Motivations for engaging in non-farm activities are not always purely financial, but also reflect societal changes. In terms of the farm household, a financial motivation appears to be the strongest driver for diversification in general, although social motivations are shown to be important for farm tourism. However, it appears that weak business skills are limiting the extent of diversification. Women play a more important role in the diversification of the farm into non-farm activities than in the primary agricultural activities (OECD, 2009).

Differences also appear in terms of the size and type of farm operation. In general, off-farm diversification activities are undertaken by smaller farms, for which they are more financially important. A number of factors would explain this including the existence of less utilized farm resources and greater financial pressure. The location of the farm also plays an important role in determining the extent of diversification activities. In general, the further a farm is away from a urban area, lower is the opportunity to diversify into non-farm activities (OECD, 2009).

The challenges of income diversification have a strong regional character or lie in the characteristics of the farm or farm household. According to the Working Group on Diversification of the British Department for Environment, Food and Rural Affairs (DEFRA, 2007), key barriers to farm diversification include validity of market research, capacity to develop a considered business case, quality of business skills and training, availability of appropriately skilled personnel and regulatory controls, and access to specialist business advice. Access to finance was also identified as a potential barrier.

A range of policy measures have been introduced in various countries to assist farm household diversification into non-farm activities. These measures involve grants, training and facilitation. The diversity of measures reflects not only differences in policy objectives and country approaches but also differences in terms of the barriers that the policy tries to overcome or correct. In some countries, diversification activities appear to reduce access to some types of agricultural support. Regulations governing tax, social security, land zoning and labour markets may complicate diversification in countries where agriculture is not treated the same as other sectors. Farm households, who engage in non-farm activities, may have to maintain two separate registration and declaration systems for tax and social security purposes, and may lose the benefits of being "farmers" (e.g. if there is preferential treatment in the social, tax system, or access to some farm subsidies, such as investments) if the income they derive from non-farm activities becomes higher than the income from agricultural activities (OECD, 2009).

The impact of labour regulations and the social security and tax systems on diversification essentially depends on how agriculture is defined under those regulations/systems. Often a broad definition of agriculture is used, allowing many forms of on-farm diversification activities to be classified as agricultural or farming, and thus permitting a continuation of the *status quo* in terms of administration requirements and special concessions (OECD, 2009).

The heterogeneity of farm operators and the variety of non-farm activities mean that, at any one time, there will be sets of circumstances that are highly favourable to diversification and others where there are insuperable obstacles. This has a number of policy implications for countries wishing to encourage farm diversification. The DEFRA Working Group on Diversification recommends modifying rural actor skills as well rural development planning and service delivery systems so that they do not pose such a substantial barrier to diversification (DEFRA, 2007).

CONCLUSION

Rural economies in south-eastern Bosnia are quite diversified but agriculture is still the main economic activity for many households. Many households have started new income-generating activities such as services provision and on-farm processing but they had to tackle many problems and constraints such as the lack of financial resources. Harnessing farm diversification especially in the non-farm economic activities requires improving the environment, thus strengthening incentives and reducing risks for the actors. This involves improving rural infrastructure and services as well as governance and the business climate to encourage private investment. Creating an improved environment for farm activities diversification requires the efforts of many actors. The roles of government actors are often critical.

Diversification of farm households into other activities on and off the farm affects the rural economy, by raising the level of farm income and the viability of farms. However, household livelihoods' diversification depends on the existence of a healthy and diversified rural economy, which provides off-farm work opportunities as well as services. For rural policy to be more effective, small fragmented programmes should be replaced by an integrated rural development policy, that rural farm and non-farm households can benefit from, which requires a strong horizontal coordination effort at all governance levels. In fact, it is necessary to reframe and redesign the rural development policy as agriculture is no more the only way to alleviate poverty and to improve rural living standards. Fully exploiting rural economy diversification potential in Bosnia requires also improving rural governance, upgrading rural people's human capital, strengthening rural social capital and improving physical capital as well as access of the rural population to finance. That requires also a favourable and enabling legal and legislative environment fostering farm activity diversification.

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