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# Institutional Reforms and Small Farms in Republika Srpska<sup>1</sup>

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#### **Abstract**

The research aims to explore and analyze the main elements of agricultural policy in Bosnia and Herzegovina with a particular focus on one of the two entities: Republika Srpska. A particular attention has been given to the institutional capacity to identify adequate instruments and mechanisms.

The paper is based on the use of different methodological tools including the agrarian system analysis; the examination of official documents and reports; a field survey; a number of interviews with policy makers and key informants.

### **Keywords**

Agricultural policies; Small farms; Bosnia and Herzegovina

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<sup>&</sup>lt;sup>1</sup> Matteo Vittuari has been responsible for chapters 1, 2, 3, 4, 5 and 6. Andrea Segrè has coordinated the work.

#### 1. INTRODUCTION

In describing the evolution of the Balkans Micheal Pailaret used the expression "evolution without development" and concluded that policy makers had spoiled rather than valued the natural and human resources of the region.

Within this framework agricultural and rural areas have been often neglected to the periphery not only physically, but also economically and politically. This is particularly evident in Bosnia and Herzegovina (BiH) due to the extremely complex administrative organization created with the Dayton Peace Agreement in 1995. This complexity has lead to an extremely controversial policy environment that has been strongly characterized by the lack of a long-term perspective and by a non harmonized regulatory framework in which single municipalities have promoted individual development strategies.

The development of clear policy objectives and endorsement of a long-term, coherent and mutual agricultural and rural development policy have also been affected by structural problems: a lack of reliable information on population and other relevant issues, the absence of an adequate land registry system and cadastre. Moreover BiH agricultural sector is characterized by many factors that have typically affected transition countries such as land fragmentation, lack of agricultural mechanization and outdated production technologies, and rural aging, high unemployment and outmigration.

Small farms still dominate rural areas so their viability and their inclusion in long term agricultural and rural development strategies still represent a major issue in the academic and political debate.

The research aims to explore and analyze the main elements of agricultural policy in Bosnia and Herzegovina with a particular focus on Republika Srpska (RS). A particular attention has been given to the institutional capacity to identify adequate instruments and mechanisms.

The paper is based on the use of different methodological tools including the agrarian system analysis; the examination of existing literature, official documents and reports; a field survey; a number of interviews with policy makers and key informants.

#### 2. BACKGROUND AND LITERATURE REVIEW

The share of primary agricultural production (GDP) in the gross domestic product is declining significantly over the years, but agriculture is still playing a relevant role in the social and economic development of Bosnia and Herzegovina (BiH). Figures show also a consistent diversity between Republika Srpska (RS) where agriculture represents 15-16% of the GDP, and the Federation of Bosnia and Herzegovina (FBiH) where primary agricultural production accounts for a rather smaller percentage (7-8% of the GDP). The reliability of the figures provided by the Agency for Statistics of Bosnia and Herzegovina (BHAS) and the Republika Srpska Institute of Statistics is affected by the role of subsistence farming (S. Bojnec, 2005) and by the significant size of the grey economy in which the weight of agriculture is rather consistent (World Bank, 2004).

The unemployment rate ranges from the 40% indicated by official registrations to the 15-20% estimated by the World Bank on the base of the 2004 Living Standard Measurement Survey (LSMS).

Officially agricultural labor force ranges from 3.1% (BHAS) to 3.5% (FAOStat). However official statistics fail to take into account that a large share of the population, also actively employed in services or industry, works "part-time" in agriculture in order to have an additional source of income. Moreover it is also true that with the job destruction in non-agricultural activities in war time and the consequent economic decline, a large proportion of employees in industrial activities have been transferred into unemployment and have found a form of relieve in subsistence agriculture (S. Bojnec, 2005). So official statistics fail in taking into account a large part of this "grey" agricultural labor. Several international agencies and research centers agree in identifying significantly different figures: the World Bank LMSM 2004 points out a share of 19.4% for agricultural employment, that is particularly high in rural areas where it reaches the 35%; other authors (S. Bojnec, 2005; S. Bajramovic 2006) suggest a even higher share with the agricultural labor force covering over the 40% of the total.

One of the major limit that affect BiH is the lack of updated and reliable data. The last agricultural census dates back to 1981 so that there are basically no data on land ownership and on farm structure. The three statistical institutes within Bosnia and Herzegovina (the Agency for Statistics of Bosnia and Herzegovina; the Federal Institute of Statistic of the Federation of BiH; and the Republika Srpska Institute of Statistics) reflect the administrative and political division that reflects the Country's inefficiencies and lack of coordination. There are basically no available economic data at the farm level (European Commission, 2008).

Land tenure and ownership are also relevant constraints due to the unsolved question of the restitution of land which is affected by the lack of a reliable cadastre: beside other causes a significant share of records have been lost or destroyed during the war period.

The agricultural sector of BiH is still characterized by a dual structure with an extremely large number of individual farms<sup>2</sup> and a less significant number of agricultural enterprises and cooperative farms. The situation is similar in RS where according to 2006 estimations the 81.5% of farms is lower than 5 ha and only the 4% is larger than 10 ha (Z. Vasko, 2006).

Despite the efforts undertaken to improve the competitiveness and productivity of farmers and agro processors, BiH remains a net agricultural importer (BHAS data).

FAO statistics show that the majority of BiH population (the 54.8%) is still living in rural areas, so even the major changes that have been driven by the 1992-1995 war and by the collapse of the socialist regime did not change the predominantly rural character of the region.

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<sup>&</sup>lt;sup>2</sup> According the 1991 agricultural census in BiH there were 569,581 farms.

A further confirm is given by the application of the OECD<sup>3</sup> criteria for the definition of rural areas to BiH population data<sup>4</sup>. Following this criteria the 81.5% of the total land area and the 61% of the population can be classified as rural.

Poverty is still a widespread phenomena in BiH, especially in rural areas. According to the 2004 LSMS survey there are no groups under the extreme poverty line (395 Euro per capita per year), however it has been determined that the living standard of around 19,5% of the population of BiH is below the general poverty line (1140 Euro per capita per year). Eighty percent of these poor live in rural areas (World Bank, 2005).

The clash of the rural-urban fringe is particularly evident in Bosnia Herzegovina as well as in many areas in the Balkans. Also due to the effect of the 1992-1995 war the complex "rural – urban symbiosis" described by Valdo Puljiz in 1987 is still effective in describing the situation in many rural and urban areas. Many non-agricultural workers households are somehow dependent on villages and on agriculture, hence small scale subsistence production provided an essential contribution to the living standards of many workers' households in the villages or on the outskirts of the towns (C. Schierup, 1992).

#### 3. METHODOLOGICAL ISSUES

The theoretical framework of the study from which this paper is largely based has benefit from the methodological approach to case study research proposed by R. Yin, from the conceptual structure of the system approach and partially from the agrarian system analysis. Within this overall framework some specific additional methodological tools and data gathering methods have been used: literature review; secondary data analysis; open interviews; field survey; direct observations.

## 3.1 The field survey

A field survey, based on a structured questionnaire<sup>5</sup>, has been utilized in order to overcome some of the constraints related to the scarcity of data and to gain a deeper insight into the production structures and conditions of farms, with particular attention paid to market opportunities and subsidies allocation.

The selection of the sample has been particularly complex due to the lack of data resulting from: an unclear definition of who can be identified as farmer in RS<sup>6</sup>;

<sup>&</sup>lt;sup>3</sup> OECD defines rural areas in terms of population density. For the OECD, rural areas are those with less than 150 inhabitants/sq. Km.

<sup>&</sup>lt;sup>4</sup> It has to be recalled that most of the available data are estimates so that the application of the criteria could result affected by that.

<sup>&</sup>lt;sup>5</sup> The questionnaire has been prepared by and the survey coordinated by Renata Rakic (Agency for Extension Service of Republika Srpska), Gordana Rokvic (Department of Agricultural Economics, University of Banjaluka), Matteo Vittuari (Department of Agricultural Economics and Engineering, University of Bologna).

<sup>&</sup>lt;sup>6</sup> The Law 01-892/06 defines as farmer who is holding a registered farm or a member of a family farm who is engaged in agricultural production. A family farm is a farm owned and operated by a family. The definition remains unclear due to different classification that can be used to identify family farms.

uncertain information regarding the total number of farmers in the Entity; the lack of a land register (a project to complete land registration has been initiated at the beginning of 2008 thanks to a World Bank loan); the number of farmers working part time or full time in other sectors and so not classified as agricultural workers by official statistics (World Bank, 2004).

Farmers have been selected randomly among those asking for advice or assistance to extension services (this criterion has been used to partially overcome the absence of a land registry). The number of respondent per region has been partially balanced according: the total population and the total sown area of each region. The total sample comprised 215 agricultural households in 5 "regions" of RS. Since the administrative division of RS does not foresee the regional level - only the municipal level - the 5 regions were selected by following the territorial network and organization of the Agency for Extension Service of Republika Srpska.

Table 1. Respondent area

Area	Respondent			
Banja Luka	66			
Bijeljina	21			
Doboj	44			
Sokolac	26			
Trebinje	45			
No response*	13			
Total	215			
* The "no response" category includes incomplete questionnaires.				

Source: author's survey

## 3.2 Limits of the survey

The survey does not aim to be exhaustive. The limits of this approach are evident especially in the size and in the selection of the sample. Therefore the survey does not aim to have a statistical significance, but the overall methodological approach has been considered relevant according to the context of the analysis. In the case of RS, considering the overall lack of reliable and updated data, additional and updated field information is a basic analytical resource.

# 4. POLICIES, INSTITUTIONS AND GOVERNANCE IN THE AGRO-FOOD SECTOR

# 4.1 Institutional framework in the agricultural sector (BiH level)

The major elements that must be underscored in analyzing BiH agricultural policy, are the absence of a consistent uniform policy at the national level and the lack of institutional capacity to develop and coordinate agricultural policy and legislation (European Commission, 2005).

According to the constitutional setting of Bosnia and Herzegovina (BiH), all the existing public administration levels (State, entities, District, cantons and

municipalities) are involved in agricultural legislation and administration (European Commission, 2005).

Duties and responsibilities at the State level are limited to the competencies emphasised by the Constitution as foreign policy and international agreements, foreign trade policy, and custom policy. Any function or power which is not expressly assigned in the Constitution belong to the Entities.

The exclusive responsibility for land use policy, at the Entity level, is reflected in the general framework of the agricultural administration of BiH, and is actually composed of two ministries at the entity level, six cantonal ministries, a department at the district level (Brcko) and four departments at the canton level within the respective ministry of economy.

The competencies of the ministries at the entity level are not identical, so there are additional difficulties in getting cooperation among the various institutional bodies-between the Entities, between the Entities and the District, and between the Entities (FBiH) and the cantons<sup>7</sup>.

The lack of coordination and the ineffective management have been underscored several times by different international organizations, such as the EC and the World Bank. In 2001, the two Entities signed a Memorandum of Understanding to harmonize taxes for trade of agricultural products, legislation in the Entities, laws on the BiH level with the EU regulations and to contribute to the strengthening of the BiH administration. However, both Entities were lacking in their respective efforts to implement the memorandum. A further step forward was recommended by the EC in 2004, which advanced an invitation to create a State Ministry for Agriculture and Rural Development in order to strengthen the central coordination and harmonization functions. The EC considered the creation of a common Ministry to be a key requisite for any further substantial progress towards integration with the EU, and the development of the BiH agricultural sector (European Commission, 2005). The EC suggestion has been partially accomplished with the creation of a Section for Agriculture, Food, Forest and Rural Development (AFFRD) within the Ministry of Foreign Trade and Economic Relations (MoFTER).

Within this context, a major attempt is represented by the *Draft Law on Agriculture*, *Food and Rural Development*, which has been formulated within the MoFTER and it is still under evaluation by the Parliamentary Assembly<sup>8</sup> (MoFTER, 2008b).

#### 4.2 Support services in the agricultural sector

The link between policy, policy makers and farmers is guaranteed by sector associations and extension services.

The most important sector associations are the BiH Farmer Associations, which consist of 96 associations in RS, 99 associations in FBiH, and, overall, about 28.000 farmers;

<sup>&</sup>lt;sup>7</sup> All 10 Cantons have their own Constitution that regulate the joint responsibilities between the Canton and the Federation in the field of environmental protection, tourism and use of natural resources including agriculture.

<sup>&</sup>lt;sup>8</sup> The Parliamentary Assembly of Bosnia and Herzegovina (*Parlementarna Skupština Bosne i Hercegovine*) is the bicameral legislative body of Bosnia and Herzegovina.

the BiH Association of Cooperatives, that consists of more than 400 cooperatives from all sectors with a total of 100 cooperatives, with 60.000 members, from the agricultural sector; the BiH Association of Food Processors within the BiH Chamber of Foreign Trade (European Commission, 2005).

Extension services for farmers vary significantly between RS and the FBiH. There are basically two separate structures that operate independently and are connected with the respective ministry of agriculture. The extension service of RS has its headquarters in Banja Luka, 4 regional offices (Bjelijna, Doboj, Trebinje and Sokolac), and 7 additional information points (covered with one or two extension officers) in 7 municipalities in the Banja Luka region. The extension services of FBiH are lagging behind those of RS, basically they are available within some cantonal administrations that have set up agricultural offices in order to provide some support services.

The overall situation of the institutions dealing with property land issues is particularly difficult due to the lack of an update cadastre system. However new mutually harmonized Laws on Survey and Real Estate Cadastre were drafted in both Entities in 2007 and should lead to a significant reorganization and rationalization of land property rights.

Financial support services are, generally, depressed, considering both the public spherein which the level of subsidies has been particularly low over the past ten years-and in the private sphere where the services offered by commercial banks are significantly poor. The situation is difficult mostly for small farmers, who basically have no access to credit, except for the microcredit programmes offered by several NGOs.

## 4.3 Assistance to agriculture in BiH

The complex institutional framework also characterizes agricultural support, and affects the BiH agricultural policy framework. Excluding the sectors that are the responsibility of the MoFTER, BiH do not have a substantial state level policy. The fact that responsibilities are shared at the entity, district and, partially, canton levels results in several different programmes of agricultural support, in different measures, and in different budget allocations.

Since the mid-1990's, agricultural support in BiH (considering the two entities) has been relatively weak, taking into account that, in the last fifteen years, the agricultural budget never exceeded three percent of the total budget and that the policy measures adopted have often been characterized by short term perspectives, and regular, annual revisions that concentrated only on support of certain commodities.

The overall situation related to public support for agriculture improved (even if from a very low one) in both entities between 2005 and 2007, with growth in public expenditures for agriculture and rationalization of the support measures. On the quantity side, it has to be underscored that in 2007, total support to agriculture exceeded 20 million euro (with the 2007 figure being 6.5 million euro higher than 2006) in FBiH and 25 million euro (with the 2007 figure being 8.5 million euro higher than 2006) in RS. However, it is also true that the numbers and different levels of public spending bodies, providing agricultural and rural development support, makes it difficult to

determine how much aid is being given nationally (Ministry of Foreign Trade and Economic Relations, 2008b).

On the quality side, the major share of aid has been historically allocated to production (72% in FBiH and 40% in RS in 2007). In both entities, the most supported productions have been milk and tobacco, while some consistent differences at the entity level can be underscored in the establishment of orchard and vineyards, strongly supported in FBiH; and in the fruit and vegetable production, strongly supported in RS.

Apart from production subsidies, the other main categories are capital investments and the recently introduced rural development. Capital investment, which accounts for the thirty-three percent (19 million KM) of the total support in RS and for nine percent (3.3 million KM) in FBiH, include investment in such factors of production as fruit trees and bushes, new orchards, improved seed varieties, and agricultural machineries (no assistance for investment in marketing improvements is provided). Significant resources for rural development were allocated for the first time in 2007, thereby, accomplishing an important step on the way to considerable alignment with the Common Agricultural Policy. Overall, RS has allocated sixteen percent of the total resources to rural development, FBiH allocated nine percent.

Two other elements that characterize the BiH agricultural support environment are the lack of transparency in aid distribution and management. More structured and clear procedures are missing for application for and evaluation of aid in this "long term" social conflict between farmers and governmental bodies.

Table 2. Type of support in FBiH and RS in 2007

Type of measure	FBiH	RS
Production support	72%	40%
Capital Investment	9%	33%
Rural Development	9%	16%
Other	10%	11%

Source: MoFTER, 2008b

## 4. 4 Assistance to Agriculture in RS: the 2000 – 2007 Period

The agricultural support system of RS can be considered relatively weak, taking into account that in the last decade, the agricultural budget never exceeded three percent of the national budget, and that the policy measures adopted have often been characterized by short term perspective and regular annual revisions.

Table 3. Agricultural budget 2000-2007 (data in .000 KM)

2000	2001	2002	2003	2004	2005	2006	2007
7,562	16,149	17,781	22,149	27,607	31,748	38,780	50,000

Source: Ministry of Agriculture of RS

Before 2000, agricultural support in RS was characterized by individual, ad hoc decisions made by the Government or the Ministry of Agriculture. In addition, it was provided mostly to certain state-owned companies. In this sense public aid to agriculture was missing an overall strategy (both short or long term), and was basically unfair, as

subsidies were not allocated according clear and transparent rules. Policy measures were adopted on an annual basis, and often characterized by a significant delay in their approval and implementation. This created uncertainty among agricultural producers, since in most of cases, they did not have any indication of the subsidies orientation or any access to credit, making it necessary for them to invest their own resources.

In the year 2000, some agricultural policy instruments were introduced, taking a step toward the creation of a more clear and better defined strategy. Measures such as regress for breading stocks in livestock production and premiums for milk and tobacco were introduced; moreover, significant resources (38% of total support) were used in the form of extended credits and loans.

In 2001, the agricultural budget more than doubled from the previous year. With the positive impact of these measures being confirmed during the preceding years, additional measures were also introduced in 2002. A case in point was the Law on Allocation and Disbursement of Resources for Agriculture and Rural Development Support, which provided long-term grounds of support for this sector. However, at the same time, this law was characterized by critical aspects related to significant fluctuations and instability in different premiums such as milk production and breeding stock. Subsidies for livestock were halved, and even tobacco and wheat subsidies were significantly reduced. Overall, total resources for agricultural development support remained at the level of the previous year (+10%), and government started co-financing operating costs of Agriculture Extension Services, as an indirect support measure.

The year 2003 was characterized by the availability of additional resources (+25% on an annual basis), and significant diversification of the overall program. Apart for a further growth of milk and tobacco premiums, for the first time, subsidies for fruit growing, feed and medicinal herb plantation production were introduced. An important measure, that became effective in 2004, was the provision of subsides for the interest rate for agricultural credits (around 10% of total resources). This significant diversification also included introduction of resources for rural infrastructure development, that were planned but not used, due to the need for those financial resources to mitigate flood and drought consequences.

In 2004, overall resources grew an additional twenty-five percent. Apart from a further strengthening of the supports to milk and tobacco, new grants for the veterinarian sector were introduced. In addition, for the first time, subsidies for contracted production of vegetables and establishment of new orchards and vineyards were set up.

The increase of the agricultural budget continued during the 2005-2007 period, and was generally characterized by a lower degree of fragmentation than in the previous period: in these three years, agricultural policy was consolidated, despite constraints imposed by a lack of transparency and stability, low accessibility, and a general lack of a long term strategy. During this three-year period, direct support to production was slightly reduced in favor of investments in and support for rural development and the veterinary sector.

Other Subsidies division by type of expenditure (2000-2007) 100% Veterine 90% (animal and 80% plant protection) 70% 60% Rural development 40% 30% Investment 20% 10% 096 ■ Production 2004 2005 2001 2002 2003 2006 2007 2000

Figure 1. Subsidies by type of expenditure (2000-2007)

Source: author's elaboration

Even though the four percent of the total RS budget provided for in the Law on Allocation and Distribution of Agriculture and Rural Development Support of 2002 was attained, the 2000-2007 period was characterized by a significant increase of resources. During this period, the major share of agricultural support was allocated, through direct, support to certain types of production (milk, seed, tobacco) and only in the last years significant additional resources were assigned to rural development, long-term investment and to the veterinary sectors. Although this shift of resources towards rural development was a positive measure, a clear mechanism for distribution of these funds has yet to be developed with respect to transparent rules on how to distribute such resources to beneficiaries.

So among the tendencies that have characterized the agricultural support system in the 2000-2007 period, it is relevant to highlight the following:

- total amount was increased significantly since 2000, when it was KM 7.562 million, to KM approximately KM 50 million, or by 6.6 times;
- more than 50% of the agricultural budget was allocated to direct support of production, and to income support in particular for certain products (milk, seed, and tobacco);
- many analysts agree that a significant amount of subsidies tend to end in the pockets of a negligible part of (large) producers, while a large number of (small) agricultural producers have had access to only relatively small subsidies (Z. Vasko, 2006). This suggests a lack of an equitable principle in subsidy allocation, and a failure in scope, as extremely few subventions have a social more than developmental character;
- funds for agricultural credit have often been characterized by an unclear mechanism of functioning, however, with the new strategy, these funds should be partially transferred to rural development;
- a not so negligible category was represented by those subsidies that were allocated by Ministry decision or under diverse "development programs" that were characterized by a lack of information regarding purpose and selection criteria;

- veterinarian grants have been allocated more for establishment and financing of veterinarian institutions than for animal health protection;
- funds have been allocated through 47 different items: such a broad spectrum suggests, on the one hand, that the overall strategy failed to have a long term perspective, and, on the other hand, that policy aims have been largely unclear.

Subsidies chosen by RS did not have developmental character during the period observed, and from the structure of beneficiaries, it could be concluded that they were used only by certain groups of beneficiaries, while they had little impact upon the stronger support for current and long-term development of larger groups of producers. Similarly, in the previous period, not a single more serious analysis of the impact of subsidies was performed, indicative of the impact of governmental financial support to growth, increased competitiveness and change of production structure. Actually, this analysis indicates irrational use and poor targeting of resources, which significantly puts under question readiness of society to provide support to the agriculture sector. When we add to this extreme inconsistency the measures and mechanisms implemented at RS level, individual local administration levels, as well as very poor monitoring of targeting resources and evaluating effects of the measures, we get a clearer picture of the appropriateness of RS agricultural policy and capacities of the responsible institutions. Agricultural support policies has been partially revised during 2006 when the Ministry of Agriculture carried out important reforms and created and adopted three major documents: the "Strategy for agricultural development of the Republic of Srpska by 2015" (including a new model for agricultural subsidies); an action plan for the implementation of the strategy; and a new regulation on subsidies. All three documents came out with the following understanding:

- 1. RS Government shall channel its support to the agrarian sector through the "Agrarian budget" and the total amount of resources should reach 6% of the domestic revenues during the first phase of the strategy and 8% during the second phase.
- 2. Agricultural support should be addressed through the current system of subsidies and incentives (axis 1), through support to development programmes (axis 2), and through support to rural development and non-commercial holdings (axis 3).
- 3. In the course of the initial three years of the realization of the Strategy, the ratio of resources directed should amount to 40 (axis 1):40 (axis 2):20 (axis 3), and following a period of three years, the ratio should shift to 30:50:20. Therefore, in both periods, the emphasis was placed on development (axis 2 and axis 3), with 60, i.e. 70% of the volume of support, from the aspect of multi-functional development of agriculture.

## 5. LOOKING FOR FARMERS IN RS: MAIN FINDINGS OF THE SURVEY

Within the scope and the limits indicated, the survey suggested a number of important elements. Basically, the agricultural households involved in the interviews were subsistence or semi-subsistance farmers or commercial farmers of rather small dimension, leading agricultural activities in the regions of Banjaluka, Doboj, Bijeljina, Sokolac and Trebinje.

As indicated in the methodology, farmers were randomly selected among those requesting advice, and the number per region was partially balanced considering: the total population and the total sown area of each region. The survey involved altogether 215 agricultural households.

#### **5.1 General issues**

The sample in the survey respects the farm size indicated by the last estimations (a large number of farms under 5 ha) and suggests significant regional differences (in Trebinje area farm size is particularly low due to natural conditions).

Table 4. Land area

Farm size	Frequency	Percent	Cumulative Percent
0-1 ha	17	8,4	8,4
1-5 ha	76	37,4	45,8
5-10 ha	41	20,2	66,0
10-20 ha	33	16,3	82,3
20-50 ha	23	11,3	93,6
50-100 ha	9	4,4	98,0
>100 ha	4	2,0	100,0
Total	203	100,0	

Source: author's survey

Land ownership is still under a transition process. A large share of agricultural households do not have formal documents to certify their property or the rental status of the land (renting without contract is quite widespread). Within the fifty percent of registered properties, there is a variety of situations: in some cases land "belongs to grandfathers", in other cases the process of registration is "ongoing". An exception is represented by the few big producers that are in possession of the legal documents for the land they have rented. This situation could suggest a strong institutional and organizational weakness.

Labor is largely the main input and, generally, the overall level of mechanization remains poor, due to the average farm size being largely inappropriate for modern mechanization, and to the lack of financial resources that would allow for purchase or rental of machinery. Moreover, the existing technical equipment is generally extremely outdated and only few farms possess modern technical equipment.

The absence of associations and cooperatives can be also considered a major obstacle to joint investment and marketing activities, thereby, missing the opportunity to foster farm competitiveness.

# **5.2 Production patterns: subsistence vs market**

Most of the farms are not specialized (this is linked also to size), and production is mainly oriented to subsistence. Exceptions are represented by the few big producers in Banjaluka, Bijeljina and Doboj areas, which are predominantly market oriented.

Grain, fruit and vegetables are produced mainly for self consumption, while the marketed share is considerably low.

Farms based on fresh meat and fresh milk production are more market oriented than in the case of crop production. Some of the reasons behind the development of this sector can be identified as follows: a well developed milk processing industry, a well structured shredded milk collection network, the opportunity for a valuable monthly income for small farmers, low market costs and fixed investments.

Milk and meat processed products are predominantly produced for self consumption, with the exception of the Doboj and Trebinje areas. This can be partially explained by the characterization of both Doboj and Trebinje having enjoyed a number of positive experiences related to farm markets, traditional cheese brands, direct farm sales, developed service capacities, tourism. However, meat processing on the farm also remains rare, because of the relevance of a live animal market within the country.

Table 5. Production orientation: subsistence vs market

	Grain	Fruits	Veg.	Milk (fresh)	Milk produc ts	Meat (fresh)	Meat produc ts	Honey
Mainly for family consumption	103	145	155	51	87	31	148	35
Up to 70% for family consumption and 30% for market	19	13	12	17	11	24	2	0
50% for family consumption and 50% for market	16	7	4	29	12	19	1	4
Up to 70% for market and 30% for family consumption	12	9	17	28	32	71	1	5
Mainly for market	11	10	11	47	15	52	0	4
No production	41	18	2	30	45	5	50	154
Total	202	202	202	202	202	202	202	202

Source: author's survey

#### **5.3** Access to credit

The credit system is not used by the majority of agricultural households (57.7%). However, the most accessible institutions are Micro Credit Organization (MCOs) and NGOs, while the presence of commercial banks is absolutely residual.

The major barriers to credit are the high interest rates required (MCOs and NGOs are more accessible since they offer better condition) and the requirement of significantly high collateral, considered to be a major constraint for 56% of the cases. However, the overall perception of the farmers is connected with the complexity of the credit system, and, in many cases, a feared high risk of debt.

Table 7. Access to credit: credit facilities

		Frequency	Percent	Cumulative Percent
Valid	Do not use the credit system	116	57,1	57,4
	Bank	38	18,7	76,2
	Micro Credit Organization (MCO)	35	17,2	93,6
	Bank + MCO	6	3,0	96,5
	NGO	4	2,0	98,5
	MCO + NGO	2	1,0	99,5
	Bank + NGO	1	0,5	100,0
	Total	202	99,5	
Missing	No response	1	0,5	
Total		203	100,0	

Source: author's survey

A correlation between access to credit and access to subsidies must to be noted. Farmers who do not have access to subsidies usually also do not have access to either credit or microcredit. Small size, age and low education levels are among the main causes.

Table 8. Access to subsidies past 2 years related to the use of credit facilities

Technical and economic performances (Access to credit) - Credit									
	•					Total			
			Micro Credit		Do not use	Bank	Bank	MCO	
			Organization		the credit	+	+	+	
		Bank	(MCO)	NGO	system	NGO	MCO	NGO	Bank
Subsidies - Access	Yes	26	23	2	45	1	5	2	104
to subsidies past 2 years	No	12	12	2	70	0	1	0	97
Total		38	35	4	115	1	6	2	201

Source: author's survey

## **5.4 Subsidies**

Overall, more than 50% of the interviewed agricultural households have received subsidies, but relevant regional disparities have to be underscored. Subsidies have been received by 65% of agricultural households in the Doboj area, and only by 20% in Trebinje area. This diversity in subsidies distribution can be partially explained with the diversity of farm size within the regions: large farms in Banja Luka and Doboj receive the largest share of subsidies.

The subsidy system is considered extremely complicated by a large group of households, which find the main element of complexity in the fact that the system has been deeply modified on an annual basis over the last several years.

Subsidies are extremely fragmented and fail to promote specialization or competitiveness. Considering that almost 80% of subsidy recipients obtain less than 900 KM per year, it is probably appropriate to recognize in agricultural subsidies a more social than developmental purpose.

Table 9. Subsidies received in 2006 (data in KM; 1,9558 KM = 1 Euro)

Data in KM	Frequency	Percent	Cumulative Percent
No subsidies received	97	48.0	49.2
50-100	7	3.5	52.8
100-200	7	3.5	56.3
200-300	8	4.0	60.4
300-400	11	5.4	66.0
400-500	14	6.9	73.1
500-700	9	4.5	77.7
700-900	4	2.0	79.7
900-1500	8	4.0	83.8
1500-2000	13	6.4	90.4
>2000	19	9.4	100.0
Total	197	97.5	
No response	5	2.5	
Total respondent	202	100.0	

Source: author's survey

Subsidies have been received by a large majority for production, and only a small share has been received for the purchase of new equipment or the modernization of facilities. The large majority of subsidies (70,5%) was allocated exclusively to production. This was coherent with the agricultural policy instruments used in the 2000-2007 period, which basically aimed for the direct support of certain commodities (overall milk and tobacco). Apart from production, there was quite a significant share of farmers (15,8%) who received subsidies both for production and for the purchase of new equipment. Other categories (modernization of new facilities, purchase of inputs as chemicals and fertilizers) have been residual, and did not have a significant impact at the farm level.

Table 10. Subsidies - Subsidies/aim (For what did you get subsidies)

		Frequency	Percent	Cumulative Percent
Valid	Production	72	70,8	70,8
	Purchasing new equipment + production	16	15,8	86,6
	Purchasing of new equipment	4	3,9	90,5
	Modernization of facilities	4	3,9	94,4
	Purchasing of inputs (chemicals, fertilizers, seeds)	3	2,8	97,2
	Other	3	2,8	100
	Total	102	98,5	
Missing	No response	3	1,5	
Total		105	100,0	

Source: author's survey

Overall, the main criticism that farmers direct to the subsidy system is related to its extreme complexity due to the lack of stability (in the past decade an overall strategy

have been not foreseen and instruments were changed on an annual basis) and extremely bureaucratic (for farmer's average knowledge) procedures.

## 6. CONCLUSIONS

## **6.1 Farmers and policy**

A large majority of farmers seem to elude a commercial definition or orientation. Subsistence and semi-subsistence remain still largely the main orientation so that non commercial farms are still the most common production unit. This is emphasized also by several findings:

- farm size is predominantly small or extremely small (less than 5 ha) although if regional differences have to be highlighted;
- land ownership is still under a transition process so that the land market is affected by a significant stagnation due to the uncertainty of property and to the lack of investments and long term strategy at the governmental level. This situation gives no incentive or adequate support to the farmers to move from a subsistence to a more market oriented production;
- production is extremely diversified and based on labor as main input so that the overall productivity is significantly low;
- access to credit is at a very low level due to the high interest rate required and to the request of significant collaterals by the credit institutions. Moreover the overall perception of the risk is very high so that farmers are reluctant to invest or ask for credit even in case they would fulfill the requirements;
- subsidies are often too small to be attractive (so that the system results to be too complex also due to its scarce economical attractiveness) and do not have a significant impact on farming activities. Overall subsidies are too fragmented to promote specialization and competitiveness and so to support an evolution of the "farmer" that at the moment find in the subsidies, and overall in the agricultural sector, a safety net.

Hence the number of commercial agricultural producers is usually small. In many cases farmers rely on agriculture more for a social than an economic function.

## 6.2 Agricultural policy in RS

Overall the agricultural administration of BiH is characterized by an extraordinary complexity. This complexity is reflected also in the agricultural policy of RS which is formally independent in the identification of its own strategy, but which has significant limitations on this independency, considering:

- a. the need of a better coordination with the Ministry of Agriculture, Water Management and Forestry of the FBiH;
- b. the presence of a number of laws at the state level;
- c. the perspective of the EU integration that will probably force BiH to have a unique agricultural policy;
- d. the significant role of the international community (Undp, Fao, Ifad, World Bank) which is encouraging the harmonization of policies and a more comprehensive integration.

The subsidy system is characterized by a acute fragmentation in quality (47 different items have been financed in the 2000-2007 period) and in quantity terms (the survey has suggested that a large group of recipient gets a rather small share of subsidies per capita; several analyst agree that a significant share of subsidies is allocated to a negligible group of recipients). In this frame subsidies have a dual role: a short term – social character for a large group of beneficiaries; a long term – development character for a negligible group of beneficiaries. So except for the case of few recipients the subsidy system fails in the promotion of specialization, modernization and competitiveness.

To some extent it is possible to recognize a significant fracture between agricultural administration and farmers. A more exhaustive analysis on the effect of subsidies and on the characteristics (and needs) of the recipients should be made in order to target agricultural and rural development measures in a more effective way.

In an environment affected by a high degree of instability (changes in the political elite, changes in the agricultural administration, a weak legislative framework) short terms strategies are the most frequently adopted.

If competitiveness and modernization are among the main policy aims of the actual agricultural strategy some of the measures should probably be retargeted and should be accessible for a larger group of farmers. The new Strategy for Agricultural Development partially overcame this short term perspective and this irrational utilization of subsidies even if, especially in consideration of the mentioned fracture between agricultural administration and farmers, it will be relevant to see how the implementation phase will work. On the one hand the Strategy does not fail to consider the needs for competitiveness and modernization and takes into account the major issues related to European integration, but on the other hand no specific measures to support the transition of non-commercial holdings are foreseen.

Non-commercial holdings support is included in the upcoming strategy for rural development that should account for the 20% of a particularly poor agricultural budget. Considering the large number of small holdings their inclusion in the strategy could be a challenging task.

The unclear and short term agricultural strategy that has characterized RS in the last decade contributed to create a significant uncertainty where trust and reliability can be considered as major issues: in this sense the lack of trust has been a major constraint for the development of associations and cooperatives.

A rural development strategy could be crucial to encourage the vitality of rural areas. Competitiveness, modernization and European integration have to be milestones in identifying the policy goals. However it is essential to define an appropriate and sustainable model of agriculture characterized by an autonomous process of modernization. In the conception of this model it should be essential to identify the farmers and their needs and to define the main characteristics of the agricultural and rural systems of RS.

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