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Recent agricultural policy developments in the context of the EU approximation process in the pre-accession countries

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Foreword and acknowledgements

The EU approximation remains one of the main economic and political projects for the Western Balkan (WB) countries/territories and Turkey. The changing policy framework may have wide-ranging impacts for the development of the overall economy in general and the farming sector in particular. Along with the national schemes resulting from country-specific policy designs and budgetary transfers, the EU has developed an instrument to ease the transition process of the WBs and Turkey in their preparations for accession to the EU – namely the instrument for pre-accession assistance (IPA). Most of the assistance for agriculture and rural development in pre-accession countries is implemented through the multiannual IPA for rural development (IPARD) programmes.

In this context, the changing policy environment in the WB countries/territories and Turkey requires the development of approaches for agricultural data collection and analysis to shed light on the potential impacts of the adopted policies on the farming sector and the approximation of the EU *acquis* in the area of agriculture and rural development. This allows a better understanding to be gained of the effectiveness and efficiency of the policies adopted and thus provides a scientific basis for policymaking. Gaining a more comprehensive understanding of the effects of individual policy measures on the development of the agricultural sector allows better targeting of both national support schemes and IPARD programmes.

Over recent years, the Joint Research Centre (JRC) and the Directorate-General for Agriculture and Rural Development of the European Commission have initiated a number of research activities focusing on an economic analysis of the agricultural sector in the EU and selected non-EU countries and their associated agricultural policies. JRC financed the monitoring of agricultural policy developments in the WB countries/territories in the period before 2019, publishing reports on three studies: *Analysis of the agricultural and rural development policies of the Western Balkan countries* ([1]), *Monitoring of agricultural policy developments in the Western Balkan countries* ([2]) and *Agricultural policy developments and EU approximation process in the Western Balkan countries* ([3]). The Regional Rural Development Standing Working Group (SWG) was involved in the implementation of each of these studies. The main achievements of these studies (summarised) are the following:

- regular updates were carried out regarding the agricultural policy developments in the pre-accession countries;
- a comprehensive dataset was produced about the agricultural policy budgetary transfers in the pre-accession countries as a tool for monitoring policy developments and benchmarking;
- a statistical dataset on agriculture in the pre-accession countries was produced;
- an analysis was undertaken of the availability and quality of farm accountancy data network data in the WB countries/territories;
- policy recommendations were given for the relevant ministries of the pre-accession countries;
- the agricultural policy network and cooperation in the pre-accession countries were strengthened, including both agricultural economists and ministerial representatives from the region;
- the agricultural policy plus web platform was created and maintained.

The current report presents the results of the project '*Study on the research, innovation and technology transfer capacities and on the recent agricultural policy developments in the context of the EU approximation process in the pre-accession countries'*. This study is a follow-up to previous research efforts aiming to analyse recent agricultural policy developments in the pre-accession countries and to assess the state of harmonisation with the Common Agricultural Policy in these countries.

On this occasion, JRC and the SWG would like to thank all participating ministries of agriculture and rural development from the south-eastern European region and all of the experts involved for their valuable contributions, as well as the Association of Agricultural Economists of North Macedonia for the scientific coordination of this study. We would like to gratefully acknowledge Liam Breslin, Marius Lazdinis and Zigo Rutkovskis (Directorate-General for Agriculture and Rural Development) for the support they provided throughout the implementation of the study and for their valuable feedback on the results.

On behalf of JRC

Mr Giampiero Genovese
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Secretary General

([1]) http://seerural.org/wp-content/uploads/2016/08/JRC-Technical-Report-2016_Analysis-of-the-agricultural-and-rural-development-policies-of-the-Western-Balkan-countries.pdf
([2]) http://seerural.org/wp-content/uploads/2017/06/Monitoring-of-agricultural-policy-developments-in-the-Western-Balkan-countries.pdf
([3]) http://seerural.org/wp-content/uploads/2019/03/Agricultural-policy-developments.pdf

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(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Summary

The aim of this report is to analyse recent agricultural policy developments in the countries/territories of the Western Balkans (WBs) and Turkey and their state of harmonisation with the Common Agricultural Policy (CAP) of the EU. The report provides both comparative cross-country analyses and a more detailed assessment in the form of country case studies. The report builds on the series of previous work undertaken on a similar issue by providing an update on the recent agricultural policy developments in the region. That is, the report covers the period from 2017 to 2019 in detail, with reference made to changes that took place in the previous decade. The comparative cross-country analyses carried out in this report follow the conceptual framework that defines the key harmonisation principles required to align the agricultural policies of the WBs and Turkey with the EU's CAP. A quantitative analysis of agricultural policy developments was performed using data on budgetary support for agriculture, systematised according to the unified statistical databases and the Agricultural Policy Measures Classification (APMC) tool, a uniform classification scheme of agricultural budgetary support enabling a comparison of the scope and structure of budgetary support for agriculture between the WBs and Turkey and the EU.

The alignment of the agricultural policies of the WBs and Turkey with the EU's CAP is rather heterogeneous across countries/territories. Overall, the agricultural policies of the WBs and Turkey are more in line in terms of commitment and future planning than in terms of the policy measures actually implemented. The WB countries/territories and Turkey adopted, to a large extent, the sustainability model in their medium- and long-term strategic planning for future agricultural policies by aiming to promote economic, environmental and social objectives in the agricultural sector and rural regions. However, when it comes to the implementation of measures, support is mainly production oriented and has a sectorial focus.

Overall, in recent years, agricultural support has increased in the WB countries/territories, but there has been a notable decrease in Turkey. Regarding the structure of agricultural support, market and direct support measures (first pillar) dominate the support measures in almost all countries/territories, followed by structural and rural development support (second pillar), while only a small proportion of the total support is allocated to other agricultural support (third pillar) in all countries/territories. A key difference in the agricultural policies of the WBs and Turkey and of the EU's CAP is the type of measures implemented. First, the WBs and Turkey allocate first pillar support primarily through coupled direct support, whereas in the EU the main type of direct support is decoupled payments. A second important difference between the WBs and Turkey and the EU's CAP is in second pillar support. In all of the WBs and Turkey, this support is almost entirely targeted at improving competitiveness within the agri-food sector, whereas less support tends to be allocated to promoting quality of life and employment in rural areas and, in particular, to promoting the delivery of environmental and agricultural public goods. In the EU, the reverse situation holds. A major challenge, related to the alignment of the agricultural policies of the WBs and Turkey with the EU, which still remains unsolved in the region, is linked to capacity building and the institutional set-up in the public administration responsible for managing and implementing agricultural support. In addition, in the WBs and Turkey, the development of a strategic policy framework with respect to monitoring and analytical capabilities has been insufficient to ensure that, upon eventual accession, they are able to implement the CAP policy cycle, consisting of, among other things, planning, evaluation and contributions to the formulation of an effective support system.

Key words: agricultural policy, Agricultural Policy Measures Classification, Western Balkans, Turkey, CAP, EU accession.

1. CROSS-COUNTRY SYNTHESIS: RECENT AGRICULTURAL POLICY DEVELOPMENTS IN THE CONTEXT OF THE EU APPROXIMATION PROCESS IN PRE-ACCESSION COUNTRIES

Aleksandra Martinovska Stojcheska, Ana Kotevska, Ivana Janeska Stamenkovska, Dragi Dimitrievski ([4]) and Pavel Ciaian ([5])

1.1. Introduction

Background and aim

Joining the EU is a key strategical priority for the countries/territories in the Western Balkans (WBs) and Turkey. One of these countries' objectives is to prepare their agricultural sectors to enter the EU and, accordingly, harmonise their policies with the EU's Common Agricultural Policy (CAP).

The overall objective of this report is to provide country case studies and a cross-country analytical overview of agricultural policy developments in the WBs and Turkey and to analyse their state of harmonisation with the EU's CAP. Alongside Turkey, the WB countries/territories covered in the report are Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, North Macedonia and Serbia.

This report presents the results of the project '*Study on the research, innovation and technology transfer capacities and on the recent agricultural policy developments in the context of the EU approximation process in the pre-accession countries*', which was initiated and funded by the Joint Research Centre (JRC) and the Directorate-General for Agriculture and Rural Development of the European Commission and implemented by the Regional Rural Development Standing Working Group (SWG). This report builds on previous studies that aimed to establish regular analyses of agricultural policy development in the region ([6]), namely *Analysis of the agricultural and rural development policies of the Western Balkan countries* (Volk et al., 2016), *Monitoring of agricultural policy developments in the Western Balkan countries* (Volk et al., 2017) and *Agricultural policy developments and EU approximation process in the Western Balkan countries* (Volk et al., 2019). As an update on the previous reports, the current report provides statistical and agricultural policy data and a policy analysis for the latest available years for the WB countries/territories (2017 to 2019) and a statistical and policy data series for Turkey for the last 10 years.

The report is structured into eight chapters. The first chapter provides a comparative cross-country analysis of the agricultural policy developments in the WB countries/territories and Turkey and their state of harmonisation with the EU CAP. Chapters 2 to 8 detail country case studies, describing recent developments of the agricultural policy in each pre-accession country.

Method, data and conceptual framework

The quantitative analyses carried out in this report were performed using two methodological tools/databases: (i) the Agricultural Policy Measures Classification (APMC) tool and (ii) the supplementary agricultural statistical dataset (StatDatabase). These methodological tools build on and extend the previous work of Volk (2010), Rednak et al. (2013), Volk et al. (2014), Volk et al. (2016, 2017, 2019) and Erjavec et al. (2021). Both databases cover a 10-year time period from 2010 to 2019, with the current study adding to the available research the following periods: 2017–2019 for the WB countries/territories and the full 10-year period for Turkey. However, the focus of this report was principally the recent developments, namely those in the last three referenced years (2017 to 2019).

Information for the databases was collected by national experts from the available national statistics, formal policy documents, research studies, reports and papers. In cases with no publicly accessible data on agricultural support, other relevant sources were used, such as governmental budgetary plans, policy programmes and

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([6]) The novelty of this report in terms of geographical coverage compared with previous work is that it includes Turkey alongside the WB countries/territories.

regulations, reports on the implementation of agricultural policy measures from various ministries and personal communications.

StatDatabase is organised using a number of headings, covering various economic and agricultural aspects. To ensure uniformity across the information collected, predefined templates were used for the data collection. StatDatabase was upgraded to cover additional socioeconomic and rural development issues, including data on organic production ([7]). Although the availability of agricultural statistics in the pre-accession countries is increasing over time, in some countries/territories important data are still missing. For example, the farm structure survey is not available in Albania, Bosnia and Herzegovina or Turkey, and was not updated in the last few years in the other countries/territories. Economic accounts for agriculture are missing in Albania, Bosnia and Herzegovina and Montenegro, and the Turkey dataset was compiled by the country expert for the purposes of this project. Price indices are not available for Albania or Montenegro. Furthermore, general and agriculture censuses have not been carried out recently in most countries/territories; therefore, the official population estimations from statistical offices are used instead.

The APMC tool provides a harmonised and consistent database of individual policy instruments for the WB countries/territories and Turkey (Rednak and Volk, 2018). The APMC database contains data on realised budgetary transfers to agriculture, classified by the EU two-pillar concept and the Organisation for Economic Co-operation and Development's (OECD) producer support estimate (PSE) concept (OECD, 2016a). This tool allows uniform classification of the different policy measures among countries/territories and a comparison with the EU's CAP. The APMC tool integrates predefined layouts to prepare data for substantive and comparative analysis. The APMC is built on a hierarchical principle, which allows the analysis of agricultural policy instruments to be conducted at different levels of aggregation. At the first level, agricultural support is grouped into three main areas: (i) market and direct producer support measures (first pillar), (ii) structural and rural development measures (second pillar) and (iii) other measures related to agriculture (third pillar). Each of these three broad types of support is then split further into specific submeasures (Volk et al., 2019). Thus, the broadest level of the APMC analytical presentation provides information on the evolution of total budgetary support related to agriculture over time, by pillars and also more analytically, namely within pillars with different levels of disaggregation.

Using StatDatabase and the APMC, several indicators were derived and are compared throughout the report. The report also compares the performance of the WB countries/territories and Turkey relative to the EU, with the latter serving as a benchmark. Since the dataset does not extend beyond 2019, the EU averages are taken for the 27 Member States and the United Kingdom ([8]). For the EU, the CAP policy context and performance indicators used in the report are from the European Commission (2020a).

Alongside agricultural policy-related indicators, different agricultural performance indicators are analysed in the report, such as labour productivity (based on the gross value added (GVA), as a volume measure of the output, and the number of people employed, as a measure of the input use; Freeman, 2008). Agricultural orientation was also assessed by using the proportion of agricultural support based on gross domestic product (GDP), gross agricultural output and government spending.

To gain a detailed understanding of the existing agricultural support in the WBs and Turkey, and subsequently their approximation status with the CAP, we applied a conceptual framework that defines the key principles underlining the EU's agricultural policy priorities. In this respect, the conceptual logic for assessing the accession and pre-accession agricultural policy harmonisation process is built along the following six key principles (Erjavec et al., 2021; Figure 1): (P1) the strategic policy framework, (P2) the size and allocation of financial resources, (P3) direct producer support, (P4) measures to improve competitiveness, (P5) policies for sustainability and public goods provision by the farming sector and (P6) quality of life and employment in rural areas. These six principles align with the priorities set by the EU's CAP, in terms of their broad categories, which can be adapted to take into consideration any future CAP changes. Acceding countries' agricultural policies must align with these principles for respective agricultural policies to become harmonised with the CAP.

The conceptual framework allows a qualitative and quantitative assessment to be undertaken of the state and progress of the alignment of the national policies in view of the common goal of accession to the EU and joining

([7]) The statistical databases, including a summary of the agricultural budgetary transfers, are available on the SWG web portal (http://app.seerural.org/agricultural-statistics/).

([8]) The United Kingdom is also included for the calculation of various EU-level indicators, because the periods both before and after the United Kingdom's withdrawal from the EU are considered in the report.

the CAP. This framework also enables a comparison to be made of the agricultural policies in the different countries/territories, as well as with the EU benchmark.

This chapter, on the cross-country analysis, is structured as follows: after this introduction, which has briefly described the aims, data sources and method, Section 1.2 presents the state of the agricultural sector through some key macroeconomic, sectoral and trade indicators, with an additional focus on the socioeconomic issues underlying rural areas in the WBs and Turkey in Section 1.3. The agricultural policy framework and recent policy changes are presented in Section 1.4, including aspects related to strategic policy planning, financing and budgetary transfers to agriculture and rural development. That section discusses the approximation of agricultural policies in the candidate countries with the EU CAP following the framework depicted in Figure 1. The chapter closes with the final section highlighting the main conclusions and recommendations.

Figure 1. The principles underlying the EU CAP, which acts as a benchmark for agricultural policy in pre-accession countries

Source: Erjavec et al. (2021).

The following chapters (Chapters 2 to 8) set out the individual pre-accession country case studies, prepared by the national experts. All of the case studies follow a similar structure and methodology, supplemented by the experts' assessment of the country's contextual background, the systematic and standardised evaluation of the national agricultural statistics, the socioeconomic issues underlying rural areas, the analysis of agricultural and rural development policy documents, the identification of the major policy changes in recent years and progress with regard to the EU policy approximation, as well as relevant conclusions and recommendations.

1.2. Situation and trends in the agricultural sector in the Western Balkans and Turkey – context and setting

The situation and trends analysis of the development of the macroeconomic situation and of the agricultural sector in the WB countries/territories and Turkey provided in this section is based on data from StatDatabase complemented with additional socioeconomic and rural development data extracted from various sources, such as Eurostat and CAP context indicators (European Commission, 2020b). The assessment of the developments over time was conducted primarily by comparing the change of average values of various indicators from 2010–2012 to 2017–2019 ([9]).

Macroeconomic context

The WB countries/territories and Turkey recorded positive economic development from 2010 to 2019. From 2017 to 2019, the GDP per capita ranged from EUR 3 746 in Kosovo* to EUR 7 202 in Montenegro and EUR 8 577 in Turkey, compared with 31 505 in the EU (Table 1). The highest growth of GDP per capita from 2010–2012 to 2017–2019 was observed in Bosnia and Herzegovina (+48 %). A similar trend is seen for the other countries/territories, with an increase in GDP per capita over this period varying between 30 and 40 %, with the exception of Turkey, where the GDP per capita grew by only around 2 % over the same period. In the EU, GDP per capita increased by around 23 %. Similarly, the output of the economy, measured by the GVA of all sectors, also shows an increasing trend during the observed period for all countries/territories. North Macedonia achieved the highest growth (+45 %), followed by Kosovo* (+39 %), Albania and Montenegro (+37 %), Bosnia and

([9]) As indicated above, the United Kingdom is also included for the calculation of the EU indicators because the periods both before and after the United Kingdom's withdrawal from the EU are covered.

Herzegovina (+36 %), Serbia (+25 %) and Turkey (+14 %). The EU shows a similar trend with an increase of 21 % in the GVA of all activities since the early 2010s (Table 1).

While the total employment in the EU fell by about 4 %, it increased in almost all of the WB countries/territories and Turkey, except for Bosnia and Herzegovina, where the figures remained stable from 2010–2012 to 2017–2019. Subsequently, unemployment rates markedly dropped in all of the WB countries/territories, although the unemployment rate still remains relatively high, ranging from 12.5 % in Albania to 29 % in Kosovo*. In contrast, unemployment in Turkey has increased by 24 % since 2010–2012, reaching 11.9 % in recent years (Table 1).

The proportion of total household expenditure on food, beverages and tobacco varied among countries/territories in 2017–2019, from 25 % in Turkey to 44 % in Kosovo* (the EU benchmark being 16.1 %), indicating relatively low disposable income in these countries/territories, as expenditure on food items constitutes an important portion of the household budget. As in the EU (+7 %), over the last decade, the proportion of household expenditure taken up by food, beverages and tobacco has increased in Albania (+6 %), North Macedonia (+7 %), Bosnia and Herzegovina (+10 %) and Kosovo* (+12 %), while a significant reduction is seen in Montenegro (–19 %) and no significant change is seen in Serbia or Turkey (Table 1).

A relatively high proportion of the population is at risk of poverty in the WB countries/territories and Turkey. Almost one quarter of the population in these countries/territories was confronted with the risk of poverty or social exclusion, which is somewhat higher than the EU level (Table 1).

Table 1. Socioeconomic context indicators

Indicator	Period	AL	BA	XK	ME	MK	RS	TR	EU
Population (thousand inhabitants)	2017–2019	2 865	3 434	1 801	622	2 076	6 989	81 900	513 669
Density (inhabitants/km ^{2})	2017–2019	99.6	67.1	165.2	45.0	80.7	90.2	104.5	117.9
GDP per capita (EUR)	2010–2012	3 193	3 370	2 650	5 145	3 601	4 633	8 377	25 710
	2017–2019	4 425	4 983	3 746	7 202	5 151	6 104	8 577	31 505
	Index 2017–2019/2010–2012 (%)	138.6	147.9	141.3	140.0	143.0	131.7	102.4	122.5
GVA of all activities (million EUR)	2010–2012	8 057	10 586	3 933	2 670	6 395	28 229	551 845	11 828 407
	2017–2019	11 073	14 415	5 448	3 668	9 295	35 379	627 937	14 251 629
	Index 2017–2019/2010–2012 (%)	137.4	136.2	138.5	137.3	145.4	125.3	113.8	120.5
Total employment (thousand persons)	2010–2012	929	824	303	164	644	2 293	23 020	225 112
	2017–2019	1 230	823	353	237	766	2 814	28 335	217 340
	Index 2017–2019/2010–2012 (%)	132.4	99.8	116.6	144.6	118.8	122.7	123.1	96.5
Unemployment rate (%)	2010–2012	13.4	27.6	39.9	19.7	31.5	22.0	9.6	9.9
	2017–2019	12.5	18.2	29.0	15.5	20.1	13.1	11.9	6.9
	Index 2017–2019/2010–2012 (%)	93.2	65.9	72.7	78.5	63.9	59.5	124.1	69.7
Proportion of food, beverages and tobacco in total household expenditure (%)	2010–2012	38.9	37.0	39.3	36.7	37.3	29.7	25.0	15.0
	2017–2019	41.2	40.8	44.0	29.7	39.9	29.5	24.5	16.1
	Index 2017–2019/2010–2012 (%)	106.0	110.4	111.9	80.9	106.9	99.4	98.0	107.0
At risk of poverty (%)	2017–2019	23.6	:	:	23.7	22.1	25.2	23.5	17.0

:, no data available.

Source: WB&TR StatDatabases, Eurostat (2020), CAP context indicators (European Commission, 2020b).

Agriculture as an important economic sector for the WBs and Turkey

Agriculture remains an important economic sector for all of the WB countries/territories and Turkey. The GVA generated from agriculture, forestry and fisheries showed notable growth in almost all countries/territories, except for Kosovo* and Turkey, where its value dropped by 12 % and 18 %, respectively, in 2017–2019 compared

with 2010–2012. On the other hand, as national economies are growing, the proportion of agricultural value added in each country's total GVA has considerably decreased in the WBs and Turkey and, as expected, this trend is stronger than in the EU. The decrease in the proportion that agricultural GVA makes up of the country's total GVA is most pronounced in Kosovo* and Turkey, followed by North Macedonia, Montenegro and Serbia. Albania is the only country where the proportion of agricultural GVA out of that for all activities remains relatively flat (Table 2).

Table 2. Sectoral indicators – gross agricultural output and employment

Indicator	Period	AL	BA	XK	ME	MK	RS	TR	EU
GVA of agriculture (million EUR)	2010–2012	1 700	871	610	247	705	2 296	51 629	200 765
	2017–2019	2 368	985	538	304	899	2 635	42 530	235 425
	Index 2017–2019/2010–2012 (%)	139.3	113.1	88.1	123.3	127.5	114.8	82.4	117.3
Proportion of agricultural GVA out of GVA of all activities (%)	2010–2012	21.1	8.2	15.5	9.2	11.0	8.1	9.5	1.7
	2017–2019	21.4	6.8	9.9	8.3	9.7	7.4	6.6	1.7
	Index 2017–2019/2010–2012 (%)	101.5	83.2	63.7	89.8	87.4	91.6	69.6	97.4
Employment in agriculture and forestry (thousand persons)	2010–2012	508.3	164.3	:	11.7	118.3	492.7	5 265.6	9 821.3
	2017–2019	459.1	144.1	:	18.5	116.9	461.7	5 279.1	8 375.4
	Index 2017–2019/2010–2012 (%)	90.3	87.7	:	157.4	98.8	93.7	100.3	85.3
Proportion of those employed in agriculture and forestry out of total employment (%)	2010–2012	54.8	19.9	:	5.8	18.4	21.5	22.9	4.4
	2017–2019	37.3	17.5	:	7.7	15.3	16.2	18.6	3.9
	Index 2017–2019/2010–2012 (%)	68.1	87.9	:	132.2	83.3	75.6	81.4	89.0

:, no data available.

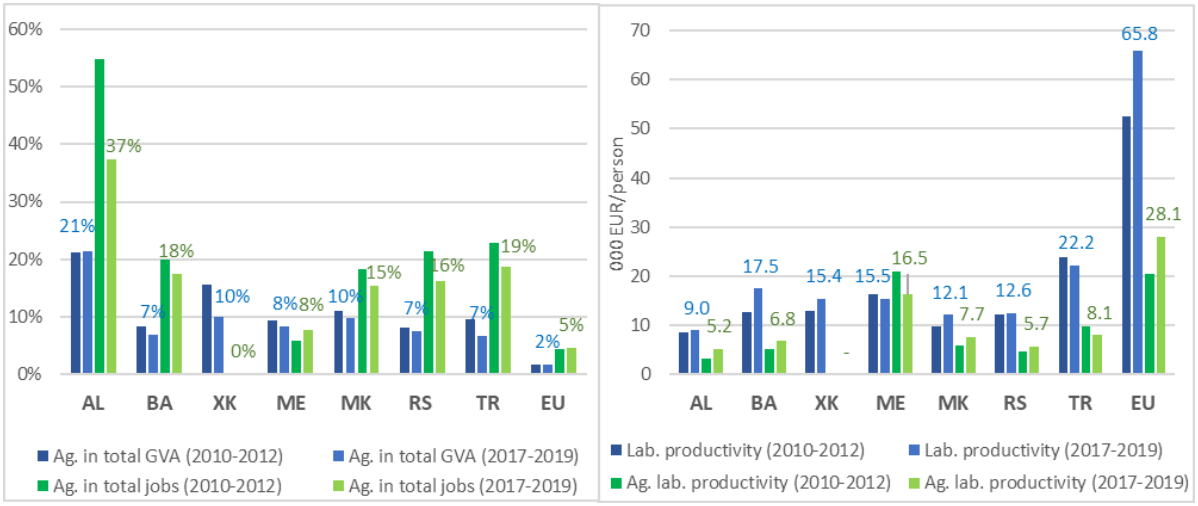
Source: WB&TR StatDatabases, Eurostat (2020), CAP context indicators (European Commission, 2020b).

The importance of the agricultural sector in the national economies of the WBs and Turkey is confirmed by the sizable number of people employed in the sector. Whereas in the EU only 3.9 % of people are engaged in agriculture, in all of the WB countries/territories and Turkey, this proportion is significantly higher, ranging from 7.7 % in Montenegro to 37.3 % in Albania, albeit with a decreasing trend over the years analysed in almost all of the countries/territories. This reduction is most evident for Albania (–32 %) and Serbia (–24 %) (Table 2). Nevertheless, the high proportion of labour in agriculture vis-à-vis total employment, as compared with its GDP contribution (Figure 2), signals lagging sectoral productivity when compared with other sectors in the economy.

The economic development in the region has been dynamic. For example, labour productivity levels, calculated as the total Gross Value Added per employed person, have slowly risen in almost all WB countries/territories in the last period (Figure 2). Exceptions are Montenegro and Turkey, where over the course of the last years, labour productivity experienced some setbacks. Still, labour productivity levels are far behind the rapid growth shown in the EU average. In average terms, highest values of the aggregate labour productivity in 2017–2019 are observed for Turkey (22.2 thousand EUR/person), followed by Bosnia and Herzegovina and Montenegro with

17.5 thousand EUR/person and 15.5 thousand EUR/person, respectively. The lowest total labour productivity is evidenced for Albania (9 thousand EUR/person) (Figure 2).

Figure 2. Gross value of agriculture versus employment (left) and total labour and agricultural labour productivity (right)



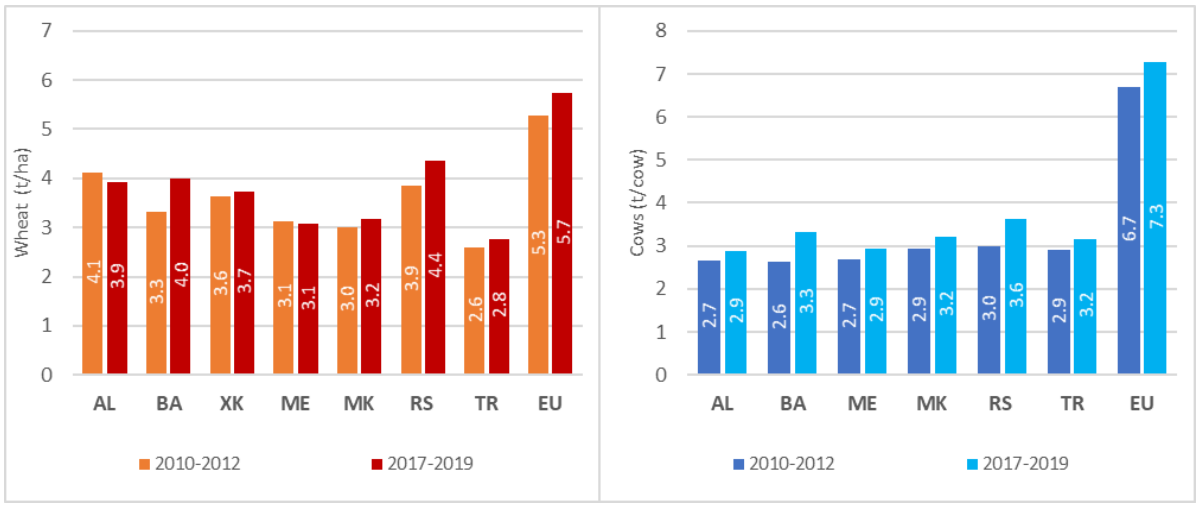
Note: 'Ag. in total GVA' refers to the proportion of agricultural GVA out of total GVA; labour productivity is measured as the total GVA per employed person; and 'Ag. labour productivity' refers to the GVA per employed person in agriculture.

Source: WB&TR StatDatabases, Eurostat (2020), CAP context indicators (European Commission, 2020b).

A similar development is observed for agricultural labour productivity, with an increasing trend in all countries/territories, again aside from Montenegro and Turkey. Values range from an agricultural GVA of EUR 5 200 per person in Albania to EUR 8 1 per person in Turkey, with Montenegro set apart from the rest with a much higher value (an agricultural GVA of EUR 16 500 per employed person in agriculture), mainly because of the lower number of people employed in agriculture than in the other countries/territories (Figure 2).

Regarding the productivity of key agricultural activities, wheat and milk yields in the WB countries/territories and Turkey fall far behind EU levels. In Montenegro, North Macedonia and Turkey, wheat yield ranges from 48 % to 55 % of the EU average, while in Albania and Bosnia and Herzegovina it is 65 % and 69 % of the EU average, respectively. The highest wheat yields are in Serbia, which has a wheat yield equal to 78 % of the EU average. Cow's milk yields in all of the WB countries/territories and Turkey are less than half of the EU average, although they have increased in recent years, compared with the early 2010s; this trend is less evident for wheat yields (Figure 3).

Figure 3. Average wheat yields (left) and milk yields (right)



Notes: t, tonnes; ha, hectare. No data available for milk yields in Kosovo*.

Source: WB&TR StatDatabases, Eurostat (2020).

Table 3 gives the average agricultural land by type for 2017–2019. Similar to the EU average, in Albania, Bosnia and Herzegovina, and Kosovo*, arable land takes around 50 % of total agricultural land, while this proportion is smaller for North Macedonia (33 %) and is only 3 % in Montenegro. Agricultural land in North Macedonia and especially in Montenegro consists mainly of permanent grassland and meadows. On the other hand, arable land makes up quite a high proportion of total agricultural land in Serbia (75 %) and Turkey (85 %). The area under organic production, although slowly increasing, is still very modest in all of the WB countries/territories and Turkey, making up less than 1 % of the total agricultural area, and is significantly behind the EU average (7.5 %).

Table 3. Sectoral indicators – agricultural land and yields (thousand hectares, 2017–2019)

Indicator	AL	BA	XK	ME	MK	RS	TR	EU
Agricultural land (total)	1 190	2 176	417	257	1 265	3 469	23 207	179 164
Arable land	607	1 061	188	7	418	2 586	19 763	105 020
Permanent crops	84	106	11	6	41	206	3 443	12 155
Permanent grassland and meadows	478	1 080	218	242	805	656	14 617	61 434
Other agricultural land	:	:	:	0.1	1	:	5	554
Area under organic production*	:	1.15	:	3.53	4.87	8.95	229	13 438

:, no data available; *, data for 2018.

ha, hectares.

Source: WB&TR StatDatabases, CAP context Indicators (European Commission, 2020b).

The agri-food products trade has experienced growth in the WB countries/territories and Turkey over the last decade. Export value increased in 2017–2019 compared with 2010–2012 in all of the countries/territories, except in Montenegro, where a slight decrease in the agri-food exports of 7 % was observed. The highest growth was noted for Albania and Kosovo*, where the export of agri-food products increased remarkably by 218 % and 166 %, respectively, over the period analysed. However, although absolute values of agri-food exports are growing, in relative terms several WB countries/territories have experienced decreases in the share of agri-food exports out of total exports, most notably in North Macedonia (–36 %), Serbia (–22 %) and Montenegro (–10 %). Imports of agri-food products have also increased in all of the WBs and Turkey, but as a proportion of the total imports, a decreasing trend has been observed for most countries/territories, except for Serbia and Turkey (Table 4).

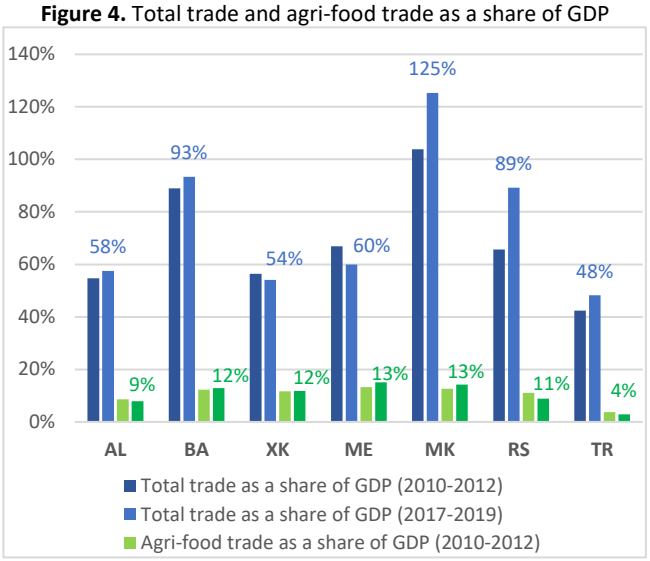
Most WB countries/territories are net importers of agri-food products, leading to a negative trade balance and an increasing trade gap over the period analysed for Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, and North Macedonia. In contrast, Serbia and Turkey are net exporters of agri-food products and the trade balance increased over the period from 2010 to 2019 (Table 4).

Table 4. Trade in food and agricultural products

Indicator	Period	AL	BA	XK	ME	MK	RS	TR
Exports of agri-food products (million EUR)	2010–2012	80.1	307.8	23.8	51.8	449.2	1 929.3	10 416.5
	2017–2019	255.1	475.3	63.4	48.2	564.2	2 973.7	15 337.7
	Index 2017–2019/2010–2012 (%)	318.5	154.4	266.1	93.0	125.6	154.1	147.2
Proportion of agri-food exports out of exports of all products (%)	2010–2012	5.8	7.8	8.0	13.7	15.3	23.4	10.4
	2017–2019	11.1	7.9	18.2	12.4	9.8	18.3	10.6
	Index 2017–2019/2010–2012 (%)	189.7	101.0	226.8	90.3	64.3	77.9	101.8
Proportion of agri-food products (million EUR)	2010–2012	652.1	1 363.9	539.0	429.6	604.2	1 031.0	7 317.2
	2017–2019	842.6	1 619.6	722.1	543.1	791.8	1 731.0	11 136.1
	Index 2017–2019/2010–2012 (%)	129.2	118.7	134.0	126.4	131.1	167.9	152.2
Proportion of agri-food imports out of imports of all products (%)	2010–2012	17.6	18.0	22.6	24.5	12.7	7.4	4.4
	2017–2019	16.9	16.4	21.9	22.0	10.4	8.0	5.8
	Index 2017–2019/2010–2012 (%)	96.0	91.1	97.2	89.5	81.8	107.3	132.0
Trade balance in agri-food products (million EUR)	2010–2012	–572.0	–1 056.1	–515.1	–377.7	–155.0	898.3	3 099.3
	2017–2019	–587.5	–1 144.4	–658.6	–494.9	–227.6	1 219.1	4 201.6
	Index 2017–2019/2010–2012 (%)	102.7	108.4	127.9	131.0	146.8	135.7	135.6
Export/import rate	2010–2012	12.3	22.6	4.5	12.0	74.7	189.3	143.6
	2017–2019	30.2	29.4	8.8	8.9	71.2	171.8	137.7
	Index 2017–2019/2010–2012 (%)	246.4	130.1	197.1	74.0	95.3	90.7	95.9

Source: WB&TR StatDatabases.

Figure 4. Total trade and agri-food trade as a share of GDP



Source: WB&TR StatDatabases.

Figure 4 presents a comparative perspective referring to trade (for the total trade and agri-food trade) as a proportion of a country's GDP. In this context, the total trade (exports and imports) significantly contributes to the country's GDP and, with the exception of Kosovo* and Montenegro, its proportion significantly increased in all countries/territories in 2017–2019 compared with the early 2010s.

The proportion of the trade of agri-food products in the countries' GDP is, as expected, smaller than the total trade. It is on a similar level in almost all of the WB countries/territories, varying from 9 % in Albania to 13 % in Montenegro and North Macedonia in 2017–2019. A smaller proportion is found for Turkey (4 % of GDP in 2017–2019).

1.3. Rural development statistics in the Western Balkans and Turkey

Although most of the countries/territories have made significant progress in the harmonisation of national and agricultural statistics with EU methodologies, the quality and availability of rural development statistics still lags behind. Most countries/territories do not have data available or do not disaggregate statistics for rural regions. This lack of data hinders the process of policy design, monitoring and evaluation, especially with regard to the rural development component. Without accurate and timely information on the state of the situation in rural regions, it is challenging to conceptualise, formulate, adopt, implement and, not least, evaluate and monitor the effectiveness of agricultural and rural development policies.

As part of this report, rural development statistics were updated within StatDatabase to include certain variables related to rural population and labour force data. As reported in Table 5, there is a heterogeneous availability of data across variables and countries/territories and for many of them data are missing.

Table 5. Assessment of rural areas' data availability (2010–2019)

Indicator	AL	BA	XK	ME	MK	RS	TR
Population in rural areas	+	–	–	+/–	–	+	+/–
Population migrated from rural to urban areas	+/–	–	–	–	+/–	+/–	–
Population migrated from urban to rural areas	–	–	–	–	+/–	+/–	–
Population active and non-active in the labour market in rural areas (by education, age and gender)	–	–	+/–	–	+	+/–	+/–
Activity rate of rural population	–	–	+/–	–	+	+/–	+/–

+, available; +/–, partially available; –, not available.

Source: WB&TR StatDatabases.

The data suggest that, in **Albania**, there is a significant demographic change taking place, with the urban population having been larger than the rural population since 2011. There is no official classification of the rural areas in Albania, although the national statistics agency defines rural areas in accordance with settlement patterns and population density. With regard to some socioeconomic aspects, the unfavourable infrastructure in rural areas, accompanied by the dysfunctional labour market and limited access to public services, contribute to the deterioration of these areas; for example, more people living in rural areas are at risk of poverty than in urban regions. Additionally, the GDP per capita in these areas is 20 % lower than the country average. The business environment in rural areas is also weak, and the majority of the rural population depends on agricultural activity for providing the main source of their income and employment.

In **Bosnia and Herzegovina**, there is also no official classification of the rural areas, and therefore statistical data are not divided according to the level of urbanisation in the country. For research purposes, the OECD criterion for the number of inhabitants per square kilometre is often used; thus, certain territories (states, entities, cantons and municipalities) are divided into rural and urban parts (OECD, 2016b). For example, in accordance with recent studies applying the OECD methodology for the Republic of Srpska, only 5.4 % of the territory is classified as urban, while the remaining 94.6 % is a rural area with 41.3 % of the total population living there (Zubić et al., 2019). Based on the OECD methodology, out of 79 municipalities in Bosnia and Herzegovina, 56 are considered as rural municipalities, covering 85.1 % of the territory and 49.6 % of the total population (Muminović, 2013). Using the 2013 census data at the country level, rural areas cover 91.94 % of the total territory and 67.05 % of the total population. However, as in the other countries, Bosnia and Herzegovina is facing intensive depopulation of the rural areas, which significantly affects labour markets in these regions.

Kosovo* attempted to use the OECD methodology for defining rural areas. However, it was not a relevant methodology because of the high population density in Kosovo*. As a result, the national statistics, on the basis of the 2011 census, classified 94.3 % of the total area and 62 % of the total population as rural. The unemployment rate in these areas is very high and the reliance on remittances and direct or indirect donor support is more pronounced than in urban areas. For example, according to the EU labour force survey conducted in 2012, the unemployment rate in urban areas was 28.5 %, while in rural areas it was much higher, reaching 40.1 %.

In **Montenegro**, national statistics report the results from the last population census, conducted in 2013, according to which 63.2 % of the total population lives in urban regions, while 36.8 % is considered a rural population. This relatively high proportion of the population being classed as urban results from the intensified internal migrations in the country. However, in accordance with the OECD classification of rural areas, the northern part of Montenegro, covering 13 municipalities, is made up predominantly of rural areas and is home to 59.7 % of the total population. Additionally, the coastal and central parts of Montenegro are classified as intermediate regions, with 41.7 % and 20.4 % of the total population, respectively. Thus, following the OECD methodology, almost the whole territory of Montenegro could be considered rural.

North Macedonia has a national classification of rural areas, based on three characteristics: settlements located in municipalities established within rural centres, settlements located in municipalities in urban centres with predominant systems for using agricultural and forest land, and cities with a population of fewer than 30 000 people with possibilities for using agricultural and forest land. With this definition, rural areas cover around 88.7 % of the Macedonian territory and are home to 47.5 % of the total population. Many rural areas, especially small villages, are faced with strong outmigration, which has been especially true in recent years. Around 50 % of the rural population is active in rural labour markets, with higher employment rates (70 %) observed for the rural male population. The unemployment rate has decreased among the male population in recent years, while remaining almost unchanged for the female population.

Serbia is also lacking a clear definition of rural areas. As a result, the rural regions in Serbia are represented by two types of settlements – urban and others – which has been shown to be an insufficient classification. Furthermore, Serbia has not prepared a typology of its regions in accordance with the urban–rural typology of the Directorate-General for Agriculture and Rural Development. Therefore, many rural areas' indicators are missing, such as population, age structure, territory, employment rate and unemployment rate, as well as GDP per capita disaggregated by urban and rural regions. However, based on existing data in the country, the rural population constitutes around 39 % of the total population. Like in other countries/territories, rural areas in Serbia face depopulation caused by migration to urban areas.

National statistics in **Turkey** have defined rural areas based on the population and the administrative units. In this context, there are 4.3 million households in rural areas, constituting 21 % of total households in Turkey, with an average household size of 4.8 persons. People older than 65 years make up the largest proportion of the population in rural areas: their proportion of the rural population increased from 9.6 % in 2007 to 11.3 % in 2012. This ageing of rural areas is a result of the depopulation and increased internal migration in the country.

An overall observation is that, in all pre-accession countries, basic infrastructure is in place in rural areas (roads, electricity, water supply and communications technology) that provides fundamental conditions, allows access to agricultural supplies and allows the marketing of products. Although the basic infrastructure is available in rural areas, in many areas it is of poor quality and is heterogeneously accessible to different rural population groups. Furthermore, progress is needed to improve the infrastructure in rural areas, not only in physical terms but also in social and environmental terms. Other area in which improvements are needed relate to the quality

of life in rural areas, in particular enhancing the diversification of on- and off-farm economic activities and the availability of job opportunities for the rural population.

1.4. Agricultural policy in the Western Balkans and Turkey

Section 1.4.1 outlines the state of harmonisation of agricultural policies in the WBs and Turkey with the EU requirements. The subsequent subsections present cross-country comparisons of the agricultural policies with the EU's CAP following the predefined conceptual framework of the key harmonisation principles of agricultural policies as depicted in Figure 1 (Erjavec et al., 2021). The cross-country comparisons were carried out using the results from country case studies and data from APMC databases.

State of harmonisation of agricultural policies with EU requirements

Accession to the EU remains an essential political goal for the WB countries/territories and Turkey, although different countries/territories are at various stages of the integration process. On the side of the EU, the Commission's Western Balkans strategy (February 2018) acknowledged the renewed agenda for EU engagement with the region. Accession negotiations are under way with Turkey (since 2005, although they are currently at a standstill), Montenegro (since 2012) and Serbia (since 2014). As of March 2020, Albania and North Macedonia have moved a step forwards, with a decision to open the accession negotiations. Bosnia and Herzegovina and Kosovo* are potential candidate countries/territories.

As the long-term political goal of the WBs and Turkey is to join the EU, in principle the CAP represents the benchmark that their agricultural policies must meet upon their accession. Owing to the economic and social importance of the agricultural sector in the pre-accession countries (e.g. given the relatively high proportion it makes up within the overall economy and employment) and structural factors (small-scale subsistence and semi-subsistence farming), agriculture is one of the most complex and sensitive sectors in the enlargement process (European Commission, 2020c). The accession candidate countries need to develop the ability to take on the obligations of EU membership. Institutional reforms are therefore needed to align candidate countries with the legal administrative set-up and the support system of the EU, to facilitate integration of the agricultural sector into the EU single market and political decision-making process. This must ensure that, upon accession, candidate countries are able to implement the CAP policy cycle, which consists of planning, disbursing support payments, monitoring, evaluating and contributing to the formulation of the CAP support system. Thus, during the pre-accession period, candidate countries must gradually develop administrative structures that are comparable to the CAP (including food safety, veterinary and phytosanitary standards). They must also modify their agricultural policy measures to enable a shift to CAP-type support upon accession. The necessary CAP structures include administrative, financial, control and information structures, such as setting up paying agencies, an integrated administration and control system (IACS), a land parcel identification system (LPIS) and market mechanisms (e.g. marketing standards and public interventions). Furthermore, it involves putting in place the administrative capacity to monitor, evaluate and formulate support measures (European Commission, 2020c; Volk et al., 2019; Erjavec et al., 2021).

Table 6 summarises the progress made in the accession negotiations on the agriculture and rural development chapter and the food safety, veterinary and phytosanitary policy chapter of the EU *acquis* based on the most recent information available (European Commission, 2020d). All of the countries/territories seem to still need to make significant progress to close the two chapters, although more progress is evident for food safety, veterinary and phytosanitary policy than for agriculture and rural development. Montenegro and North Macedonia appear to be the most advanced in both chapters. In the agriculture and rural development chapter, the progress is very heterogeneous across the countries/territories – it varies from an early stage in Bosnia and Herzegovina and some level of preparation (namely in Albania, Kosovo*, Serbia and Turkey) to moderate preparation in Montenegro and North Macedonia.

Table 6. Progress of the WB countries/territories and Turkey by *acquis* chapters in 2018 and 2019

Acquis chapter	11: Agriculture and rural development		12: Food safety, veterinary and phytosanitary policy
Albania	Early stage (2018)	Some level of preparation*	Some level of preparation*
Bosnia and Herzegovina	Early stage		Some level of preparation
Kosovo*	Some level of preparation		Some level of preparation
Montenegro	Moderately prepared***		Moderately prepared***
North Macedonia	Moderately prepared		Good level of preparation*
Serbia	Some level of preparation**		Moderately prepared**
Turkey	Some level of preparation****		Some level of preparation***

*, screening started; **, screening completed; ***, chapter opened; ****, chapter opened/frozen.

Source: European Commission (2020d).

Principle 1: Strategic policy framework

The strategic policy framework principle addresses the policy management process or the policy cycle, starting from the strategic planning and the formulation of policy priorities until the implementation, monitoring and evaluation of policy measures. This requires that countries/territories have in place reliable administrative capacities, analytical support, monitoring systems and the use of adequate indicators to enable priority setting, and to run evidence-based policy planning of the policy intervention logic at the national level (Erjavec et al., 2021).

In general, all countries/territories have a clear commitment to EU integration; thus, most of them have established medium- and long-term strategic and programming documents, which set future goals for agricultural and rural development policies, and most have largely aligned these documents with the EU CAP priorities.

Strategic planning requires that the goals and priorities of the agricultural policy are set based on evidence-based policymaking and that their implementation is followed throughout the whole policy cycle. However, it is not the case that such a policy intervention model is always used and applied when defining strategic goals or during the policy implementation in the WBs and Turkey. For example, although the policy goals and priorities set in the medium- and long-term strategic documents largely match those of the CAP, the actual implementation of the agricultural policy does not always follow this approach. The policy measures actually implemented are mainly based on annual programmes and budgeting, which are not necessarily derived from the medium- and long-term strategic planning. Instead, they are largely influenced by the various short- and medium-term domestic and political economic factors that prevail in a given year (Erjavec et al., 2021).

Regarding policy monitoring and evaluation, the countries/territories have irregular and rather weak monitoring and evaluation systems in place. Although recently a few impact assessments were carried out, for instance in Albania and North Macedonia, it is not clear if the results from the monitoring and evaluation process and the impact assessment studies were used when developing strategic and programming documents or for improving policy implementation. Nevertheless, this indicates that there is a potential for using analytical support for policy formation and implementation. In addition, all countries/territories have established some form of institutional and administrative capacities for implementing their agricultural policy, especially for the instrument for pre-accession assistance for rural development (IPARD) programme. Nevertheless, there is a need for additional capacity building to improve the exiting systems and to be able to respond to the changing policy environment (e.g. CAP reform, climate change challenges and the ongoing COVID-19 pandemic).

Overall, there is a potential for adopting strategic planning in all countries/territories, but at the same time it seems that there is a lack of clear understanding (including from policymakers) of the actual need for it, and of the purpose of diligently pursuing each step in the policy cycle. Policies are being designed, prepared and implemented, but, to a large extent, the intervention logic framework, as well as monitoring and policy impact analyses, are not systematically used. Some country-specific differences observed in the country case studies are presented below, where the current situation is assessed qualitatively using the following three-level scale: initial, medium and advanced preparation stage.

In **Albania**, one of the key weakness of the framework is the lack of a clear link between different documents outlining the strategic planning for and the implementation of the agricultural policy (e.g. between the inter-sectoral strategy for agriculture and rural development (ISARD) for 2014–2020 and the agriculture and rural development programme fund (ARDPF)) to ensure consistency between them. The main shortcomings are related to the unclear policy priorities and objectives set, the unclear link between objectives and specific measures and the fact that implementation often departs from the strategic priorities and objectives stated. Although Albania has conducted some impact assessments (for more details, see Chapter 2), the low level of administrative capacity constrains the use of such results for policy design purposes or to improve the implementation of policy measures. This is reinforced by the slow progress made in establishing an IACS, a LPIS, an analytical support system or farm accountancy data network (FADN) data collection and, in general, by the presence of weak information systems and statistics in agriculture. Overall, this indicates that Albania is still in the initial stages of establishing its strategic policy framework and needs to make more progress on the proper implementation of the policy cycle approach.

Bosnia and Herzegovina has also adopted strategic documents with relevant objectives, but these are not strictly followed in practice neither in scope nor by structure. There is a weak monitoring and evaluation system in place in Bosnia and Herzegovina, which is carried out through 'irregular, unsystematic and superficial' analyses of the policies implemented (see Chapter 3). Some progress regarding the harmonisation of the monitoring and control system has been made in the phytosanitary and veterinary sectors. The differing views between the two entities – the Federation of Bosnia and Herzegovina and the Republic of Srpska – also delay the establishment of a common administrative structure and agency or agencies for the implementation of agricultural policies (e.g. the IPARD). Owing to these weaknesses, Bosnia and Herzegovina can be considered as being in the initial stages of establishing a strategic policy framework.

Kosovo* has developed a number of strategic documents defining the priorities of its agricultural policy; however, as is the case in other WB countries, the implementation of the policy is not fully aligned with the priorities set. Administrative capacities, including monitoring and evaluation systems, are not fully developed and utilised in the policy cycle, and there is lack of harmonisation of the legislation among sectors. According to the EU progress report on Kosovo*, limited progress has been made on the implementation of the agriculture and rural development programme, and there is a need to prioritise the improvement of policy monitoring and evaluation. Similar to other WB countries, progress has been made in adopting legislation on food safety and veterinary and phytosanitary issues (see Chapter 4). Overall, Kosovo* is in the initial stages of establishing its strategic policy framework.

As with most of the WB countries/territories, strategic planning is evident in **Montenegro** only through the strategic documents it has prepared, while the implementation of the policy measures lags behind. Montenegro has not established an evidence-based policy system for assisting in the design and implementation of agricultural policy. Slow progress has also been made in establishing administrative capacities, such as setting up a functioning paying agency, an IACS and a FADN. This leads to the conclusion that the country does not have an appropriate basis for a system of analytical support for the policymaking process. Therefore, we might conclude that the country is in the initial stages of implementing the strategic planning framework.

North Macedonia has developed strategic documents that define the priorities of its agricultural policies and these are aligned with the EU's CAP. However, the country's frequent modifications to the annual programmes raise doubts about the relevance of the strategic planning process, the consistency of the policies implemented as part of the strategic planning process and the focus of the policy. North Macedonia has largely established key administrative capacities to implement its agricultural policy, with the IPARD contributing significantly to this process. However, the performance of these administrative capacities is constrained by the limited resources allocated relative to the needs. For example, although there was an increase in staff in the paying agency, the increasing volume of national and IPARD measures means that some measures (e.g. the agri-environment, knowledge transfer and *liaison entre actions de développement de l'économie rurale* (links between actions for

the development of the rural economy – LEADER) initiatives) have not started implementing additional administrative preparation and capacity building. Regarding policy monitoring and evaluation, there is ongoing development of further functionality and a general improvement of IACS, the farm register and the LPIS, and the FADN is being upgraded; nevertheless, there is a still a requirement for stronger management and control systems, as the existing systems lack data quality and relevance owing to insufficient resources to maintain them. The use of analytical support for policy formation and implementation is modest, irregular and unsystematic, and needs to be further fostered and enhanced. Overall, North Macedonia can be considered to be in the initial to medium stages for establishing the strategic policy framework.

In **Serbia**, the strategic policy framework has been significantly improved in the previous decade, with some progress made in policy harmonisation with the EU, although the policy is not fully harmonised with the *acquis*. The IPARD II has contributed to the establishment of the required administrative infrastructure and capacities. However, as in the case of North Macedonia, the administrative infrastructure and capacities are reported to be insufficient for the administration and coordination of support (particularly the IPARD) and the legal framework. In addition, there is varying degrees of support among farmers and measures are not tailored to the specific needs of different regions, suggesting a lack of use of the intervention logic framework (particularly monitoring and evaluation) when designing the policy measures. Therefore, Serbia is also considered to be at the initial to medium stages of application of the strategic planning framework.

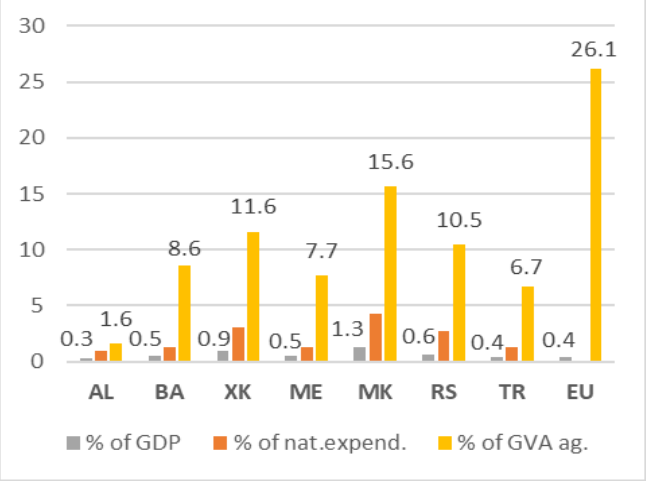
Turkey has adopted strategic documents as part of its comprehensive policy framework for agricultural policy and rural development, with the IPARD programme constituting an important part of this framework. The administrative capacity of the IACS has been developed and has recently been put in place. Although Turkey has been harmonising its management and control systems with the EU CAP for about two decades now, this process is still not fully accomplished. The common market organisation (CMO) legislation needs to be developed and aligned with the EU CMO legislation. The country's support system also needs to be redesigned to be in line with the CAP (e.g. linking direct payments to cross-compliance standards). Turkey has integrated the FADN data into its agricultural production and registration system, but further strategies need to be established for aligning the agricultural statistics with the requirement for better monitoring of agricultural policy performance. Policy monitoring and evaluation are used irregularly for guiding the design and implementation of policies. Overall, Turkey can be assessed as being at the initial to medium stages of establishing the strategic policy framework.

Principle 2: Size and allocation of financial resources

An implicit prerequisite for joining the EU is the acceptance of support provisions for the farming sector and rural areas. This goes beyond direct support for primary agricultural producers (e.g. direct payments) and includes support to be granted as part of the rural development programme (Erjavec et al., 2021).

Figure 5 shows the importance of agricultural support in terms of its average proportion of GDP, government spending and the gross agricultural output for 2017–2019. For instance, the proportion of GDP allocated to support the agricultural sector in the countries/territories ranged from 0.29 % in Albania to 1.31 % in North Macedonia. In the EU, this proportion is 0.35 %. The proportion of spending allocated to agricultural support out of total governmental spending ranges from 3 % to 4 % in Kosovo*, North Macedonia and Serbia, whereas other countries/territories spend around 1 % of their total budget on supporting the agricultural sector. The relative proportion of total support, in terms of agricultural GVA, is another indication of the variation in the level of support among the countries/territories, which ranges from 1.6 % in Albania to 15.6 % in North Macedonia, lagging behind the EU level (26.1 %).

Figure 5. Total budgetary support for agriculture in terms of GDP, government spending and agricultural GVA (2017–2019)



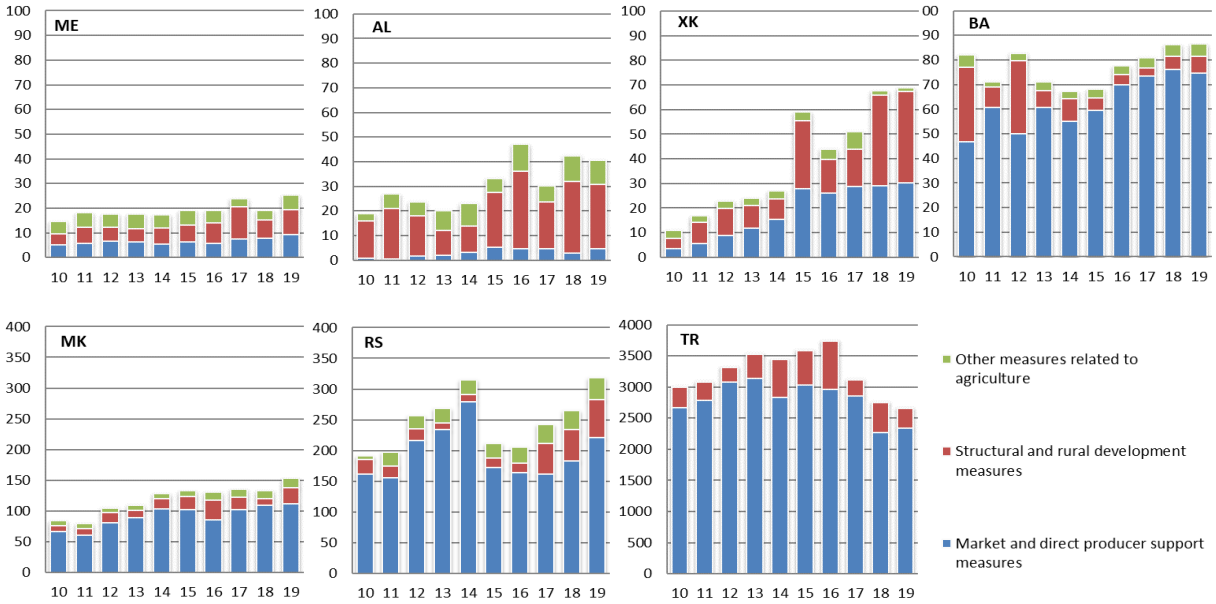
Note: 'nat.expend.' refers to national expenditure and 'GVA ag.' refers to agricultural GVA.

Source: WB&TR APMC databases, CAP context indicators (European Commission, 2020b).

The development of the total annual support allocated to agriculture in the WBs and Turkey in 2010–2019 is shown in Figure 6. The support over time shows mixed patterns across the countries/territories. In Kosovo*, Montenegro and North Macedonia, the total support shows an increasing trend. The highest growth in total support is observed in Kosovo*. In the rest of the countries, both positive and negative trends are observed in the development of total support in 2010–2019. However, in Turkey, a decrease in support is observed over the final 3 years analysed, while, in the rest of countries/territories, support increased in the final 3 years.

In absolute values for 2017–2019, Montenegro and Albania have the lowest budget, namely less than EUR 30 million and EUR 40 million per annum, respectively. They are followed by Kosovo* and Bosnia and Herzegovina, with about EUR 70 million and EUR 80 million, respectively, North Macedonia with close to EUR 150 million, Serbia with over EUR 300 million and Turkey with about EUR 2 500 to 3 000 million per annum (Figure 6).

Figure 6. Total budgetary support for agriculture (million EUR, 2010–2019)

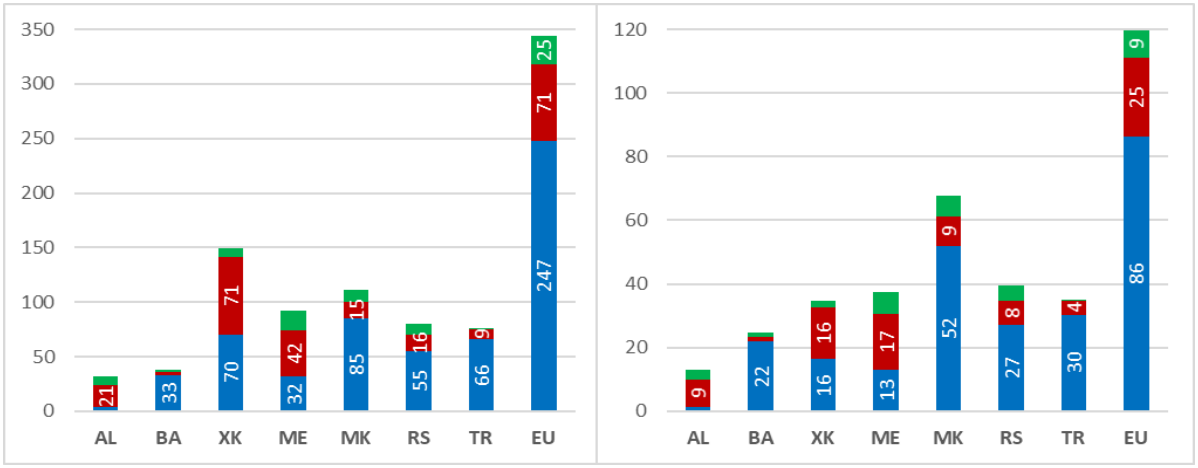


Source: WB&TR APMC databases (2020).

Considering the large differences between countries/territories in terms of their agricultural area and population, the differences in the total support allocated to agriculture are not directly comparable. Therefore, Figure 7 presents a more comparable view of total agricultural support, namely support per hectare (ha) of agricultural land and per inhabitant for 2017–2019. The figure also provides comparative figures for the EU ([10]). The differences in the support per hectare between the countries/territories are rather significant, ranging from EUR 32 and EUR 39/ha in Albania and Bosnia and Herzegovina, respectively, to EUR 150/ha in Kosovo*. The total support per hectare in the WBs and Turkey is less than half of the EU average. However, some of the WB countries/territories and Turkey are more comparable to certain eastern EU Member States, for example EUR 137/ha in Latvia, EUR 175/ha in Lithuania, EUR 214/ha in Bulgaria and EUR 218/ha in Romania (European Commission, 2020a). Payments per inhabitant vary from EUR 13 per inhabitant in Albania to EUR 68 per inhabitant in North Macedonia. Compared with the EU, the support per inhabitant in the WB countries/territories and Turkey is significantly lower.

([10]) To correspond to the APMC concept, the EU CAP budget (first and second pillar measures; European Commission, 2020a) was supplemented with 'other measures related to agriculture', using the structure reported in Erjavec et al. (2021).

Figure 7. Total budgetary support per hectare (EUR/ha; left) and total budgetary support per capita (EUR/inhabitant; right) (2017–2019)



Note: blue indicates market and direct producer support measures, red indicates structural and rural development measures and green indicates other measures related to agriculture.

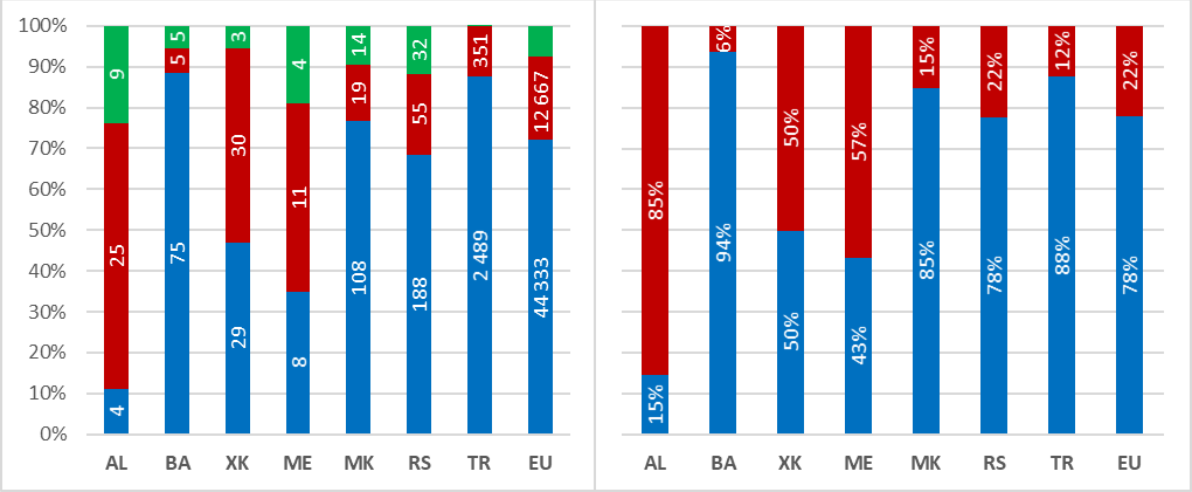
Source: WB&TR APMC databases (2020), Eurostat (2020), European Commission (2020a).

Regarding the structure of the agricultural support in the WB countries/territories and Turkey, market and direct support measures (first pillar) dominate throughout the whole period for almost all of the countries/territories, which is also the case in the EU. These measures are followed by structural and rural development support (second pillar), and other agricultural support (third pillar) which has the smallest representation in the total support in all countries/territories.

The absolute value of the first pillar increased in Bosnia and Herzegovina, Kosovo*, Montenegro and North Macedonia over last 3 years of the period analysed, compared with the previous 3-year period (2014–2016), whereas, in Serbia and Turkey, it decreased over the same period. Regarding the second pillar, it increased in Albania, Kosovo* and Montenegro and decreased in Bosnia and Herzegovina, North Macedonia and Turkey towards the end of the period analysed (Figures 6). Similar to the EU, the proportion of first pillar measures out of the total support allocated in the final 3 years was greater than 75 % in Bosnia and Herzegovina, North Macedonia, Serbia and Turkey. The lowest proportion of support allocated to first pillar measures (less than 50 %) was in Albania, Kosovo* and Montenegro.

Structural and rural development support is seen most in Albania, Montenegro and Kosovo*, accounting for 85 %, 57 % and 50 %, respectively, of total support. In the rest of the countries, this proportion is lower: 6 % in Bosnia and Herzegovina, 15 % in North Macedonia and 12 % in Turkey. The proportion of third pillar support is greatest in Albania and Montenegro, accounting for around 22 % and 19 % of total support, respectively. In the rest of the countries/territories, this proportion is no higher than 6 % (Figure 8).

Figure 8. Total budgetary support (% and million EUR; left) and ratio of market and direct producer support to structural and rural development support (right) (2017–2019)



Note: blue indicates market and direct producer support measures, red indicates structural and rural development measures and green indicates other measures related to agriculture.

Source: WB&TR APMC databases, European Commission (2020a).

Overall in terms of the structure of the total agricultural support, the Serbian support largely resembles the EU CAP. Bosnia and Herzegovina, North Macedonia and Turkey also have similar support structures to the EU, except that the proportion of structural and rural development (second pillar) is smaller than that in the EU. The remaining three countries/territories – Albania, Kosovo* and Montenegro – have higher proportions of support in the second pillar compared with the EU and significantly less support than the EU in the first pillar.

Additional contributions to the total agricultural support in the WBs and Turkey come from the EU's rural development component of pre-accession assistance (Table 7). The IPARD forms part of the instrument for pre-accession assistance (IPA), which supports reforms in countries that are in the process of joining the EU. The IPARD targets its support to rural areas and the agri-food sectors of candidate countries to prepare them for the future accession in these areas. It must be noted that the role of the IPARD is much broader than providing financial support, as it also helps pre-accession countries prepare for the effective implementation of structural and rural development policies upon accession.

Table 7. IPARD II payments in candidate countries (million EUR, unless otherwise stated)

Indicator	AL (2019)	ME (2019)	MK (2018–2019)	RS (2019)	TR (2017–2019)
Measure 1: Investments in physical assets of agricultural holdings	0.03	0.40	7.70	6.10	130.95
Measure 3: Investments in physical assets concerning processing and marketing of agricultural and fishery products	1.05	1.42	5.47	–	42.93
Measure 4: Agri-environment, climate and organic farming measures	–	–	–	–	0.36
Measure 7: Farm diversification and business development	0.10	–	0.08	–	65.50
Measure 9: Technical assistance	–	–	0.01	–	–
Total IPARD II payments	1.18	1.82	13.26	6.10	239.75
EU contribution	0.88	1.36	9.95	4.58	162.83
National contribution	0.30	0.46	3.31	1.52	76.91
Total SRD budget	25.89	10.08	37.89	62.24	1052.85
IPARD II in total SRD budget (%)	4.6	18.1	35.0	9.8	22.8
EU allocated amounts	71	39	60	175	801
Funds used by end of 2019 (%)	1.2	3.5	16.6	2.6	20.3

Notes: Albania, Montenegro and Serbia have payments in 2019, North Macedonia has payments in 2018 and 2019, and Turkey has payments in 2017, 2018 and 2019; Data concerning Measure 9 budget for Turkey are not available. SRD: structural and rural development.

Source: WB&TR APMC databases, country case studies.

It should be noted that the IPARD is not operational in all countries/territories. The IPARD programmes for 2014–2020 are available only in Albania, Montenegro, North Macedonia, Serbia and Turkey. IPARD II payments came into force in 2019 in Albania, Montenegro and Serbia, while in North Macedonia and Turkey the payment disbursement started in 2018 and 2017, respectively.

As reported in Table 7, two measures are operational in all candidate countries: measure 1, 'Investments in physical assets of agricultural holdings', and measure 3, 'Investments in physical assets concerning processing and marketing of agricultural and fishery products'. Measure 7, 'Farm diversification and business development', is operational in Albania, North Macedonia and Turkey, while measure 9, 'Technical assistance', is operational in North Macedonia and Turkey. Turkey has also implemented measure 4, 'Agri-environment, climate and organic farming', and measure 5, 'Implementation of local development strategies – LEADER approach' since 2020.

In terms of the distribution of funds among measures ([11]), there are noticeable country differences (Table 7). Namely, in Albania, 89 % of the IPARD II payments are allocated to measure 3, 8.5 % are allocated to measure 7 and 2.5 % are allocated to measure 1. A similar distribution is present in Montenegro, with 78.1 % allocated to measure 3 and 21.9 % allocated to measure 1. In North Macedonia, more funds are used for measure 1 (58 %) than measure 3 (41 %), while funds for measures 7 and 9 are still modest. Serbia has so far directed all of its funds to measure 1. Payments in Turkey are allocated mostly to measure 1 (55 %), followed by measures 7 (27 %) and 3 (18 %).

The proportion of IPARD II payments in the total structural and rural development transfers varies among the countries: Albania (4.6 %), Montenegro (18.1 %), North Macedonia (11.6 % in 2018 and 45.2 % in 2019), Serbia (9.8 %) and Turkey (6.3 % in 2017, 31.8 % in 2018 and 22.8 % in 2019). Nevertheless, because of the delayed start of IPARD II, only a small proportion of the available funds had been used by the end of 2019, namely 1.2 % in Albania, 3.5 % in Montenegro, 16.6 % in North Macedonia, 2.6 % in Serbia and 20.3 % in Turkey. IPARD II funds were, however, being increasingly used in 2020 and 2021 in all beneficiary countries.

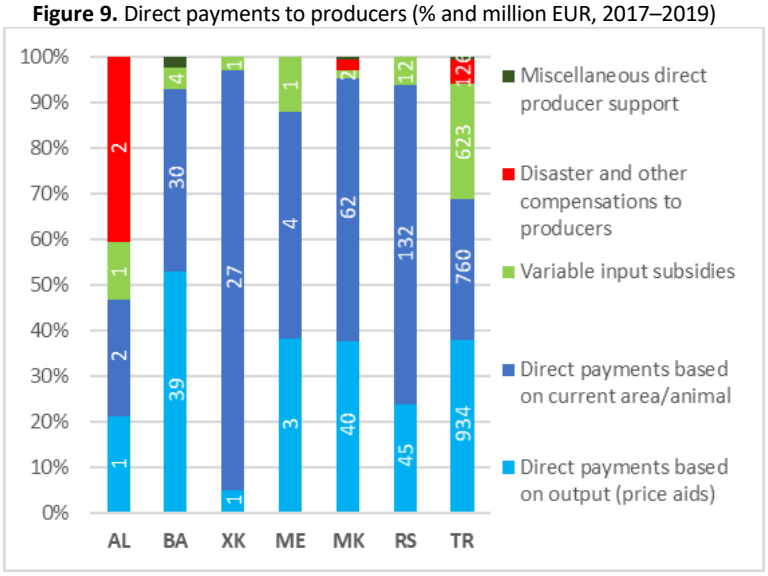
([11]) This is based on realised payments over the years according to the APMC methodology.

Principle 3: Direct producer support

Adapting direct producer support is the most politically sensitive area of agricultural policy, as it is the largest component of such policies. It involves providing a significant amount of support to the farming sector, which can have substantial implications for distributional income across sectors, farm types and regions. Upon accession, candidate countries are expected to modify their producer support system to meet the EU's requirements (i.e. to shift to CAP-style support) (Erjavec et al., 2021).

Direct producer support is the most prevalent of the first pillar measures in all of the WB countries/territories and Turkey, accounting for 94 % of these measures in Montenegro and 99–100 % in other countries/territories. Figure 9 shows the distribution of direct producer support measures in the WB countries/territories and Turkey for 2017–2019. The figure revels that direct payments in a coupled form (per hectare, animal or output) are the dominant support measure throughout this period. In contrast, decoupled payments, which constitute the main type of direct payment measure in the EU, are not incorporated in the agricultural policies in the WB countries/territories and Turkey.

Figure 9. Direct payments to producers (% and million EUR, 2017–2019)



Source: WB&TR APMC databases.

Direct payments paid per hectare or per animal make up a slightly bigger proportion of total direct producer support than direct payments paid per output in almost all of the WB countries/territories. The exceptions are Bosnia and Herzegovina and Turkey, where payments per output are the most prevalent measure.

Input subsidies are much less common than direct payments. Turkey has the highest proportion of input subsidies among total direct producer support compared with the other countries/territories. Serbia had a more sizable proportion of input subsidies in the early 2010s, but these measures have decreased in the last 3 years. In contrast with other countries/territories, Albania has a considerable proportion (40 %) of its direct producer support allocated to disaster and other compensations to producers, with Turkey having the second greatest proportion.

Direct producer support in the WBs and Turkey is implemented through a relatively large number of measures and, in most countries/territories, is subject to frequent changes over time. For example, since 2015, most WB countries/territories have introduced new direct support schemes, increased or decreased the rates of certain schemes and/or changed the eligibility criteria for some schemes. However, the overall structure of direct support has remained almost entirely unchanged in recent years.

In the EU, coupled support makes up a significantly smaller proportion than in the WB countries/territories and Turkey, accounting for less than 15 % of total direct producer support (European Commission, 2020a). This implies that the WB countries/territories and Turkey will have to adapt to this policy orientation (i.e. reduce coupled support) once they join the EU.

Principle 4: Measures to improve competitiveness

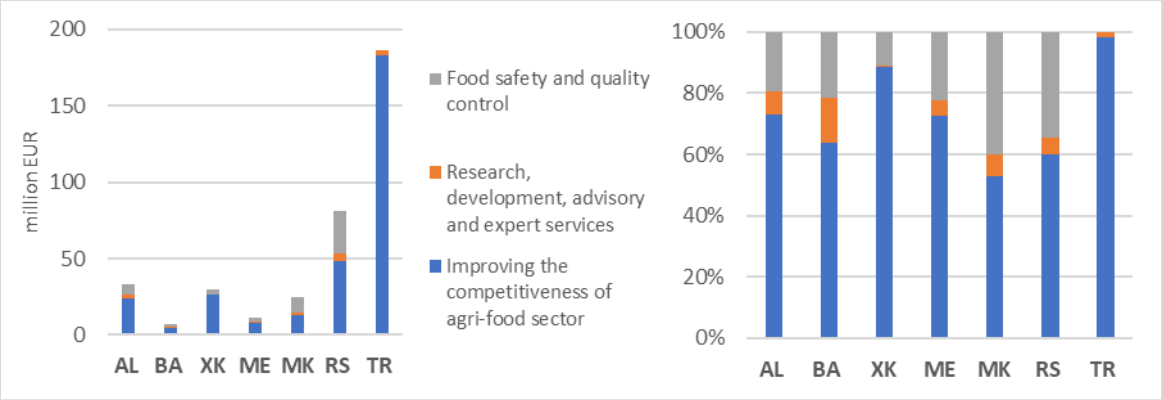
The CAP provides a broad array of measures that target the improvement of competitiveness within the agricultural sector. These measures include providing investment support to primary agricultural producers, food processers, producer organisations and food quality schemes. The pre-accession period is crucial for establishing the administrative capacity for the disbursement of support targeting competitiveness within the agricultural sector. The implementation of IPARD support before accession can contribute to developing capacities in this direction in the WBs and Turkey (Erjavec et al., 2021).

In general, measures to improve competitiveness within the agricultural sector are the most dominant instruments within the second pillar – support for structural and rural development – in the WBs and Turkey. To reduce the gap in productivity between rural and urban regions and the gap in productivity of the agricultural sectors between the WBs/Turkey and the EU, a flow of investments is required to stimulate the restructuring of and improvement in the competitiveness within the pre-accession countries' farming sector. This is reinforced by the fact that small farms dominate the farm structure in the WBs, and most of them face constrained access to credit and investments (Kotevska and Martinovska Stojcheska, 2015; Volk et al., 2017; Pokrivcak et al., 2019; Todorović et al., 2020; Erjavec et al., 2021). These issues can be addressed through structural policy measures, especially measures supporting investments in new technology, agricultural infrastructure, quality standards and knowledge transfer. These factors seem to explain why support for improving competitiveness is the most important instrument within the second pillar, accounting for about 70–90 % in the WBs. Only in Turkey is second pillar support rather equally split between the competitiveness component and support for the rural economy and population. For comparison, in the EU, support for improving competitiveness represents less than one third of all second pillar support. Various support measures to improve competitiveness within the agricultural sector were applied in the WB countries/territories and Turkey in 2013–2017. With some exceptions, most funds were allocated to on-farm investments and to restructuring support in all countries/territories.

Food safety and quality control also affect agricultural competitiveness indirectly, as they promote improvement of product and service quality and market access. In addition, research and development, advisory services and the transfer of knowledge are important instruments for supporting agricultural competitiveness through stimulating productivity growth. According to the APMC, these two measures belong to the third pillar (i.e. other measures related to agriculture). Of the two measures, the budget for food safety and quality control measures is greater in all of the countries/territories. This is also reflected by the largely positive assessment in the EU progress reports on the progress made in the context of the accession process in terms of Chapter 12 of the EU *acquis* (food safety, veterinary and phytosanitary policy) in the WBs and Turkey. However, the amount of support for research, knowledge development and transfer remains insignificant in the WBs and Turkey.

As shown in Figure 10, the distribution of the support targeting agricultural competitiveness (disbursed mainly as on-farm investment support) represents more than 50 % of the total competitiveness support in all of the countries/territories, followed by support for food safety and quality control (between 0 % and 20 %) and research, development, and advisory and expert services support (less than 10 %).

Figure 10. Measures for increasing competitiveness (million EUR and %, 2017–2019)



Source: WB&TR APMC databases, 2020.

Principle 5: Policies for sustainability and public goods provision by the farming sector

Acceding countries are expected to adopt the CAP's sustainability model, by ensuring that their agricultural policies support and promote environmental protection, nature conservation, animal welfare, public health related to food, food safety, other societal public goods and the social development of the farming sector. This is a key priority for the EU, as it is an economic justification for the provision of the size and type of support given to the agricultural sector, and aims to address market failures related to the underdelivery of environmental and agricultural public goods. Some of the key CAP measures in this area include agri-environment and climate measures, support for organic farming, support for areas with natural constraints and high natural value farmland, animal welfare measures and environmental conditionality linked to direct producer support. The pre-accession period is crucial for establishing the administrative capacity to identify areas that contribute to the improvement of the environment and to provide support that targets the environment (Erjavec et al., 2021). This is motivated by the fact there is growing evidence that the WBs and Turkey suffer from a number of sustainability and environmental issues such as the intensification of production on certain farm types, the increased use of pesticides, adverse effects of climate change, land degradation, and pollution of water, soil and air (e.g. Evrendilek and Ertekin 2002; Solomuna et al., 2018; Van't Wout et al., 2019).

The WB countries/territories and Turkey have explicitly expressed their commitment in their medium- and long-term strategy documents, where they have outlined the economic, environmental and social objectives of their agricultural policies, and the alignment of these policies with the CAP. However, there is a significant gap when it comes to the implementation of specific measures. The WBs and Turkey have minimal provisions in place for providing environmental and societal support. Overall, the proportion of support for environmental and societal benefits out of the total support for structural and rural development ranges from 0 % in Albania to 11 % in North Macedonia (Table 8). Agri-environmental and climate support schemes are not used on a large scale in any WB country/territory or in Turkey. Only in North Macedonia and Turkey are agri-environmental and climate support schemes more sizable. Albania does not implement environmental measures. Organic farming is supported in Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia, but funds are small. For a comparison, in the EU, environmental support accounts for more than half of second pillar support (i.e. structural and rural development support).

In addition, concerning first pillar payments, cross-compliance and environmental conditionality for receiving direct payments are largely not applied in the WBs and Turkey. In contrast, this is a standard requirement for direct payments in the EU's CAP.

Table 8. Support for environmental and societal benefits

Indicator	AL	BA	XK	ME	MK	RS	TR
Value (million EUR)	–	0.08	0.08	0.51	2.03	1.84	27.79
Proportion of budget for structural and rural development (%)	–	1.5	0.3	4.7	10.6	3.4	7.9

Source: WB&TR APMC databases, 2020.

Principle 6: Quality of life and employment in rural areas

Beyond the farming sector, the CAP also focuses on providing support to improve quality of life and employment in rural areas. This includes developing rural infrastructures, social services, village renewal, diversified activities (e.g. agri-tourism) and local development strategies. The need for this policy is demonstrated by the fact that many rural areas in the EU suffer from structural problems such as a lack of employment, skills shortages, 'youth drain' and underinvestment in infrastructure and social services (Erjavec et al., 2021).

As discussed above, rural areas in the WBs and Turkey also face significant structural problems, in particular related to depopulation, ageing, weak labour markets, and poor infrastructure and social services. With respect to support, the situation in this area is somewhat more advanced than is the case for environmental and public goods support in the WBs and Turkey. However, with the exception of Turkey, the amount of resources allocated to support for the rural economy and population is relatively low. Among second pillar support, support in this area accounts for 40 % in Turkey, 21 % in North Macedonia, 18 % in Montenegro and less than 10 % in the rest of the countries/territories (Table 9). In the EU, the proportion of support for the rural economy and population represents around 15 % of all second pillar support (European Commission, 2020a).

An important aspect of the EU's rural development is its bottom-up approach, in which local players identify the local requirements for development, with measures implemented primarily through the LEADER initiative (European Commission, 2019). The countries most advanced in developing the bottom-up approach appear to be Turkey and North Macedonia. Turkey has reported successful implementation of the IPARD programme as a result of the local action strategies developed under LEADER and the involvement of civil society. In North Macedonia, the LEADER initiatives for establishing local action groups and supporting local development strategies have been implemented quite recently. Other countries/territories lag behind. For example, Albania has not yet adopted the relevant legislation needed to establish LEADER initiatives. Bosnia and Herzegovina lacks the measures to improve the rural economy; those measures that are available primarily aim to improve infrastructure. In general, the underdevelopment of the LEADER initiatives may explain the difficulties present in identifying and developing relevant measures to support the improvement of quality of life and employment in rural areas in some countries/territories.

Furthermore, as discussed above, alongside the relatively small budget allocated to providing support to improve quality of life and employment in rural areas, the WBs and Turkey also lack statistical data that would allow a better understanding and an evaluation of the socioeconomic situation in rural areas. This has potential implications for the design of policy measures, given that the lack of statistical data reduces the possibility of monitoring and evaluating policy performance and of designing specific measures to reflect local needs.

Table 9. Support for the rural economy and population

Indicator	AL	BA	XK	ME	MK	RS	TR
Value (million EUR)	0.35	0.39	2.94	1.98	4.02	4.09	140.27
Proportion of budget for structural and rural development (%)	1.5	7.8	9.9	18.4	20.9	7.5	40.0

Source: WB&TR APMC databases, 2020.

1.5. Conclusions and recommendations

The agricultural sector is an important sector in the WB countries/territories and Turkey. Although there is a significant heterogeneity across the countries/territories, the sector makes a major contribution to these countries' economic growth, employment and trade. Despite being an important source of income for a major proportion of the population, the productivity of the agricultural sector lags behind other sectors of the economy. The WBs and Turkey show some increases in key crops and livestock yields and in labour productivity over time, but they remain largely below the average EU level. The WBs and Turkey also face significant structural problems in rural areas, in particular related to depopulation, ageing, weak labour markets, and poor infrastructure and social services. Furthermore, the agricultural sector in the WBs and Turkey suffers from a number of social and environmental sustainability issues.

Agricultural policies can play a crucial role in addressing some of these challenges in the WBs and Turkey. In promoting the growth of the agricultural sector and rural areas, the key challenge is to find a balance between promoting agricultural productivity and competitiveness and creating conditions for the protection of the environment and social sustainability in rural areas. Furthermore, one of the main political goals of the WB countries/territories and Turkey is accession to the EU. From the perspective of the agricultural sector, this implies that the CAP represents the benchmark for setting future agricultural policy in the WBs and Turkey.

The objective of this chapter was to provide a cross-country overview of agricultural policy developments in the WBs and Turkey and to analyse their state of harmonisation with the EU's CAP. The comparative analyses carried out follow the conceptual framework that defines the key harmonisation principles required to align the agricultural policies of the WBs and Turkey with the EU's CAP. The quantitative analyses carried out were performed using the APMC tool and StatDatabase. The chapter provides an overview of the agricultural policies for 2010–2019 and more detailed analyses for the more recent developments, namely those observed in the last 3 years (2017–2019).

All of the WB countries/territories and Turkey have in place operational policy frameworks for designing and implementing agricultural policies. Overall, the WB countries/territories and Turkey adopted, to a large extent, the sustainability model in their medium- and long-term strategic planning for future agricultural policies by aiming to promote economic, environmental and social objectives in the agricultural sector and rural regions. However, when it comes to the implementation of these policies, the support has a sectorial focus and is

primarily aimed at stimulating the production or competitiveness of the agricultural sector or rural regions, with environmental support playing a marginal role.

The alignment of the agricultural policies of the WBs and Turkey with the EU's CAP is rather heterogeneous across the countries/territories. Overall, the agricultural policies of the WBs and Turkey are more in line with the CAP in terms of commitment and future planning than in terms of the policy measures actually implemented.

Overall, the total agricultural support has shown an increasing trend in recent years in the WB countries/territories and has shown a notable decrease in Turkey. On a per hectare basis, the total support ranges from EUR 32/ha in Albania to EUR 150/ha in Kosovo* and is less than half of the EU average. Regarding the structure of agricultural support, market and direct support measures (first pillar) are the predominant measures of support in almost all of the countries/territories, which is also the case in the EU, followed by structural and rural development support (second pillar), with other agricultural support (third pillar) having the smallest representation (e.g. research, development, advisory and expert services, food safety and quality control).

A more significant difference between the agricultural policies of the WBs/Turkey and the EU's CAP is in the type of measures implemented. First, the WBs and Turkey differ significantly from the EU in terms of the type of direct support (payments) granted to primary agricultural producers. The main form of direct support in the WBs and Turkey is coupled payments granted as area payments for the cultivation of specific crops or payments paid based on animal numbers. In contrast, the main type of direct support in the EU is decoupled payments, which are linked to land, but do not require the production of a specific crop, or production at all, and are conditional on fulfilling environmental measures.

A second important difference between the WBs and Turkey and the EU's CAP is the composition of structural and rural development support. Given the different country-/territory-level challenges in the WBs and Turkey, this support is almost entirely targeted at improving competitiveness within the agri-food sector, and less tends to be allocated to promoting quality of life and employment in rural areas and, in particular, to promoting the delivery of environmental and agricultural public goods. In the EU, the reverse situation tends to hold as regards the composition of structural and rural development support.

However, some heterogeneity is observed in these patterns across the countries/territories and there are some attempts at harmonisation with the CAP. For example, Albania, Kosovo* and Montenegro have a more balanced distribution of structural and rural development in terms of budgetary support across the different measures, although the overall level of support remains relatively low. In Serbia, recent changes introduced to the agricultural policy led to the allocation of support across different pillars, such that it significantly resembles the CAP allocation structure between the three pillars. While North Macedonia and Turkey dedicate most of their support to market and direct support measures, these two countries also allocate a sizable proportion of resources to supporting environmental and agricultural public goods and quality of life and employment in rural areas, respectively. The promotion of organic farming is the most common environmental measure applied in the countries/territories in the region, although this support accounts for a small proportion of the total support.

An additional major challenge, related to the alignment of the agricultural policies of the WBs and Turkey with the EU that still remains unsolved in the region, is linked to capacity building and the institutional set-up in the public administration responsible for managing and implementing agricultural support. This aspect of the agricultural policy is key to ensuring effective design, enforcement and implementation of different policy instruments and measures. Functioning administrative, financial, control and information systems – such as a paying agency, IACS or LPIS – are important prerequisites for designing, enforcing and implementing agricultural policies. The implementation of the IPARD programme significantly contributes to the preparation and development of the capacities in this direction.

The farming structure in the WBs and Turkey, which is dominated by small-scale (often subsistence and semi-subsistence) farms, combined with the low productivity of rural regions in these countries/territories, points to the need to strengthen farms' market position and productivity growth via having knowledge, innovation and technology that is more accessible to the farming sector. While some support is granted in this area and agricultural extension services are operational in each of the countries/territories, further improvement in this respect is needed in the region given that significant gaps persist.

The WBs and Turkey need to improve their strategic policy framework with respect to monitoring and analytical capabilities to ensure that, upon eventual accession, they are able to implement the CAP policy cycle, consisting of, among other things, planning, evaluation and contribution to the formulation of policy support. Major

shortcomings in this respect are linked to the limited availability of relevant data, including basic agricultural statistics, farm surveys and, in particular, rural development data. Furthermore, policies are usually designed, prepared and implemented without systematically applying monitoring and policy impact analyses. These shortcomings, among others, make it difficult to identify policy needs, design policy measures, identify relevant policy targets in terms of regions or population groups and assess the efficiency and impacts of the policy measures implemented, namely if they have achieved the objectives set. The effects of these shortcomings are, among others, reflected in the unclear identification of policy objectives and priorities, inconsistencies between medium-/long-run strategic planning and the short-term implementation of the agricultural policy, and the frequent changes introduced to measures and allocated funds over time, which creates a rather unstable policy environment for both the agricultural sector and rural communities.

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2. CASE STUDY: ALBANIA

Edvin Zhllima ([12])

2.1. Introduction

The agriculture sector has played and will continue to play an important role in the Albanian economy, in terms of its contribution to both GDP and employment. The main agricultural policy document is the ISARD for 2014–2020, which follows the priorities set out in the national strategy for development and integration for 2015–2020, the National Plan for European integration (NPEI) for 2019–2021, the Government of Albania programme for 2017–2020 and the yearly priorities of the Ministry of Agriculture and Rural Development (MARD).

Agriculture and rural development policies are crucial in the framework of Albania's integration in the EU. The country's agriculture and rural development policies are reaching a turning point. The country is in the process of updating most of its sector strategic policy documents, including the preparation of the ISARD for 2021–2027. Moreover, the European Council, in March 2020, opened the accession negotiations for Albania, subject to the European Commission's endorsement and a proposal for a revised methodology for enlargement.

Since 2006, the Government of Albania has been following and updating the nNational Plannp for European integration. This strategic document determines the country's path for aligning its agricultural and rural development policy with the EU CAP ([13]). Given the significant work that will be required in the near future, it is important to assess the country's promptness in continuing the necessary reforms in agriculture and rural development and its ability to accept the necessary assistance for addressing sector shortcomings and moving forward along its path towards EU membership.

This report presents the state of affairs of the country's agricultural policy and its level of harmonisation with the current (and future) CAP by assessing the policy framework and illustrating the socioeconomic aspects of its policy that are associated with agriculture and rural development. The main methodological approach is based on a review of research studies and policy documents, combined with the analytical use of information provided through statistics and the agricultural policy measures (APM) database ([14]) updated for 2010–2019. The data for the latter are collected by the National Statistical Office of Albania (INSTAT), the Agriculture and Rural Development Agency (payment agency), the MARD and related departments and agencies. The report provides the basis for a comparison between Albanian agriculture and rural development policy and the policies of other WB countries and Turkey, as well as new Member States in the year before their accession.

2.2. State of the agri-food sector

During the last decade, Albania has experienced economic growth of around 3 % per year, but, in 2019, economic growth shrank to 2.2 % (Figure 11). The decelerating trend in 2019 was caused by contractionary effects related to the earthquake and a drastic decline in rainfall that cut hydroelectric power production (World Bank, 2018) ([15]). The unemployment rate in 2019 was 11.5 %. By contrast, the inflation rate has decreased slightly in recent years, with a value of 1.5 % in 2019. In 2019, from the production perspective, economic growth was supported by the expansion of activities in the service sector, accompanied by fluctuations in the construction and industry sectors. From the aggregate demand perspective, economic growth was largely supported by the increase of private consumption until 2018.

The agriculture sector has experienced a gradual increase in terms of GVA in the last few years, with GVA value up to EUR 2.5 billion in 2019. Agriculture's contribution to the total economy in terms of GVA has been stagnating at the level of 21 %, while the sector's contribution to employment has reduced 10 percentage points in the last decade (Figure 11). Migration and increased productivity have contributed to a reduction in the number of people employed in agriculture.

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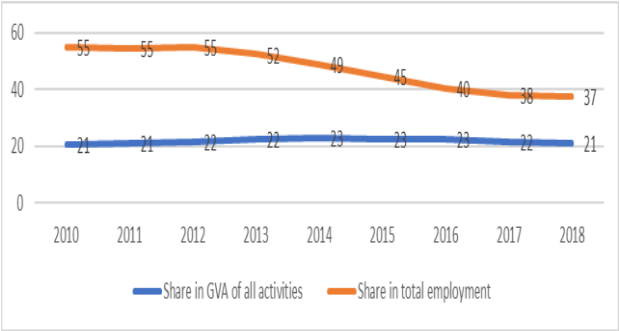
([13]) Agriculture and rural development is of major importance for the achievement of the country's international commitments, such as sustainable development goal 2 of the post-2015 development agenda and the objectives set out in Chapter 14 of Agenda 21.

([14]) This database was compiled for Albania under the SWG projects.

([15]) An expansion in domestic demand led to growth in 2019, while net exports reduced growth, as stagnant growth among trade partners limited traditional exports, while energy exports declined.

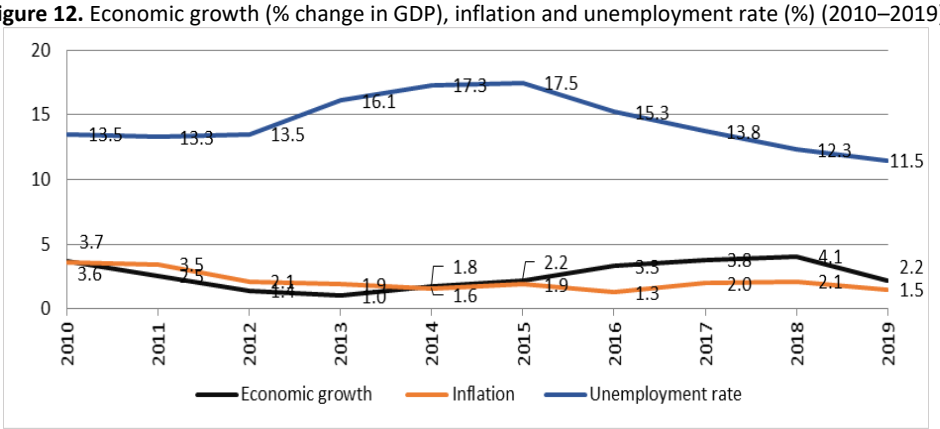
Figure 11. Agriculture's contribution to total GVA and employment (%, 2010–2018)



Source: AL StatDatabase (2020)

Labour productivity in the agriculture sector has been increasing continuously, accounting for EUR 5 515 per person working in agriculture in 2019 (Figure 12). Despite the increase in the GVA per worker in recent years, Albania still has the lowest level of GVA per worker compared with the other WB countries (FAO et al., 2019).

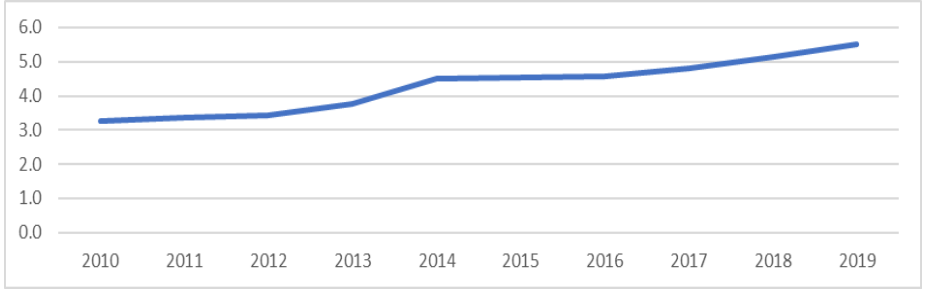
Figure 12. Economic growth (% change in GDP), inflation and unemployment rate (%) (2010–2019)



Source: AL StatDatabase (2020).

There are no updated data on the number or structure of farms. Based on data from 2012, there are approximately 350 000 farms in the country. The average utilised agriculture area (UAA) per farm, based on the figures of 2013, is 1.9 ha. Approximately 45 % of all farms lie in the category of 0–1 ha (as arable land), 41 % of farms are 1.1–2 ha and only 14 % of farms have a surface area of more than 2 ha. The average farm size is slightly more than 1.2 ha and the average plot size in 2012 was 0.26 ha, according to the Albanian Institute of Statistics (INSTAT, 2013).

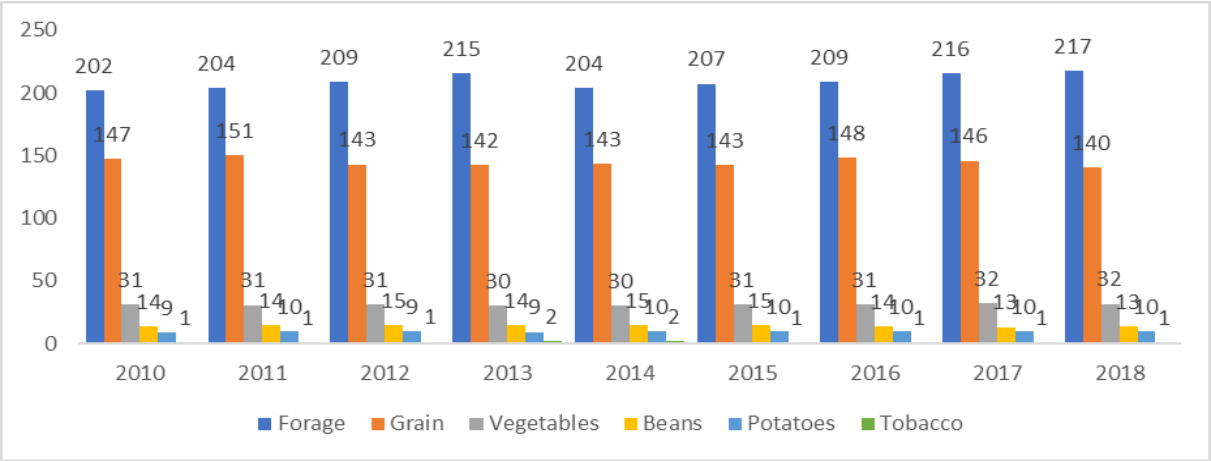
Figure 13. Value added per worker in the sector of agriculture, forestry and fishing (thousand EUR, 2010–2019)



Source: AL StatDatabase (2020).

Crop production in Albania is mainly composed of forage and cereals (36 % and 25 % of crop area, respectively). The vegetable sector, although covering a smaller crop area, is a large contributor in cash incomes. The sector continues to experience a highly positive trend in terms of production, especially in terms of greenhouse agriculture, with the quantity produced in 2005 approximately doubling, reaching 1 166 000 tonnes (t) in 2018 (Figure 14). This shift into more intensive production has almost doubled the production volume per hectare (20.6 t/ha in 2015 to 36.8 t/ha in 2018). Positive trends are also reported in terms of production quantities for potatoes, but this is not as dynamic as in the case of vegetables.

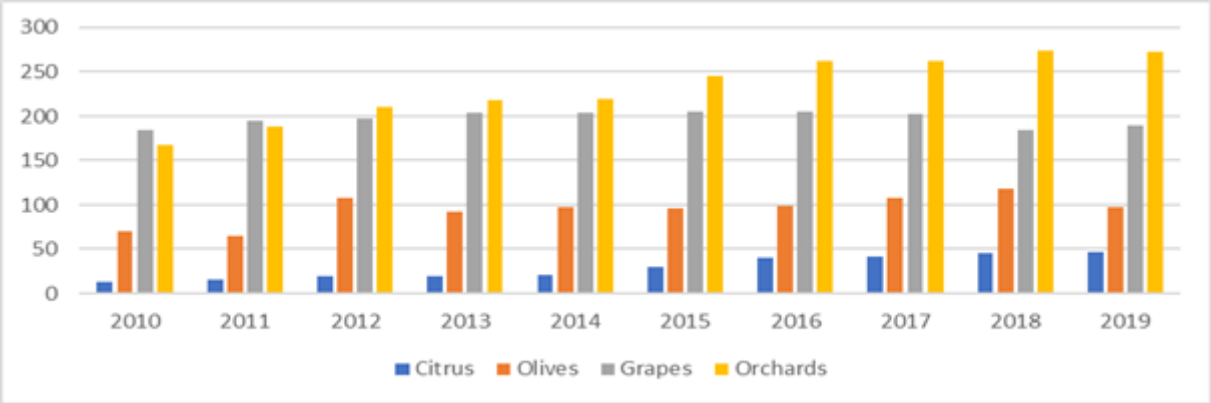
Figure 14. Area of production for crops (thousand hectares, 2010–2018)



Source: AL StatDatabase (2020).

Production of perennial crops overall, composed mainly of stone and pome fruits, citrus, grapes and olives, continues to increase in Albania. Production is boosted by a gradual increase in the planted area and improved production yields. The production of pome fruits (especially apple) and citrus has been growing from year to year, unlike grape and olive production, which has experienced a period of years with stable levels of production but has recently seen slight decreases (Figure 15).

Figure 15. Fruit tree production (thousand tonnes, 2010–2019)



Source: AL StatDatabase (2020).

Livestock farming is a very important activity in terms of income generation for the majority of farms in rural Albania, considering that 86 % of farms in the country pursue livestock activity (Gjeci et al., 2018). Trends in terms of size reveal that beekeeping and poultry are performing positively, while farming of small ruminants and cattle is experiencing a decreasing (negative) trend (Table 10).

The agriculture sector has gained in importance in terms of trade. Since 2013, there has been a considerable increase in agri-food exports as a proportion of total exports (12 % in 2019), while the proportion of agri-food imports within total imports has been stagnating (17 % in 2019). Despite the positive trends, the trade deficit has continued to gradually increase. Nevertheless, agri-food exports as a proportion of agri-food imports in Albania have continued to increase (from 12 % in 2005 to 32 % in 2019 – the highest registered) (INSTAT, 2020).

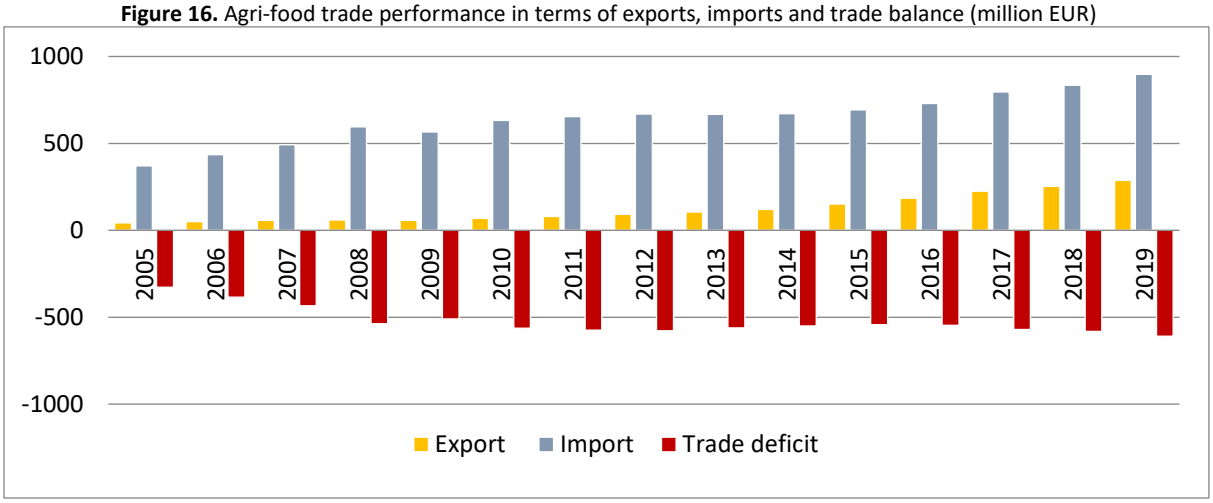
The EU remains Albania's most important trade partner for both exports and imports of agri-food commodities (67 % of total agri-food exports and 62 % of imports during 2019) (Figure 16). The WB countries/territories are the destination of 25 % of Albanian agri-food exports and are the origin of 11 % of agri-food imports.

Table 10. Herd size (in thousands) of livestock subsectors by year (2010–2019)

Livestock	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cattle	493	492	498	498	500	504	492	475	467	416
Small ruminants	2 581	2 517	2 619	2 722	2 800	2 850	2 913	2 859	2 781	2 621
Pigs and sows	177	175	171	174	183	182	194	192	196	184
Perissodactyl	98	99	97	93	91	91	95	89	88	87
Poultry	8 437	9 292	9 493	8 928	9 493	8 558	8 326	7 835	8 362	8 179
Beehives	218	233	239	246	261	271	303	290	285	288

Source: INSTAT (2020).

Figure 16. Agri-food trade performance in terms of exports, imports and trade balance (million EUR)



Source: AL StatDatabase (2020).

No new statistical data have been available in Albania since 2014. Based on a review of data, statistics on farm structure, farm population, agriculture economic accounts and prices are still lacking. Farm survey data are not available and are only for internal use (calculation of national accounts) by INSTAT. There is no market information system and a FADN has not yet been established. Moreover, a slow pace of development in IACS components (European Commission, 2019) vis-à-vis the statistical gaps that are remaining creates limited capacities for policy monitoring. In addition, unlike in other WB countries, Albania does not yet have a functioning economic analysis unit of its MARD (FAO, 2018).

2.3. Socioeconomic issues underlying rural areas

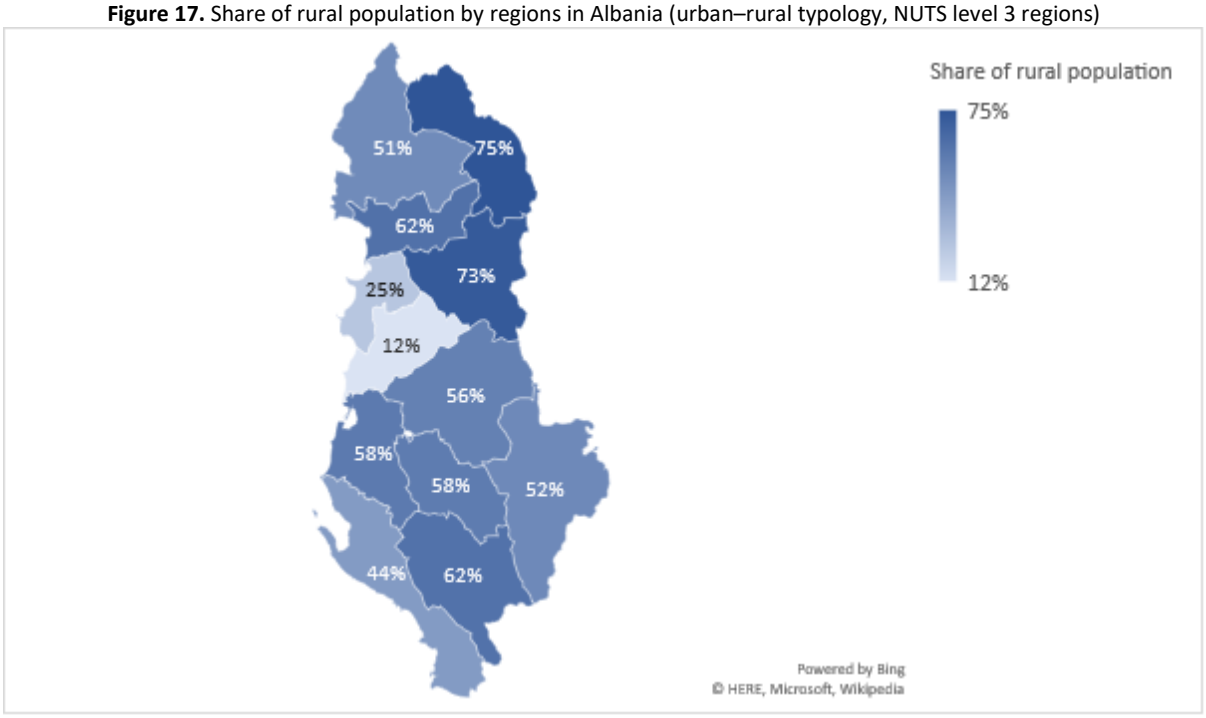
In Albania, since 2011, the urban population has been larger than the rural population, indicating that there has been significant demographic change since the early 1990s. Since 2012, there has been no classification used for rural areas in Albania. Owing to this limitation, INSTAT has not provided data with a rural–urban division since 2012. However, INSTAT's methodological publications indicate that rural areas can be denominated according to settlement patterns, defined through population density. According to INSTAT, rural areas can be classified using three approaches: (i) based on the type of cluster (contiguous grid cells of 1 km^2), (ii) based on the degree of urbanisation (local administrative unit (LAU) level 2 areas) and (iii) based on a division of urban–rural typologies using Nomenclature of Territorial Units for Statistics (NUTS) level 3 regions.

The approach based on the type of cluster (contiguous grid cells of 1 km^2) characterises rural areas as those with a population density of less than 50 000 inhabitants per km^2. Based on this classification, INSTAT assesses through the population census that 42 % of the Albanian population are rural-based inhabitants (INSTAT, 2020). Regarding regions, according to INSTAT data (INSTAT, 2014) and based on the new EU typology for NUTS 3 statistical regions, only the area of Tirana is an urban or predominantly urban area, where the rural population is less than 20 % of the total population. More than two quarters of the population resides in predominantly and significantly rural areas. For the rural population proportions in other regions, see Figure 17.

In 2018, the at-risk-of-poverty threshold (i.e. the percentage of individuals with incomes below 60 % of the median equalised income), according to the EU Statistics on Income and Living Conditions (EU-SILC), was 23.4 %. Severe material deprivation (i.e. the percentage of the population with an enforced lack of at least four out of the nine material deprivation items) is estimated to be 38.3 %.

The Gini inequality index (i.e. the statistical dispersion used to represent the income inequality as frequency distribution between segments of population within a nation) is 35.4 % for year 2018. No rural–urban disaggregation is available for these indicators. Poor infrastructure conditions in rural areas, accompanied by a dysfunctional labour market, limited access to services and a poor business environment, should keep these indicators at a higher level than for urban areas. For instance, regional GDP estimates reveal that in predominantly and significantly rural regions the GDP per capita is 20 percentage points lower than the country average. This situation is expected to worsen in the future, considering the reduction in GDP growth due to COVID-19 (GDP growth was 5 % less in 2020 than in 2019 according to the International Monetary Fund (IMF, 2020)) and a weakening of safety nets (the number of households subject to economic aid in 2018 was 33 % less than in 2017 according to INSTAT).

Figure 17. Share of rural population by regions in Albania (urban–rural typology, NUTS level 3 regions)



Source: INSTAT (2014).

Economic development in rural areas within Albania is characterised by a high dependence on agriculture production. For instance, the labour force survey of 2018 indicates that 42.3 % of women and 33.5 % of men belonging to the age group 15–64 years old are mostly employed in the agriculture sector. The situation is much more diversified than in 2013, when 53 % of women and 37 % of men were employed in agriculture (INSTAT, 2019). Agriculture is also the sector with the lowest gender pay gap in Albania (agriculture has a pay gap of 5 %, with the country average being 10 %).

The business environment in rural areas is weak. Although there are 16 banks operating in Albania, they are hardly present in rural, remote areas. Other, non-banking, institutions (127 institutions) are widespread in rural areas, which usually specialise in micro-credit (UN Women, 2016). Under these circumstances, surveys show that 10 % of the rural population are inclined to use such services. The coverage of information and technology is also more limited in rural areas. Less than 10 % of households in predominantly and significantly rural areas have access to the internet, while only 28 % of households in rural areas have computers (INSTAT, 2018).

In terms of education services, resource and capacity limitations are an issue for quality education across the country. Consequently, the education system in rural areas faces additional problems; for example, the European Commission (2019) showed there is a difficulty in attracting qualified teachers in rural areas. The Albanian demographic health survey for 2018 also identified gaps in educational attainment between urban and rural populations, with median years of school completed of 14.4 and 7.5, respectively (INSTAT, 2018). Moreover, the

net attendance ratio in rural areas is 8 % point lower than in urban areas for secondary education, slightly more pronounced for males. Access to health services is also limited in rural areas compared with urban areas.

While no official data are provided in terms of health services owing to a lack of rural classification, a few surveys, such as Albanian demographic health survey, reveal that the health situation is worse in rural areas. A higher proportion of women in rural areas report at least one problem in accessing healthcare (45 %) than women in urban areas (26 %) (INSTAT, 2018).

2.4. National policy framework

The agriculture and rural development policy cycle in Albania should reflect a logical link between the ISARD and the ARDPF. The ISARD for 2014–2020 is transposed in the action plan([16]), which is detailed in the annual action plans. The annual action plan is reported by the MARD to the Council of Ministers, that is, to the Department for Monitoring of Legislation and Programmes. Each activity described in the yearly MARD action plan is coded, assigned to a responsible body and aligned to a specific paragraph in the national plan for European integration for 2018–2021. The annual action plan, in line with the ISARD for 2014–2020, provides the framework for setting up the ARDPF. It establishes the specific measures available to the agricultural sector in a given year.

There is a not always a clear link from year to year between the ISARD and the ARDPF. For instance, the ISARD for 2014–2020 prioritises policies that promote the development and growth of agricultural production and it targets the improvement of competitiveness, the harmonisation of policies and institutional settings with the EU *acquis*, the sustainable use of natural resources and the social inclusion of the rural population. Topic 1.4 of the strategy covers the environment, forests, water management and biodiversity. However, according to the Albanian Institute for Democracy and Mediation (IDM, 2019), the ARDPF priorities are strongly focused on increasing competitiveness and reducing the structural and institutional shortcomings emerging in agriculture and rural development. Other objectives described in the ISARD for 2014–2020 such as the preservation of natural resources, balanced territorial development, sustainable and inclusive rural development and issues related to quality are not fully promoted in the ARDPF.

Moreover, the priorities in the ARDPF have not been consistent across years. When analysing the decisions of the Council of Ministers (DCMs) that annually settle the ARDPF, there is no consistency observed in the policy objectives set. The objectives sometimes simply list sectors (beekeeping was listed as an objective in 2018). Moreover, risk insurance was a priority in the 2018 programme, while training and knowledge transfer appeared as a priority in the 2019 programme. The lack of clearly stated policy objectives has resulted in a low degree of policy consistency and unclear relationships between policy measures and policy objectives.

In the future, it seems that competitiveness will remain a primary concern for policymakers. Based on a policy prioritisation exercise in line with the nine objectives of the CAP for 2020–2027 that was undertaken by top-level experts and policymakers in the framework of a Food and Agriculture Organization (FAO) study focused on Albania (FAO, 2020), participants ranked competitiveness as a primary objective for the future, while the rural preservation of natural resources and the landscape and biodiversity were ranked less important (fifth and ninth by importance respectively).

Albania is currently in the initial stages of policy reform. Future policy objectives have been formulated, but new policies and policy tools to achieve these objectives are not yet in the process of development. A focus on territorial rural development and rural diversification can be seen in the implementation of the integrated programme for rural development (2018–2020) ([17]). In this strategy, a strong focus is placed on the sustainability of the management of natural resources, promoting diversified economic activities and strengthening capacities to improve living conditions. The ARDPF, considering the priorities in this strategy, has set out measures for the support of agri-tourism.

Policy objectives related to the sustainable use of resources in rural areas are underlined in other strategic documents, including those related to water, land and forests, namely (i) the Albanian national land consolidation strategy, approved by DCM No 700, dated 12 October 2016; (ii) the draft strategy for irrigation and drainage (2018–2030); (iii) the national strategy on climate change and national plans for greenhouse gas mitigation and adaptation to climate change; and (iv) the national strategy of integrated energy and climate (18). These policy

([16]) Another action plan was drafted but not adopted in 2016 (building on the previous plan for 2016-2018).

([17]) DCM No 21, dated 12 January 2018, focuses on the design of an integrated programme for rural development of 100 villages.

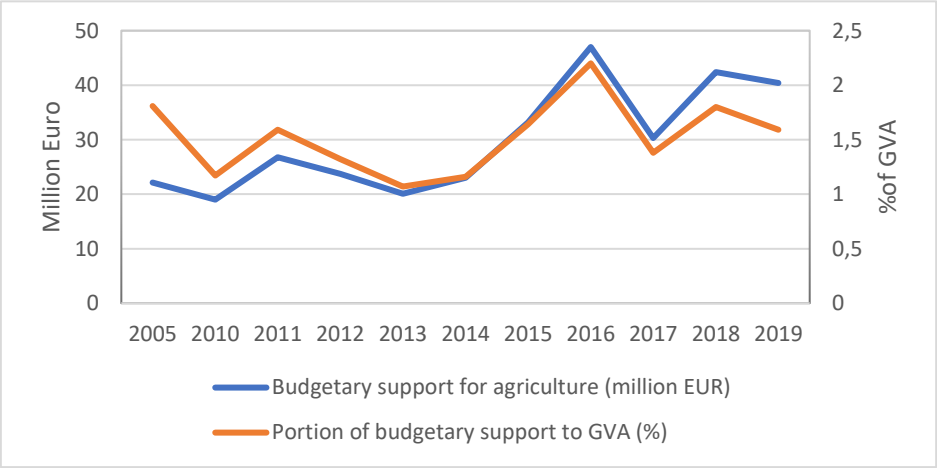
([18]) This was developed after following Republic of Albania's attendance at the ministerial meeting of the Energy Community (December 2017).

objectives also have a legal basis provided by (i) the draft law on local action groups; (ii) the law on climate change (DCM No 499, dated 17 July 2019); and (iii) DCM No 21, dated 12 January 2018, focusing on the design of an integrated programme for rural development of 100 villages.

Measures and budgetary support for agriculture and rural development

Budgetary support for agriculture in Albania fluctuated between 2017 and 2019. In 2019, support reached 1.6 % of GVA, with EUR 40.4 million allocated to agriculture (Figure 18). It can be assumed that, at this level, this support does not provide enough assistance to Albanian farmers to face market competition (from producers from the EU or other WB countries enjoying higher support), to meet specific needs and challenges in rural areas, and to fulfil accession requirements in the near future. Albania is far from the *de minimis* principle, which states that candidates' agricultural budget should amount to at least a third of the funds that a country can expect from the EU upon accession, or at least 10 % of agricultural output (see Volk et al., 2019).

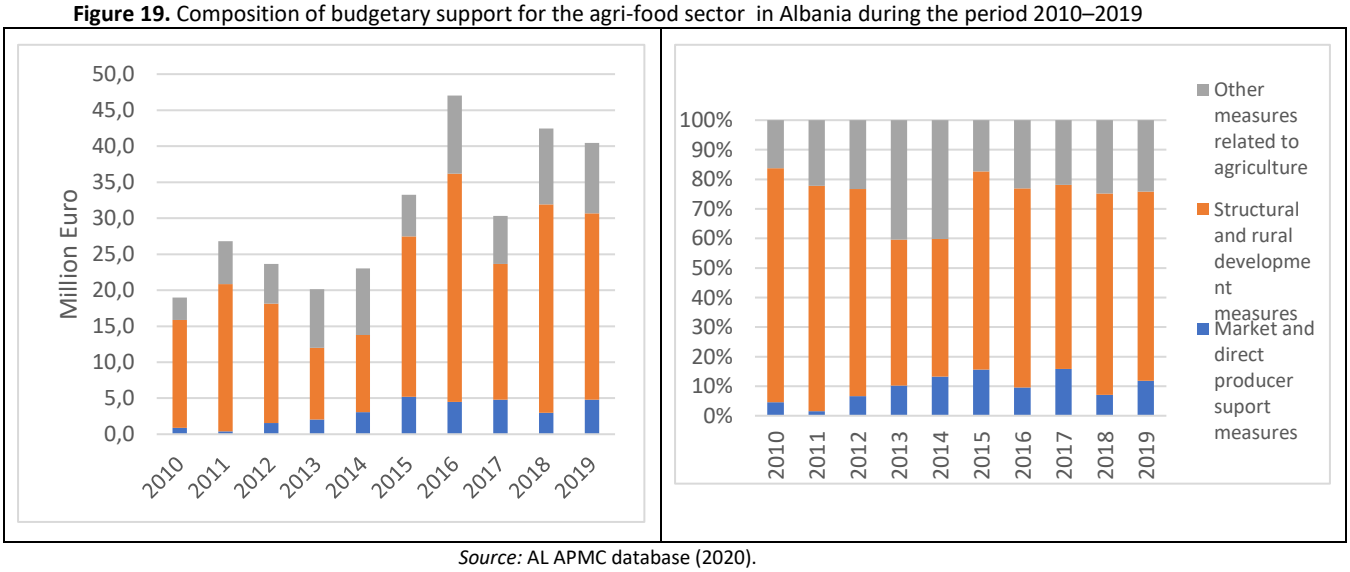
Figure 18. Level of budgetary support for the agri-food sector in Albania during the period 2010–2019



Source: AL APMC database (2020), AL StatDatabase (2020).

Figure 19 presents the structure of agricultural support according to the three pillars. From 2017 to 2019, Albania's support structure remained heavily oriented towards structural and rural development measures (second pillar). Unlike in other WB countries, market and direct producer support (first pillar) is of the lowest importance in Albania. Approximately 80 % of Albania's financing is based on national sources. A large increase in the proportion of international funds was observed in 2016, when international and IPARD-like funds accounted for 30 % of the financing. Some of that financing enabled additional investments for the modernisation of farms and the agri-processing sector.

Figure 19. Composition of budgetary support for the agri-food sector in Albania during the period 2010–2019

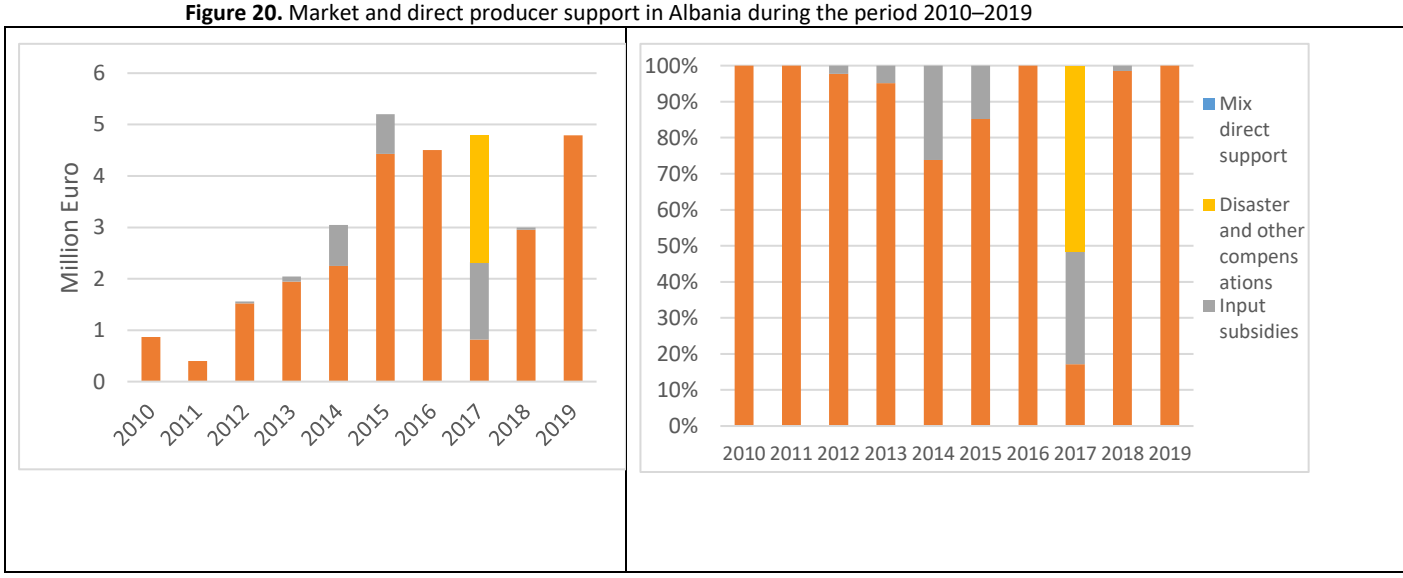


Source: AL APMC database (2020).

Direct producer support is at a relatively modest level in Albania, but has been rising since 2012, although with some slow-down in 2016–2018 (Figure 20). In 2019, the share of total support made up of direct payments increased again, but the number of sectors subject to this type of support reduced to five. Considering these trends, Albania has the lowest level of direct support among the WB countries (not exceeding EUR 5 million). Direct support in Albania during recent years has included payments based on the input used (e.g. the amount of plastic used wraps replacement for greenhouses and tunnels used), payments based on output (milk, fruits and vegetables) and payments based on number of animal (sheep, dairy cows, bees). Direct support is not conditional on any CAP-like cross-compliance. No area payments are provided for Albania (as is the case in other WB countries) and no decoupled payments have been designed (as the CAP urges) owing to the limited development of IACS components. The 2019 Albania report by the European Commission noted that there has been limited progress in building these systems (European Commission, 2019).

The funding for structural and rural development measures (second pillar) has been increasing in Albania since 2015, reaching nearly EUR 30 million in 2018 (Figure 21). Given Albania's significant challenge in adjusting farm structures, the country's lack of competitiveness and the high pressure for alternative incomes in rural areas, the broadening of the second pillar in terms of the level and scope of funding seems to be a rational approach. At the same time, and given the inevitable budget constraints, spending in the first pillar needs to take the forms that are most effective and efficient in achieving the income support objectives and hence needs be well targeted to the farm households in need and the sectors with the highest growth potential.

Figure 20. Market and direct producer support in Albania during the period 2010–2019



Source: AL APMC database (2020).

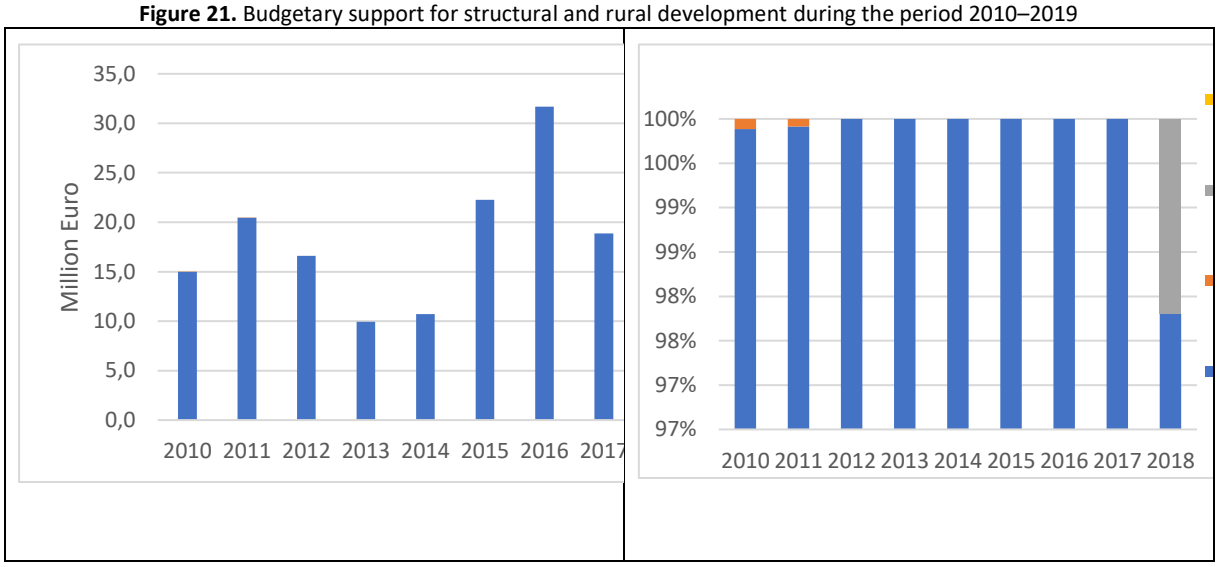
The provision of investment grants for upscaling the quality and improving the safety of the products along the value chain should address the current challenges related to resource use and technology absorption. The priority should still be those subsectors that are oriented towards exports and have the largest market orientation. The attention paid to diversification activities, besides the presence of measure 7 of the IPARD, remains low owing to the limited availability of small grants for activities beyond rural tourism.

Almost all of the funding for the second pillar was allocated for the improvement of competitiveness of the agri-food sector and, more specifically, for on-farm investments. There is no measure for environmental and societal services. The lack of payments for areas with natural constraints ([19]), where production conditions are extremely unfavourable, remains to be addressed (Volk et al., 2019). Rural areas and areas with natural constraints should be defined according to the existing methodologies in EU countries. In the framework of the integrated rural development programme for 100 villages, within the spectrum of investments related to infrastructural improvements and rural diversification, a measure was introduced for the establishment or reconstruction of spaces for rural tourism and investments in agri-tourism, which could be considered in the broader group of measures and funding supporting rural population resilience and for reviving rural areas. With these few exceptions in the last 2 years of the period analysed, there are no measures related to the rural economy and population.

([19]) The SWG has made prior attempts to focus on these areas (see SWG, 2017).

Although LEADER is obligatory only under the European agricultural fund for rural development (EAFRD), candidate countries are encouraged to use this approach and establish local action groups to comprehensively integrate local needs and solutions. Furthermore, it helps to reinforce the links between rural, urban and fisheries areas. Despite the good progress made in terms of the drafting of the law during 2018, the draft has not been adopted and no positive development has been witnessed so far.

Figure 21. Budgetary support for structural and rural development during the period 2010–2019



Source: AL APMC database (2020).

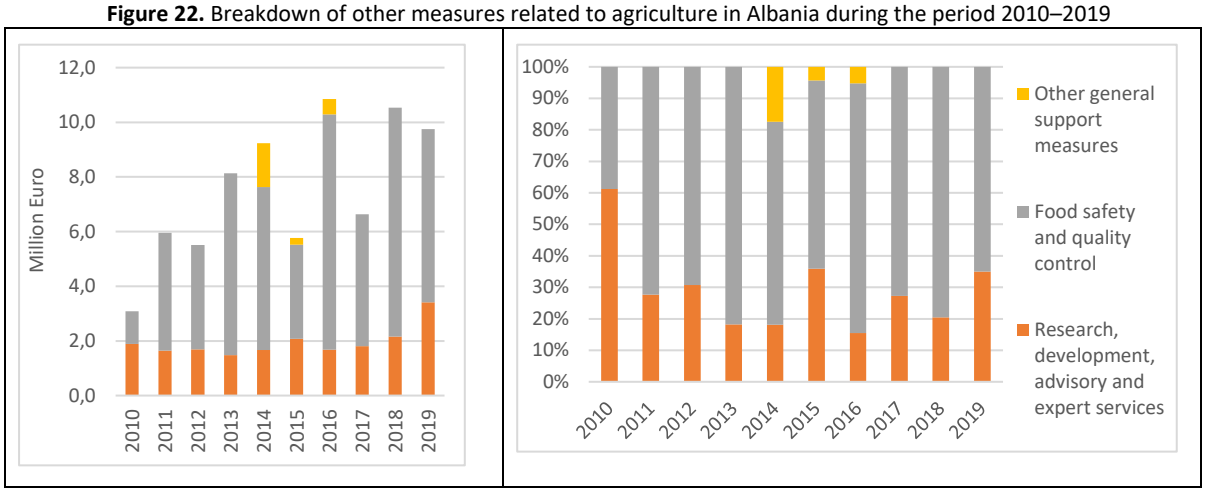
In the past, investments were provided in the form of grants or full or partial compensation of interest on credit for the construction of buildings and the purchasing of machinery and equipment, irrigation systems, heating and plastic covers, etc., in the main sectors, such as orchards, olive growing, vineyards, greenhouses, medicinal and aromatic plants (MAPs), and dairy. Currently investments are targeted at measures to reduce farm production costs related to crop cultivation and certification in the main sectors, such as organic agriculture, the olive sector, MAPs, etc.

The MARD has recently significantly reduced the proportion of the funding given to and the number of measures applied to permanent plantations (e.g. orchards), as well as concentrated support for the olive sector (in 2019), which later was switched to the dairy sector (2020). The previous measures, such as investments in productive structures (irrigation systems, the planting and improvement of orchards, the planting of MAPs and the expansion of greenhouses) ceased to exist. The support is concentrated in a few sectors, such as greenhouses (plastic cover replacements for greenhouses and tunnels), dairy (payments per head and output), beekeeping, MAPs and organic certification, as well as tourism.

A partial contribution has also been provided by the IPARD programme, namely the IPARD Like and IPARD II projects. In the first phase covered by IPARD Like, only measures 1 and 3 was implemented, with expenditures of EUR 1.67 million and EUR 2.81 million in 2014–2016, respectively. The implementation of the IPARD II programme also includes measure 7. The first payments were made in 2019 for a total amount of EUR 1.18 million, out of which EUR 0.88 million was EU contributions (measure 1, EUR 0.03 million; measure 3, EUR 1.05 million; and measure 7, EUR 0.10 million).

The importance of other measures related to agriculture (third pillar) increased over the years mainly because of the disbursement of funds for donor projects (Figure 22). This pillar retained the second largest proportion of the total budget for support in 2010–2019, accounting for 12 % of total support (with the largest allocation in 2016 of EUR 11 million). Food safety attracted the largest proportion of the funding in the third pillar. The funding for the second largest subgroup, namely research and development, advisory and expert services, has remained at around EUR 2 million since 2009. In the future, this component is expected to increase owing to greater attention from donors to advisory services.

Figure 22. Breakdown of other measures related to agriculture in Albania during the period 2010–2019



Source: AL APMC database (2020).

The ARDPF has supported a large number of sectors, but the support for these sectors has not been consistent over the years (Table 11). The formulation and implementation of budgetary measures has not been consistent, in terms of the number of measures, the sectors supported and the criteria. The final years of the period analysed saw alterations to support measures (particularly in 2018) and inconsistencies with regard to policy implementation (particularly in 2016 and 2017). In 2018, there were a large number of measures (52 submeasures) compared with 2016–2017 (19 measures). However, the number of measures then radically reduced again in 2019. These decisions were based not on monitoring (*ex ante* or *ex post*) studies but on budgetary conditions. Most of the measures under the ARDPF are related to single commodities. In some years, certain measures were exempted and certain commodities were not supported, with no clear policy justification.

Table 11. Agriculture and Rural Development Program sectors and products supported during the period 2017–2019

Year	Number of measures	Sectors/products supported
2017	17	Five sectors: vineyards, fruits and nuts, MAPs, livestock and beekeeping and aquaculture, greenhouses
2018	52	Twelve sectors: fruits, nuts, citrus, MAPs, olives, vineyards, greenhouse vegetables, melon and strawberry in tunnels, fishing and aquaculture, production with GlobalG.A.P. certification and other certifications, organic production, livestock and its by products and beekeeping
2019	10	Five sectors: livestock (cattle and small ruminants), fishery (anchovies and sardines), olives/olive oil, beekeeping breeding, rural tourism/agri-tourism/diversification of economic activities in rural areas
2020	7	Five sectors and one cross-sector: livestock (cattle and small ruminants), greenhouse vegetables, organic, beekeeping breeding, GlobalG.A.P. certification (vegetable, fruits and MAPs), rural tourism/agri-tourism/diversification of economic activities in rural areas

Source: Authors own elaboration based on a review of the content of the DCMs.

Based on the content of the measures, a major impact is expected in terms of competitiveness, value chain strengthening, an increase in cooperation and an increase in sector self-sufficiency. Some support measures might be also beneficial for the livelihood of the rural population, the diversification of and support for natural resources such as the cultivation of orchards and MAPs, the improvement of farm irrigation and beekeeping, support for certification (organic, GlobalG.A.P. and ISO 2001 certification) and support for small ruminants.

The impact of budgetary measures is scarcely studied. A few impact assessment studies have been conducted in the last decade. Skreli et al. (2015) focused on an analysis of a government subsidy scheme and its impact on farm production capacity, technical efficiency and the use of idle production factors in the olive and vineyard sectors of Albania, using the propensity score matching method. The results show that the government subsidy scheme had a clear net impact on production yields but not on farm size. No major impact was observed regarding the use of idle production factors (farm employment) or technical efficiency (crop yield) level. The results of the study of Gecaj et al. (2018) regarding the support for the MAPs sector suggest that subsidies affect the planted area and yields but have no impact on price (a proxy for quality). The FAO (2020) study is one of the

few impact assessment studies carried out in the last decade. According to this study, based on a quantitative and qualitative approach, it was found that, overall, support for new fruit tree plantations has had a clear impact in terms of increasing the area under fruit trees and the mobilisation of otherwise idle production factors. Payments for matriculated sheep and goats has motivated farmers to remain in the business and has positively affected milk (and meat) yields. Output payments have consolidated chain governance, but farmers have also claimed for unfair distribution and lack of access. The impact of rural diversification measures has been rather limited, except for specific measures, mainly because the procedures were very demanding, particularly for small farmers, and the degree of funding was low. The use of the counterfactual causality approach showed that the measures to support greenhouses, dairy farms and orchards have not had a significant impact on employment but have had a positive impact on investments, especially in the dairy sector. The grants have lead to an increase in farm size (i.e. the number of milking cows) in the dairy sector, while they had no significant effect on the apple and greenhouse sectors. Moreover, budgetary measures in these three sectors did not have a significant effect in terms of yields and incomes, although some impacts have been observed in terms of farm structure for orchards.

The effects of budget support are closely linked to developments in non-financial services that are provided to farms and agri-business. The advisory service, despite reform efforts ([20]), remains limited in terms of its coverage ([21]) and in its quality of information. Knowledge gaps and a lack of compliance with food safety and quality standards continue to affect market access (especially exports, despite their good performance in recent years) and the development of the sector in general (European Commission, 2009). Despite the achievements made, further strengthening of the food safety system, including law enforcement and further improvements to the laboratory capacity in the field of food safety, remains a must. To succeed in these commitments, there is also a need for improved coordination between institutions to advance the approximation and implementation of EU legislation.

2.5. EU approximation process

Albania signed and ratified the stabilisation and association agreement (SAA) with the EU and its Member States in June 2006, while an interim agreement entered into force in December 2006. The SAA was concluded on 31 March 2019. In March 2020, the European Council opened the accession negotiations of EU integration with Albania. To speed up the progress, the Government of Albania continues to work based on the national plan for European integration for 2020–2021, aiming to reach full legal approximation of the national legislation with the EU *acquis* and align all of its sectors with the standards set by the *acquis* chapters. Chapter 11 of the *acquis* defines the agriculture and rural development priorities for acts to be approximated, the institutions tasked with drafting/revising the Albanian legal acts, the degree of approximation and the dates of adoption and entry into force.

During 2017–2019, various legal changes were carried out that are reflected in the new law that has been designed, as well as in the preparation of DCMs, minister orders and minister guidance. Albania has adopted the law on agriculture and rural development (2007), which was partially drafted in line with the EU *acquis* ([22]). This law sets out the policies and institutional framework for the agricultural and rural development sector. In addition, the ISARD for 2014–2020 (DCM No. 709, dated 29 October 2014) was adopted, which was drafted with the support of the EU and the FAO following the good practices outlined in the EU CAP.

In the budgetary year 2018–19, the MARD launched the IPARD (2018–2020). A list of the CAP-like rural development measures is already given in the sssIPARD Programss for 2015–2017 and 2018–2020. Since 2015, Albania has benefited from the EU's IPARD, which aims to coordinate and implement a more integrated policy for the development of rural areas. This was implemented mainly in two stages: IPARD I (in the form of IPARD Like) in 2015 and IPARD II in 2018. In 2015, the funding was provided for investments in physical assets of agricultural holdings (measure 1) and investments in physical assets concerning processing and marketing of

([20]) Following DCM No 147, dated 13 March 2018, on the establishment, organisation and functioning of regional agricultural extension agencies, the public agricultural extension service was restructured and four regional extension agencies were established as subsidiary institutions of MARD. These agencies are funded by the state budget and their tasks, areas of service, organisation and functions are defined by the DCM.

([21]) The total number of agricultural extension experts is 241, most of whom are agronomists and zootechnical experts and a small number are agricultural economists (for whom there is an increasing need, in order to absorb IPARD and national scheme funds).

([22]) Law No 9817, dated 22 October 2007, on agriculture and rural development has been partially adopted and approximates Council Regulation (EC) No 1085/2006 for establishing an IPA (National Plan for European Integration, 2017-2020). Following this law, DCM No 709, dated 29 October 2014, for the implementation of the ISARD was also adopted and then amended through DCM No 21, dated 12 January 2018, for the design of an integrated programme for rural development of 100 villages.

agricultural, livestock and fishery products (measure 3). In addition to this funding, in 2018, resources were allocated for farm diversification and business development (measure 7). Further efforts are being made, with the help of the German Development Agency (GIZ) sustainable rural development project, to adopt other measures such as measure 4 (agri-environment, climate and organic farming measures), measure 5 (the implementation of local development strategies through the LEADER approach) and measure 10 (advisory services). Measure 9, which consists in technical assistance, is expected to be developed beyond 2020. Moreover, an additional measure on Forestry is being prepared with the support of GIZ Sustainable Rural Development (SRD) Programme.

With respect to other types of support provided by the rural development programme of the CAP, in Albania there has limited progress in the adoption of such support. If we compare the measures designed in the framework of the EAFRD with the measures formulated so far by the ARDPF, it can be seen that, of these 17 measures, the current ARDPF could quickly implement five measures in the near future. Some measures, such as support for areas with natural constraints, have not even progressed as far as the development of definitions ([23]).

The pace of legal adoption as regards the establishment of an IACS has been slow. The progress has been stalled by problems regarding the population of databases owing to weak information systems and statistics in agriculture, non-functioning farm and animal registers, and the slow preparation of the LPIS (European Commission, 2018). Moreover, policy monitoring has been weakened by the slow progress of statistical activities, the lack of an economic analyses unit and scarce resources for *ex ante* and *ex post* evaluation, including for the use of the FADN. The animal register has also not been updated properly, limiting traceability, endangering food safety and limiting the implementation of livestock farming management policies.

The level of effort and progress for aligning the legislation with the EU *acquis* chapter for agriculture and rural development is relatively good. The European Commission report for Albania (European Commission, 2019) states that Albania has achieved 'good progress' in Chapter 11 of the *acquis* and the country has only 'some level of preparation' in terms of this chapter, which is a slightly better review of the situation than was given in the European Commission reports for Albania for 2015, 2016 and 2018 (which reported that the country's preparations were at an early stage for this chapter) (Vurmo, 2019) ([24]). The evaluation should also consider the progress made in achieving the obligations set out in the SAA. Given the efforts made on Chapter 11 of the *acquis*, according to analyses (ACIT, 2019), this is one of the chapters for which Albania has a relatively positive performance record in terms of the accomplishment of SAA targets, with an adoption level of 75 %, which is equal to that for foreign, security and defence policy (*acquis* Chapter 31), topped only by that for public procurement (*acquis* Chapter 5) and the customs union (*acquis* Chapter 29). A review of the most recent version of the national plan for European integration (2020–2021) indicates that there are only seven remaining legal interventions (one law, two minister guidance documents, one minister order and three DCMs). However, Chapter 11 of the *acquis* is related to other legal efforts that the Government of Albania has to implement, such as the reform of land rights, reforms in food safety, etc. Therefore, alignment with that chapter will be difficult in the future despite the progress achieved up to now.

2.6. Discussion, conclusions and recommendations

Despite the progress and the reforms made, various gaps still exist in terms of the policy and institutional requirements for further alignment of Albania's agriculture and rural development policies with the CAP. The ISARD for 2014–2020 has served as a reference for the strategic orientation of the MARD; however, its policies have not been fully consistent over the years and are not fully in line with the baseline policy framework. The MARD should benefit from the opportunity given in the framework of designing the ISARD for 2020–2027 in terms of addressing the main policy shortcomings and establishing a policy framework. The MARD should carry out an overall review of the policy objectives for the sector, considering the preparatory phase for the ISARD for 2020–2027 and the emerging alignment required from the design of the future CAP. The MARD should make best use of preparatory work for the ISARD for 2020–2027 by prioritising policy objectives guided by an exercise for linking national policy priorities with the action plan and the ARDFP.

National policies expressed in the ARDFP measures have not given considerable attention to cover some of the key elements of agriculture and rural development policies, such as those related to the environment, the

([23]) In 2009, a team of SWG researchers prepared recommendations on the definition of areas with natural constraints (see SWG, 2017).

([24]) The scores used by Vurmo (2019) are as follows: early stage (5), early stage to some level of preparation (4.5), some level of preparation (4), moderate to some level of preparation (3.5), moderately prepared (3), good to moderate level of preparation (2.5), good level of preparation (2) and well advanced (1).

promotion of sustainable rural development, territorial development, the maintenance of rural livelihoods and support for vulnerable populations, and climate change. There has been a lack of support (resulting from limited institutional capacities) for dealing with rural diversification, area-based development and quality promotion. Despite the growing attention from the MARD, separate measures for the protection of landscapes, valuable natural habitats and biodiversity and/or for the promotion of appropriate agriculture practices have not been developed. The ARDPF should be thoroughly reviewed to ensure it is in line with CAP by developing schemes that support rural populations and disadvantaged areas, protect the environment and promote diversification to reduce poverty and to balance the economic development of rural areas.

The MARD has a limited supporting policy environment in terms of institutional preparation, as, despite a professional and accredited paying agency having been set up (which is already established, namely the Agriculture and Rural Development Agency), it is not yet putting in function a management and control system, compliant to IACS, due to absence of a functional Farm Register and Parcel Identification System. IACS elements should be a priority, which requires the following: (i) establishing a functioning farm register and updating/registering the animal register, (ii) establishing a LPIS and a market information system and (iii) preparing the FADN as soon as possible.

The MARD should continue to make significant efforts to aligning legal and institutional framework with EU CAP. More efforts are needed to include components of the IPARD programme in supporting Local Action groups. These reforms should be accompanied by a strong awareness campaign and an intensive capacity building process. Moreover, definitions and classifications of rural areas and areas with natural constrains should be formulated and put in place accordingly. Interventions should involve close coordination with the donor community to improve their legal and institutional basis. Extra efforts should be made in terms of interinstitutional coordination, including with academia and civil society.

Policy design should follow a standard policy cycle approach, which considers regulation for reducing policymakers' discretion by explicitly reflecting the links between strategy vision, strategic objectives, the mid-term action plan, the annual action plan and the ARDPF. Changes to the ARDPF should be based on impact analysis. Capacity building within the MARD should be focused on policy analysis frameworks, based on close cooperation with academia.

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3. CASE STUDY: BOSNIA AND HERZEGOVINA

Sabahudin Bajramović ([25]) and Željko Vaško ([26])

3.1. Introduction

The policy institutional framework for the development of the agricultural sector and rural development in Bosnia and Herzegovina (BiH) is complex because the policies and goals, as well as the ways in which they are implemented, in accordance with the constitutional structure of BiH, are implemented at different administrative levels, namely through the state of BiH and via two entities (the Federation of BiH (FBiH) and the Republic of Srpska (RoS)), one district (Brčko District of BiH (BD BiH)) and 10 cantons.

The development of the agricultural sector and rural development in BiH in the period analysed were defined by several strategic and programming documents at the state and at entity level. Although the objectives adopted in these documents are relevant, they are not strictly followed in the measures adopted or in the scope and structure of financing. The system of monitoring and evaluating the degree of realisation of the strategic and programme documents is weak and unsystematic.

The agricultural policy in both of the BiH entities did not change significantly in 2017–2019. The amount of total budget transfers remained the same (FBiH) or slightly increased with the continuation of support for direct payments to producers. The direct payment schemes and the number of producers supported were almost identical throughout the period until 2017. Structural and rural development measures are still not ranked as a high enough priority for decision-makers and, in the case of the FBiH, they were completely neglected until 2018. It is clear that this approach will have to change for faster progress to be made in the integration processes.

Currently, the status of BiH is a potential candidate for EU membership, for which it applied in 2016. BiH received a questionnaire from the European Commission and responded to the initial questions in 2018 and to additional questions in 2019. In terms of EU accession, according to the latest European Commission report (2019), Bosnia and Herzegovina is at an early stage of preparation in the areas of agriculture and rural development and fisheries and has some level of preparation in the area of food safety, veterinary and phytosanitary policy.

Although BiH fulfilled the formal conditions for access to IPARD funds at the beginning of 2018 (i.e. establishing a coordination mechanism and drafting a rural development programme at the state level), access was not gained. Instead of the IPARD programme, as a replacement the EU offered BiH access to the EU4Agri programme, in which many IPARD measures (investments in agricultural and food industry, etc.) are present. It should be emphasised that the implementation of this programme is the responsibility not of the BiH institutions, but of the United Nations Development Programme (UNDP).

3.2. State of the agri-food sector

Favourable economic trends in the international economic environment and the strengthening of domestic demand in 2017–2019 have enabled the continuation of economic growth in BiH. Based on available national accounts, it is estimated that, in 2019, BiH achieved economic growth of 2.7 %, which is slightly lower than the growth rates in the previous 2 years (2017 and 2018) but is within the range of the regional average (ASBiH, 2019). Total GDP has shown a trend of constant growth and, in 2019, it was estimated to be EUR 18.01 billion, which is 18 index points more than in 2016 (EUR 15.3 billion). The same trends have been noted when it comes to GVA (Table 12).

After deflationary pressures were interrupted at the beginning of 2017, consumer prices grew, which resulted in an annual inflation growth in 2018 of 1.4 % and a noticeable decline of 0.6 % in 2019. Such inflation is strongly influenced by two price sections within the consumer price index: food and non-alcoholic beverages (due to food prices) and transport (due to oil prices).

Since 2016, there has been a trend of constant growth in the number of employees and a decrease in the unemployment rate. In 2019, the total number of employees amounted to 830 000, which is 3.6 % more than in 2016 (801 000).

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Table 12. Key general statistics of BiH (2010–2019)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (thousand inhabitants)	3 843	3 840	3 836	3 531	3 526	3 518	3 511	3 504	3 496	3 488
Population density (inhabitants/km^2)	75.1	75.0	74.9	69.0	68.9	68.7	68.6	68.4	68.3	68.1
GDP (at current prices, million EUR)	12 570	13 130	13 117	13 445	13 961	14 592	15 287	16 121	17 100	18 012
GVA (at current prices, million EUR)	10 346	10 727	10 685	11 078	11 487	12 028	12 605	13 293	14 593	15 359
Economic growth (real change in GDP, %)	0.8	1.0	–1.2	1.6	0.6	3.0	3.1	3.2	3.6	2.7
GDP per capita (EUR)	3 271	3 420	3 419	3 808	3 959	4 148	4 354	4 601	4 891	5 425
GDP per capita in PPS (EU=100; %)	30	30	30	31	30	31	21	32	31	:
Inflation (%)	2.1	3.7	2.1	–0.1	–0.9	–1.0	–1.1	1.2	1.4	0.6
Total employment (thousand persons)	843	816	814	822	812	822	801	816	822	830
Unemployment rate (%)	27.2	27.6	28.0	27.5	27.5	27.7	25.4	20.5	18.4	15.7
Total export of goods (million EUR)	3 628	4 204	4 018	4 285	4 439	4 595	4 815	5 821	6 268	6 069
Total import of goods (million EUR)	6 962	7 938	7 799	7 756	8 283	8 105	8 263	9 432	10 018	10 163
External trade balance (million EUR)	–3 334	–3 734	–3 781	–3 471	–3 844	–3 510	–3 448	–3 611	–3 750	–4 094
Trade as a proportion of GDP (%)	84.2	92.5	90.1	89.6	91.1	87.0	85.6	94.6	95.2	90.6
Food, beverages and tobacco in total household expenditures (%)	:	:	:	:	41.3	41.6	41.2	40.9	40.7	40.8

:, no data available; PPS, purchasing power standards.

Note: The total area of BiH is 51 197 km^2.

Source: ASBiH,Gross domestic product - Production approach; Central Bank of BiH, Annual reports, Eurostat, GDP per capita in PPS.;

The unemployment rate decreased from 25.4 % in 2016 to 15.7 % in 2019. In BiH, the trend of growth in foreign trade continued, but the trade deficit also continued to increase. The value of total exports increased from EUR 4.8 billion (2016) to EUR 6.1 billion (2019) and total imports increased from EUR 8.3 billion (2016) to EUR 10.2 billion. This resulted in growth of the trade deficit, which in 2019 amounted to EUR –4.1 billion. The total coverage of imports by the export of goods in 2019 was 61.7 %.

Agriculture remains an important sector of the BiH economy, as it contributes significant values in terms of GVA, employment rate and trade balance (Table 13). The agricultural sector contributed EUR 1.01 billion GVA in 2019, which accounted for 6.6 % of total GVA, which was less than the average of the last 5 years. Agriculture, forestry,

hunting and fishery are still very important when it comes to employment and, in 2019, the total number of employees in this sector was 149 000, which accounted for 18 % of the total number of employees in BiH. There are still no official economic accounts for agriculture in BiH. According to information from the Agency for Statistics of BiH (ASBiH), the first official data could appear soon.

Unfortunately, the agricultural census has not yet been conducted in BiH and the only relevant information is the number of agricultural holdings (363 394), which was determined by the last general census in 2013. If we take into account the fact that the total agricultural area used in BiH in 2019 amounted to 1 776 000 ha, the average farm has 4.88 ha of UAA.

Table 13. Key agricultural statistics of BiH (2010–2019)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GVA of agriculture, forestry, hunting and fishery										
GVA (at current prices, million EUR)	887	904	820	938	832	910	975	939	1 006	1 008
Proportion out of all activities (% of GVA)	8.6	8.4	7.7	8.5	7.2	7.6	7.7	7.1	6.9	6.6
Employment in agriculture, forestry, hunting and fishery										
Number (thousand persons)	166	160	167	155	139	147	144	154	129	149
Proportion out of total employment (%)	19.7	19.6	20.5	18.9	17.1	17.9	18.0	18.9	15.7	18.0
Trade in food and agricultural products										
Exports of agri-food products (million EUR)	288	318	317	351	338	430	499	540	450	435
Proportion out of exports of all products (%)	7.9	7.6	7.9	8.2	7.6	9.4	10.4	9.3	7.2	7.2
Imports of agri-food products (million EUR)	1 262	1 404	1 426	1 394	1 396	1 464	1 515	1 611	1 597	1 652
Proportion out of imports of all products (%)	18.1	17.7	18.3	18.0	16.8	18.1	18.3	17.1	15.9	16.3
Trade balance in agri-food products (million EUR)	–973	– 1 086	– 1 109	– 1 043	– 1 057	– 1 034	– 1 016	– 1 070	– 1 147	–1 216
Export/import rate (%)	22.9	22.6	22.3	25.1	24.2	29.4	32.9	33.6	28.2	26.4

Note: Agri-food trade data according to Combine Nomenclature of Custom Tariffs (CNCT 1-24).

Source: ASBiH, GDP - Production approach, Data base of, Chamber of Commerce of BiH;

Out of the total of 2.2 million ha of agricultural land in 2019, 606 000 ha was utilised arable land (27 %) while 487 000 ha remained uncultivated. Regarding other intensive areas, orchards account for 101 500 ha and vineyards account for 4 400 ha. The largest part of agricultural land consists of permanent grasslands, pastures and meadows and with 1.01 million ha they make up 45 % of the total agricultural area. According to the data for 2017, BiH gross agricultural output has a higher contribution from animal production, with 59 % (EUR 634.3 million), than plant production, with 41 % (EUR 440.3 million).

As there are no recent data on the size of farms in BiH, data on the number of registered farms in 2016, which were presented by BiH in response to the European Commission's questionnaire, are presented here. Data on the number of farms at the end of 2018 are given on the basis of data from the Ministry of Foreign Trade and Economic Relations of BiH. There is an evident trend of an increasing number of registered farms (Table 14). Because the registration of farms in the farm register is voluntary, the number of registered farms varies, as the calculation of whether or not it pays off to be in the register depends on how many subsides farms will receive and how much they will have to pay as a result of registration.

Table 14. Number and size of agricultural holdings in BiH registered in the farm register

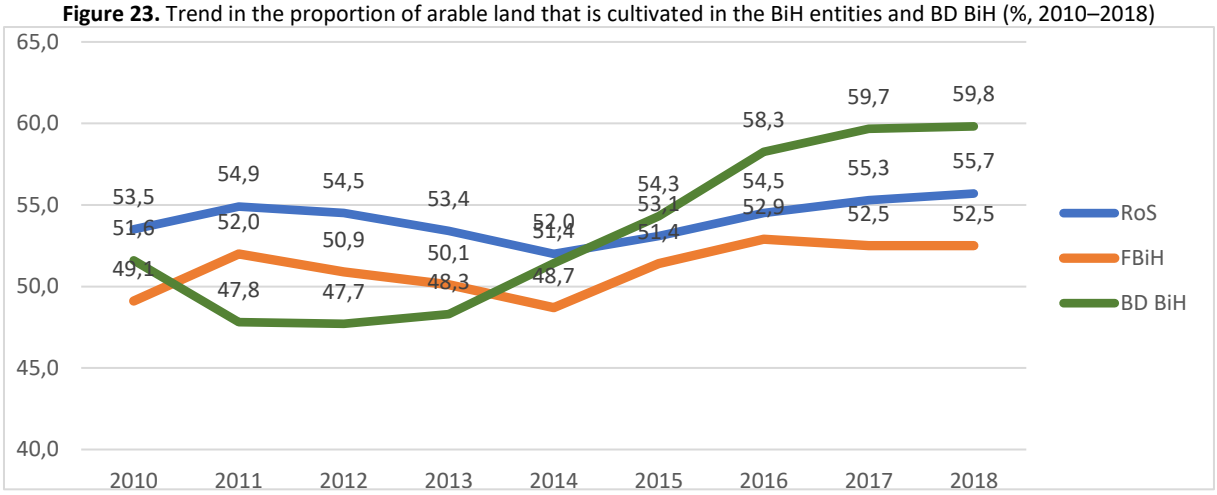
	Year	FBiH	RoS	BD BiH	BiH
Number of farms	2018	76 003	42 403	3 544	121 950
	2016	66 998	33 362	3 191	90 092
Average size (ha)	2016	1.58	4.72	2.6	2.96

Source: for 2016 Responses to the European Commission questionnaire for Chapter 11. Agriculture and Rural Development (http://www.dei.gov.ba/dei/direkcija/sektor_strategija/Upitnik/odgovoriupitnik/Archive.aspx?langTag=hr-HR&template_id=120&pageIndex=2) and for 2018 Annual Report in the Field of Agriculture, Food and Rural Development (2019). Ministry of Foreign Trade and Economic Relations of BiH.

The data in Table 14 show that BiH is dominated by small farms, of which there are more than 100 000, and the number of agricultural enterprises with the status of joint-stock companies, limited liability companies or cooperatives does not exceed 1 000.

In addition to farms registered in the farm register (which are mainly registered for the purpose of exercising the right to financial incentives), there are a number of other farms that are also, to some extent, engaged in agricultural production, mainly for their own needs. According to the 2013 census, there were 363 394 households in BiH (slightly less than one third of the total number of enumerated households) engaged in agriculture, which is equal to a quarter of those that were registered in the farm register in 2016. According to the labour force survey, 129 000 inhabitants of BiH, or 15.7 % of the total population, were engaged in agriculture either full time (103 000) or part time (26 000), in 2018 (ASBiH, 2018). Given that an FADN does not exist in BiH, there are no relevant data on the economic strength of farms or their revenues, costs and profits.

Figure 23. Trend in the proportion of arable land that is cultivated in the BiH entities and BD BiH (%, 2010–2018)



Source: Statistical offices of the FBiH, RoS and BD BiH.

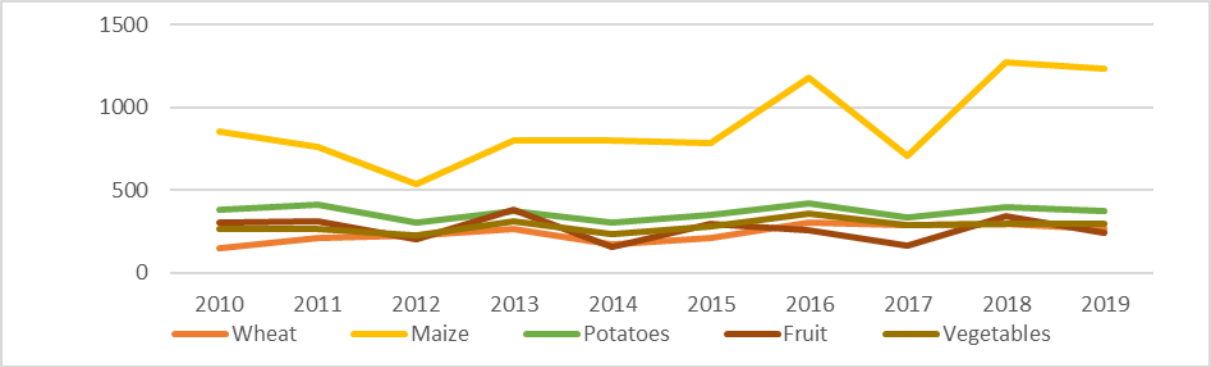
When it comes to estimating production potential, first a measure of the country's agricultural land is needed. From official statistics, it can be seen that close to half of the arable land in BiH has not been cultivated (Figure 23). However, the reality is probably somewhat different, because since these data were collected there have been changes in the purpose of certain categories of land.

This mostly refers to arable land, which has reduced in size because some is being used for construction purposes and some has transformed into meadows owing to many years of non-cultivation. In addition, the mowing of natural meadows stopped, so they turned into pastures, and mountain pastures have been taken over by forest vegetation.

These changes are to a large extent not accompanied by changes in cadastral categorisation, so the only source are official data on uncultivated arable land (which are probably overestimated). Regardless, the official data on cultivated arable land and gardens at the level of the two BiH entities and the BD BiH are presented in Figure 23, where two subperiods are evident, the first until 2014, when there was a trend of decreasing numbers of cultivated areas, and the second from 2015, when the trend reversed and an increase in cultivated areas was seen. The lowest cultivation was in 2014, due to the catastrophic floods that hit BiH that year.

As a consequence of the lack of modern agrotechnics, irrigation systems and quality seed/seedling material, total plant production varies from year to year and is primarily the result of the climatic conditions in the country. This is especially noticeable in the production of maize, potatoes and vegetables (Figure 24).

Figure 24. Crop production in BiH (thousand tonnes, 2010–2019)



Source: ASBiH.

Average yields vary significantly, even between two adjacent years, owing to the high dependence on weather conditions (Table 15). Drought, which has been occurring frequently in recent years, halves expected yields. Irrigation systems are still lacking, although much is being done to expand common irrigation infrastructure thanks to the credit support of the World Bank and the European Bank for Reconstruction and Development. In fruit growing, the cause of reduced yields is late frosts and hail, which occur almost every year.

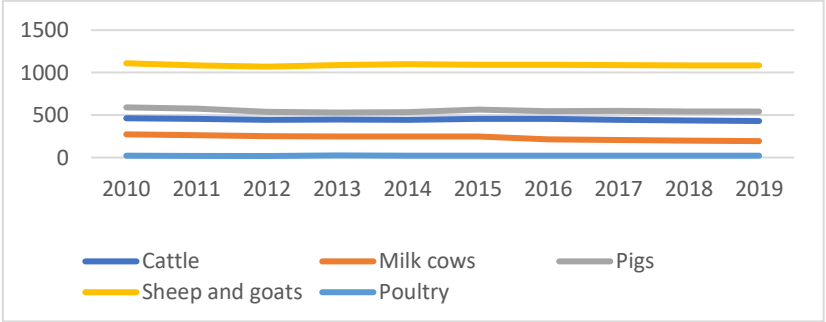
Table 15. Average yields in agricultural production in BiH (t/ha)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Wheat	2.6	3.5	3.7	3.9	2.5	3.4	4.3	4.2	4.0	3.8
Maize	4.5	3.9	2.7	4.2	4.6	4.1	6.2	3.6	6.6	6.4
Soya	1.9	1.7	1.4	1.8	1.9	1.5	2.7	1.6	2,7	2.6
Tobacco	1.2	1.3	1.0	1.2	1.1	1.3	1.6	1.2	1,5	1.3
Potato	10.4	11.0	8.1	10.5	8.7	9.9	11.9	9.6	11.2	11.0
Cabbage	13.8	13.1	11.1	13.0	11.8	12.5	16.5	12.5	15.0	15.7
Raspberry	7.1	7.8	5.6	7.2	7.5	8.1	8.4	6.9	7.8	6.7
Grape	4.0	3.8	4.6	6.1	4.8	7.1	7.6	6.3	8.9	9.0

Source: ASBiH.

The realised yields in BiH are lower than in the neighbouring countries Croatia and Serbia, and they are at approximately the same level as yields in Albania, Montenegro and North Macedonia . In animal production (number of animals), there have been slight decreases in the number of animals in almost all types of livestock (Figure 25). One of the main reasons for this is cheap imports and insufficient budget support for this subsector.

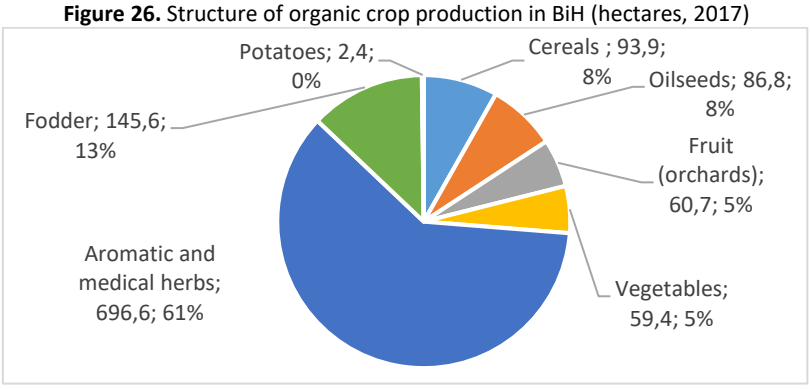
Figure 25. Herd size of main livestock in BiH (thousand heads and poultry in million heads, 2010–2019)



Source: ASBiH.

Organic production in BiH is still modest. According to the Ministry of Foreign Trade and Economic Relations, which collects data from all accredited houses for certification of organic production ([27]), in 2017 in BiH there were a total of 89 producers who fully certified their organic production on an area of 1 145 ha, while there were 88 ha in the conversion process. This area accounts for only 0.1 % of the total arable land or 0.05 % of the total agricultural area. Aromatic and medicinal plants make up the largest proportion of certified organic production (61 %), followed by fodder plants with 13 % and cereals and oilseeds with 8 % each (Figure 26).

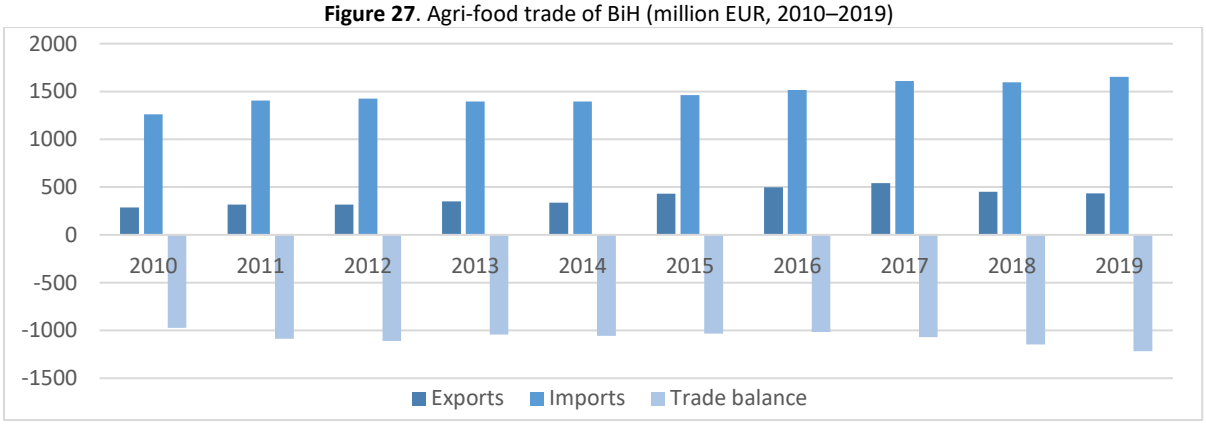
Figure 26. Structure of organic crop production in BiH (hectares, 2017)



Source: Database of the Ministry of Foreign Trade and Economic Relations of BiH.

BiH has an unfavourable trade balance in agri-food products, and BiH is a strong net importer and lacks self-sufficiency in most products. In 2017–2019, there was a negative trend of growth in the trade balance of these products as a result of a decrease in total exports (EUR 540 million in 2017, EUR 435 million in 2019) and an increase in total imports (EUR 1.6 billion in 2017 and EUR 1.7 billion in 2019) (Figure 27).

Figure 27. Agri-food trade of BiH (million EUR, 2010–2019)



Source: Chamber of Commerce of BiH.

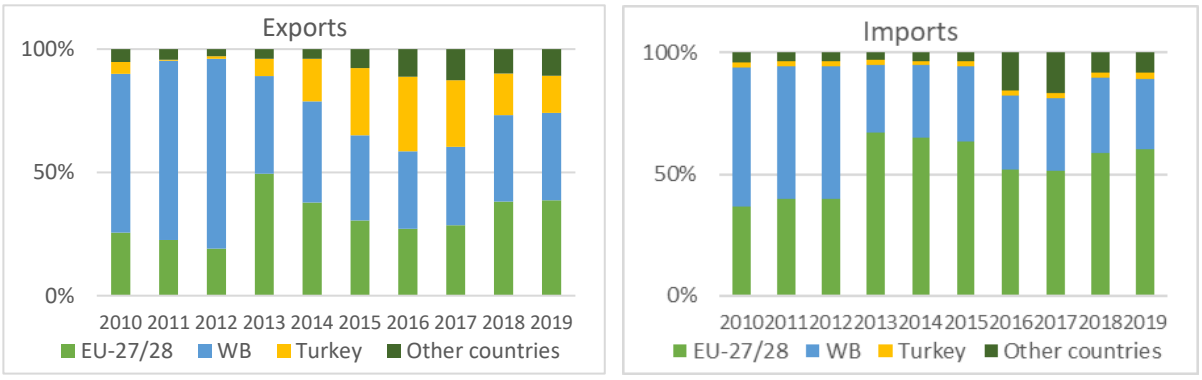
The sectors having the biggest impact on this decrease are sugars, meat, fats and oils, and milling products. On the other hand, the imports of those products (except meat) also decreased from 2017 to 2019. In 2019, total exports of agri-food products constituted 7.2 % of total BiH exports, while the total value of imports accounted for 16.3 % of total imports in BiH.

According to data for 2019, the largest proportion of imported agri-food products comes from EU countries (60.3 %), followed by the WB countries/territories (29.0 %) and other countries (8.4 %) (Figure 28).

BiH's most important trade partners in the EU are Croatia, Hungary and Slovenia and in the WB countries/territories are North Macedonia and Serbia.

([27]) A total of nine certification companies have been accredited in BiH: Agreco R. F. Göderz GmbH, Albinspekt, Bio.inspecta AG, Ecocert SA, IMOswiss AG, LACON GmbH, ORSER, Organic Control System and Organic Control. The aggregate data of organic production in BiH refer to the work/reports of two companies that work only in BiH: Organic Control from BiH and Ecocert SA from France.

Figure 28. Regional breakdown of the agri-food trade in BiH (%,, 2010–2019)



Source: Data base of Chamber of Commerce of BiH.

Regarding the exports of agri-food products, the EU (38.7 %) and the WB countries/territories (35.5 %) have equal importance, to which should be added Turkey, which accounts for 15.1 % of total BiH exports of agri-food products. In 2019, the most important export partners from the EU were Croatia and Germany and from the WB countries/territories were Montenegro and Serbia.

Institutional, legislative and public policy issues, such as environmental protection, natural resource management and energy efficiency issues, are exclusively the responsibility of the BiH entities and their relevant institutions, while at the state level these issues are covered by the work of the Ministry of Foreign Trade and Economic Relations. As a consequence, in BiH, there is no any state strategic document that regulates the issues of sustainable development or environmental protection, which are integral elements of the concept of a green economy. However, there are several documents whose purpose is to regulate these issues. Activities to achieve the sustainable development goals in BiH are ongoing and affect all elements of society, especially through the process of Euro-Atlantic integration. Thus, BiH is committed to the implementation of the millennium development goals and, as such, several documents related to sustainable development have been developed, such as that prepared following the 2002 World Summit on Sustainable Development in Johannesburg Summit or the document entitled *BiH in the Rio + Process* (2012).

Although in BiH and its entities there are a significant number of documents that are in line with the harmonisation of policy and the legislative framework with EU standards – such as standards on climate change and carbon dioxide emissions; environmental protection and waste management; land, air and water protection – the degree of harmonisation is still weak, the implementation of existing policies and regulations is insufficient and there is a lack of adaptation of mechanisms (taking into account the EU standards) for successful functioning.

One of the problems of BiH agriculture is the connecting of value chains (i.e. the purchase and processing of agricultural products). Buying products from farms in former Yugoslavia was the responsibility of agricultural cooperatives, which, although they still exist today, are, with rare exceptions, organisationally and financially unable to deal with the purchase and sale of agricultural products ([28]). The collection of agricultural products was taken over and organised directly by processors (such as for milk) or by private trading companies (such as for fruit and vegetables). The problem is that processors and traders prefer to import raw materials or final food products, thus meeting the needs of the domestic market, which is one of the main sources of the high foreign trade deficit of agricultural and food products.

3.3. Socioeconomic issues underlying rural areas

There is no official classification of rural areas in BiH and no official legal act on the basis of which to carry out the demarcation of rural areas. Therefore, statistics data are not sorted based on urban and rural areas. However, some scientists and projects are dealing with this topic and most often are using the OECD criterion on the number of inhabitants per km^2 for dividing a certain territory (state, entity, canton or municipality) into rural and urban parts.

([28]) A recent trend that has been developing is the establishment of new cooperatives with a small number of founders from the same family or a narrow circle of friends, who practically operate as partnerships, but for some reason the founders opted for the organisational form of the cooperative.

In the RoS, the first such designation was undertaken when preparing the rural development strategy of the RoS in 2010. The demarcation was then undertaken at the municipal level (which corresponds to LAU level 1 in the classification area), which found that 95 % of the territory of RoS had a population density of less than 150 inhabitants (i.e. meeting the condition to be a rural area) and that 83 % of the population lived in rural areas (Mirjanić et al., 2010). Recently, a newer classification was carried out applying a more complex methodology, stemming from the perspective that municipalities are too large as geographical areas and a that lower territorial subdivision is necessary to identify rural areas. In this case, the level of demarcation led to the lowest level of settlements (which corresponds to LAU level 2). On that occasion, it was determined that 5.4 % of the territory of the RoS was urban and 58.7 % of its total population lived in urban areas. In contrast, 94.6 % of the RoS was found to be rural, with 41.3 % of the population living in rural areas (Zubić et al., 2019). However, it should be noted that this is not an officially recognised classification, but an expert analysis based on the application of the OECD methodology, which gives the results scientific validity.

In the FBiH, there is no official demarcation of rural areas, so the only classification is within scientific publications. According to Muminović (2013), based on the OECD typology and criteria for defining rurality (municipalities with a population density of fewer than 150 inhabitants/km^2), it was determined that out of the 79 municipalities in the FBiH, 56 were considered rural. A detailed calculation determined that rural areas covered 85.1 % (22 213 km^2) of the territory of the FBiH and that 49.6 % (1.16 million inhabitants) of the total population of the FBiH lived in rural areas.

Regardless of the absence of an official division of the territory of BiH into urban and rural areas, some institutions publish certain data classified according to this criterion. For example, Goss (2012), for the rural household survey, divided the territory and population of BiH into predominantly urban (>100 inhabitants/km^2), semi-urban (50–100 inhabitants/km^2) and rural areas (<50 inhabitants/km2) based on population data before the first census in BiH, after its independence. The UNDP stated that, in BiH, 61 % of the population lives in rural municipalities and, on the basis of this division, it continues to monitor a number of indicators based on the rural–urban criteria, concluding that there are only small differences in the size of the two areas (UNDP, 2013).

Based on the own processing of the 2013 census data, taking the level of the municipality as the dominant territorial unit, it was determined that rural areas in BiH cover 91.94 % (47 010 km^2) of the country and that 67.05 % (2.33 million inhabitants) of the total population live in rural areas. The population density in rural areas of BiH is 49.5 inhabitants/km^2, which is 37 % less than the national average (68 inhabitants/km^2).

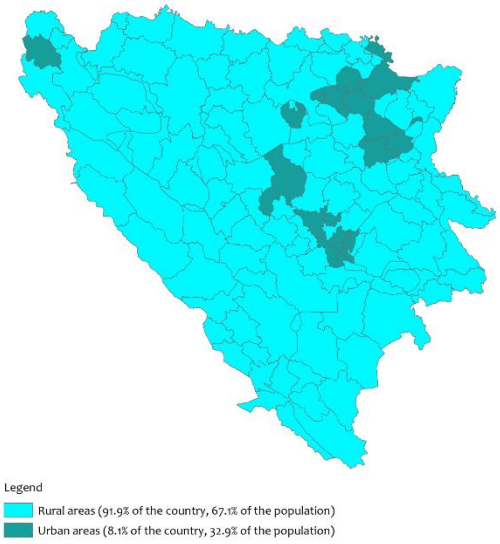
Rural areas are exposed to intensive depopulation, for many reasons. The World Economic Forum ranked BiH 140th out of 144 countries in terms of the countries with the least to most brain drain (Council of Ministers of BiH and Directorate for Economic Planning, 2019). The elderly population in rural areas is heavily dependent on remittances sent to them by younger family members. According to the World Bank, BiH has received between USD1.8 and 2.2 billion in the last decade on the basis of remittances from abroad, which in 2019 amounted to 10.9 % of its GDP (World Bank, 2019).

Unfortunately, in BiH there is no statistical monitoring of demographic trends using the urban–rural divide, given that the territory of BiH (i.e. its entities and BD BiH) has not been divided in this way. Labour force surveys provide some demographic data, but this is only general for BiH and these surveys do not allow for the consideration data only for rural areas.

Compared to the last census (2013), the total number of inhabitants in BiH is slightly declining. Over 5 years, the number of inhabitants decreased by 35 000 or 1 % (ASBiH, 2018). The number of employees in agriculture was around 18 % of the employed labour force over this period ([29]).

([29]) Based on the labour force surveys for the corresponding years.

Figure 29. Rural and urban areas of BiH at the local level



Source: Own calculations based on Population Census data published by ASBiH

The total active and non-active population is around 2.7 million people and is declining. The number of employed people is growing slightly, and the number of unemployed people is declining faster. The faster decline in unemployment is likely (although there is no exact evidence) to be the result of the more intensive migration of workers from BiH to the EU, following the liberalisation of the work permitting process. The activity rate of the total population is 42–43 %. Males are more active than females, among both the employed and the unemployed labour force. In terms of education levels, 37 % of the workforce has only a primary school education, 53 % have completed secondary school and 10 % have a higher education. Among both the employed and the unemployed population, the majority have a secondary school education (ASBiH, 2018).

3.4. National policy framework

The development of the agriculture sector and rural development in BiH in the period analysed was defined by four strategic documents: (i) the strategic plan of rural development of BiH (2018–2021) framework documen (Council of Ministries of BiH, 2018)t, (ii) the strategic plan for the development of agriculture and rural areas of RoS for 2016–2020, (iii) the medium-term strategy for the development of the agricultural sector in the FBiH for 2015–2019 (Federal Ministry of Agriculture, Water Management and Forestry, 2014) and (iv) the programme of rural development of the FBiH for 2018–2021.

The first strategic document for the agriculture sector and rural development in BiH was adopted in 2018 with a validity period of 4 years (2018–2021). The strategic plan of rural development of BiH (2018–2021) defines six strategic goals: (i) ensuring income stability and equalising business conditions with the surroundings, (ii) strengthening the competitiveness of agriculture, forestry and rural areas by increasing the level of investment and improving the transfer of knowledge and promoting innovation, (iii) improving the marketability of agri-food products by increasing their added value, improving quality and safety standards, and strengthening links within value chains, (iv) the sustainable management of natural resources and adaptation to climate change, (v) improving the quality of life in rural areas through the creation of new sources of income and the improvement of physical infrastructure, social inclusion and the accessibility of public services and (vi) improving institutional systems and capacities and harmonising the legal framework in the field of agriculture and rural development, at all levels of government in accordance with constitutional competencies, in the direction of gradual approximation to the CAP (Federal Ministry of Agriculture, Water Management and Forestry, 2018). This strategic document is mainly a synthesis of the goals from the two entity strategies that were adopted before the adoption of this strategic plan. For the realisation of the six goals, 11 measures and 66 submeasures have been defined. The adoption of this strategic plan was one of the key conditions for BiH to receive some grants for rural development from the EU pre-accession funds.

Republic of Srpska

In the RoS, the strategic plan for the development of agriculture and rural areas of the RoS for 2016–2020 (Ministry of Agriculture, Forestry and Water Management of the Republic of Srpska, 2015) was adopted in 2015. This strategic plan sets six strategic goals: (i) increasing the volume and productivity of agricultural production and ensuring the stability of the income of agricultural producers, (ii) strengthening the competitiveness of the agricultural sector by increasing the level of investment, (iii) increasing the level of marketability and finalisation of agricultural production, (iv) the sustainable management of natural resources and the mitigation of climate change, (v) balanced integrated rural development and (vi) systemic support for the development of the agricultural sector and rural areas. The six strategic objectives are further divided into 16 specific objectives and 52 measures. These objectives are intended to be realised through three policies: (i) a production support policy, (ii) a policy of restructuring agriculture and (iii) a rural development policy. Before the end of 2019, the Ministry of Agriculture, Forestry and Water Management of the RoS initiated the preparation of a new strategic document for 2021–2025. The agricultural cooperative development programme for 2019–2025 was also adopted in the period analysed.

Federation of Bosnia and Herzegovina

The FBiH has a medium-term strategy for the development of the agricultural sector in the FBiH for 2015–2019 (Fedearal Ministry of Agriculture, Water Management and Forestry, 2014) whose validity has been extended until the end of 2020 by the conclusion of the FBiH Government. This document defines a strategic framework consisting of four strategic goals and 37 measures divided into three groups that follow the three pillars of agricultural policy. The strategic goals of the FBiH's agricultural development are (i) the development of the agriculture sector and related sectors through raising the technical and technological level, more efficient use of available resources and respect for modern market requirements, (ii) providing conditions for the stronger generation of more stable income within the agricultural sector and quality improvements to life in rural areas, (iii) the sustainable management of natural resources and the adaptation of agriculture to climate change and (iv) the adaptation of the institutional legislative framework and agricultural policy to the EU CAP respecting the level of development of the agricultural sector of the FBiH. In addition, there is a FBiH rural development programme for 2018–2021. The programme was created to be compatible with the IPARD principles of the management of rural development financing in the FBiH, with the intention of demonstrating that the FBiH Government is committed to strengthening its capacity to meet the obligations in this key area in the approximation process as regards EU standards and requirements. Unfortunately, by 2020, there was no parliamentary adoption of this programme and most of the planned measures had not been implemented. The five main objectives of the programme are (i) increasing the competitiveness of agricultural products, (ii) improving the environment, (iii) strengthening the diversification of the rural economy, (iv) supporting the establishment of the LEADER approach and (v) supporting forestry. For the implementation of the programme, 10 measures and 14 submeasures are envisaged. Within the FBiH, some cantons also had agricultural development strategies and programmes.

Brčko District of Bosnia and Herzegovina

The BD BiH did not have strategic documents defining the goals of development of the agricultural sector and rural areas in the district in the period analysed (the validity of the last such document expired in 2013). The FAO, in cooperation with the Department of Agriculture of the BD BiH, developed a new strategic document in 2018, namely the strategy for the development of agriculture and rural areas of the BD BiH for 2019–2025 (FAO, 2018),, which, unfortunately, has not yet been adopted. This document defines four general objectives: (i) improving the sustainability and competitiveness of agriculture and food processing, (ii) providing support through advisory services and technology transfer to agriculture and agricultural processing, (iii) improving quality of life through social inclusion, poverty reduction and balanced economic development through investment activities and income diversification, including tourism, and (4) restoring, preserving and improving ecosystems that are dependent on agriculture and forestry.

Although all administrative levels had valid strategic documents, the institutions in charge of agricultural and rural development were largely not guided by the objectives and measures defined by these documents. Therefore, the need for and benefits of drafting such documents is called into question. The policy for financial support for agriculture did not follow the strategic commitments, neither in scope nor by structure, and many other goals were not met at all or were the target level.

3.5. Measures and budgetary support for agriculture and rural development

BiH and its entities have a clear commitment to European integration, as confirmed by the strategic documents that began the process in 2014 (FBiH) and 2015 (RoS) (Bajramović et al., 2016). These strategic documents for the development of agriculture and rural areas of both BiH entities were due to expire in 2020, so in 2019 their results and impact on the development of the sector could already be seen. The general impression is that, in both BiH entities, the necessary motivation for reform has been lacking and the steps required to approach harmonisation with the EU CAP have not been taken. There was no planned increase in total budgetary expenditures for the sector. A significant amount of the direct payments intended for producers on the basis of output was retained. There was no significant support for structural and rural development measures and there were no significant changes to general support for agriculture regarding research, advisory services or food safety issues.

The total budget for agriculture in BiH has constantly been increasing since 2014, when it was at its lowest level (EUR 67.4 million), and in 2019 it reached its highest value of EUR 86.6 million. In the budget for 2019, the largest element (EUR 74.8 million, namely 86.3 %) is made up of direct support measures to producers; rural development measures were allocated EUR 6.7 million (7.7 %) and general measures in agriculture were allocated EUR 5.2 million (6.0 %).

In the FBiH in 2017–2019, the total budget allocations (at the level of the Federal Ministry of Agriculture, Water Management and Forestry and the cantons) remained consistent at around EUR 44 million. The main feature of agricultural policy throughout the implementation period of the medium-term strategy is the exclusive support given to producers through direct payments until 2018, with a complete lack of support for rural development. Only in 2018 and 2019 was EUR 0.75 million per year allocated for rural development measures at the level of the Federal Ministry of Agriculture, Water Management and Forestry, which was far below the amounts planned by the strategy. Owing to the large debt left to the beneficiaries by the previous minister (a debt of around EUR 23 million), in addition to regular support related to current agricultural production (direct payments), gradual payments of debts from the previous period were made in 2015–2019. Thus, in 2015–2017, the total available annual budgetary support of about EUR 35 million was exclusively spent on the direct payments for the years in question and on the payment of the above-mentioned previously incurred debt. The increase in the budget for support for agriculture and rural development planned in the medium-term strategy for 2015–2019 was missing, but budget allocations were maintained at an annual rate around EUR 40 million. In that period, there was no allocation for rural development at all. Small amounts for all three pillars of agricultural policy were realised at the cantonal level.

In the RoS, the total budget allocations in 2018 and 2019, with the value of about EUR 36 million, increased slightly compared with the previous period, when they averaged EUR 30 million. Direct support measures for producers were the most prevalent support measure in this entity (making up about 80 % of the budget), but, unlike the FBiH, the allocations for second pillar measures were higher, which in 2018 and 2019 made up about 7–10 % of the total budget. Like in the FBiH, the strategy lacked significant support for development in this entity. For other measures related to agriculture, EUR 3.8–4.6 million was allocated annually, making up about 13 % of the total budget allocations.

In the BD BiH, there was a significant increase in total budget allocations, from EUR 1.8 million in 2014 to EUR 7.1 million in 2019. The support structure was maintained, with direct support to producers the predominant measure and rural development measures allocated 9–14 % of the budget. There were no other types of support for the agricultural sector in this BiH administrative unit.

Direct producer support measures

3.5.1.1. Federation of Bosnia and Herzegovina

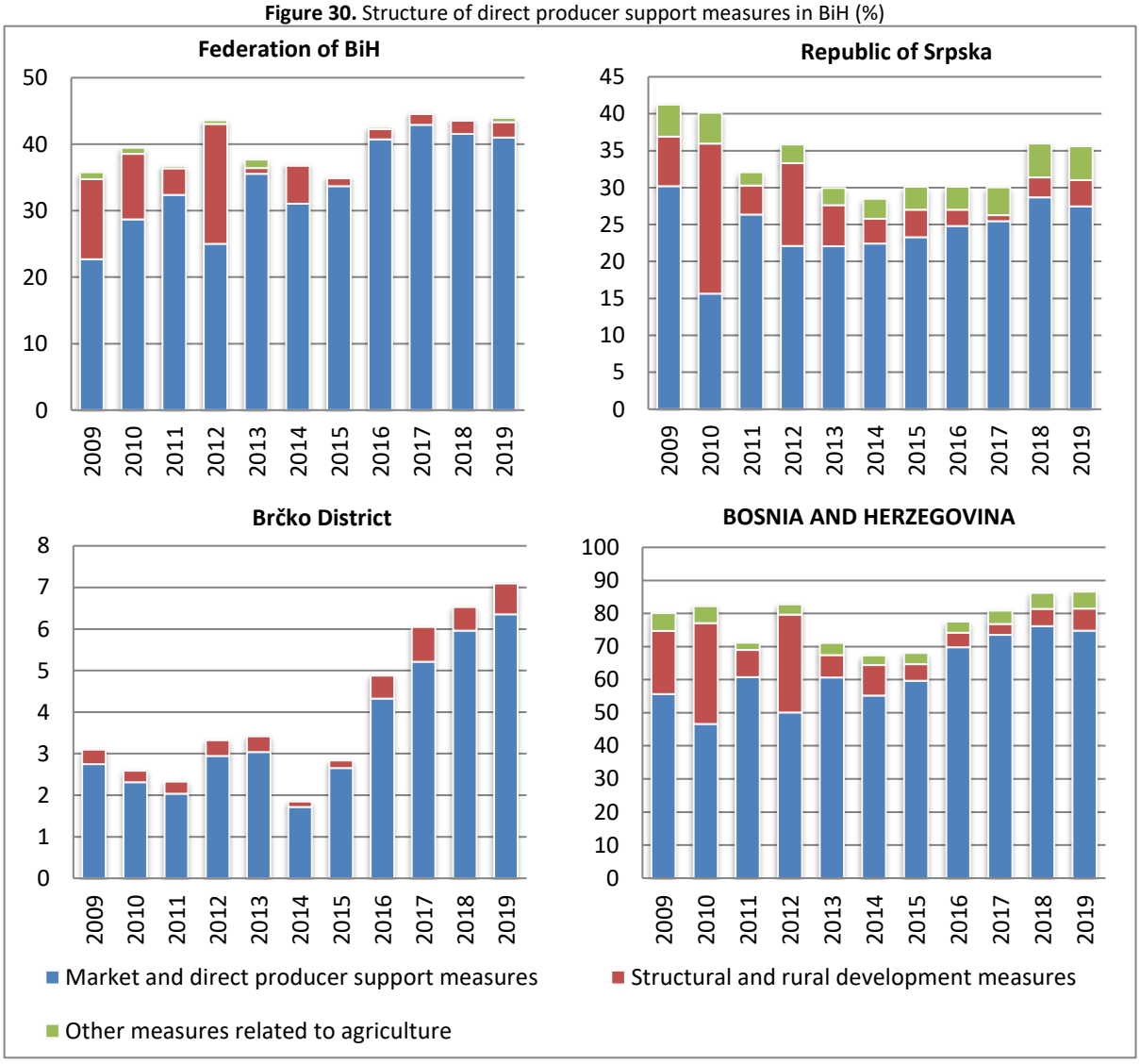
Direct producer support measures were the most significant budget support measures, which were maintained at the level of EUR 41–43 million, in 2017–2019 (Figure 30). Most of the direct payments were based on output (59.6 % in 2018, 50.9 % in 2019), with the payment of the largest part of this support going to milk producers (per litre of purchased milk). A smaller part of this direct support was based on payments per hectare or head in terms of the value of measures. Namely, in 2019, except for payments for milk (per litre) and payments for planting material (per piece), all other direct payments were per hectare or head. In 2018 and 2019, the payment scheme was maintained with equal amounts of support and uniform award criteria. The largest amount of

support was given to milk producers, which in 2019 amount to EUR 23.2 million, making up more than half (52.6 %) of the total direct support given to producers.

3.5.1.2. Republic of Srpska

Direct producer support measures are the most important support measures of agricultural policy in this BiH entity. In 2017–2019, these measures ranged from EUR 25.5 to 28.6 million (Figure 30), with almost two thirds paid based on output (66.3 % in 2019, 65.2 % in 2017). In addition to milk, the direct payment schemes based on output also included the production of fruits and vegetables and the production of seed/seedling material. A significant difference between the RoS makes and the FBiH is the support for variable inputs that the former gave in 2017–2019, which amounted to between EUR 2.3 and 4.0 million, namely 8.5–14.8 % of the total direct support to producers.

Figure 30. Structure of direct producer support measures in BiH (%)



Source: BA APMC database (2020).

Compared with 2018, in 2019, new direct support measures for producers were introduced in the form of premiums related to the production of buckwheat, aromatic and medicinal plants, seed material and tobacco and input subsidies for domestic hybrid maize seeds. In 2019, compared with 2018, the total support for milk producers decreased, but this type of support remained the most dominant among all direct support measures (amounting to EUR 14.7 million, namely 41.3 % of total budget support).

3.5.1.3. Brčko District of Bosnia and Herzegovina

In this BiH administrative unit, the most dominant group of measures are direct payments per hectare or head (there are no direct payments based on output). A large number of plant and animal producers are supported and payment schemes have remained mostly the same in the last 3 to 4 years. The positive aspect of support in this region is the continuity of growth since 2014. In 2019, a new measure of support was introduced, namely support for fish production was introduced as a continuation of support in 2018 for, for the first time, the procurement of juvenile fish.

Structural and rural development measures

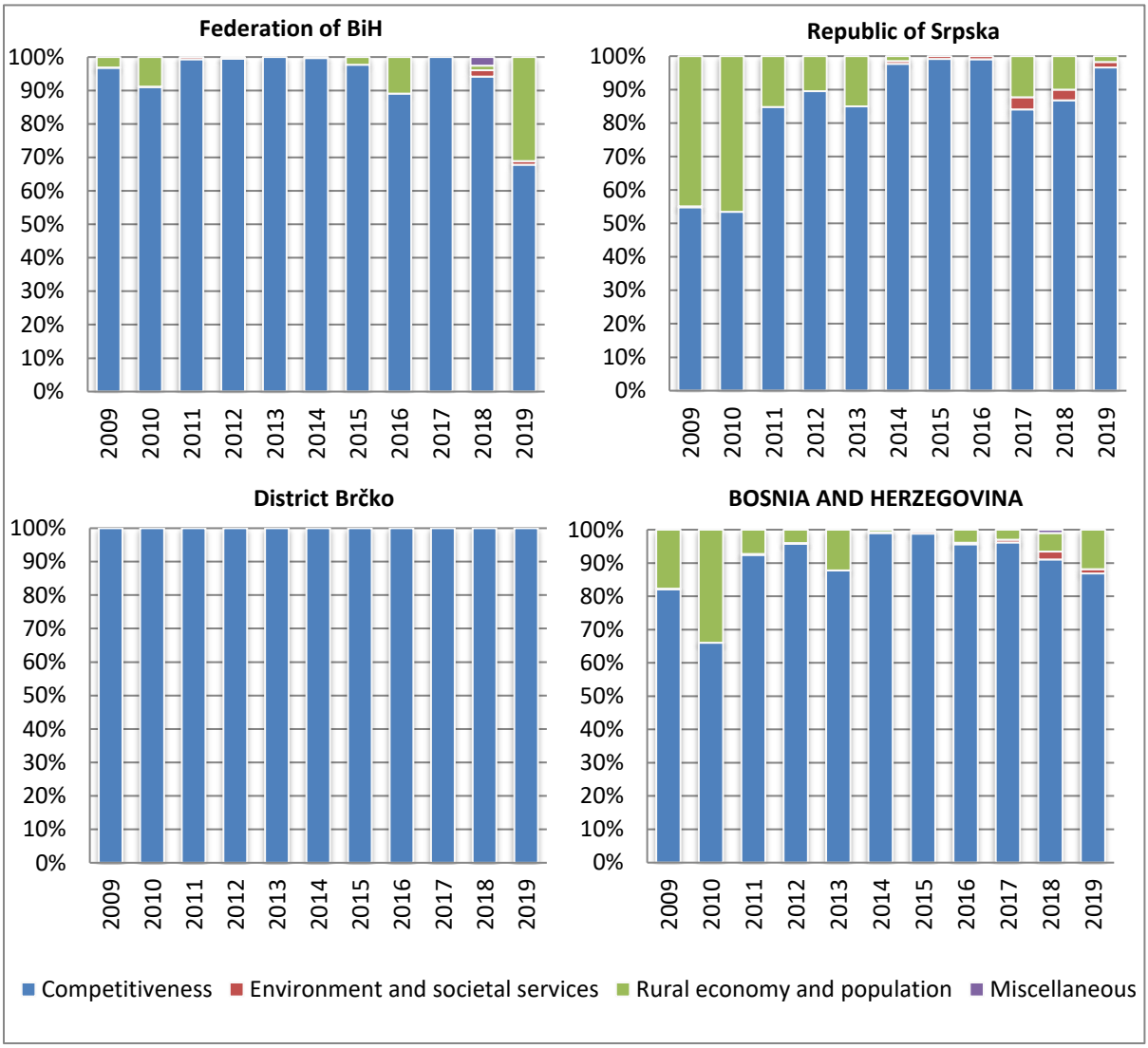
3.5.1.4. Federation of Bosnia and Herzegovina

One of the biggest weaknesses in the implementation of the strategic (programme) document for the development of the agricultural sector in 2015–2019 was the absolute imbalance between planned and implemented measures to support rural development. Namely, there was almost no budget support for the second pillar and for rural development measures from the Federal Ministry of Agriculture, Water Management and Forestry in the entire implementation period; from 2014 to 2017, this pillar had no budgetary support and, in 2018 and 2019, the support was modest, amounting to EUR 0.75 million (Figure 31). In the strategy, it is planned that, in 2019, the budgetary support ratio of direct payment measures and structural and rural development measures would be 55 %:45 %, with a budget of about EUR 70 million. Instead, the ratio that year was 95 %:5 %, with a budget of EUR 44 million. This is certainly a part of the agricultural policy that will have to change in the next cycle in 2021–2027. A smaller amount of support for rural development is coming from the federal level than from the cantonal level (EUR 2.3 million in 2019). Budgetary transfers mainly aim to improve competitiveness and support investments on farms (for the procurement of machinery, the procurement of basic livestock and equipment for establishing plantations), whereas support is lacking for environmental measures and measures to improve the rural economy.

3.5.1.5. Republic of Srpska

Compared with 2017, when the budget support for rural development amounted to only EUR 0.8 million, the budget increased significantly in the following 2 years to EUR 2.7 million in 2018 and EUR 3.6 million in 2019. Nevertheless, this increase is far from the strategically set goals when it comes to the second pillar of agricultural policy. As in the FBiH, structural and rural development measures are strategically recognised as the most important development measures, and the budget structure at the end of the strategy's implementation is planned to have a 60:40 ratio between direct support measures and rural development measures.

Figure 31. Proportion of structural and rural development measures in BiH (%)



Source: BA APMC database (2020).

The analysis of the budget from 2019 shows that a ratio of 88:12 was reached and that it will take a long time to reach the planned goal. In 2019, there was a wide range of measures that were within the framework of rural development, with the largest proportion being so-called capital investment measures, namely measures to increase competitiveness (e.g. the procurement of machinery, establishing basic herds and raising orchards). Environmental measures are very modest and relate to support for organic production, while measures to improve the rural economy have make up a slightly larger proportion, consisting primarily of measures to improve infrastructure, especially in 2017.

3.5.1.6. Brčko District of Bosnia and Herzegovina

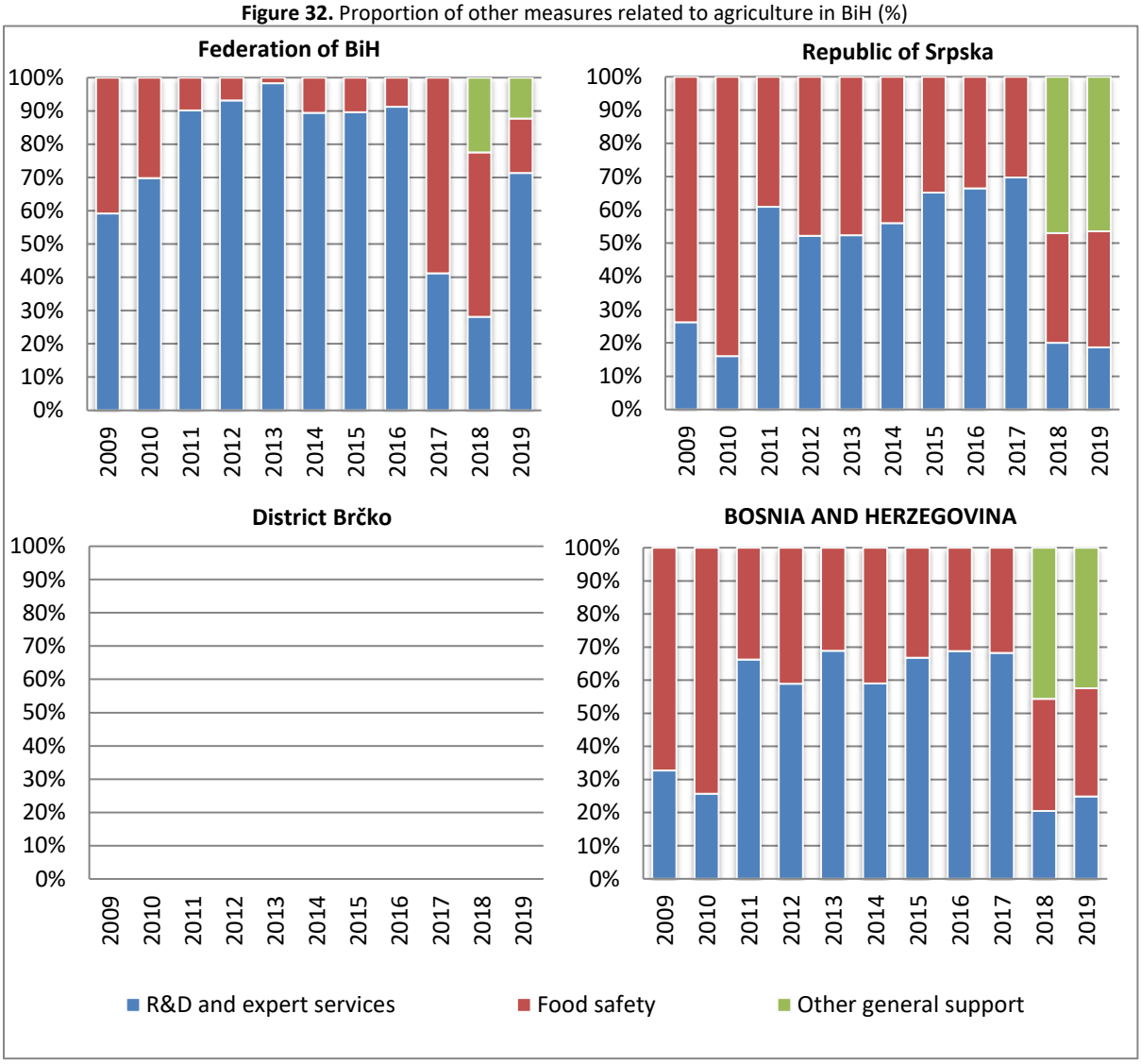
Structural and rural development measures have a very modest budget, which in 2017–2019 was EUR 0.7 million per year. This measures aim to improve competitiveness (e.g. investments in mechanisation and other equipment, irrigation systems and raising new orchards).

Third pillar measures and general measures in agriculture are completely neglected in the BD BiH, and in the FBiH this type of support is very modest and ranges from EUR 0.2 to 0.6 million. In the RoS, support for general agricultural measures in 2018 and 2019 amounted to EUR 4.6 million and accounted for almost 13 % of the total budget allocated to the agricultural sector (Figure 32).

The main conclusion regarding the analysis of the structure of measures and budget support to the agricultural sector at the level of both BiH entities is unequal support in favour of direct payments, insufficient understanding

of the importance of rural development measures and structural measures among decision-makers, unwillingness for more serious reforms. In both BiH entities direct payments based on output are dominated which significantly distances it from the approaching CAP. Finally, the implementation of the Strategy so far has shown non-compliance with the set goals.

Figure 32. Proportion of other measures related to agriculture in BiH (%)



Source: BA APMC database (2020).

3.6. EU approximation process

In 2008, BiH signed a stabilisation and association agreement with the EU, which entered into force in 2015. In 2016, BiH officially applied for EU membership. In 2018, BiH submitted answers to the European Commission's questionnaire and, in 2019, answers to additional questions. Chapter 11 referred to 42 (+18 additional) questions, Chapter 12 referred to 44 (+18 additional) questions and Chapter 13 referred to 72 (+13 additional) questions, and the answers were given in a 1 000-page document. Currently, BiH has the status of a potential candidate for EU membership.

BiH has received financial assistance from the EU since the end of the War (1992-1995), first for renewal and reconstruction, and later for the construction and improvement of infrastructure and the business and institutional environment within the IPA programme. BiH receives significant EU assistance for capacity building in agriculture, rural development, food security, veterinary medicine and phytosanitary protection. Regarding direct pre-accession assistance for agriculture and rural development (through the IPARD), this priority sector was not covered by financial assistance from the IPA II programme in 2014–2020 owing to non-fulfilment of political and technical conditions. The political condition in question was the adoption of the strategic plan for

rural development of BiH (Council of Ministries of BiH, 2018) which was adopted in 2018, and the technical conditions were the establishment of the IPARD institutional structure and the improvement of administrative capacities for the payment and control of the expenditure of allocated funds. Regarding the establishment of a unified administrative structure and agencies for the implementation of IPARD measures, there were differing views between the two entities and, therefore, the establishment of this structure was delayed. In 2018–2020, the EU made available to BiH certain funds for rural development. These funds are not allocated through BiH institutions owing to a lack of accredited bodies; instead, they are allocated through international organisations according to criteria similar to those applicable to the IPARD.

One element of the financial assistance for the agri-food sector and rural development was realised through the project 'Competitiveness and Innovation: Local development strategies – EU4business', which is jointly implemented in BiH by the UNDP, GIZ and the International Labour Organization (ILO) through public calls within Grant Fund Facility (GFF). This project had EUR 10 million at its disposal in 2018–2019 for four areas, two of which were intended for farmers, companies and cooperatives. Project activities related to the agricultural sector, the food industry and rural development are implemented by the UNDP. Projects focusing on 21 agricultural producers and processors, worth EUR 4.4 million, were selected for co-financing, with a total of EUR 2.1 million grants given out during 2019. For each project, applicants had to provide a minimum of 40 % of their own financial contribution, and grants from the GFF could amount to a maximum of 60 %. This project was important in terms of providing an opportunity for learning and adjusting to the procedures that would be applied if the IPARD mechanism were activated, rather than in terms of the amount of the EU grant, which was more modest than was originally announced.

Owing to the non-compliance with the EU preconditions for the implementation of the IPARD programme and the EU's lack of understanding of the complex institutional and political situation, BiH is also likely to lose its right to the use the IPARD pre-accession funds in the next programming period (2021–2027). In the European Commission's analytical report for BiH for 2019 (European Commission, 2020), it stated that BiH needs to (i) ensure that the 2008 law on agriculture and the acceleration of *acquis* alignment is properly implemented; (ii) adopt other state-level laws in the sector, such as on wine and organic production; (iii) put in place the harmonised rural development programmes at the different levels of government in the country; (iv) establish the administrative structures required for the CAP, including establishing a paying agency, an IACS and a LPIS; (v) establish an FADN; (vi) harmonise country-wide direct payments and gradually align these with EU requirements by decoupling direct aid payments from production; (vii) fully align its legislation in this field with the *acquis* and strengthen administrative capacity at all levels; (viii) improve and harmonise state-level regulation of the protection of designations of origin, geographical identifications and traditional names to ensure a clearer distribution of competences between different institutions; (ix) harmonise the regulatory frameworks on organic farming across different levels of government; (x) step up efforts to ensure sustainable resources for animal disease controls measures in the long run; (xi) improve the animal identification, registration and, in particular, movement control systems, including the central database; (xii) align with the *acquis* and make relevant amendments to the state-level law on food (from 2004), the law on veterinary medicine (from 2002) and the law on agriculture, food and rural development (from 2008); (xiii) align with the *acquis* the work of official phytosanitary diagnostic laboratories and official controls of imports; (xiv) harmonise genetically modified organism (GMO) legislation across the country and improve its institutional arrangements to avoid an overlap of competences and to strengthen its control and coordination chain; and (xv) adopt a country-wide strategy on fisheries and aquaculture, in view of aligning the legislation with the *acquis*, and harmonise the methodology for data collection for fish and fishery products across the country and establish relevant statistics.

Some progress is being made in approaching the *acquis* and in the harmonisation with the EU monitoring and control systems, such as in the phytosanitary and veterinary sector, thanks to a combination of efforts of domestic institutions and technical and financial assistance from the EU. However, among those with a good knowledge of the situation in BiH, fulfilling the above 15 recommendations seems like an impossible mission. Therefore, the following concluding statement from the European Commission report (2019) will remain relevant to the EU accession situation for the foreseeable future, especially since most of the recommendations had already been made in earlier EU reports in this area:

Bosnia and Herzegovina is at an early stage of preparation in the area of agriculture and rural development and fishery and in some level of preparation in the area of food safety, veterinary and phytosanitary policy.

This is confirmed by the EU opinion on BiH's application for EU membership (European Commission, 2019), which states that:

Bosnia and Herzegovina does not have any policy areas where the country has a good level of preparation or is well advanced regarding its capacity to undertake the obligations stemming from EU membership.

The BiH's position in relation to the EU means that, for years, BiH will finance the development of agriculture and rural areas mainly from its own modest sources, which will certainly slow down the restructuring and modernisation of the sector, but BiH will have some freedom to create and lead its own agricultural and rural development policy. Nevertheless, it is important not to make major deviations from the current and future EU CAP.

3.7. Discussion, conclusions and recommendations

Unlike earlier, in period 2017–2019 the state and both of its entities had strategic documents for the development of agricultural and rural areas, combined into one (RoS) or as two separate documents (FBiH),. For the first time, there are strategic documents at the level of BiH as a state. Analytical activities for the preparation of new strategic documents have already started and it is realistic to expect that time gaps without valid strategic documents will not appear. Analyses of the implementation of current strategic documents are not done regularly, as part of public policy; instead they are done superficially and not systematically. It is recommended that analytical capacities be improved at all administrative levels and that publicly available monitoring and evaluation reports be prepared and published on a regular basis.

BiH has no official division of territories into urban and rural areas. It is recommended that a legal basis be adopted and that the demarcation of the total territory of BiH into urban and rural parts be carried out, in accordance with the methodology applied by the EU (Eurostat) or the OECD. Thus, the available data in the future could be classified according to the urban–rural divide, which will enable better targeting and greater sensitivity of rural policy measures, including in potential IPARD funds.

Total budget support for the agricultural sector and rural areas in BiH and its administrative units, although with a slight growth trend, is still low (EUR 87 million in 2019). The expected growth, as defined by the strategy, did not occur. Budget support in both of the BiH entities is mainly concentrated on first pillar policy measures and direct support for producers, whereas support for structural and rural development measures lags significantly behind. An approach being taken by decision-makers in both of the BiH entities is to focus on general agricultural measures and provide modest allocations for research and development, advisory services and food security.

Direct payments for producers are still divided into those based on output and those based on hectares or heads. Payments based on kilograms/litres make up a larger proportion, which still puts BiH's agricultural policy at a significant distance from the CAP. In the FBiH, the payments are given only to producers of milk and planting material, whereas in the RoS the number of producers given such support is much higher and includes those for fruits and vegetables, in addition to milk. Nevertheless, milk is still the agricultural product most supported by the budget in both the FBiH and the RoS.

In the next policy cycle, from 2021, BiH must clearly define the mechanisms and instruments for the implementation of defined strategic objectives and related budget allocations. In that period, more political and other commitments are needed to implement the reform processes accepted in the valid strategic documents, wherein one of the key objectives should be to move closer to the CAP.

Rural development and support for rural areas is very low. In the FBiH, it was completely absent at the Federal Ministry of Agriculture, Water Management and Forestry level until 2018 and, in 2018 and 2019, its budget allocation was quite modest at EUR 0.75 million. There are also insufficient funds in the RoS. Decision-makers in both of the BiH entities must recognise the importance of rural development measures (which are the only real development measures in agricultural policy) as soon as possible and start implementing the goals set out in the current strategic documents, according to which the FBiH budget ratios for direct payments and rural development should be 55:45 and in the RoS should be 60:40.

The lack of political will does not allow BiH to withdraw IPARD funds. Instead, BiH uses the EU4Agri programme to implement rural development measures such as those from the IPARD (investments in agricultural and food industry, etc.). BiH must find a way to be part of the new IPA III programme, in which there will be a significant possibility of BiH farmers and the rural population receiving financial support.

Productivity in the production of many basic agricultural products, measured by yield per unit area, in BiH is lower than in most countries/territories in the region. The level of yields is greatly influenced by climatic factors, so that natural disasters such as drought, hail, floods or excessive rainfall reduce the yield and volume of

production, which then affects the GDP of agriculture. Owing to climate change, such adverse events are becoming more frequent. Since most farms are engaged in production in a semi-intensive way, their ability to prevent adverse events is small. BiH must force climate change-resilient technology and expand agricultural insurance coverage.

BiH is a potential candidate for EU accession. BiH responded to the basic and additional questions in the EU questionnaire. The analytical report of the European Commission for BiH for 2019 lists 15 tasks that BiH should fulfil under Chapters 11–13. Some activities are being undertaken in this regard, but progress is slow and it is likely to take years to achieve the desired outcome. It is recommended that, in all areas of agricultural and rural policy, if there is real interest in joining the EU, BiH should take actions that ensure a greater degree of compatibility with the CAP and other EU policies and avoid those that are contradictory to these policies.

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4. CASE STUDY: KOSOVO*

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4.1. Introduction

EU integration has been among the key priorities for Kosovo* for several years now. The SAA, signed in October 2015, is an important element in the process towards EU accession. The agreement entered into force in April 2016, thus marking a significant new phase for Kosovo* and providing new opportunities for closer economic relations with the EU countries.

Invaluable experience was gained through the implementation of the agriculture and rural development plan (ARDP) for 2007–2013, and this fed in to the implementation of Kosovo*'s rural development plan for 2014–2020. The SAA is aligned with the new strategic direction of the EU rural development policy. The IPA II strategic priorities served as a guideline for the objectives set out in the ARDP for 2014–2020, but the ARDP also focused on ensuring that the country/territory's strategic development objectives completely matched the needs of Kosovo*'s current agri-food sector, rural areas and forestry sector.

To date, Kosovo* has made progress in agricultural-related spheres, including in the process of development of national agricultural strategies, the registration of farms and statistics, the establishment of control mechanisms or work towards grant schemes. Even though the development of the agricultural sector and the harmonisation of national policies was supported by the EU through the IPA for 2014–2020 and Technical Assistance and Information Exchange (TAIEX) assistance, Kosovo* still faces significant challenges in these processes. This is especially the case when it comes to meeting the targets previously set by the CAP, developing a standard operation procedure for data collection and analysis, increasing the proportion of budgetary support for the improvement of rural infrastructure, developing an effective trade strategy, providing advisory services, improving network, communication and monitoring processes, and improving capacity building and knowledge transfer.

Among others, Kosovo* benefits greatly from its agriculture sector in terms of the employment opportunities and income generated. The Kosovo* Agency of Statistics (KAS) has shown that, in 2019, the agricultural sector contributed 15.3 % of total GVA and 20.85 % of total export value.

Developing the agricultural sector in Kosovo* is a key factor in improving the trade balance and would contribute significantly to increasing the employment rate, increasing food security and improving environmental protection in general.

This chapter aims to describe the current situation and the recent development of Kosovo*'s agricultural policy, with a special focus on the budgetary support for this policy development, and includes an assessment of the agriculture sector. KAS and the Department of Economic Analysis and Agricultural Statistics within the Ministry of Agriculture, Forestry and Rural Development (MAFRD) served as the main sources of data for this chapter, and a standard APM template enabled a comparison of agricultural budgetary transfers.

4.2. State of the agri-food sector

This section gives an overview of Kosovo*'s agri-food sector and describes the outlook for future developments in agricultural markets in Kosovo*, focusing on the main agricultural commodities. Kosovo* has huge agricultural potential owing to its rich natural resources (soil, climate and water) and key geographical position in the WBs. The role of agriculture in Kosovo*'s economy is quite considerable. Compared with the EU average (14.4%) from the same year (2017), Kosovo*'s gender pay gap is 9.8 % (EurostatEurostatKosovo* Agency for Gender Equality, 2020).Eurostat The balance of trade in agricultural products in Kosovo* is extremely negative.

The economic growth in 2019 was 3.9 %, with the agricultural sector making a significant contribution. The proportion of GVA contributed by the agriculture, forestry, hunting and fishery sector varied from 13 % in 2016 to 15.3 % in 2019 (Table 16). The situation in the agri-food sector in Kosovo* improved in 2016–2019; however, the quality standards for food production still require more attention. In particular, enhancing capacity building and preparing training curricula for the agri-food sector that are attractive to farmers, including the use of smart technology, are needed.

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In 2019, agricultural enterprises produced about 441.8 tonnes of grain and 68.8 tonnes of potatoes in Kosovo*. On the other hand, Kosovo*'s household farms produced about 190.1 tonnes of vegetables and 53.6 tonnes of fruit. Local production of livestock is mainly on a very small scale. The data show that Kosovo* remains a strong net importer of agri-food products (39.7 % from the EU-27/-28, 33 % from the WBs, 7.5 % from Turkey and 19.8 % from other countries). The main products imported are tobacco, beverages, meat, cereals, dairy produce, eggs and honey. The agri-food enterprises operating in Kosovo* are relatively small, and raw materials and final products, especially for meat processing and the production industry, are to a large extent imported. Currently, in Kosovo*, there are around 12 meat processing companies that together process approximately 3 000 tonnes of locally produced meat annually. On the other hand, there are about six relatively large meat processors supplying around 15–20 % of Kosovo*'s domestic market (SEEIM, 2019). Local milk production from agriculture enterprises in Kosovo* is estimated to produce 240 000 to 260 000 tonnes, of which 10–15 % of is supplied to dairies. There was also a rise in the export of agriculture products in Kosovo* in 2019. The majority of exports are to the WBs (51.5 %), followed by exports to the EU-27/-28 (32.1 %), Turkey (1.6 %) and other countries (16.3 %). Therefore, the trade balance is significant and growing (–694.4 million in 2019, an increase from –633.1 million in 2017). The GVA of the agriculture, forestry, hunting and fishery sector and trade in food and agricultural products ranged from EUR 586.1 million in 2017 to EUR 1 103.8 million in 2019). The export/import rate was 8.8 % in 2017, while in 2019 it was 8.6 %. Table 16 gives a detailed breakdown of key statistical figures.

Table 16. Key agricultural statistics of Kosovo* (2010–2019)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GVA of the agriculture, forestry, hunting and fishery sector										
GVA (at current prices, million EUR)	598.8	614.3	617.6	638.7	661.8	599.6	635.0	586.1	482.0	542.2
Proportion out of all activities (% of GVA)	16.2	15.6	14.8	14.4	14.3	12.6	13.0	11.4	8.9	9.5
Trade in food and agricultural products										
Exports of agri-food products (million EUR)	24.7	26.2	20.6	34.9	39.4	41.7	45.3	61.3	64.0	65.0
Proportion out of exports of all products (%)	8.3	8.2	7.5	11.9	12.1	12.8	14.6	16.2	17.40	20.85
Imports of agri-food products (million EUR)	482.8	561.4	572.7	583.7	616.1	633.7	658.8	694.5	712.3	759.4
Proportion out of imports of all products (%)	22.4	22.5	22.8	23.8	24.3	24.1	23.7	22.8	21.28	21.72
Trade balance in agri-food products (million EUR)	–458.1	–535.2	–552.1	–548.8	–576.7	–592.0	–613.5	–633.1	–648.4	–694.4
Export/import rate (%)	5.1	4.7	3.6	6.0	6.4	6.6	6.9	8.8	9.0	8.6

Source: XK StatDatabase (2020).

According to the data, the total utilised area of agricultural land was 416 ha, most of which was meadows and pastures (including common land; 218 ha (51.9 %)), while arable land was 188.4 ha (44.8 %), which includes open field vegetables and greenhouse vegetables. Arable land use in 2019 was quite similar to that of 2018, with a slight decrease from 188.2 ha in 2017. Based on the agriculture holding survey for 2018, farms are classified into four main categories: (i) very small farms of less than 1 ha constitute 9.9 % of farms and make up a total of 18 519 ha; (ii) farms with a size ranging from 1 ha to less than 5 ha make up 50.9 % of farms and represent about 95 138 ha; (iii) farms with a size ranging from 5 ha to less than 20 ha represent 29.7 % of farms and a total area of 55 432 ha; and (iv) farms of 20 ha or more constitute 9.5 % of farms and cover 17 918 ha.

The Kosovo*'s economic accounts for agriculture include the data up to the end of 2018, including data on production structure and primary income, output, intermediate consumption, gross and net value added and other taxes and subsidies. During the reporting period, the data for 2019 were not published. Total agricultural outputs decreased from EUR 736.7 million in 2016 to EUR 691.4 million in 2018, whereas, in parallel, agricultural increased, with a total intermediate consumption of EUR 303.0 million in 2018 compared with EUR 256.9 million in 2016. Agricultural income also fluctuated within the period analysed, with a decrease in the total output of basic prices and in GVA and net value in the last year.

4.3. Socioeconomic issues underlying rural areas

The most frequently used approach to define rural areas is the OECD's methodology, according to which an area is considered rural if its population density is less than 150 inhabitants/km^2, while a community is considered urban if its population density is above 150 inhabitants/km^2. This method is not particularly relevant to Kosovo* because the population density is 166 persons/km^2.

The definition of rural areas used by KAS for the Kosovo* population and housing census for 2011 was based on settlement level, with rural areas characterised by a low population density and having much of the land devoted to agriculture in comparison with surrounding areas (KAS, 2011).

Table 17. Labour force structure

Factor	Figure
Population aged 15 years and over	1 252 248
Population economically active	508 100
Economically active population aged 15 years and over (%)	40.6
Women among the economically active population (%)	29.1
Number of people employed	280 454
Employed population aged 15 years and over (%)	22.45
Women among employed population aged 15 years and over (%)	5.2
People employed in agriculture (%)	4.4
Women employed in agriculture (%)	0.2
People employed in the industrial sector (%)	15.3
Women employed in the industrial sector (%)	1.8
People employed in other activities (%)	42.7
Women employed in other activities (%)	21.4
Number of people unemployed	227 646
People unemployed in the economically active population (%)	44.8
Women among the unemployed population (%)	36.0

Source: KAS, Kosovo* population and housing census for 2011.

In the Kosovo* census of 2011, a settlement was defined as rural by an individual administrative decision of the municipality. Using this delimitation by KAS, 1 028 963 ha (94.3 %) were determined to be rural areas, with 62.0 % of the population living there. For the ARDP for 2014–2020, the population of the settlements was used to define rural areas to reflect the existing situation in Kosovo* from a socioeconomic perspective and at the same time to use an approach that was in line with the current administrative situation.

Kosovo* falls into the category of lower-middle-income countries/territories and has experienced solid economic growth performance in recent years. However, the economic situation is challenging. Unemployment is still very high and the reliance on remittances and direct or indirect support from donors has declined but still remains significant for Kosovo*.

Economic growth has been mainly driven by domestic demand, with strong increases in government consumption and investments. Exports of goods and services have also increased, but still cover only about one third of total imports. According to the 2012 census, the economically active population (aged 15 years and over) is less than 50 % of the total population, while the unemployment rate is as high as 44.8 % (Table 17).

According to the labour force survey conducted in 2012, an average of 35.1 % of adults aged between 15 and 64 years were unemployed; in urban areas, the unemployment rate was 28.5 % while, in rural areas, it rose to 40.1 % (Table 17). When broken down by gender, this rate is significantly higher for women (44.4 %) than for men (32 %). The highest unemployment rate is reported among young people (aged 15 to 24 years), namely 60.2 %. According to expert estimates, about 80 % of all unemployed people have been without a job for more than a year, revealing deep structural challenges (KAS, 2012). The main challenge in terms of Kosovo*'s economy is not only

low levels of employment but also very low productivity. The statistics show that about 60 % of job seekers are considered unskilled and the overall skills level is very low. Thus, public service salaries remain the most important source of income in Kosovo* and are the main source for almost a quarter of all households (Table 18). The second most important source is wages from the private sector and business, followed by money sent from abroad (remittances).

Table 18. Main sources of household income in Kosovo* (%)

Source of income	2011	2017
Salaries and wages from the public sector	25	23
Salaries and wages from the private sector	22	23
Other household businesses	12	15
Money sent from abroad (remittances)	9	10
Income from temporary activities	9	9
Pensions	8	8
Agriculture	7	5
Social benefits – first category	4	4
Other	2	2
Social benefits – second category	2	1
Total	100	100

Source: KAS, results of household budget survey for 2017.

4.4. National policy framework

The MAFRD bases its work on the following main policy documents: the national development strategy for 2016–2021, the ARDP for 2014–2020, the medium term expenditure framework for 2020–2021 (Ministry of Finance, 2018) and the economic reform programme (ERP) for 2019–2021 (Ministry of Finance, 2019). The MAFRD also follows other strategies, such as strategy for climate change for 2019–2028, the strategy for local economic development for 2019–2023, the strategy and action plan for biodiversity conservation for 2011–2020, the Kosovo* IT strategy, etc.

The national development strategy for 2016–2021 sets out concrete actions for the implementation of each pillar related to strategic planning, financial aid prioritisation, capacity building, progress monitoring, and creating a fund for development and employment. The strategy discusses potential future opportunities for more sustainable energy production, reducing energy consumption through efficiency measures, sustainable waste management, agriculture, etc. The main objectives of this strategy are to enhance farm viability and competitiveness; to restore, preserve and enhance ecosystems; and to promote social and economic inclusion and the transfer of knowledge and innovation.

The ARDP for 2014–2020 was based on the national development strategy and its priorities. The ARDP addressed three key EU rural development policy axes, namely agricultural sector competitiveness, sustainable management of natural resources and climate actions, and balanced territorial development of rural areas. It also addressed the competitiveness of the agri-food sector in alignment with EU veterinary, phytosanitary, food safety and environmental standards and the restructuring and modernisation of the sector and how this would contribute to the development of sustainable land management practices by supporting organic farming and other agri-environmental practices, sustainable forest management and forestation. This long-term programme continues to contribute to sustainable rural development by supporting the diversification of economic activities and strengthening the approach to capacity building and knowledge transfer.

The new ARDP is planned for 2021–2027. The programme will focus on investments in physical assets of agricultural holdings, processing and marketing of agricultural products (by supporting 650 projects), supporting environment and climate change and producers' organisations, and enhancing investments, capacity building and knowledge transfer among rural inhabitants. The new ARDP will continue to provide support for improving the environmental performance of the agri-food sector, as this is one of the strategic objectives of the IPA, as well as improving measures for sustainable land and forest management and the development of organic

farming. By placing more emphasis on agri-environmental measures, the new programme should help build farmers' capacity and develop the sector even further in terms of (i) drafting and implementing local development strategies to promote rural development through local initiatives and partnerships; (ii) increasing the skills of farmers relating to the management of economically viable farms, including farm accountancy skills, financial planning and market orientation; and (iii) knowledge transfer on the application of modern agricultural production, forest management and aquaculture, new technology and practices compatible with the relevant EU standards (environmental standards, including proper resource management, hygiene and quality standards, and animal welfare standards, as applicable).

Another important strategy that reflects the efficiency of the development of the agriculture sector is the strategy for climate change for 2019–2028. This publication of this strategy was the initial step in the policy management process for the mitigation of greenhouse gases and adaptation to climate change for the next 10 years. The strategy includes mitigation and adaptation measures to stimulate sustainable development, and focuses on an interdisciplinary integrated approach that aims to find a balance between economic developments, environmental protection and land use.

The strategy for local economic development for 2019–2023 sets out how the vision for municipalities should be implemented, namely through efficient governance, quality education, a clean environment, efficient agriculture, and improved health and social welfare. Thus, half of the total budget under Kosovo*'s ERP is designated by the government for subsidies and grants to ensure that the reform measures are applicable to the development of the agriculture sector (Ministry of Finance, 2019). Similarly, government support continued in 2019, mainly for investment projects (measures under the second pillar). Through the planned reforms in the ERP for 2019–2021, huge progress was made regarding the improvement of agricultural infrastructure for agri-businesses by showing a commitment to supporting farmers with the increase of irrigation system coverage (40 % of arable land), increasing the number of laboratory units, enhancing the agricultural wholesale market and launching the integrated agricultural information system. During the period analysed, EUR 2.1 million was been designated by the MAFRD for irrigation projects for the public sector, and EUR 1 million was allocated from the 2018 rural development programme to private farms. The effective application of these measures is quite challenging, as it requires more financial resources than have been distributed from the national budget for supporting the programme and other activities, for example those related to the consolidation of agricultural land. The action plan of the strategy on land consolidation for 2010–2020 notes that the implementation of this measure took place during 2016–2018 and that more than EUR 0.5 million per year was allocated from the national budget (MAFRD, 2019). Land consolidation is an integral part of rural development policy would benefit farmers in many ways, including through land tenure, investment in their property and easier access to credit.

In addition to these other strategies, the Government of Kosovo* has recognised the strategic importance of the IT industry for economic development and structural transformation towards a knowledge-based economy and the development of agriculture. A significant economic benefit of the IT industry is its positive impact on the efficiency and productivity of the agriculture sector, namely through increasing market competitiveness and product promotion. Thus, agriculture, as a traditional sector of Kosovo*'s economy, like tourism, could improve its international competitiveness by using modern software applications and IT services.

Furthermore, financial sustainability, the utilisation of resources for sustainable economic development, waste management and the strength of the local economy (including the green economy) are some of the key criteria to ensure that there is sustainable development at the local level (municipalities). The strategy and action plan for biodiversity conservation for 2011–2020 recognises that the inventory of plant and animal species is old and not fully representative and thus is insufficient as a basis for a proper conservation process. However, it is also recognised that Kosovo*'s conservation efforts cannot wait for a full inventory to be produced, as this could lead to further loss of biodiversity. Kosovo* is not yet a signatory party of any convention or international agreement in the field of nature protection. The current network of protected areas is based on national biodiversity conservation legislation, which is undergoing a process of harmonisation with the relevant EU *acquis*; therefore, one protected area is still reported under various different categories.

Kosovo* has gone a step further and included the concept of a green economy (i.e. economic growth in line with sustainability, both environmental and social) into several national strategic documents and programmes, such as the national development strategy for 2016–2021, the ARDP for 2014–2020, the strategy for climate change for 2019–2028, the strategy for local economic development for 2019–2023 and the energy strategy of Kosovo* for 2019–2026. These strategies focus on proactive involvement of relevant stakeholders in sustainable

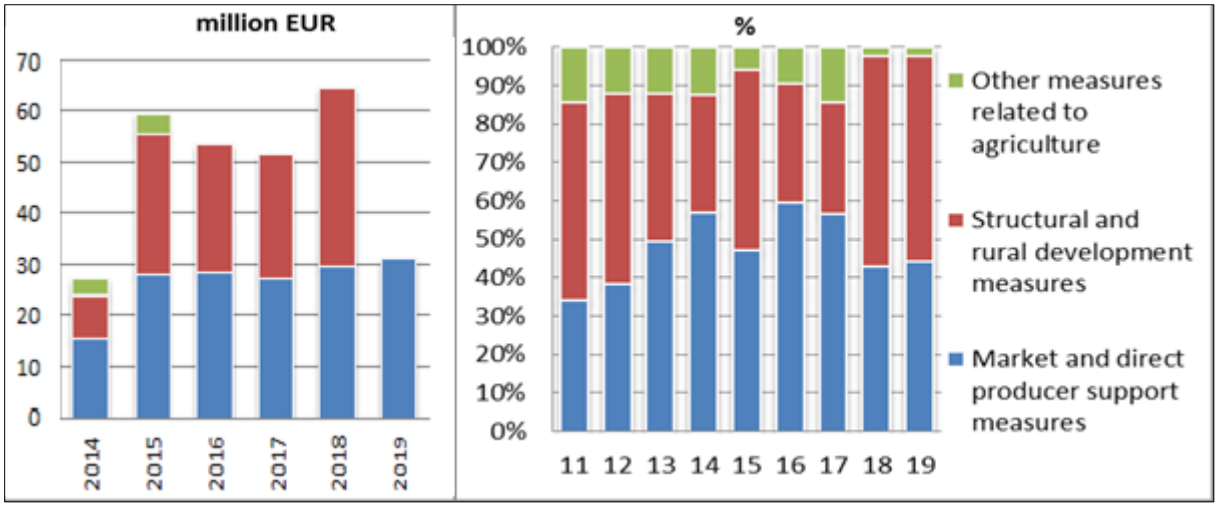
agriculture and rural development, energy-efficient solutions, sustainable use and management of renewable resources, climate actions and the implementation of environmental standards.

4.5. Measures and budgetary support for agriculture and rural development

The Government of Kosovo* and the MAFRD continued to support the development of the agricultural sector and rural areas in Kosovo* throughout 2014–2020, utilising instruments established for the reformation purposes in line with EU integration, aiming to gradually approximate Kosovo*'s agricultural polic y with the EU CAP.

The total budgetary support amounted to EUR 68.82 million in 2019, an increase on the previous year (EUR 67.54 million in 2018). An increase was also visible from 2011 to 2019 for all the subgroups of support, such as market and direct producer support measures, structural and rural development measures and other measures related to agriculture (Figure 33).

Figure 33. Total budgetary support for agriculture (2011–2019)



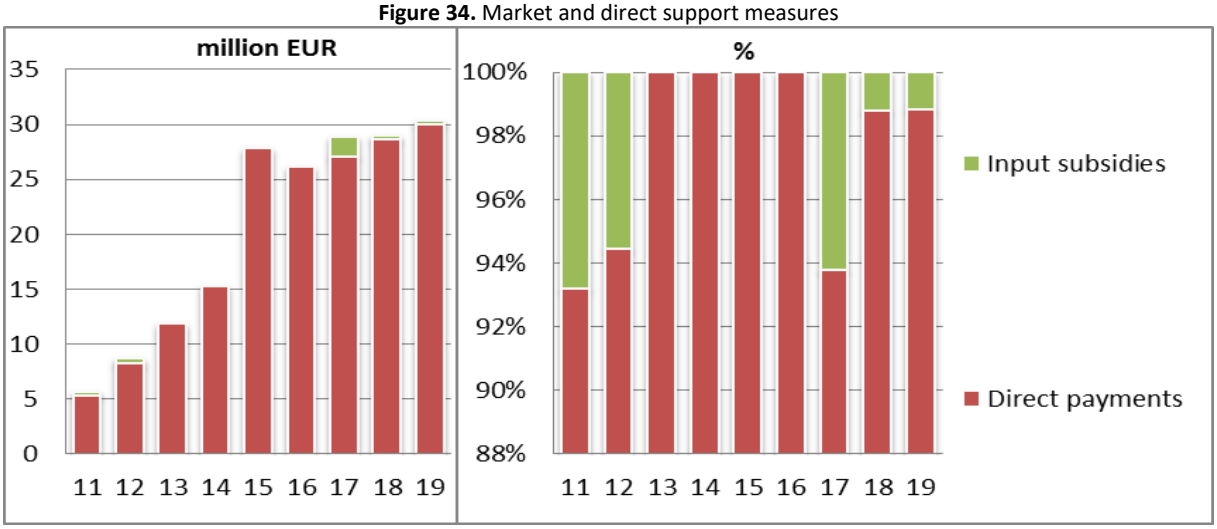
Source: XK APMC database (2020).

The MAFRD focused on providing direct production support as a subsidy programme, helping to advance agricultural sector competitiveness, increasing exports and agricultural production, and improving the income of the farmers. Kosovo* continued with new direct payments schemes by emphasising subsidies for organic farming, aquaculture and livestock purchases.

Despite constituting a low proportion in certain years, market and direct producer support maintained a positive upwards trend, with EUR 28.2 mill in 2016, EUR 27.1 million in 2017, EUR 29.6 million in 2018 and EUR 31.3 million in 2019 (Figure 33). Input subsidies were omitted for several years, but were reinitiated from 2016 and were granted for fuel for harvesting, with the amount remaining the same for 2016–2019, namely EUR 0.4 million per year.

The proportion of support measures made up by market and direct producer support in Kosovo* (first pillar measures) for 2016–2019 remained around the same level during that period, 50 %, with no significant fluctuations during that period (Figure 34). This proportion remains low compared with other WB countries/territories. During 2016–2019, the MAFRD continued to provide direct payments for farmers, with no significant changes in terms of the sectors subsidised. Nevertheless, there have been changes in terms of the amount subsidised per hectare, as the subsidies gradually increased for the following crops: rye, grape, barley and organic agriculture. At the same time, there have been changes in the livestock sector with subsidies for quail and reported cattle slaughter.

Figure 34. Market and direct support measures

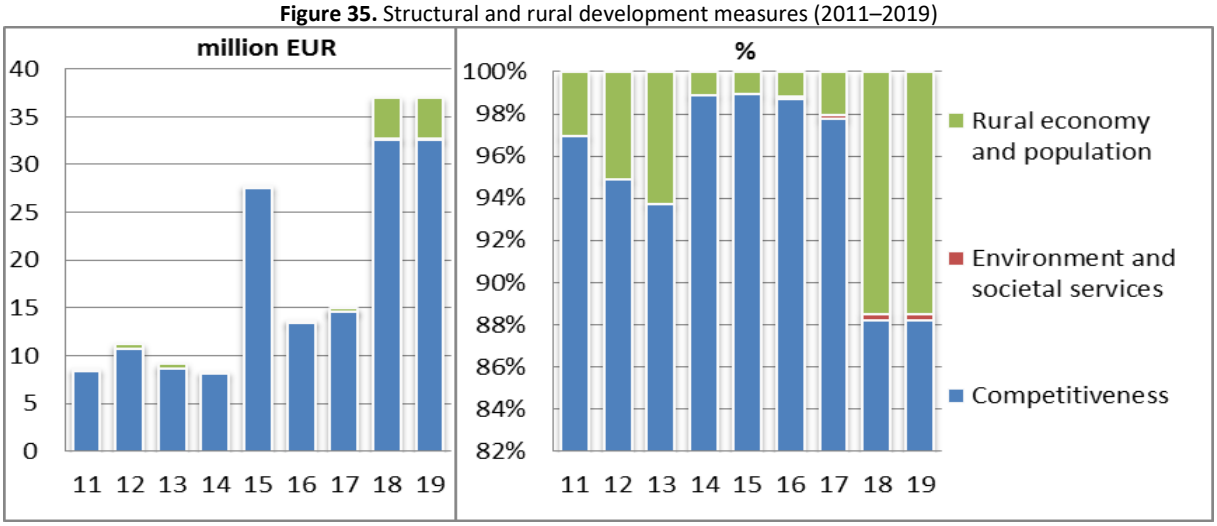


Source: XK APMC database (2020).

Approximately 50 % of the total budget for 2016–2019 was dedicated to the second pillar. During this period, there was a noticeable decrease in measures aiming to support the rural economy and population (with the amount allocated decreasing from EUR 1.7 million in 2016 to EUR 0.31 million per year in 2017–2019). Such funds were allocated through support for farm diversification, basic infrastructure for village development and measures for local capacity building (LEADER), primarily aiming to support activities in rural areas. Support for structural and rural development measures increased significantly in 2018, in comparison with the previous years. It amounted to EUR 36.95 million, an increase of around 28 % when compared with 2016 and 2017 (Figure 35).

The most significant proportion of the budget for improving the competitiveness of the agricultural sector was allocated to measures aimed at on-farm restructuring and agri-food restructuring support, with a significantly increased proportion of the budget in 2018 and 2019 (EUR 32.60 million per year) compared with 2016 and 2017 (EUR 13.48 and 14.60million, respectively). On-farm restructuring support was mostly made up of measures aimed at providing investments in agricultural subsectors such as honey, milk, vegetables, meat and cereals. During the period analysed, the support allocated to on-farm investments increased, from EUR 10.9 million in 2016 to EUR 25.1 million in 2019, indicating that a lower proportion of the budget was being allocated to improvements in competitiveness, sustainability, the quality of agricultural products, the introduction of international standards and farm productivity.

Figure 35. Structural and rural development measures (2011–2019)

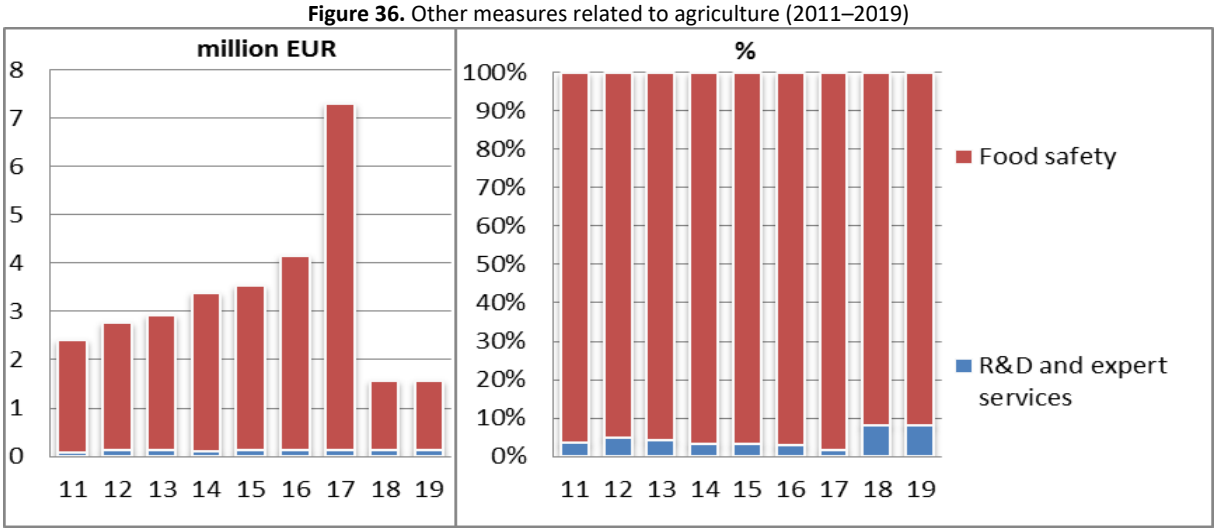


Source: XK APMC database (2020).

Kosovo* recognised the importance of having a social dimension to support for the rural economy and increased the proportion of its budget for the rural economy and population by 152 %, increasing from EUR 1.7 million in 2016 to EUR 4.3 million in 2019. This shows Kosovo*'s commitment to supporting economic and social growth

in rural areas through employment opportunities, the growth of income, increased demand and productivity. In addition, Kosovo* increased its budgetary support for measures targeting the environment and countryside, aiming to financially support all those farmers with a good farming approach and committed to protecting and preserving the environment of their farmland (this support increased from EUR 0.1 million in 2016 to EUR 0.3 million per year in 2017–2019). This type of support shows Kosovo*'s dedication to aligning its environmental policy with the EU CAP, reducing environmental risks, preserving water and soil quality, enhancing biodiversity and increasing knowledge among farmers on the importance of agri-environmental schemes.

Figure 36. Other measures related to agriculture (2011–2019)



Source: XK APMC database (2020).

The measures set out by the national development strategy for 2016–2021 and the ARDP for 2014–2020 will benefit farmers and small and medium-sized enterprises, small business activities in rural tourism and leisure facilities, industry, organisations, academia and citizens.

Limited funds are allocated to other measures in agriculture, with EUR 1.55 million allocated in 2019. The highest amount of funds allocated was in 2017 with EUR 7.3 million. The implementation of food safety standards in Kosovo* remains a challenge because many of the companies operating in the country require technical support. The funds dedicated to food safety are still low, with EUR 1.43 million allocated in 2019 (a decrease from EUR 7.17 million in 2017. The budget for research and development and expert service measures has remained at around the same level over the years with EUR 0.13 million allocated to these measures in 2017, 2018 and 2019 (Figure 36).

4.6. EU approximation process

As mentioned in the above sections, Kosovo*'s agricultural policy is mainly oriented towards EU integration. The agriculture sector is considered to be among the most challenging sectors in Kosovo*'s policy development for alignment with the EU *acquis* and compliance with the EU CAP. Therefore, greater efforts are required to obtain additional support from donors to take appropriate steps to improve the competitiveness of the agricultural sector.

The ARDPs for 2007–2013 and 2014–2020 further describe the budgetary support provided for agriculture and rural development in Kosovo*, for which the EU's CAP framework has been followed. However, very limited funds were allocated for the implementation of the ARDP and therefore the objectives were focused mainly on agricultural production and the competitiveness of this sector. The agricultural policy was concentrated on direct support measures that closely resembled the first pillar measures of the CAP and support measures for rural development that resembled second pillar measures of the CAP. Even though public investments are quite high, there is currently still a need to ensure proper implementation of support schemes that are aimed at agricultural and rural development as part of the ARDP for 2014–2020 and to ensure that they fulfil the objectives of harnessing the sector's productivity and direct existing policies for the diversification of activities and the transfer of innovation and knowledge within agriculture and organic farming.

Even though, Kosovo* developed and harmonised its policy documents in line with the EU, the implementation of this legislation is very poor, which puts pressure on the application of several measures for nature protection,

including the use of natural resources and effective management. The harmonisation of laws between sectors is absent, and more effort is required to stimulate cooperation with other departments, ministries, universities, university colleges and non-governmental organisations.

According to the EU report on Kosovo*'s progress, the country/territory has undertaken some level of preparation for agriculture and rural development. However, limited progress has been made on improving the implementation of the ARDP. Improving the evaluation and monitoring of grants and direct payments under the programme is an important priority that should be emphasised in the long run, and investments in the sector should be made more efficient, mostly to stop the loss of agricultural land and to implement legislation on spatial planning. Kosovo* also has some level of preparation in the area of food safety, veterinary and phytosanitary policy. Some progress was made in adopting legislation in the areas of food safety and veterinary practices (European Commission, 2020).

Kosovo*'s policies have been shown to be beneficial in terms of their harmonisation with most of the IPARD measures, such as achieving land consolidation, supporting organic farming, increasing farmers' productivity, increasing technical assistance and protecting forestry. However, technical support and capacity building still require additional efforts. Unlike certain other WB countries (Albania, Montenegro, North Macedonia and Serbia), Kosovo* still remains outside the financial scheme of the IPARD. All funds are allocated from the national budget and at present there is some difficulty in adequately allocating budgetary support for the improvement of rural infrastructure and the maintenance of rural heritage, for general advisory services for agriculture (mainly used to support food safety services) and for the development of effective agricultural trade strategy based on market analysis, to support local producers. Therefore, building cooperation with advisory services and other agriculture associations in the region and Europe remains important to the knowledge transfer process and capacity building.

4.7. Discussion, conclusions and recommendations

Agriculture has major economic potential in Kosovo*. In that context, Kosovo* has experienced progress in terms of assessing past competitiveness and the potential for economic growth in the future. The government has recognised the importance of investing in agri-rural development. The results of this assessment emphasised the increased interest in rural activities as demonstrated through farm diversification and non-agricultural activities, and an increased awareness of climate change challenges and the use of renewable energy in the agriculture sector. Progress has also been made in terms of the increased demand for organic food and an increase in the number of organic farmers.

Overall, during the period analysed, there was a positive public perception of the approximation of the national agricultural policy with the EU CAP owing to increased financial support, which is helping to stabilise the grave financial situation of farmers. However, the MAFRD needs to take the following steps in terms of policy design and impacts: the MAFRD needs to advocate more within the government for the necessary adjustments to the budget for the implementation of all of the measures and policies set out and for an increase in the subsidies available in order to bring about to the expected results. The purpose of the subsidies is to provide stability in agriculture in the long run and, with increased subsidies, farmers would expect better results in terms of productivity.

In addition, the Agency for Agricultural Development should be in charge of the allocation of financial support and the monitoring of grants, their implementation and their outcomes, instead of the MAFRD.

Capacity building continues to present obstacles. Training curricula for each agricultural sector need to be prepared in order to attract farmers, including the use of smart technology and the improvement of communication via electronic media so that farmers understand the role of advisory services. This service can be delivered through service providers based on 'teaching and learning' practices. A further challenge for Kosovo*'s agriculture sector is the improvement and strengthening of knowledge transfer in order to develop and implement local development strategies, promote cooperation between local groups and facilitate good governance practice.

Based on the essential features of agriculture policy, the following key recommendations need to be prioritised in the next strategy and ARDP: (i) designing a comprehensive set of schemes addressing the key agri-environmental problems and increasing skills and competence for production practices compatible with new farm technology standards; (ii) furthering the harmonisation of Kosovo*'s long- and mid-term strategic documents with the EU CAP as a result of updates and changes; and (iii) increasing the proportion of budgetary

support for the improvement of rural infrastructure, the maintenance of rural heritage and general services for agriculture (mainly used to support food safety services). This support will strengthen the development of an effective agricultural trade strategy based on market analysis to support local producers. At the same time, the development of standard operating procedures for data collection and analysis, to appropriately manage all data obtained at the central level, is necessary in order to improve the data management system in the agriculture sector.

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5. CASE STUDY: MONTENEGRO

Mirsad Spahić ([31])

5.1. Introduction

The main objective of Montenegro's agricultural policy is to improve the competitiveness of agricultural production and improve living conditions in rural areas. The main barriers to strengthening the competitiveness of the food production sector in Montenegro are low productivity per unit area, unfavourable age structures in rural areas, underdeveloped rural infrastructure and a lack of adequate forms of farmers' associations in most agricultural subsectors. In 2017–2019, a lot was done to make agricultural holdings more efficient and structured in accordance with the needs of the market.

To improve the living standards and conditions in rural areas, several new measures have been planned in the 'agri-budget'. At the same time, the programme for development of agriculture and rural areas in the IPARD II for 2014–2020 (the IPARD II programme) is being implemented to improve rural areas, increase employment and slow the existing trend of depopulation in these areas, as well as to improve the situation in the field of infrastructure. In cooperation with local self-government units, the issues of water supply, roads and other infrastructure are being addressed and there will be continuous work on education and improving knowledge among agricultural producers to allow them to make greater use of the available means of support.

Based on the increasing number of registered agricultural producers and the growing number of requests for support, it can be said that interest in agriculture is much higher than in the previous period. Opportunities for participation in agriculture have increased significantly, given that more funds are allocated for agriculture and the number of people in administration, who are servicing agricultural producers, is increasing. Discussions were held with farmers (and examples from the EU were presented) in the previous period to support and prepare them for the use of future funds.

Programmes in the veterinary and phytosanitary sectors, as well as food safety programmes, were implemented. Thanks to investments in food processing facilities and the achievement of EU food safety standards, food processing facilities have been upgraded, and the number of those that comply with EU requirements has significantly increased (from three facilities in 2014 to 61 facilities in 2020). Currently, Montenegro has 14 approved facilities for exports to the EU.

There were noticeable changes in 2017–2019, both in strengthening administrative capacities and legal regulations and in strengthening the conditions for the realisation of agricultural activities. The MARD has directed its activities to realise the obligations defined in the programme of work of the Government of Montenegro, as well as in the direction of fulfilment of the obligations established within the EU accession programme of Montenegro and within negotiation Chapters 11, 12, 13 and 27.

5.2. State of the agri-food sector

Agriculture is one of Montenegro's strategic development sectors. Its contribution to GDP in 2019 was 6.4 %. The gross value of production in agriculture, forestry and fisheries in 2019 amounted to EUR 519.5 million and increased by 0.8 % compared with 2018. Montenegrin agriculture is characterised by a large number of small and fragmented farms. The average farm size is 5.8 ha and this is the main reason for the non-competitiveness of small Montenegrin producers. As agriculture is an important sector for the development of rural areas of Montenegro, livestock breeding – considering the configuration of the terrain – represents its most important branch, as 71.4 % of all farms are breeding livestock (Monstat, 2017). Livestock production allows Montenegro to utilise less productive areas (pastures and meadows), which are dominant in the structure of the total agricultural area in Montenegro. Plant production is characterised by a large number of small agricultural holdings with different plant crops (WTO, 2020).

According to the preliminary data of the farm structure survey in 2016, the number of agricultural holdings (43 791) in 2016 had decreased by 10.4 % compared with the agricultural census for 2010, whereas 98 949 persons were engaged in agricultural activity in 2016. However, the amount of total utilised agricultural land was higher in 2016 than in 2010, namely by 15.6 %, which indicates that certain structural changes had occurred that had increased the consolidation of agricultural holdings. In 2010, the average farm size was 4.5 ha (utilised

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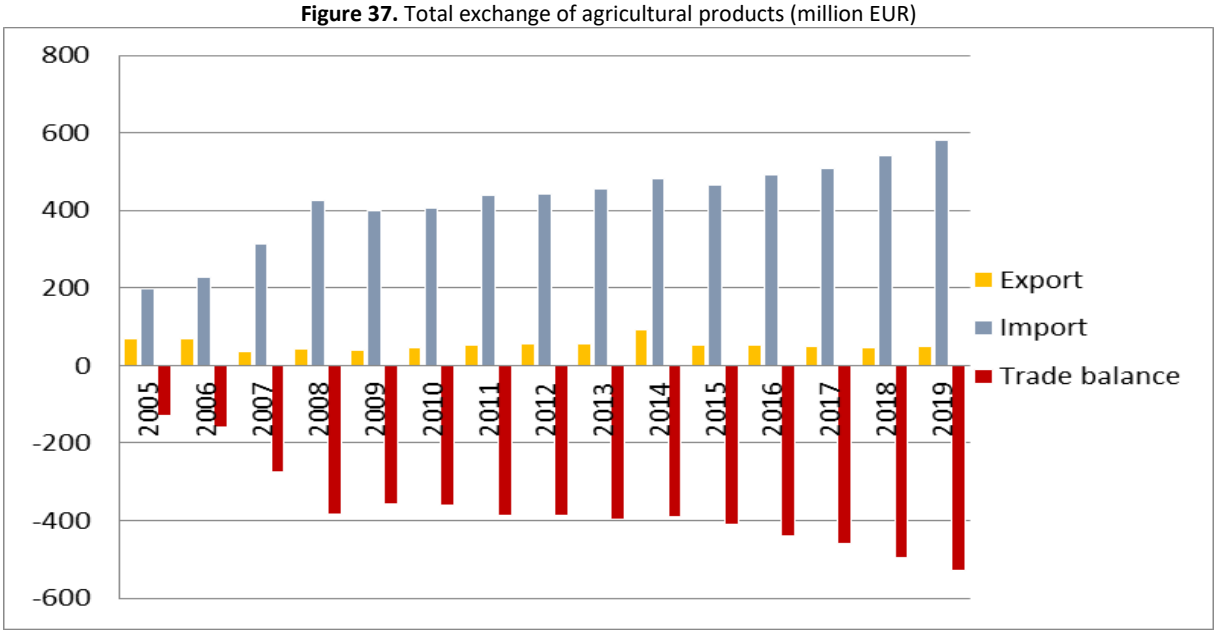
agricultural land), whereas the current average farm average size is 5.8 ha, which backs up the conclusion that farms are being consolidated. According to data from the 2010 census, the number of agricultural holdings with a size ranging from 0 to 4 ha was 42 199, but in 2016 this number was 32 045, representing a reduction of 24.1 %. However, at the same time, the number of agricultural holdings increased in the category from 4 to <100 ha, namely from 6 671 to 11 746, or by 76.1 % (Monstat, 2017). In the last few years of the period analysed, a number of measures were introduced that led to the consolidation of agricultural holdings in order to meet the conditions required for support provided by the state. It is important to note that, at the end of February 2020, almost 12 000 farmers had registered in the MARD register of agricultural producers; this represents the number of farms that are commercialised and that expect some help from the MARD (MARD, 2020a).

The increased subsidies and support to investments have led to numerous positive developments in Montenegro's agricultural production. In 2019, the total area of land used for agriculture was 257 469.6 ha (around 19.8 % of the total Montenegrin territory); 94.2 % of this was perennial meadows and pastures for livestock breeding, 2.8 % was arable land, 2.2 % was permanent crops and 0.8 % was kitchen gardens. In comparison with 2018, the total utilised agricultural land in 2019 increased by 0.3 % (Monstat, 2020a).

In the livestock sector, the total number of cattle in 2019 was 81 432 (which had decreased by 2.2 % compared with 2018). The most notable decrease in 2019 was in pig and poultry numbers, which decreased by 2.3 % and 4.6 %, respectively, compared with 2018. The total milk production in Montenegro (cow's, sheep's and goat's milk) was 177.9 million litres in 2019, of which the majority was cow's milk (93 %). The average milk yield per cow was 2 880 litres. Total milk production was on a par with the level of previous years. The total quantity of wool produced was 191 tonnes (1.7 kg per sheep). The production of eggs for consumption decreased by 13.9 % in 2019 compared with 2018. In 2019, the total quantity of cow's milk purchased was 27.9 million litres, with a decrease of 1.2 % compared with the same period in 2018 (Monstat, 2020b).

Considering the size of farms and the limited natural resources for dealing with agriculture, especially for the mass production of food, Montenegro is a net importer of food and is characterised by a high foreign trade deficit (Figure 37). If we look at the structure of the agricultural products that are imported most, it is clear that, in the majority of cases, there are products that cannot be produced in Montenegro or whose production is unprofitable and limited, both due to a lack of input and limited resources. This applies to products such as cereals, cereal-based products, cocoa products, carbonated soft drinks and others.

Figure 37. Total exchange of agricultural products (million EUR)



Source: Monstat (2020).

Tourism is also one of the factors that influences the growth of imports, which is also reflected in the monthly trade data: it is clearly seen that most agri-food imports occur during the summer months (meat, alcoholic beverages, carbonated soft drinks, bakery products and dairy products). The total imports for 3 months of 2019 (June, July and August) amounted to EUR 180 million and accounted for 35 % of total annual imports. By adding the month of December (i.e. the winter tourist season and the new year holiday season), the imports in these 4 months is close to EUR 230 million, which is 39.7 % of total annual imports (MARD, 2020b).

The data from the FADN pilot project showed that farms are mostly operated positively because they have received some type of support from the national budget, either direct payments or investment grants. Therefore, without the help of the state, this type of farm would almost certainly not exist, and there are many in Montenegro. By comparing Montenegro data with data for the neighbouring countries and the EU average, it can be seen that Montenegro provides the highest payments to the dairy sector, and the market for milk and dairy products is still dependent on imports. Another very important fact, which attracted attention after the results were collated, is that the cost of production in animal and plant production is extremely high, mostly because all of the raw materials required are imported from the surrounding countries and the EU (FAO, 2017).

Socioeconomic issues underlying rural areas

The most frequently used methodology for defining rural areas is the OECD methodology, according to which a community is considered rural if its population density is less than 150 inhabitants per km^2, while a community is considered urban if its population density is above 150 inhabitants per km^2. Rural areas are classified further at the regional level as follows:

- predominantly rural region – more than 50 % of the population lives in rural local communities;
- intermediate region – between 15 % and 50 % of a region's population lives in rural local communities;
- predominantly urban region – less than 15 % of a region's population lives in rural local communities.

When analysing the three regions of Montenegro according to the OECD methodology, it can be seen that the northern region (covering 13 municipalities) is a predominantly rural region (59.7 % of the population lives in rural local communities), while the coastal (41.7 %) and central (20.4 %) regions are intermediate regions. Judging by the data presented above and the OECD methodology, almost the whole territory of Montenegro could be considered rural. However, taking into account the pronounced inequalities among territorial units at the local level (municipalities) and other specific features of Montenegro, the following approach for defining rural areas is proposed for the purpose of this IPARD II programme. In municipalities with urban centres that have a population above 10 000 (i.e. settlements classified by the Statistical Office of Montenegro (Monstat, 2020) as urban and that in administrative terms are urban centres), such settlements are excluded from rural areas and the remaining areas are classified as rural. On the other hand, in municipalities that, according to the 2011 census, have settlements of less than 10 000, the whole territory of such a municipality would be considered a rural area.

According to the last census carried out in 2011 by Monstat, the population of Montenegro is 620 029. The population density is 45 people per km^2, on average, making Montenegro one of the most sparsely populated countries in Europe (except for the Nordic countries). According to the Constitution of Montenegro, the capital city, Podgorica, has a population of 185 937 (Government of Montenegro and MARD, 2014).

Table 19. Population of Montenegro, total and by regions (2003 and 2011)

Region	Population (2003 census)			Population (2011 census)			Difference from 2003 to 2011	
	Total	Urban (%)	Rural (%)	Total	Urban (%)	Rural (%)	In total	Rural (%)
Coastal	145 847	59.8	40.2	148 683	58.3	41.7	2 836	1.5
Central	279 419	78.9	21.1	293 509	79.6	20.4	14 090	–0.7
Northern	194 879	39.0	61.0	177 837	40.3	59.7	–17 042	–1.3
Montenegro (total)	620 145	61.9	38.1	620 029	63.2	36.8	–116	–1.3

Source: Monstat, 2003 and 2011 censuses.

The data from the last two censuses show two obvious trends. The is related to the mass migration from the northern part of Montenegro to the central and coastal regions of the country and the second regards migration from rural to urban areas. Montenegro has a very old population and over the last 50 years the natural population increase has fallen by 60 %. The number of newborns over the last half of the century fell by 25 %, while the average age of the population rose to about 38 years.

According to Monstat (labour force survey) data for 2019, the total workforce in Montenegro is 279 900 (active population). Of those, 243 800 people were employed, while 43 400 (15.1 %) were unemployed. The number of employees increased by 2.7 % compared with the previous year (2018). Monstat regularly publishes data on employment in the agricultural sector. In 2019, 17 400 persons were employed in agricultural activities, which made up 7.1 % of the working population.

The distribution of educational attainment among all working persons on family agricultural holdings (98 341) is as follows: 3.89 % have no education, 5.81 % have an unfinished primary education, 27.93 % have a primary education, 53.26 % have a secondary education and 9.09 % have a post-secondary or higher education ([32]).

Agriculture and rural development is one of the priority areas for development in Montenegro, with the aim being to provide safe and stable quantities of food and, through the supply of quality agricultural products and raising competitiveness, to encourage sustainable economic growth and development with sustainable resource management (Government of Montenegro, 2014). A large number of farmers have been helped; however, rural infrastructure is still not well maintained. It is essential that rural areas have paved roads, local centres, internet, a water supply, daily waste disposal services, local passenger transport and the like.

5.3. National policy framework

Montenegrin agriculture is still developing under the guidance of the strategic framework for 2016–2020. The country was given six benchmarks to reach in Chapters 11, 12 and 13 of the closing negotiation and their implementation is a priority. One of the main challenges in the coming period will be the accreditation of the Directorate for Payments, which will be entrusted with implementing the budget provided by the European Commission for EU pre-accession support in the field of agriculture and rural development. Along with institutional development, it is also necessary to work on strengthening the staffing capacities of the ministry, with a special focus on the Directorate for Payments, as the accreditation of this institution is conditional on the existence of a sufficient number of quality and well-trained staff, as stated in the findings of the European Commission audit (European Commission, 2020a).

To meet the basic goals of agricultural development in Montenegro (i.e. to ultimately have a sustainable and competitive sector, which stimulates balanced economic development in rural areas, while maintaining the stability of the rural population's income and maintaining stability in the food supplies produced according to the highest standards of food safety), Montenegro continues to make investments in the agriculture sector, including the nearly EUR 100 million invested in agriculture between 2016 and 2020 (MARD, 2020c). Montenegro continues to implement the activities envisaged by the strategy for the development of agriculture and rural areas for 2015–2020 and the action plan for *acquis* alignment with Chapter 11 (agriculture and rural development). To meet the objectives stated in these documents, many activities have been carried out.

The policy for the development of agriculture and rural areas aims to improve living conditions in rural areas, improve the living standard of agricultural producers, provide the necessary investments in infrastructure and improve the production process, increase the competitiveness of domestic producers and improve processing capacities, provide support for preserving traditional products, etc. Through rural development measures, simultaneous efforts are being made to strengthen institutional capacities, with the main goal being to prepare the sector for future membership of the EU and the possibility of using EU funds (IPARD) (European Commission, 2020b).

Support in the form investments in agricultural holdings provided through the Montenegro institutional development and agriculture strengthening (MIDAS) project began in 2016. The positive experience of this project helped the MARD, through support for institutional building and support for agricultural producers, to ensure the system was ready for the implementation of the IPARD II programme. MIDAS additional funding has provided support to the MARD by providing funding for the identification of measures by the rural development programme and the creation of a pilot system to support producers in line with EU rules. This project has also contributed to the MARD continuing to build a system for the implementation of various support schemes, all in accordance with Chapter 11 (agriculture and rural development) of the *acquis*. Through this project, financial support is provided for organic production. With this support, the MARD continues to strengthen its advisory services by continuing to provide practical training in the application of the future IACS implementation

([32]) As described by Monstat, full-time engagement was counted by using the annual work unit as an employment equivalent. The time spent working on the holding is considered the time spent working in agriculture, excluding holding work. For full-time employment, 1 800 hours are taken to be the minimum for Montenegro (225 working days of 8 hours each). Farm work is separated from additional activities.

mechanism. Direct support in the form of grants for agricultural producers will be implemented using an advanced system of administrative and technical controls. To receive such support the recipient must have arable land used for agricultural production. In line with the above-mentioned measure to support the development of the Directorate for Payments, geographical mapping was undertaken to produce plots for the future LPIS and an initial version of the software was created for requests for organic production support.

The current project that aims to establish an LPIS in Montenegro is supported under the IPA (EU). The hardware, software and orthophotos necessary to establish the LPIS have also been provided with the support of EU IPA funds (Government of Montenegro and MARD, 2020) to support the classification of land cover types based on the interpretation of new orthophotos.

The diversity of Montenegro's geological elements, regions, climate and soil, as well as the very good position of Montenegro in the WBs and the Mediterranean, have created ideal conditions for the emergence of rich biodiversity and puts the country in the so-called diversity 'hot spot', with European and world importance. The number of species in a unique area (the S/A index) in Montenegro is 0.837, the highest among all European countries (MSDT, 2011). To respond to the pressures on the country's biodiversity, in 2010 Montenegro adopted a national biodiversity strategy and action plan for of 2010–2015. As highlighted in these documents, everyday anthropogenic activities have various effects on the environment. The use of land and its modification for the needs of the population, besides the impact on nature's balance, also affects human health. Some sectors, such as energy, transport and industry, exert direct pressure on nature and contribute to decreases in biodiversity, whereas others, such as agriculture, forestry and fisheries, directly depend on the state of the environment. Agriculture is not the main environmental polluter, but actions are still needed to prevent the negative effects of this sector on the environment (MSDT, 2014). Agriculture's contributes to land degradation and measures have been proposed to tackle this (MSDT, 2015). The main pressures exerted by agriculture are related to urbanisation in some areas and changes in land usage (from agriculture to construction), erosion in certain areas (including in agriculture areas) and the inappropriate use of pesticides, which can pollute the water. The low level of awareness of the importance of biodiversity also represents a pressure on biodiversity. Even though there is a lack of data and biodiversity is not monitored to the full extent, the MARD has supported agricultural producers through several measures in order to reduce the pressure of agriculture on the environment in Montenegro.

Certain measures are implemented through the national agri-budget to reduce the pressure on biodiversity and to ensure the extraction of natural resources is undertaken in a sustainable way, such as (Government of Montenegro and MARD, 2014):

- support for organic production, focusing on reducing the negative impact of agriculture on the environment, the conservation of biodiversity, increasing the quality of agricultural products and contributing to the affirmation of Montenegro as an ecological state;
- support for the use of mountain pastures, namely the conservation and sustainable use of natural resources, the sustainable management of agricultural land, environmental protection, the preservation of biodiversity, the maintenance of cultural and natural heritage, and preventing the conversion of agricultural land into forest land;
- support for preserving autochthonous genetic resources in agriculture, namely the preservation and sustainable use of endangered autochthonous and local breeds of livestock and of plant species that are threatened by genetic erosion, as well as contributions to the preservation of biodiversity.

In 2013, the MARD adopted the code of good agricultural practice, which gives advice on how to produce food in a way that takes into account the preservation of the environment. Its recommendations enable Montenegrin agricultural producers to protect agricultural land; to keep rivers, lakes and shallow water clean and healthy by avoiding pollution with nitrates and using pesticides safely; and to protect farmers, consumers, animals and the environment. The code of good agricultural practice addresses all of the issues identified as pressures in the action plan for fighting land degradation and mitigation of the consequences of drought in Montenegro. To address these pressures, the MARD conducted a public campaign to promote good agricultural practice (Government of Montenegro and MARD, 2014).

Direct positive impacts on soil, water, air and the climate can be expected through the construction and/or reconstruction of manure storage capacities, including equipment for its handling and use, and through the application of good agricultural and environmental practices. Investments in stonewalls, fences, etc., can also contribute to decreasing the above-mentioned pressures.

5.4. Measures and budgetary support for agriculture and rural development

The most important form of state support for agricultural development is provided through the agri-budget. The agri-budget provides incentives in the form of grants, allocated from Montenegro's total budget for the development of agriculture and rural areas. The agri-budget includes detailed budgetary lines (programmes) with the elements required to be eligible (reasons for support, objectives, description and eligibility criteria, beneficiaries, procedures, financial plan, supervision, etc.).

The government is focused on developing the agriculture sector for both domestic use and the growing tourism sector. Incentives provided to the agriculture sector principally comprise government subsidies. The total planned incentives for the agriculture sector in 2017, 2018 and 2019 were EUR 31.5 million, EUR 39.95 million and EUR 52.4 million, respectively. In addition to subsidies, the government has offered other relief measures to target economic growth in agriculture. The gradual rise in subsidies is expected to continue, with a planned increase of a minimum of EUR 1 million per year over the next 4 years. To strengthen the food production sector, significant funding is available to Montenegrin producers (from the MIDAS World Bank project, the pre-accession funds for rural development and the national budget). During 2018, about EUR 16.7 million was invested in the agricultural sector. Support from IPA funds amounted to EUR 2.6 million (with total investment amounting to EUR 4 million). Support provided through agri-budget measures amounted EUR 14.1 million and was composed of direct support measures (subsidies) and measures aimed at supporting investment in rural areas, such as support for raising new plantings, increasing livestock stock and purchasing equipment and machinery (MARD, 2020d).

The consolidated domestic support policy, which is financed from the national budget, is divided into rural development measures and measures of direct support. Rural development measures relate to payments directed at farms aiming to improve product quality, develop organic production, diversify production, strengthen the processing on farms, etc. The sectors supported through direct support measures WERE livestock, milk production, cereals, crops and tobacco. There were also certain programmes of payments in the beekeeping sector.

Rural development measures make up the dominant proportion of measures. In the future, reforms to the policy of direct payments will aim to reduce the number of measures concerning related payments and the separation of payments from production. Changes in agricultural policy, but also the structure of all budgetary support to agriculture for 2010–2019, are presented in Figure 38.

The realised funds differ from those that were planned. Each year, the subsidy funds planned were fully realised, but the funds for investments were not. Therefore, the ministry must further encourage farmers to invest more. The lower level of investments was the result of the low degree of competitiveness in Montenegrin agriculture in relation to imported products; therefore, increasing agricultural production is always a risk because of the pressure posed by imported products. In addition, retailers do not want to take any chances with domestic production, mainly because of the problem of only small quantities being produced.

Three fields of assistance have been defined in the structure of the agriculture budget: agriculture, fisheries and operational programmes. Agriculture as field of assistance includes market-price policy measures, rural development measures, assistance for general services and agriculture services, social transfers for the rural population, and technical and administrative assistance for the programme implementation. Assistance for fisheries involves supporting the development of the sea fisheries and mariculture sector and supporting the development of the freshwater fisheries and aquaculture sector. The operational programmes comprise a programme for food safety measures, a programme for compulsory animal healthcare measures, a programme for phytosanitary measures, and a programme for the development and strengthening of capacities in the food safety, veterinary medicine and phytosanitary fields (MIDAS 2).

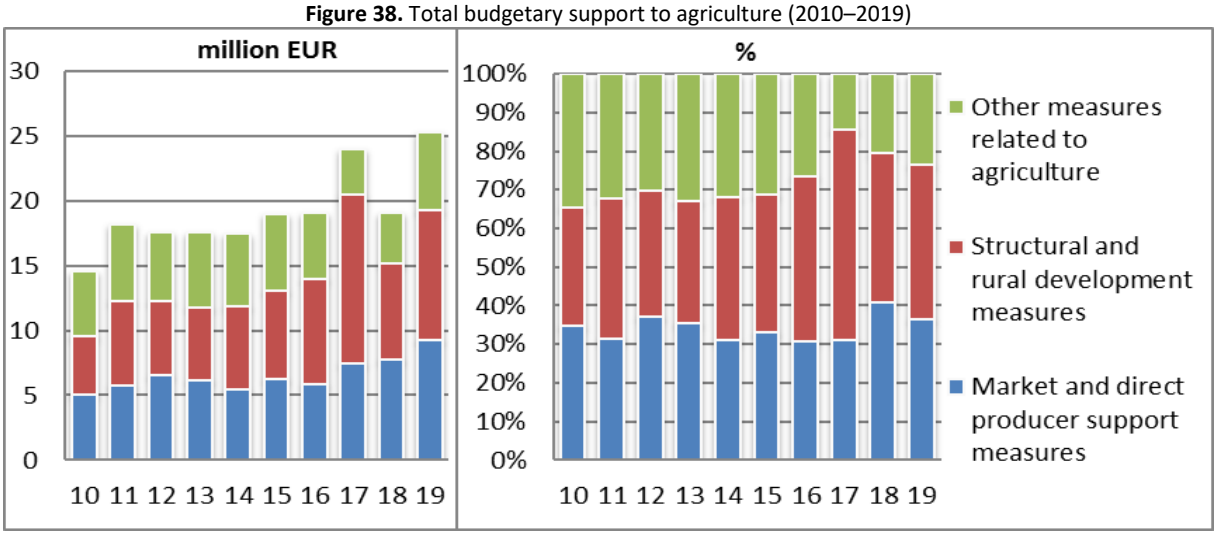
In 2019, a total of 53 measures were defined. The majority (24) of these measures are related to rural development, amounting to EUR 32.67 million (i.e. 62 %) of the overall agriculture budget. For market-price policy measures, a total of EUR 7.98 million was allocated through 10 measures, increasing by EUR 1.37 million compared with the previous year (2018).

The overall agricultural budget for 2019 was higher than that planned, namely by € 12 411 700 or 23.8%, owing to much greater assistance provided to agricultural producers and fisheries than planned, amounting to EUR 42 million (i.e. 70.2 % more than intended). Agriculture budget beneficiaries (except for fisheries) must be entered in the farm register (MARD, 2020e). Market-price policy measures are divided into direct payments, a

programme for special wine support measures (a new measure), a programme for beekeeping improvement and market stabilisation measures. An overview of the market and direct support measures is given in Figure 39.

In 2019, within the framework of market stabilisation measures related to the distribution of fruits, vegetables and dairy products in schools, a project was implemented in seven schools whereby apples, carrots and yoghurts were distributed (26 313 meals). This measure has become very popular, with many schools having asked to be part of the project.

Figure 38. Total budgetary support to agriculture (2010–2019)

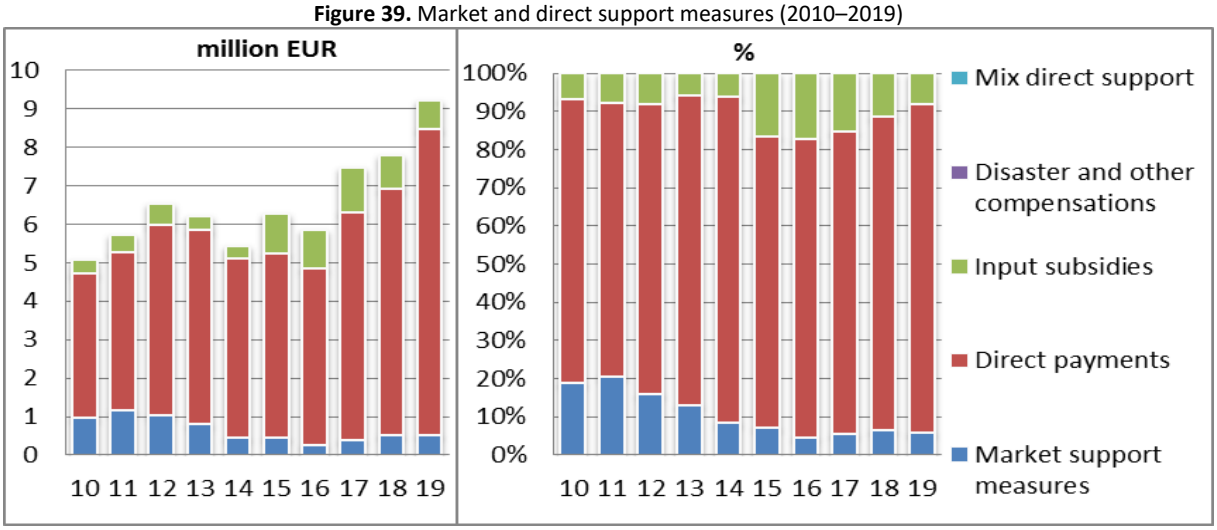


Source: ME APMC database (2020).

In addition, in the programme 'Buy Domestic', launched by the Government of Montenegro in cooperation with the Chamber of Commerce of Montenegro, the largest chains of trade and manufacturers participated, with the aim of strengthening the domestic economy by increasing the availability, positioning and consumption of Montenegrin products in the domestic market. In 2019, as the second phase of the programme, the 'domestic tastes' project was launched, with the aim of involving the tourism industry in the promotion and better marketing of Montenegrin products and services.

Under a new measure, milk processing on farms is supported by a basic premium of 0.06 cents per litre of processed milk. The condition for obtaining the premium is that the holding is registered with the Directorate for Food, Veterinary and Phytosanitary Affairs, in accordance with the decree on hygiene requirements for facilities and premises producing small quantities of primary products for human consumption. A total of EUR 1.78 million was paid out for on-farm milk processing in 2019. The total number of beneficiaries entitled to this premium was 1 537. The total quantity of on-farm processed milk covered by these premiums was about 30 million litres of milk, from which over 3 500 tonnes of cheese and cream were produced and marketed (MARD, 2020e).

Figure 39. Market and direct support measures (2010–2019)

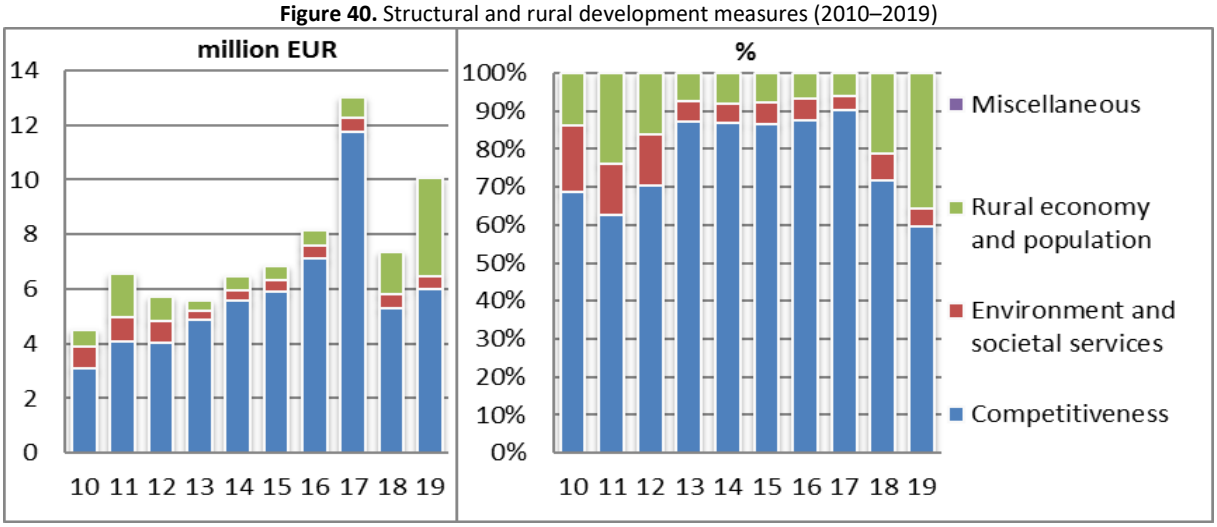


Source: ME APMC database (2020).

Rural development measures are divided into three categories: (i) measures to strengthen the competitiveness of food producers (support is provided to modernise production and strengthen competitiveness, improve product quality, introduce new technologies and innovations, and introduce new market opportunities), (ii) measures for the sustainable management of natural resources (support is given for the cultivation of indigenous livestock breeds and the cultivation of indigenous plant varieties) and (iii) measures to improve quality of life and expand economic activities in rural areas (support is provided for the improvement of rural infrastructure and especially for electricity network development projects in rural areas, as well as for the use of solar energy and the adaptation and reconstruction of existing infrastructure). It is also important to mention that rural development measures are gradually being aligned with the priorities of the EU CAP for 2014–2020. Figure 40 illustrates the structural and rural development measures in Montenegro over the last decade.

The rural clustering and transformation project is the first International Fund for Agricultural Development (IFAD)-financed project in Montenegro. The project's overall goal is to contribute to the transformation of smallholders' livelihoods in northern Montenegro, enabling them to become more competitive and resilient to climate change. The development objective of this project is to increase the participation of poor smallholders in an inclusive, profitable and environmentally sustainable value chain, and to enhance the benefits they derive this (the project's total cost is USD 14.48 million). As Montenegrin agriculture is in need infrastructure and an association of producers, during the first year of implementation of this project there was already considerable interest among local communities and agricultural producers.

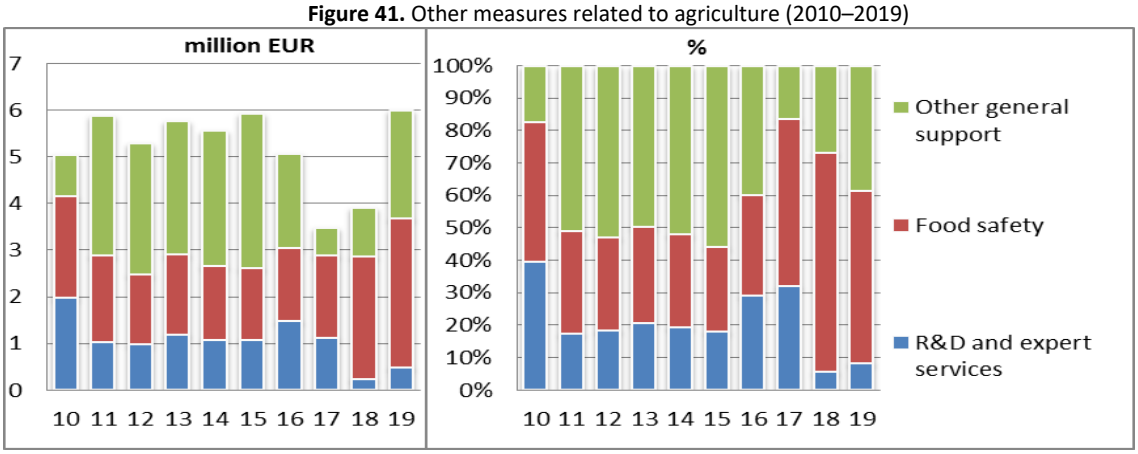
Figure 40. Structural and rural development measures (2010–2019)



Source: ME APMC database (2020).

Montenegro has experienced a positive trend when it comes to supporting the fisheries sector, in terms of the implementation of measures to support marine and freshwater fisheries and related sectors.

Figure 41. Other measures related to agriculture (2010–2019)



Source: ME APMC database (2020).

Regarding IPARD II, the total amount planned for the 2014–2020 programming period was EUR 51.7 million, out of which EUR 39 million was EU contributions. The first payments were made in 2019, namely for measures 1 (EUR 0.40 million) and 3 (EUR 1.42 million); therefore, total expenditure amounted to EUR 1.82 million. In 2019, the proportion of total structural and rural development payments under IPARD II was 18.1 %. Other measures related to agriculture have been implemented for years in support of agricultural development, through the implementation of measures to improve food safety, engagement in expert support, education, study trips, social transfers, etc. (Figure 41).

5.5. EU approximation process

The implementation of the activities set out in the action plan for harmonisation with the *acquis* continues. In line with the dynamics set out in the action plan, the implementation of EU-like trade mechanisms has started, in part concerning the administration of quotas. Specifically, preparations have begun for the implementation of activities related to the establishment of systems for the implementation of trade mechanisms and the creation of software to be funded by the IPA 2018 fund. The revised EU *acquis* compliance action plan was submitted to the European Commission after modifications agreed with colleagues from the Directorate-General for Agriculture and Rural Development and the Directorate-General for Neighbourhood and Enlargement Negotiations.

It was agreed that, through the IPA 2018, the establishment of electronic databases would be financed, namely for the construction of a wine register, the construction of a register of fruit and vegetable traders, the construction of a system for implementing trade mechanisms and the construction of an EU information system for agricultural market management and monitoring (i.e. a model price reporting system).

The final version of the revised *acquis* compliance action plan has been submitted to the European Commission for consideration. The agri-budget for 2019 continued to align its direct payment policies and introduced new measures related to compliance with the CMO policy and related to the wine sector, school schemes and producer organisations. In addition to rural development measures and per hectare support, winemakers have been able to use CMO support since 2019 for vineyard restructuring, conversion and promotion. In addition, the implementation of the pilot programme entitled 'Fruits, vegetables, milk and milk products for schools' for the 2019/2020 school year, in line with other EU programmes, was important.

In 2018, a technical specification was developed for a geospatial application for support management, with support from the EU IPA 2017. The application was developed through additional funding from the institutional development and agricultural strengthening project of Montenegro. In the second quarter of 2018, the MAFRD announced a tender for the development of the payment portion of the application under the contract for the geospatial application for support management. The application was created using a parametric approach, which means that each measure will have its own special module that needs to be adjusted.

In 2019, an initial layer was added to the LPIS, with agricultural land mapped and digitised. The necessary mechanisms are in place for a fully functioning LPIS, which will be complete after the establishment of the regional offices of the future Paying Agency, whose establishment is ongoing. Currently, in the LPIS, 2 049 holdings have registered a total of 5 533 parcels, covering 2 842.2 ha (MARD, 2020e).

During 2019, the standard output coefficient for 2013 was updated; this will be an integral part of the farm typology and will be used for selecting farms in the FADN system. A new project was launched in the middle of 2020, funded by the FAO and with additional support from IPA funds, focusing on the complete establishment of the FADN system in accordance with EU requirements. It is expected that around 200 agricultural holdings will be included in the survey sample in Montenegro, from which data will be collected by the ministry's expert associates, together with FAO experts. Following the preparation of the preliminary farm plan, it can be concluded that crop production agricultural holdings are not well represented in the plan, which can probably be attributed to the outdated structure of agricultural holdings from the 2010 census and the absence of a new farm typology based on the data from the farm structure survey for 2016 (MARD, 20202).

In accordance with the rules on the procedure and conditions for the allocation of preferential customs quotas for the import of agricultural products (Official Gazette of Montenegro 2/19), a public invitation for the allocation of preferential quotas for 2020 was issued. The allocation of preferential quotas will be made according to a reciprocity system, for all preferential quotas above 100 tonnes, prescribed by the applicable free trade agreements.

Regarding the continuation of the accreditation of measures within the IPARD II programme, after adopting amendments to the IPARD II programme, Montenegro officially submitted a request to the European Commission to implement the budget for measure 7 (the diversification of farms and business development). The implementation of this measure is expected in 2020 after receiving the certificate. Montenegro, through the National IPA Coordinator office, sent an official letter to the European Commission requesting an extension of the IPARD II deadline for the action plan for 2020, stating that activities to implement public calls and contracted investments would be undertaken as quickly as possible (MARD, 2020e). In addition, the MARD is working to create a favourable financial environment for agricultural producers, both through loans provided by the Investment and Development Fund and by creating similar opportunities for financing investments through loans offered by commercial banks.

5.6. Discussion, conclusions and recommendations

There is no fully functioning payments agency in Montenegro that is in charge of implementing agricultural policy measures. The Directorate for Payments is the designated organisational unit of the ministry that performs the tasks of the IPARD agency, that is, manages payments from pre-accession funds for rural development and the national budget. Montenegro does not have an IACS that is fully compliant with EU rules. Entry in the register of agricultural holdings is obligatory for agricultural holders applying for incentives or support and for producers of agricultural products intended for the market. The application process for the farm registry is done automatically through a software application. In Montenegro, the establishment of the FADN is under way. The big drawback is that the FADN is not functional and, even when it does become functional, Monstat does not publish data on economic accounts in agriculture; therefore, agricultural policy is based not on figures, but on the assessment of priority areas that are traditionally significant and important. During 2018 and 2019, all perennial plantations (orchards, vineyards, olive groves and plantations of MAPs) in the direct payment system were introduced into the LPIS. In this way, the control system was improved. It is necessary to reinforce structures related to the digitisation of agriculture, as this will increase the competitiveness of conventional Montenegrin agriculture. On the other hand, organic agriculture needs to be further strengthened and traditional agricultural production thus encouraged.

New investments are needed in the agricultural sector, as this will also increase the competitiveness of production and reduce the dependence on food imports. Exports of dried and smoked meats, meat products, fruit, wine, beer, spirits and essential oils have also been recorded in the last few years. The production of traditional products on farms provides the opportunity to develop short value chains, which will result in better control of food security, a reduction in the grey market and, of course, additional income for the producers themselves. Improving supply and rural tourism development would valorise Montenegro's natural resources in a sustainable and inclusive way, while creating jobs in rural areas. Agricultural policy measures should support women and young people more strongly, in such a way as to encourage employment in the food production sector.

However, it should be noted that no major changes occurred in the period analysed, although a much larger number of farmers received support than in the previous period. This is also demonstrated by the fact that many more producers are registered with the ministry and with other organisations dealing with agriculture. National budget allocations to agriculture have increased, but they are still not even close to what agriculture, along with

the processing industry, contributes to the overall economy. Organic agriculture needs to be strengthened and new measures need to be taken in line with the future CAP, particularly regarding improving environmental protection and reducing pollution. In addition, it is necessary to introduce new measures for the digitalisation of agriculture, because world industrialisation in agriculture has resulted in Montenegrin traditional agriculture no longer being competitive. Such digitalisation is important to promote the widespread use of the food produced and to strengthen organic farming.

Montenegro does not have the capacity to be competitive in the market of the main agricultural products of the EU owing to its natural predispositions and unorganised participation in the market (i.e. small-scale agriculture and unfavourable structures of farms), but it has the potential to develop the production of high-quality agricultural and food products in an innovative and traditional way. The Montenegrin market for agricultural products is completely unstructured, so there is very little protection against competition from imported products. Agricultural producers are not able to supply chains with their products throughout the year, which puts them into a non-competitive position with those who sell imported goods. Large commercial chains are not willing to stop importing agricultural products during Montenegro's seasonal production, because this would endanger their business and planned profits. This has a significant impact on the planning of agricultural production and, consequently, on the development of overall Montenegrin agriculture, and the most common reason for this is that agricultural producers are aware that they cannot be competitive in relation to imported products.

Agriculture projects have contributed to the transformation of the lifestyles of smallholders in northern Montenegro, enabling them to become competitive and resilient to change. The knowledge among agricultural producers is good and they are experienced in farming, but they must be properly trained. Farmers with greater investment and support can improve their household economic situation and then help to ensure the stability of rural communities. Plant production is quantitatively increasing and revenues are increasing. Transportation has improved. Although farmers are aware of the opportunities, the possibilities for increased stability of household income should be further promoted, which would improve agriculture in general. Provisions should be made for direct training in digitalisation in agriculture and climate change, support for organisations working in this field, and support for the media and non-governmental organisations to promote these topics. Support for agricultural producers must be continued in order to strengthen Montenegrin agriculture, create new opportunities for young farmers and increase production. Finally, the key aspects of improving Montenegrin agriculture are to promote domestic agricultural products and to increase their competitiveness with imported products, while also using tourism as a promotional tool.

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6. CASE STUDY: NORTH MACEDONIA

Ana Kotevska, Aleksandra Martinovska Stojcheska, Ivana Janeska Stamenkovska, Dragi Dimitrievski ([33])

6.1. Introduction

European integration and gaining full membership to the EU is the top priority on North Macedonia's agenda. The country gained candidate status in 2005, but only in March 2020 did the EU give its formal approval for accession talks with North Macedonia to begin. This marked a new phase in the integration process, namely the start of intensive policy reforms and work for alignment with the community *acquis*. The European perspective sets out the basic direction of the country's agricultural and rural development policy and as such has influenced the country's legal, administrative and institutional set-up, as well as its strategic orientation, which tends to align with the EU CAP.

The aim of this chapter is to present the latest developments in the agricultural policy framework of North Macedonia and its harmonisation with the CAP, with a specific focus given on the socioeconomic aspects of agriculture and rural development. The chapter is a continuation of a series of previous studies (Dimitrievski and Kotevska, 2008; Dimitrievski et al., 2010, 2014, 2016, 2017), which have provided continuous insights into the agricultural sector and its corresponding policy development since 2008. This report uses three main sources: (i) the agricultural statistics database for North Macedonia – StatDatabase (2020), which builds on the official data from the State Statistical Office; (ii) the APMC database for 2020 (Rednak and Volk, 2010, 2013, 2018), which is based on data obtained from the Agency for Financial Support of Agriculture and Rural Development (AFSARD), and refers to the annual payments from the support programmes, and supplemented with data from the final financial statements of the national budget; and (iii) a review of the formal policy documents and related research studies. The databases cover 2010 to 2019 (although for some indicators the period ends in 2018 or 2020, depending on the latest data available), but the report mainly focuses on the recent developments in the sector and its related policy, since 2017.

6.2. State of the agri-food sector

North Macedonia has made significant efforts to reform its economy over the last decade, as a small upper-middle-income country (World Bank, 2019). During 2010–2019, there was evident growth in the country's GDP, which reached EUR 11.34 billion in 2019 (Table 20). After economic growth of 2.7 % in 2018, the economy's growth accelerated in 2019, with an estimated growth rate of 3.6 % in that year, mainly stemming from an increase in private consumption (including the effect of the rise in minimum wage), export stability in the traditional sectors (including the food industry) and export growth in new production capacities (Government of the Republic of North Macedonia, 2019). This economic growth was followed by the lowest unemployment rate in the last decade (17.3 % in 2019). The unemployment rate is nevertheless still high and contributes to high poverty rates. Moreover, the robust growth seen has been strongly affected by the ongoing COVID-19 pandemic crisis, with a reversal of growth in all aspects, including unfavourable effects to GDP and trade and an increase in unemployment.

North Macedonia's agricultural sector contributed 10.7 % to GVA, on average, during 2010–2019, with this proportion gradually falling to 9.6 % in the last 3 years analysed (Table 20). As one of the most important sectors in the economy of North Macedonia, agriculture employs a significant number of people; during 2010–2016, agriculture made up, on average, 18 % of total employment but, since then, this proportion has been decreasing, reaching its lowest recorded level of 13.9 % in 2019. This decrease is due to both the overall increase in employment in absolute figures (an increase of 122 000 new jobs was recorded) and the parallel decrease in jobs in agriculture (there was a decrease of 11 300 persons engaged in agriculture from 2010–2016 to 2019). The reasons behind this decrease require additional investigation. The decreasing trend in employment in agriculture, combined with its high proportion of GDP, puts North Macedonia in the category of urbanised countries with significant economic growth (World Bank, 2015).

In terms of trade, the proportion of agri-food product exports among total exports decreased during the last 3 years of the period analysed (i.e. from an average of 14 % in 2010–2016 to 10 % in 2019). Agri-food imports

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followed the same trend, making up an average of 12.3 % of total imports in 2010–2016 to 10 % of total imports in 2019 (Table 21).

Table 20. Macroeconomic indicators

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP (at current prices, million EUR)	7 109	7 544	7 585	8 150	8 562	9 072	9 656	10 038	10 698	11 340
Value added (at current prices, million EUR)	6 132	6 491	6 561	7 092	7 435	7 927	8 370	8 700	9 286	9 899
Economic growth (real change in GDP, %)	3.4	2.3	–0.5	2.9	3.6	3.9	2.8	1.1	2.7	3.6
GDP per capita (EUR)	3 459	3 665	3 680	3 948	4 141	4 382	4 659	4 839	5 153	5 463
GDP per capita in PPS (EU=100; %)	34	34	34	35	36	36	37	37	37	38
Inflation %)	1.6	3.9	3.3	2.8	–0.3	–0.3	–0.2	1.4	1.5	0.8
Total employment (thousand persons)	637.9	645.1	650.6	678.8	690.2	706.0	724.0	740.6	759.1	797.7
Unemployment rate (%)	32.1	31.4	31.0	29.0	28.0	26.1	23.7	22.4	20.7	17.3

PPS, purchasing power standards.

Note: Preliminary data.

Source: MK StatDatabase (2020).

Considering the higher level of imports than exports in the trade of agri-food products, North Macedonia is a net importer of agri-food products that is constantly faced with a negative trade balance, which reached its highest value of EUR –246.3 million in 2018. The export/import coverage rate was, on average, 73 % in 2010–2019, thus revealing the country's agri-food import dependency.

Table 21. Key agricultural statistics

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GVA of the agriculture, forestry, hunting and fishery sector										
GVA (at current prices, million EUR)	719.5	705.4	690.6	807.6	871.5	882.5	885.7	790.3	913.4	994.5
Proportion out of all activities (% of GVA)	11.7	10.9	10.5	11.4	11.7	11.1	10.6	9.1	9.8	10.0
Employment in the agriculture, forestry, hunting and fishery sector										
Number (thousand persons)	121.5	120.9	112.5	127.2	127.4	126.1	120.3	120.3	119.3	111.0
Proportion out of total employment (%)	19.1	18.7	17.3	18.7	18.5	17.9	16.6	16.2	15.7	13.9
Trade in food and agricultural products										
Exports of agri-food products (million EUR)	418.2	458.9	470.3	495.5	479.6	480.7	525.9	530.0	541.3	621.3
Proportion out of exports of all products (%)	16.5	14.3	15.1	15.3	12.8	11.8	12.0	10.6	9.2	9.7
Imports of agri-food products (million EUR)	527.7	611.9	672.9	648.6	643.0	695.7	713.7	755.7	787.6	832.1
Proportion out of imports of all products (%)	12.8	12.1	13.3	13.0	11.7	12.0	11.6	11.1	10.3	9.9
Agri-food trade balance (million EUR)	–109.5	–153.0	–202.6	–153.1	–163.4	–215.0	–187.8	–226	–246.3	–210.8
Export/import rate (%)	79.3	75.0	69.9	76.4	74.6	69.1	73.7	70.1	68.7	74.7

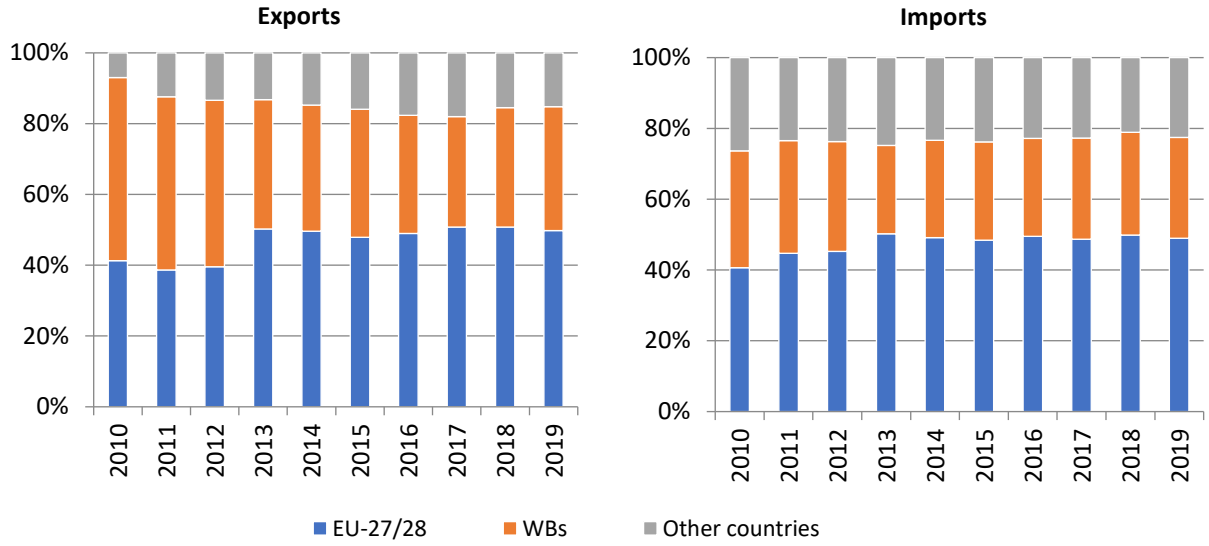
Note: Preliminary data.

Source: MK StatDatabase (2020).

Tobacco and tobacco products are the leading export commodity (making up 24 % of total agri-food exports), followed by beverages (12 %), cereal preparations (12 %) and vegetables (11 %). Agri-food imports include meat (14 %), edible preparations (9 %), and dairy, eggs and honey (7 %) (MK StatDatabase, 2020).

In the last decade, exports to EU countries increased until they made up a greater proportion of total exports than those to WB countries/territories. Imports from the WB countries/territories have also decreased, with imports from the EU countries again now making up a greater proportion of total imports. This is, however, mostly due to the regrouping of countries since Croatia's accession to the EU. Overall, exports and imports have remained relatively stable in terms of total trade (Figure 42).

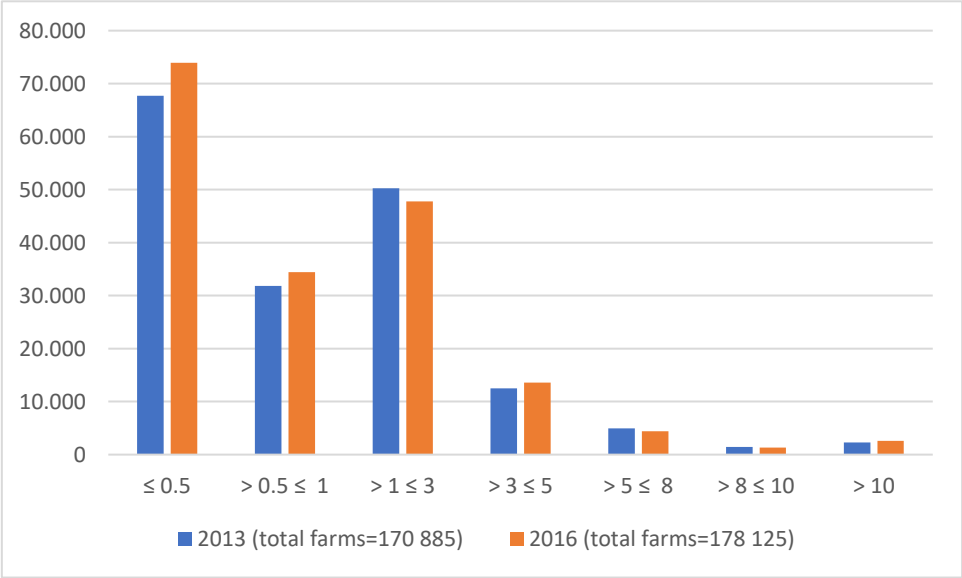
Figure 42. Regional breakdown of agri-food trade in North Macedonia (%, 2010–2019)



Source: MK StatDatabase (2020).

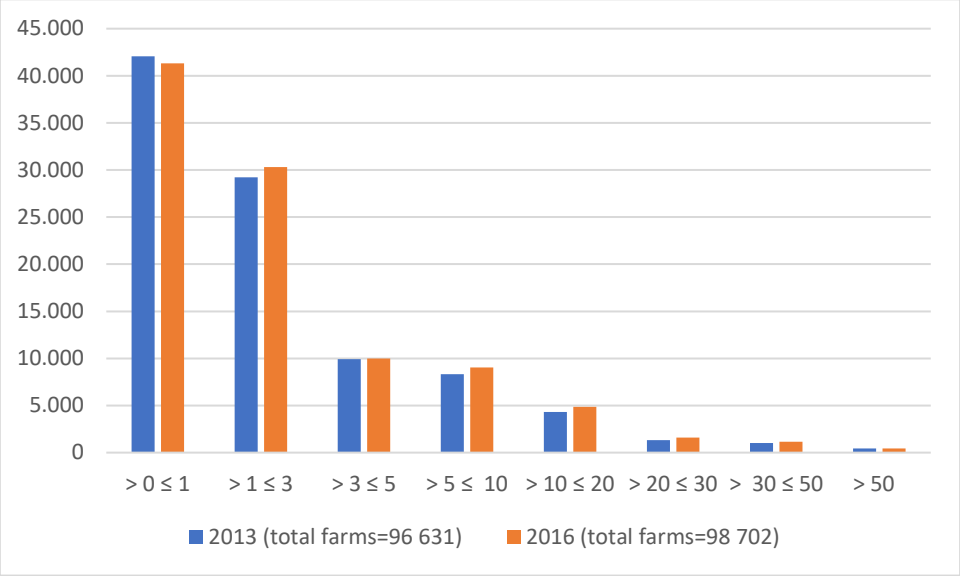
Half of North Macedonia's territory (i.e. 1.26 million ha in 2019) is categorised as agricultural land, with permanent pastures taking up 59 %, arable land covering about 33 %, meadows covering 5 %, vineyards taking up 2 % and orchards making up 1 %. According to the latest farm structure survey (2016), there are 178 125 farms and 320 738 ha of total UAA in North Macedonia. Small-scale farms (utilising less than 1 ha of land) dominate, making up 60.8 % of all farms (Figure 43). The total number of agricultural households with livestock units is 98 702 (farm structure survey, 2016), with most farms (41 %) having only one livestock unit (Figure 44). The average farm size in the country is 1.8 ha, while the average farm has 2.1 livestock units.

Figure 43. Number of agricultural holdings by farm size (ha)



Source: MK StatDatabase (2020).

Figure 44. Number of agricultural holdings with livestock (number of livestock units)



Source: MK StatDatabase (2020).

Crop production is dominant in the total agricultural output value, contributing 77 % compared with the 23 % contributed by livestock (State Statistical Office, 2019). The production structure in North Macedonia has not changed significantly in recent years; cereals are the most significant crop in terms of crop area, with the most significant crops being wheat (23 %), maize (11 %) and other grains (18 %). The proportion of vegetables in the total harvested area was about 11 % and permanent crops made up 10 % in 2019.

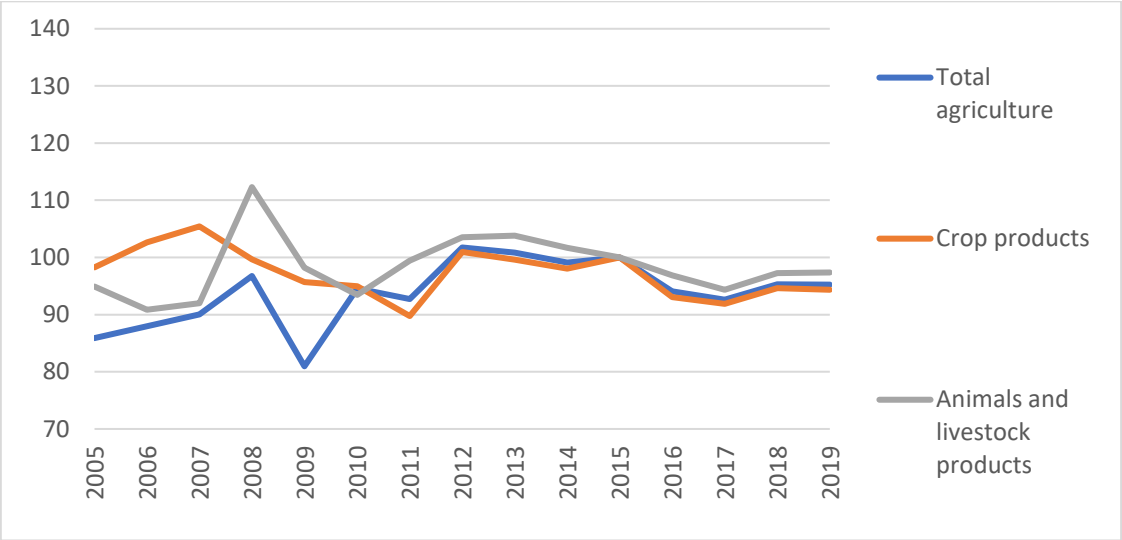
During 2010–2016 crop production was stable with a slight increasing trend. However, the unfavourable weather conditions of 2017 caused significant losses for most crop products. Production recuperated in 2018. Domestic vegetable production is experiencing increasing competition from imports, especially from the neighbouring countries/territories, which have invested in production technologies enabling earlier and more competitive production. In addition, in the past few years, vegetable producers in North Macedonia have begun to shift to the production of fruit, which requires less labour input.

Regarding livestock production, milk contributes around 50 % of the total animal output, followed by cattle production with 19 % and pigs with 16 % of the total animal output (State Statistical Office, 2019). In 2019, there was an evident decreasing trend in the livestock numbers of all categories: pigs by 30 %, cattle and poultry by 15 % each, and sheep and goats by 7 % each. This is also reflected in the decreased production output of the livestock sector, which requires further examination to determine the reasons behind this drastic drop.

Organic agricultural production has shown a slow but steady increase in North Macedonia. During 2010–2019, the number of organic operators almost doubled. In terms of harvested area, organic production is still marginal, making up an average of 1 % of the total area of production. Organic livestock farming has also gained in importance, especially in terms of increasing numbers of organic sheep and beehives. However, compared with the total livestock budget, the budget for organic livestock is far behind, although it is still important considering the increasing number of organic livestock producers from year to year.

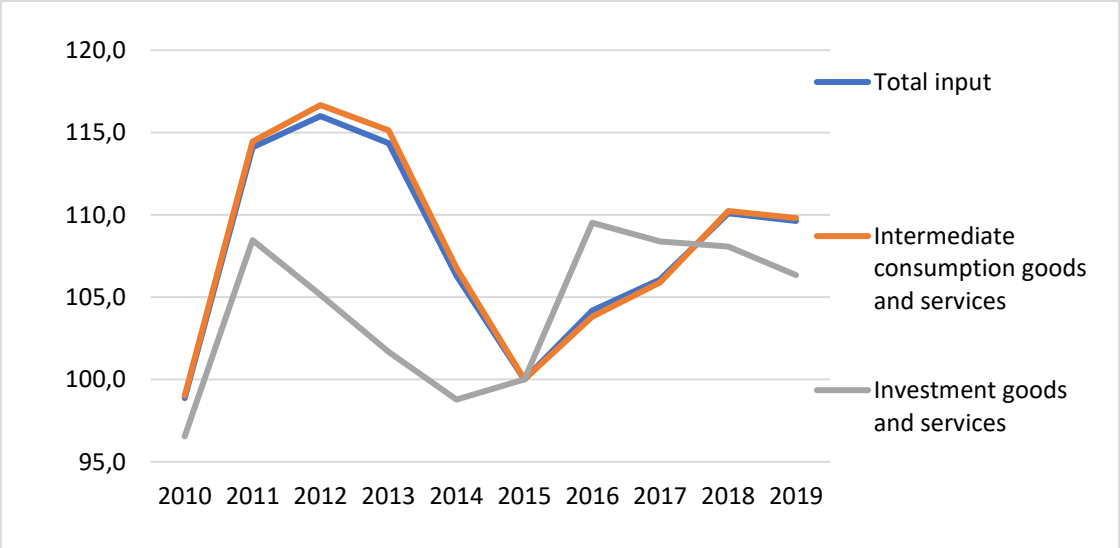
Agricultural output prices in the last few years have not recovered to the 2012–2015 level. Output prices dropped for both crop and livestock production in 2017. In the following years, prices slowly started to recover (Figure 45). There were also notable variations in agricultural inputs: the highest input prices occurred in 2012, falling sharply in 2015, and again increasing in the last 3 years analysed (Figure 46).

Figure 45. Output price indices (2015=100)



Source: MK StatDatabase (2020).

Figure 46. Input price indices (2015=100)



Source: MK StatDatabase (2020).

6.3. Socioeconomic issues underlying rural areas

The national definition of a rural area is an administrative unit with a population of less than 30 000 inhabitants, as registered in the national population census (the latest being in 2002). In this context, the definition of rural areas includes three groups: (i) settlements located in municipalities established within rural centres (rural municipalities), (ii) settlements situated in municipalities in urban centres with systems predominantly based on the use of agricultural or forest land and (iii) cities with populations of less than 30 000 people with the possibility of using agricultural and forest land. Based on this definition, rural areas cover around 88.7 % of the territory within 62 municipalities and are home to 47.5 % of the total population (MAFWE, 2019).

In the last years analysed, many rural areas, especially small villages, experienced outmigration and now have a small number of inhabitants. Considering the age structure of people living in these areas, there is very high risk of them becoming abandoned in the near future. The number of persons migrating from rural to urban areas increased during 2010–2019, from 1.34 in 2014 to 1.74 thousand persons in 2019, confirming the threat of intensified depopulation (Table 22).

Table 22. Migration statistics (2010–2019, thousand persons)

Statistics	2014	2015	2016	2017	2018	2019
Total population (thousand persons)	2 069.0	2 071.0	2 072.0	2 074.5	2 076.2	2 076.2
Number of population migrated out of the country	0.84	1.02	0.63	0.42	0.38	0.80
Number of population migrated from rural to urban areas	1.34	1.40	1.60	1.76	1.67	1.74
Number of population migrated from urban to rural areas	0.91	0.99	1.03	1.04	0.92	0.96
Net internal migration	0.43	0.41	0.57	0.72	0.75	0.78

Source: MK StatDatabase (2020), own calculations.

Therefore, rural employment is very important and plays a significant role in keeping the population in rural areas. During 2017–2019, most people working in agriculture were between 25 and 65 years of age, with a very small number of those employed younger than 25 years. This indicates that young people migrate to urban areas, or abroad, hence the need for support for younger people to encourage them to stay in rural areas by enabling different on-farm and off-farm job opportunities. As unemployment among the younger population is highest in the rural areas, it poses a risk to the success of rural development and increased the risk of the depopulation of the rural areas. A seasonal labour force is also typical for the sector, and this contributes to decreasing the poverty and unemployment rate; however, the availability of seasonal labour, cost and the qualification of individuals are becoming increasing challenges. In agriculture, the average farm holder is around 58 years of age.

Around 50 % of the total population in rural areas is active, and male labour is dominant in this population, making up 70 %. Higher employment rates are seen among the rural male population than among the rural female population. The unemployment rate fell from 22.2 % in 2017 to 16.7 % in 2019 for the male population, while it remained almost unchanged for the female population at around 21 %. During the last 3 years of the period analysed, in terms of the active population in both the country as a whole and rural areas, the dominant age group was 35 to 65 years (Table 23).

Table 23. Active and non-active labour population by age (2017–2019)

Population statistics (thousand persons)	Total country			Rural areas			Proportion of rural population in total country population (%)		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Total combined active and non-active population	1 451	1 446	1 441	658	686	648	45	47	45
<34 years	589	579	569	281	288	265	48	50	46
35–65 years	862	867	871	377	397	383	44	46	44
Employed population	733	748	788	316	340	341	43	45	43
<34 years	231	232	249	107	112	112	46	48	45
35–65 years	503	516	540	209	228	229	42	44	42
Unemployed population	213	198	166	90	94	78	42	47	47
<34 years	114	107	86	53	55	42	47	52	49
35–65 years	99	91	80	37	38	36	37	42	45
Non-active population	504	500	486	252	252	229	50	50	47
<34 years	244	240	235	121	120	110	50	50	47
35–65 years	260	260	251	131	131	118	50	50	47

Source: MK StatDatabase (2020).

Poverty remains one of the most severe problems in the country. Considering the gradual decrease in unemployment, the poverty rate (the threshold for which is 60 % of median equalised income) decreased from 27 % in 2010 to 21.9 % in 2019. Consequently, the inequality income distribution has also decreased, with lowest Gini coefficient of 31.9 % in 2019 (40.9 % in 2010). Nevertheless, these indicators are still very high and imply that there is a significant portion of the population living in poverty in the country.

6.4. National policy framework

The law on agriculture and rural development (Official Gazette 49/2010 and its amendments) is the main legal framework determining the strategic orientation of agricultural and rural development policy in the country and its implementation. Owing to the wide spectrum of diverse and specific issues concerning agriculture and rural development in the country, there are more than 30 other laws and by-laws regulating different matters.

The strategic orientation is also postulated in the most recent strategic document, namely the national agricultural and rural development strategy (NARDS) for 2014–2020, which defines the policy's priorities and specific objectives (Table 24). The policy's primary focus is increasing the competitiveness of the agricultural sector and agri-food industry, the development of rural areas and the sustainable management of natural resources. The improvement of the economic position of agricultural entities is planned by restructuring and modernising the sector, improving food quality and safety and supporting the organisation of markets and agri-food chains. Social and structural issues, such as the prevalence of small farms, demographic and educational aspects, and the lack of infrastructure, which are particularly present in rural areas, are addressed to improve living conditions and economic activities in rural areas. The environmental impact that intensive agriculture has on water, soil, biodiversity, etc., is considered through the sustainable management of natural resources. Continuous access to knowledge and investment in human capital in agriculture is a cross-cutting issue that can support the meeting of the other specific objectives.

Table 24. Strategic priorities and specific objectives in the NARDS for 2014–2020

Priorities	Increasing the competitiveness of the ag. sector and agri-food industry	Development of rural areas	Sustainable management of natural resources
Specific Objectives	Restructuring and modernization of the agri-food sector		
	Organization of markets, food chain and improvement of the quality of ag. products		
	Completing the functionality of the food safety system		
		Improving living conditions and economic activities in rural areas	
			Sustainable management of natural resources
	Continuous access to knowledge and investment in human capital in agriculture		

Source: Authors' interpretations and visualisation.

In addition to this strategic document, there is IPARD II, whose objectives correspond to the strategic and specific objectives of the NARDS for 2014–2020. The objectives of IPARD II are addressed through 11 measures, but the implementation began with three accredited measures: (i) investments in physical assets of agricultural holdings (M1), (ii) investments in physical assets concerning the processing and marketing of agriculture and fishery products (M3) and (iii) farm diversification and business development (M7). Most investments for the first two measures are related to the purchasing of machinery and equipment for specialised production and manufacturing activities. For the third measure, construction and reconstruction activities dominate, as well as improvements to applicants' existing infrastructure (IPARD Managing Authority, 2019). In addition, technical assistance (M9) is a horizontal measure that supports the successful implementation of the entire programme. Investment in rural public infrastructure (M6) is a measure that is currently in the process of accreditation, and the remaining measures are planned to be introduced at a later stage (their implementation has been postponed because of, according to the programme rationale, the need for additional preparation and capacity building).

As the 7-year programming period of the NARDS for 2014–2020 is ending, the preparation of a new strategy is under way. Several questions are during the preparation of the new NARDS for 2021–2027: Will it be a continuation of the NARDS for 2014–2020? Will it be based on a situation analysis and an impact analysis of the previous NARDS? Will it be in line with the new CAP priorities? The strategical planning for the NARDS is undertaken by the Ministry of Agriculture, Forestry and Water Economy (MAFWE), as the responsible authority for planning, monitoring and evaluation of the agricultural and rural development policy measures and

instruments, whereas the AFSARD is responsible for the implementation and control of the agricultural policy measures. Nevertheless, there are some cross-cutting issues across other institutions, which need to be considered in the strategical planning for the next long-term programming period.

The operational framework is defined in the national programme for agriculture and rural development for 2018–2022 and in the annual support programmes for agriculture, for rural development and for fisheries and aquaculture. What is evident in the reference period (2017–2019), which has also been addressed in previous studies (Dimitrievski et al., 2017), is the continuous practice of issuing frequent amendments to the annual programmes (a dozen per year), including to introduce a new measure(s), change set deadlines, alter the support amounts, or change the criteria or the beneficiaries' eligibility. Such frequent operational revisions cause uncertainty in terms of the relevance of the strategic planning, the consistency and the focus of the policy, that is, does it aim to support farmers to merely help them survive or to grow, is it used to remedy other societal issues, and does the pressure from certain stakeholder groups interfere with the realisation of the programme? These questions stem not just from the current analysis covering the last few years, but also from observations of the sectoral policy during the whole period since the country's independence.

6.5. Measures and budgetary support for agriculture and rural development

The budgetary support for agriculture and rural development can be analysed from two perspectives: the programmed support (measures and funding) and the actual realisation (budgetary transfers).

Programmed budgetary support

The programmed measures are an illustration of the policy priorities set. The direct payments planned and the rural development scheme, as a list of measures with specific requirements, reflect the design of the agricultural and rural development policy. The programmed budgetary transfers to agriculture still mostly consist of direct producer support measures. Among the new policy measures in the direct payments scheme introduced in 2017 (Table 25), some were introduced with the intention of becoming regular measures, whereas others were applied as ad hoc, one-time measures.

The programme for financial support of rural development follows the structure of the APMC, which more or less follows the EU rural development policy system for 2007–2013 (Volk et al., 2014); thus, the structural and rural development measures are grouped into three main categories, namely those targeting (i) competitiveness, (ii) the environment and countryside and (iii) the rural economy and population.

The first axis, to improve the competitiveness of the agri-food sector, includes both on-farm and off-farm investment support. The main form of on-farm support focuses on the modernisation of agricultural holdings by supporting investments such as the purchasing of machinery, livestock heads and bee queens and bee swarms; establishing new plantations or setting up drip irrigation system; and the construction of wells and other interventions of surface water (M121). Other on-farm support includes targeted aid for young farmers (up to 40 years of age) for starting agricultural activity (M112). Off-farm support includes includes capital investments in infrastructure for development of agriculture, forestry and water economy, such as hydrological interventions, consolidation of and access to agricultural land and state-owned pastures (M124), and investments in marketing infrastructure (for the processing and marketing of agricultural products, M123). The marketing of agricultural products is also supported by two technical measures: (i) aid for the organisation of and participation at fairs and other promotional events for agricultural products (1.1) and (ii) aid for the marketing of agricultural primary and processed products (1.3). Producer groups, such as cooperatives, are also supported through a measure to establish and maintain such groups (M131).

Table 25. New measures in the direct payments scheme (2017–2020)

Measure	Description
Payments per output (as EUR/kg or EUR/piece)	
Ad hoc additional payments for cereals, vegetables and fruits	For barley (2017), wheat (2018), tomatoes (2018), cabbage (2020), peaches (2017), plums (2018) and apples (2018–2019)
Additional payments for rice shells	For rice shells sold to registered buyers (2018–2019)
Payments for wine grapes	For wine grapes sold to registered processing plants (2018–2019)
Small farm grants	For farms of 0.2–0.5 ha (and separately for 0.5–1 ha in 2019)
Historical payments for small farmers	For beneficiaries from the last 3 years based on their average grants within four categories (up to 162.5, 325, 487.5 and 650 euro/ha) (since 2020)
Payments per area (as EUR/ha) or livestock (as EUR/head)	
Additional payments for orchards and vineyards	For reconstructed orchards and vineyards and for those that changed their variety structure (2018–2020)
Additional payments for sheep	For lambs delivered to slaughterhouses (2019)
Other payments (based on % increase)	
Additional payments for increased livestock capacities	For increased herd size, flock size or number of bee hives (2017–2020)

Note: Some of these measures were previously also programmed, namely for wine grapes (2010–2012) and rice shells (2012). The full list of measures of the direct payments scheme and more details are available in Table 8.1 of the agricultural statistics database for North Macedonia, 2020.

Source: Authors' elaboration based on the programme for financial support of agriculture, and the supporting regulation acts.

The second axis, to provide environmental and societal benefits, involves two measures: aid for agricultural production in less-favoured areas (M211) and for organic farming (M215), which is paid as additional direct payments based on current capacities (in terms of agricultural area and livestock heads). In addition, biodiversity is supported through a measure for establishing, monitoring and analysing indigenous agricultural plant species and livestock breeds and their mandatory genetic reserves (M214).

The third axis, to support the rural economy and population, includes measures to improve rural infrastructure and basic services, and as such to improve the quality of life in rural areas (M321), for village renewal and development (M322) and for preserving and promoting traditional values in rural areas (M323). As an aid to preserve sheep breeding as a traditional rural activity, compensation is also provided for the costs of maintenance of highland pastures and meadows (M213). Investments for increasing the economic value of forests (M122) is a measure targeting the development of non-agricultural activities in rural areas. Building local capacities is also an important element for developing the rural economy (the LEADER approach), which is undertaken through several measures: establishing local action groups (M412), providing support for the realisation of strategies for the local development of rural areas (M413), fostering local development in rural areas (M431) and supporting the establishment of and activities within the national rural network (provided as technical support since 2019).

The programme also includes some general measures for supporting research-based development, namely important cross-cutting measures relevant for all three rural development policy axes: (i) the implementation of innovative practices (M1.6), as a way to increase competitiveness; (ii) investments for establishing applied research pilot trials (M1.7), as a measure to communicate new and improved ways of operating in rural areas; and (iii) the implementation of research, analyses, project proposals, studies and strategic documents (M1.5), which are needed for evidence-based policymaking. These kinds of measures were introduced in 2012 and 2013. Additional general support for agriculture is provided through the subsidised interest rate (M2), which is another support measure included in the programme. Measures for vocational training and advisory services have been programmed until 2019, but there have not been payments since 2014 (according to the APM dataset) and they have been removed from the programme in 2020 (Table 26). Those informative and educational events that relate to the programme implementation have received support, namely as technical support.

Other recent changes in the annual programmes include the introduction of several new measures, namely measures for the restructuring of agricultural holdings (M125), establishing local action groups (M412) and, most recently, in 2020, supporting agricultural production (M113) and active female members in agricultural holdings (Table 26).

Table 26. Changes in rural development measures (2017–2020)

Added measures		Removed measures	
Code	Measure	Code	Measure
M113	Support for agricultural production (in 2020)	M111	Training and information (in 2019 and 2020)
M115	Support for active female members in agricultural holdings (in 2020)	M114	Advisory services (in 2020)
M125	Restructuring of agricultural holdings (in 2018 and 2019)		
M412	Establishing local action groups (in 2019 and 2020)		
M431	Fostering local development in rural areas (in 2017 and 2018)	M431	Fostering local development in rural areas (in 2019 and 2020)

Source: Authors' elaboration based on the programme for financial support of rural development, and the supporting regulation acts.

The implementation of these direct payment and rural development measures is supported via technical support for the related costs (M1.8) and through the preparation and publishing of educational, informative, scientific, promotional and professional materials, publications and journals (M1.4).

Budgetary transfers

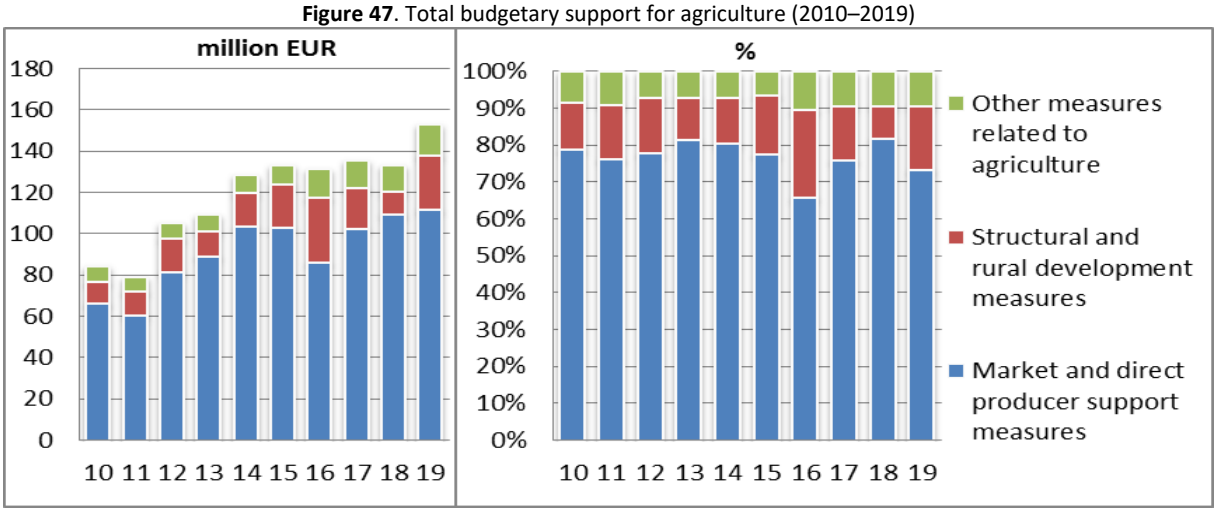
The realisation of programmed policy measures depends on many internal and external factors, primarily the institutional capacity to respond to the number of applications, but also the complexity and duration of procedures. The complexity of procedures, combined with the frequent amendments and adjustments to the regulations, are a challenge for applicants, as they have little experience in, knowledge of or skills for managing this process (Kotevska et al., 2016).

The APMC database lists the payments in the year of realisation, as a function of all previously addressed factors. The payments are presented as the total budgetary transfers to agriculture and separately for market and direct producer support measures, structural and rural development measures, and other measures related to agriculture.

6.5.1.1. Total budgetary support for agriculture

There has been an increase in total budgetary transfers from the national budget to agriculture, namely from EUR 135.21 million in 2017 to EUR 152.80 million in 2019. This increase is evident in all three pillars, but was most significant in structural measures (EUR 26.38 million in 2019, compared with EUR 19.80 million and EUR 11.51 million in 2017 and 2018, respectively). A change in the structure of budgetary transfers was evident in 2018 and 2019. As in the past, budgetary support for agriculture mainly focuses on market and direct support measures, which accounted for 76 % of total support for agriculture in 2017 (similar to the average for 2010–2016), 82 % in 2018 and 73 % in 2019. Among market and direct support measures, direct payments to producers were most dominant (95 % on average). Structural and rural development measures were the second most utilised support measure (15 % in 2017, 9 % in 2018 and 17 % in 2019), and other measures related to agriculture made up around 10 % (EUR 13.10 million in 2017, EUR 12.73 million in 2018 and EUR 14.73 million in 2019), which was slightly higher than the average for 2010–2016, namely 8 % (Figure 47). The goal of the NARDS for 2014–2020 to allocate 30 % of the budget for the second pillar was met only in 2016, when EUR 31.18 million was allocated to this pillar.

Figure 47. Total budgetary support for agriculture (2010–2019)



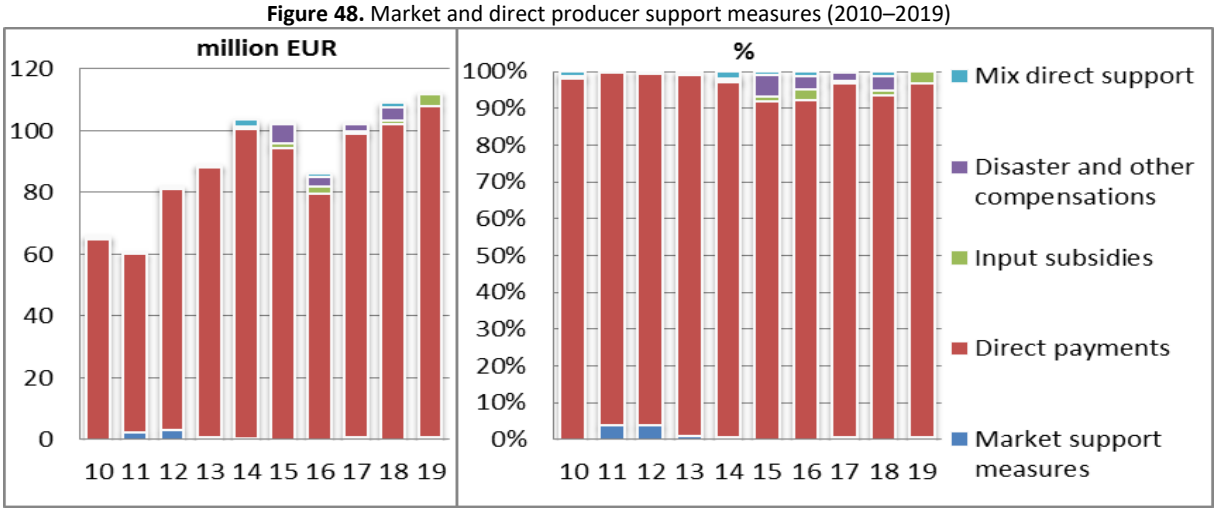
Source: MK APMC database (2020).

6.5.1.2. Market and direct producer support measures

Direct payments, mostly coupled, are the major form of support in this area (Figure 48). Direct payments per output (i.e. per unit of agricultural product) make up about 40 % and payments based on capacity (i.e. per area of agricultural land or per head of livestock) make up about 60 %. These payments are conditional on cross-compliance to ensure the application of good agricultural practices. Market measures were paid, in 2017, for the buyout of wine grapes and, in 2019, for the buyout of wheat and plums, whereas export subsidies are planned only as additional payments for organic production (when realised, they are categorised as support for organic production). Input subsidies have taken up only a small amount of budgetary transfers, ranging from EUR 0.73 million in 2017 and EUR 1.32 million in 2018 (about 1 %) to EUR 3.56 million in 2019 (3 %). This category was mostly used in 2019 for introducing a measure for subsidising the cost of fuel used for agricultural machinery (the 'green fuel' measure), but has also been used in the form of insurance subsidies throughout the years and for co-financing of bank guarantees in 2015. Compensation was also provided to producers for damages caused by natural disasters (late frost, hail, drought and flood) that have affected agricultural production in the last few years.

Crop commodities take up a larger proportion (around two thirds) of direct producer support measures, with tobacco the main single supported commodity (ranging from EUR 24.6 million in 2017 to EUR 29.2 million in 2019), followed by vineyards (EUR 7.6 million in 2017, increasing to EUR 13 million in 2019) and arable crops (EUR 11.9 million and EUR 10.3 million in 2017 and 2019, respectively).

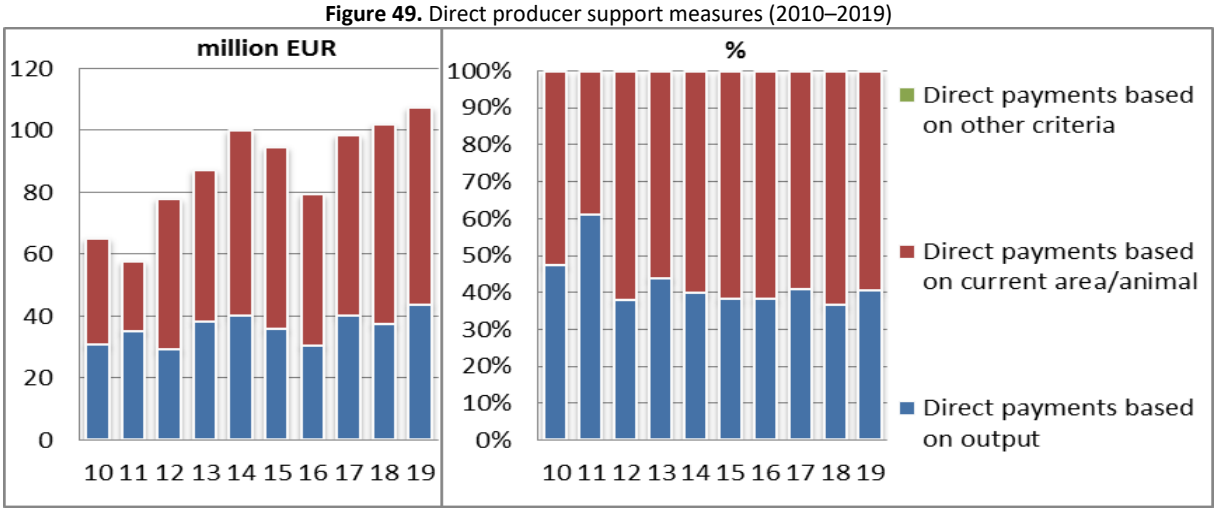
Figure 48. Market and direct producer support measures (2010–2019)



Source: MK APMC database (2020).

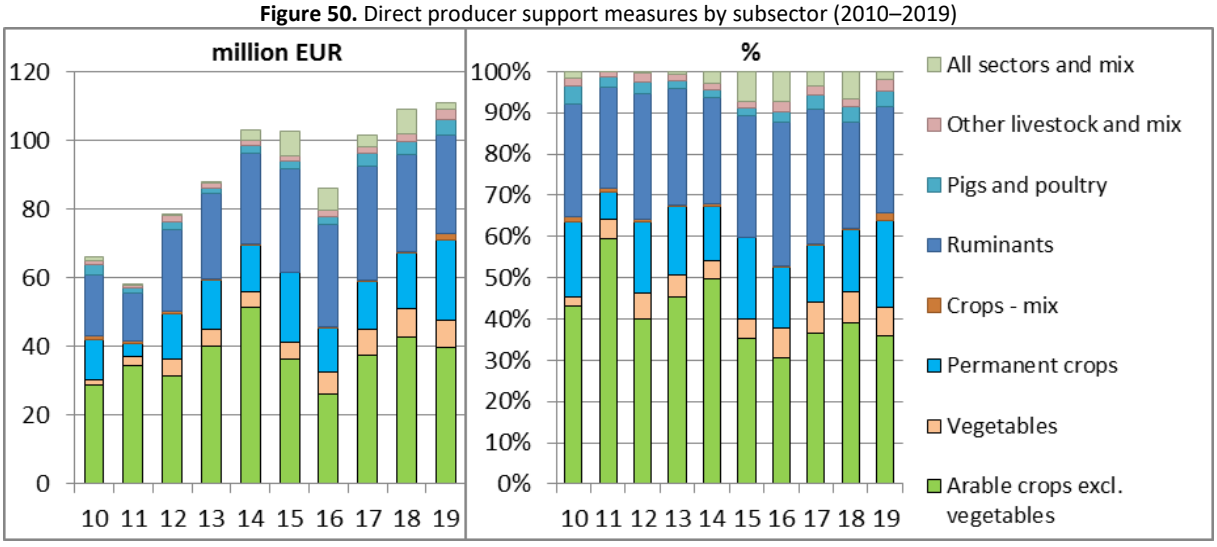
Livestock commodities have taken up about one third of direct producer support in the last 3 years of the period analysed, with sheep and goats (per head) and milk (per output) as the main supported commodities (Figure 49). The sheep and goat subsector receives about EUR 14 million annually. Milk support is provided for all categories (cow's, sheep's and goat's milk at EUR 11.3 million, EUR 6.0 million and EUR 7.8 million in 2017–2019, respectively), whereas about EUR 7 million is injected annually into the cattle sector (milk and beef). The decreasing number of livestock heads corresponds with these declining budgetary transfers to this subsector. Budgetary transfers are also provided for the pig (2 % of payments) and poultry subsectors (1 %), which are not supported as such in the CAP (Figure 50). There is a negligible amount of support dedicated to measures covering all commodities as a group or as mixed support (Figure 50).

Figure 49. Direct producer support measures (2010–2019)



Source: MK APMC database (2020).

Figure 50. Direct producer support measures by subsector (2010–2019)



Source: MK APMC database (2020).

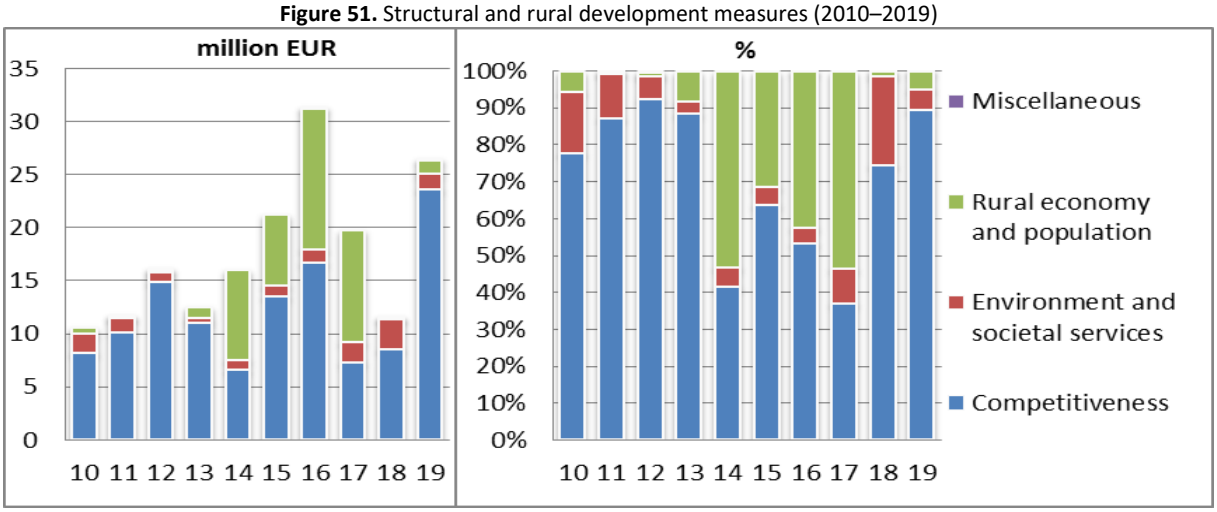
6.5.1.3. Structural and rural development measures

Increasing competitiveness continues to be the major support mechanism for farmers (Figure 51), although the amount allocated has varied a lot in the last few years (EUR 16.6 million in 2016, EUR 7.3 million in 2017, EUR 8.6 million in 2018 and EUR 23.6 million in 2019). Support for the rural economy and population experienced a significant increase from 2014 to 2016, with the highest ever amount of budgetary transfers received in the latter year (EUR 13.2 million). In the years that followed, there was a significant decrease in the amount allocated for such projects (EUR 10.59 million in 2017, only EUR 0.14 million in 2018 and EUR 1.33 million in 2019). Agri-environmental support takes up only a small proportion of the second pillar

(with about EUR 2 million allocated per year). Within agri-environmental support, organic farming makes up the largest proportion (from 75 % in 2017 to 100 % in 2019).

Source: MK APMC database (2020).

Figure 51. Structural and rural development measures (2010–2019)



Source: MK APMC database (2020).

The implementation of IPARD measures is also included in the structural and rural development budget. The IPARD I programme, although intended for 2007–2013, had its last two calls in 2015 and payments were made in March 2017. The IPARD II (2014–2020) programme began with its first call in April 2017. Since then, there have been seven public calls. The first call covered three measures (measures 1, 3 and 7) and it was implemented in 2018. The transfers to producers in 2018 amounted to EUR 1.34 million, that is, 11.6 % of the total budget for structural and rural development measures (according to the APMC). Of these, 45 % were dedicated to measure 1 and 55 % to measure 2. The two calls in late 2018 covered measures 1 and 3, and they were implemented in 2019, with EUR 11.92 million allocated (i.e. 26 % of the structural and rural development budget). These transfers were allocated between measures 1 and 3, with 59 % and 40 %, respectively. As in the case of IPARD I, farm diversification and business development (measure 7) was underused, being allocated only EUR 0.08 million in 2019, that is, just 1 % of IPARD transfers for that year. Bearing in mind the plan for the allocation of EUR 6 million, EUR 10 million and EUR 14 million for 2017, 2018 and 2019, respectively, the budget was not fully utilised. However, compared with the implementation of IPARD I, it is evident that there were lessons learnt, as the implementation rate substantially increased, especially in 2019.

The proportion of total IPARD II transfers for structural and rural development increased substantially from 11.6 % in 2018 to 45.2 % in 2019. However, this did not lead to a decrease in the national expenditure on rural development policy; on the contrary, national funds increased from EUR 10.17 million in 2018 to EUR 14.46 million in 2019.

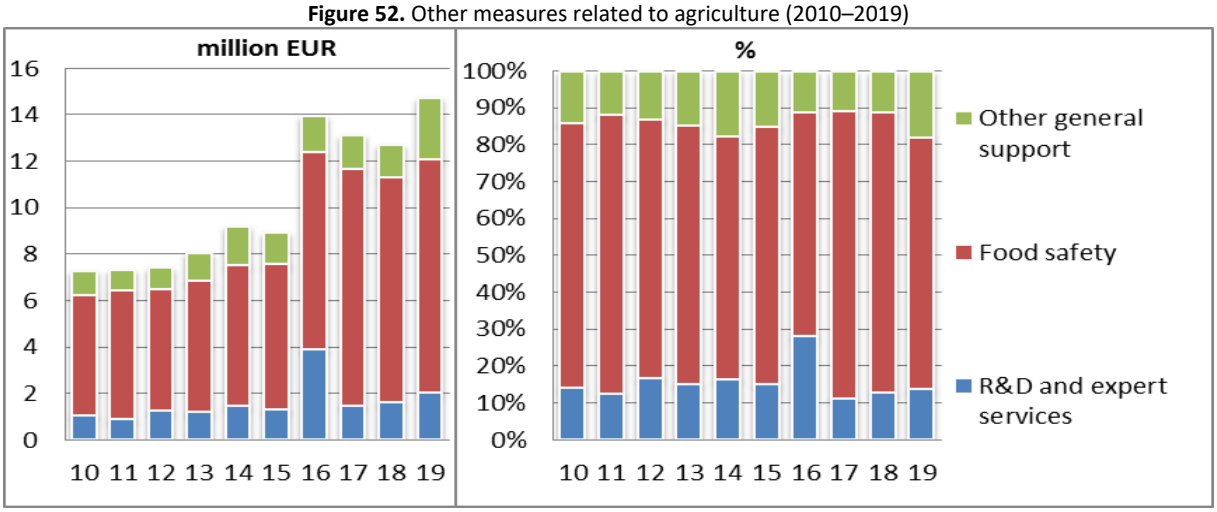
6.5.1.4. Other measures related to agriculture

Budgetary transfers for general support for agriculture (Figure 52) reached their highest level in 2019 (EUR 14.7 million) ([34]).

The largest proportion (on average 77 % in 2017 and 2018) of such transfers were allocated to veterinary and food quality control (as the budget of the Food and Veterinary Agency). The budget for expert services for research and development and vocational training, including the budget for the National Extension Agency, made up a much smaller proportion (12 % on average in 2018 and 2019) and decreased compared with the previous periods, namely 2010–2015 (15 %), and 2016 (28 %). Transfers for other general support measures were mainly designated for the budget of the National Hydrometeorological Service and for the organisation and realisation of various events and fairs, that is, EUR 1.42 million (11 %) in 2017 and 2018, compared with 14.5 % in 2010–2015.

([34]) Since the final budget for 2019 has not to date been published, the budgetary support of some institutions related to agriculture (the National Extension Agency, the Food and Veterinary Agency, the National Hydrometeorological Service, etc.) are included as the amount planned in the last budget rebalance in October 2019.

Figure 52. Other measures related to agriculture (2010–2019)



Source: MK APMC database (2020).

6.6. EU approximation process

The accession negotiations with North Macedonia opened in March 2020, pending a revised enlargement methodology for enhancing the progress for the candidate countries. So far, the screening process is under way, but no chapters have been opened, as no exact date to start the negotiations has been set. It is still not fully certain how the new enlargement methodology will function and how it will affect the chapters connected to agriculture and rural development within the pre-accession negotiation framework. It is certain, though, that the future agricultural policy of North Macedonia will need to be amended in line with the changes to EU policy. Succeeding the CAP for 2013–2020, which introduced more equitable and greener direct payments and strengthened measures for rural development, the new CAP for 2021–2027 is intended to be additionally flexible and hence more effective. Member States will have single national strategic plans with quantitative targets covering both policy pillars. The proposal for the new CAP for 2021–2027 gives precedence to the environment and climate action issues, with direct payments to be closely linked to compliance with stricter environmental and climate protection requirements. Knowledge, advisory infrastructure and innovations are also high on the priority list. The new 7-year strategic programme to be defined in the NARDS for 2021–2027 will have to consider these changes in its priorities and objectives, and hence programme appropriate measures that will address not only the production side of the sector, but also the wider economic, social and environmental context.

The last EU approximation report found the country to be moderately prepared in the area of agriculture and rural development. The country's legal framework is mostly aligned with the *acquis*, although there is a need for further policy alignment, including decoupling direct payments, and a stronger application of cross-compliance rules is recommended (European Commission, 2019). The chapter on food safety, veterinary and phytosanitary policy was evaluated as the strongest, with the country found to have a good level of preparation in terms of this chapter.

With the sector development strategies (the NARDS for 2007–2013 and the subsequent NARDS for 2014–2020), North Macedonia has adopted priorities that, in principle, follow the EU CAP priorities. Nevertheless, differences remain between the national budget measures applied (direct producer support, in particular) in the country and the EU CAP. A significant proportion of the direct support is still oriented towards production with coupled payments, which contrasts with the EU policy approach of decoupled payments and greening with strict cross-compliance requirements as the core mechanism of market-based support.

The introduction of CMO, as part of the first pillar, was addressed more intensely in 2017–2019 than in previous periods. The legal framework on quality and marketing standards for agricultural products largely already exists, but some updates are needed and many provisions still need to be implemented. Still lacking is an appropriate framework for implementing some of the market intervention measures, measures to improve producer organisation functioning, measures to encourage the consumption of fresh fruits, vegetables, milk and dairy products (similar to school schemes), measures to enforce contractual relations, etc. The agricultural market information system within the MAFWE needs to be continuously upgraded, maintained and updated.

The rural development component conceptually reflects the current EU policy to a large extent. Nevertheless, the proportion of the budget allocated to structural and rural development measures needs to increase (towards the set goal of 30 %), so that they can have a more sustainable impact on the rural economy. A recent input–output analysis, based on AFSARD and FADN data (World Bank, 2019), demonstrates that the economy-wide effects of rural development measures are greater than those of direct payments, when improvements in productive capacity and structural impacts are taken into account. Therefore, the reallocation of some funds from the first to the second pillar would enable better fulfilment of the rural development programme objectives, create better job opportunities in rural areas and target young people and women, ensuring generational transfer. To enable business development and equal opportunities, support is provided to young farmers for start-ups and, in 2020, a new measure was introduced for supporting active female members in agricultural holding (i.e. small grants for rural women up to EUR 3 000 – that is, M115 in the national rural development programme).

Besides national funds, development is also supported by the current IPARD II programme, which, although it refers to 2014–2020, only started with its first call in 2017. The accreditation and implementation of measures is a long process that requires adequate human capacities, which must eventually be able to manage the process in line with the EU rules upon accession. Therefore, besides the specific measures and sector beneficiaries, one of the key IPARD contributions is the development of the institutional infrastructure, competence and administrative capacities in the country, which is an important prerequisite for fulfilment of the EU accession requirements. Although the number of measures within the programme for 2017–2019 was initially planned to be increased, only three measures, and a fourth horizontal measure of technical assistance, are open for calls in the programme. The improvement of rural infrastructure is at an advanced stage, but is still not accredited. The agri-environment, climate and organic farming measure (M2.1) is planned to be introduced conditional on the preparation of an agri-ecological programme, ready paying agency procedures, certain legal interventions, an established system of sanctions, calculations for the amounts to be given to farmers, etc. The implementation of local development strategies (the LEADER approach (M3.3)) and advisory services (M4.3) is next in line, pending additional preparation and capacity building.

The lessons learnt from IPARD I have contributed to gradual improvements to and higher absorption of the IPARD II funds. The main lessons learnt are as follows: there is a need to simplify some procedures and administration for applicants (they need to be made more easily understandable and approachable), for a faster resolution of the calls, for more visible communication of the programme to the potential applicants and for more transparent functioning of the IPARD committee.

Given the large number of farmers in the country, the complex array of measures and criteria, the frequent short-term alterations to the measures and the introduction of new ad hoc or regular measures, it is a necessary to have strong management and control systems. The development of the IACS, the farm register and the LPIS is ongoing, but, owing to insufficient resources to maintain and operate the system, these systems are still lacking in terms of data quality and relevance (European Commission 2019). The capacity of the AFSARD requires continuous strengthening to ensure that an increasing volume of national and IPARD measures are implemented. Although there has been some increase in staff in the AFSARD, fluctuations in employee numbers are still an issue and the agency's capacity to absorb funds, especially with regard to IPARD II, is insufficient.

The FADN survey is regularly undertaken and was considerably improved in terms of procedures, data entry, processing and controls in 2018–2019, ensuring that it is more in line with the current EU requirements. However, to keep the system running, local human resources, both at the field data collection and entry level (National Extension Agency advisors) and at the management level (MAFWE staff), have to be continuously trained and developed. The use of the FADN data for policymaking purposes, in research and, last but not least, as feedback to farmers needs to be enhanced.

6.7. Conclusions and recommendations

Although the agricultural policy and its institutional framework should reflect the development of the agricultural sector, in practice the opposite is true. The policy priorities and goals are defined in the strategic documents and there are a number of laws, by-laws, programmes and measures to regulate and support the sector. However, a number of sectoral issues still persist, such as no important structural changes being undertaken, low productivity, and poor horizontal and vertical integration.

As no important structural changes have been observed over the period analysed, the large number of farms (over half of which are very small farms) remain the core characteristic of North Macedonia's agriculture. The

insufficient use of production capacities persists as a problem, resulting in persistent low productivity levels. The lack of more advanced investments, limited own finances and insufficient entrepreneurship skills emphasise the need for effective knowledge transfer and the encouragement of innovation. Horizontal and vertical integration is still poor. The cooperation between farmers, which is especially important given the generally small farm size and low individual market and bargaining power, is still lacking. Efforts have been made to support agricultural cooperatives, but their functioning and sustainability still remains a challenge.

In recent years, the statistics show decreasing livestock numbers. If this trend persists, it could affect the subsector's balance and existing value chains. In crop production, an increasing orientation towards less labour-intensive crops has been observed, mainly owing to the decreased availability of labour and working capital. The existing direct payments scheme in some cases drives farmers to switch to less labour- and capital-intensive farming enterprises. Organic production is increasing in terms of capacity and number of farmers. Nevertheless, it is still marginal, constituting less than 1 % of the total area of agricultural production and lagging far behind the total livestock fund.

Labour in agriculture and rural areas is becoming one of the key constraints in terms of availability and qualifications. The average farmer age, gender inequality and rural–urban and out-of-country migration further exacerbate this issue. The development of rural areas, as vital factor in economic, social and environmental viability, has failed to gain the necessary attention. Rural communities are still faced with a lack of basic services, infrastructure and employment opportunities, affecting the quality of life and resilience of the rural population.

Most of the issues in the sector arise from policy planning gaps and certain implementation challenges that need to be considered when planning the next policy cycle. The following are some of the key recommendations.

Coupled direct payments are still an important part of the budget, which is not in line with the EU principles. To make farmers more responsive to the market, further decoupling of measures is expected, towards full alignment with the EU CAP. However, this should be done with caution, taking into consideration the possible negative effects on the production structure and the experience from other countries in which shifting to less labour-intensive agricultural production occurred. Income support needs to be linked more intensely with protecting the environment, plant and animal health, and welfare, contributing to sustainable agriculture and rural development.

Furthermore, reallocating funds from direct support funds to structural and rural development funds, and even more so to important general support services (such as advisory services, research, knowledge transfer and measures for improving sector competitiveness), would improve farm efficiency and ensure more productive use of the limited public resources.

There is a large number of measures with complex procedures. Their frequent changes, especially in annual programming, are also a burden for less educated farmers, as this makes it hard for them to follow, understand and meet the requirements. Policy needs to be tailored to the population it targets, and should follow the strategic goals and priorities set by policymakers.

A general remark is that evidence-based policy is only partially ensured, with modest use of analytical tools in policy development. The process of turning data into meaningful objective information that can be used for making informed policy decisions, and later transparent policy monitoring, evaluation and impact assessments, is still not a default applied mechanism. The lack of a system for monitoring, evaluation and impact assessment, and the lack of human resources with the appropriate knowledge of methods and tools, added to the persistent issue of the lack of data quality, availability and accessibility, remain major obstacles.

There are many changes and challenges ahead, and these need to be taken into consideration in the new national strategical framework (the NARDS for 2021–2027), among which are the changes to the CAP and the new revised EU accession methodology. The COVID-19 crisis also raised some issues regarding the functioning of the institutions in the agricultural sector and the economy in general.

Regarding the legal framework, the public consultations as part of the process of adopting legislation have improved by using the national electronic consultation system. Nevertheless, proposed legislation should be thoroughly discussed and explained to relevant stakeholders, especially those directly targeted to be actively consulted in the process, and their opinions should be taken into consideration for improving the legal documents.

Continuous and consistent pursuing of the strategic goals and priorities set should be a strong governmental commitment, as a prerequisite for successful implementation of the measures. In this context, cooperation and

coordination within and among the relevant institutions is of crucial importance. In addition, inter-ministerial consultations, especially on cross-cutting issues such as environmental issues, sustainable development, and opportunities for young people and women, need to be properly integrated into the process.

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7. CASE STUDY: SERBIA

Vlado Kovačević ([35])

7.1. Introduction

Agriculture is an economically and politically important sector in Serbia. The agricultural sector in 2019 accounts for around of 11.7 % of GVA and employs 19.1 % of the total labour force (MAFWM, 2019b). Serbian agriculture is characterised by a consistent positive foreign trade balance, underutilised resources and production potentials, underdeveloped agri-food chains, the marginalisation of rural areas, etc. A limitation in the research on socioeconomic issues is the lack of information and an adequate methodology for monitoring at the state level. In previous decades, the agricultural policy in Serbia was quite inconsistent, characterised by changing political and economic aims, a satisfaction of farmers' social needs and market disturbances. Currently, the budgetary support for agriculture and rural development is around 5 % of the national budget, with direct subsidies dominating. Serbia gained candidate status on 1 March 2012. As of December 2017, the IPARD II programme began in Serbia.

This chapter analyses Serbian agriculture in terms of the existing policy and institutional framework, the state of the agricultural sector, the structure of budgetary support, recent trends, the sector's output and foreign trade, the main developments in key subsectors and the basic characteristics of farm structure. Special attention is paid to the role of European integration in the context of agriculture and rural development. The analysis of the agricultural sector is based on the agricultural statistics database ([36]) and the APM database ([37]), as well as national statistics data provided by the Statistical Office of the Republic of Serbia (SORS). Data on budgetary transfers are collected from the Ministry of Agriculture, Forestry and Water Management (MAFWM) and classified according to the APMC template to enable comparison with other WB countries/territories and the EU CAP. The analysis covers 2010–2019, with particular focus on the situation and changes in recent years, namely from 2017 to 2019.

7.2. State of the agri-food sector

During the period reviewed, agriculture remained a sector that played a significant role in the national economy (Table 27). Agriculture is an important sector in the Serbian economy, although its contribution to GVA has been slowly decreasing, reaching 11.7 % in 2019. The agriculture sector employs 19.1 % of the Serbian workforce and has a consistent positive foreign trade balance.

The negative effects of the global economic crisis were noticeable, affecting several of the main economic indicators, while, in the middle of the period analysed, the effects of floods had a negative influence on some sectors, especially agriculture. The second half of the period was characterised by a steady positive trend in most indicators.

One of the main structural issues in Serbia is unfavourable farm structures and low productivity. However, there are growing trends in the average wheat and maize yields, which provide a strong export base in the cereals production sector. In addition, average milk yield also increased over the past decade; therefore, although there was a reduction in the number of dairy cows, the amount of milk produced remained unchanged (Table 27).

The structure of farms regarding UAA size has improved slightly, as some small farms (up to 1 ha) have upgraded to a higher UAA size category. The majority of farms (about one third of all farms) utilise from 1 to 3 ha, but these farms represent only 10.3 % of UAA. In addition, 11 % of farms cultivate over 10 ha of UAA, covering 57.5 % of total UAA (SORS, 2013).

According to the 2018 farm structure survey data, (SORS, 2018), there are 1.93 million livestock units in Serbia, a decrease of 4 % compared with the 2012 census data. About 77 % of farms own some livestock. The average number of livestock units per farm is 4.4, indicating a predominance of small herds and a limited scope of the production (market oriented). The majority of farms (35.7 %) breed between 1 and 3 livestock units, while almost 70 % of farms have up to 3 livestock units. Only 0.5 % of farms breed more than a quarter of the total number of livestock units in the country.

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([36]) The agricultural statistics database was compiled for Serbia under the SWG Institute for Prospective Technological Studies (IPTS) projects (http://app.seerural.org/agricultural-statistics/).

([37]) The agricultural policy measures database was compiled for Serbia under the SWG IPTS projects.

About 1 336 940 persons were engaged in agriculture in 2018 (7.4 % less than in 2012), of which 98.5 % is the family labour force. The total number of annual work units (AWUs) was 645 733 in 2018, of which 91.6 % originated from the family labour force. The AWUs per holding was 1.14 in 2018, which was 11.4 % more than in 2012, while the AWUs per hectare of UAA and per livestock unit stayed the same as in 2012 (0.19 and 0.33, respectively).

Table 27. Serbian agriculture's contribution to the economy and characteristics of the agricultural sector

Characteristic	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
% of GVA	12.2	13.3	12.1	13.2	13.0	12.6	12.8	11.7	11.7	:
% of employment	26.2	25.2	25.4	25.4	23.7	23.4	22.5	21.0	19.8	19.1
Agri-food exports (% of total exports)	23.0	23.2	24.1	19.1	20.8	21.6	21.8	19.4	17.5	18.5
Agri-food imports (% of total imports)	6.6	7.4	8.3	7.9	8.0	9.1	7.8	9.5	7.8	7.8
Agri-food export-to-import rate (%)	207.7	185.8	174.5	172.1	187.4	175.0	214.5	158.2	166.5	173.3
UAA (thousand hectares)	3 521	3 528	3 462	3 495	3 518	3 480	3 456	3 438	3 487	3 482
% of arable land in UAA	75.4	74.8	74.0	74.1	74.1	74.4	75.2	75.5	74.1	74.1
% of crops in total agricultural production	70.5	69.1	64.5	67.0	66.9	65.8	71.1	65.7	67.6	:
Average wheat yield (t/ha)	3.4	4.2	4.0	4.3	3.9	4.1	4.8	4.1	4.6	4.4
Average milk yield (t/dairy cow)	2.9	3.0	3.0	3.3	3.4	3.6	3.6	3.6	3.6	3.6

:, not available.

Source: SORS 2020.

The age distribution of farm holders is not favourable, as the average age of farm holders is 61 years (2 years older than in 2012), with 42.8 % of holders over 65 years of age. Only 3.1 % of holders are younger than 35 years and 7.1 % of farm holders are under 40 years of age. The gender structure is also not favourable, as females make up only 15.3 % of all farm holders. The educational structure shows that the majority of farm holders carry out their business based on experience gained through practice (48.6 %), while 45.2 % have a high school education and 6 % have a university degree (SORS, 2013).

The average standard output per holding has been increasing significantly since the 2012census data – according to farm structure survey data, the average standard output in 2018 was EUR 9 457 (EUR 5 918 in 2012). The distribution of standard output has also improved, with 27.7 % of holdings having a standard output of less than EUR 2 000 per holding (this was 45.9 % in 2012), while 23.5 % have a standard output between EUR 2 000 and EUR 4 000, similar to the proportion of holdings with a standard output between EUR 4 000 and EUR 8 000 (23.1 %). Vojvodina kept its position as having the highest values regarding average standard output (SORS, 2013).

Agricultural production in Serbia is based largely on crop production, which constitutes about two thirds of agricultural output. In 2018, crop production accounted for 67.6 % of agricultural output, while livestock output accounted for 29.9 %. Both indicators are at a similar level to 5 years previous. However, owing to the characteristics of crop production itself (i.e. the seasonal impact), the proportion of crop production in agricultural output has varied between 64.5 % and 71.1 % in the last decade (MAFWM, 2019b).

The most significant contributions to Serbian agriculture in terms of resources, production potential and their growing trend can be considered the production of cereals, oilseeds, fruit and vegetables, beef and veal, and milk and dairy products. Serbia's organic production segment has seen marked growth, both in plant and in livestock production. The area under organic production reached about 9 000 ha in 2018, five times more than in 2012. More than one third of the area is covered by orchards, and other common organic crops include wheat and oilseeds (MAFWM, 2019b).

Agriculture's contribution to GVA has shown a steady trend that has followed the increase in total output and input consumption in the period analysed. Subsidies on products represent, on average, 8 % of total output at

producers' prices, but the absolute level of subsidies has been growing, reaching a maximum of EUR 491 million in 2019. Feeding stuffs make up the most significant proportion of total intermediate consumption (34.6 % on average), ranging between EUR 960 million and EUR 1.1 billion in 2010–2018. Energy makes up 12.7 % of total intermediate consumption, while other goods and services make up about 13 %. On the other hand, plant protection products, veterinary expenses and agricultural services contribute only 3.6–5.5 % of total intermediate consumption (MAFWM, 2019a).

After significantly lower levels of price indices in 2010 and 2011 (compared with 2015), nominal price indices varied within the limits of ±10 % in the period that followed. In 2019, total agriculture price indices were 2.4 % higher than in 2015 and 2.7 % higher than in 2018 (MAFWM, 2019a).

The agriculture and food industry remains one of the few sectors in the Serbian economy with a positive foreign trade balance. The foreign trade of agricultural and food products in 2019 accounted for EUR 5.11 billion. The foreign trade in 2019 was 11.8 % higher than in 2018 and 21.5 % higher than the 5-year average. Both exports and imports of agricultural and food products continue to grow – in 2019, exports reached a value of EUR 3.24 billion (13.7 % higher than in 2018) and imports amounted to EUR 1.86 billion (8.6 % higher than in 2018). This relationship between exports and imports resulted in a positive trade balance at the level of EUR 1.38 billion, which was 21.2 % higher than in the previous year. The import coverage ratio of agricultural and food products in 2019 was 1.74 (MAFWM, 2019a).

The structure of the foreign trade balance is not favourable; Serbia imports mainly high-value products, while exporting mainly raw agricultural products. Raw agricultural products traditionally dominate in the structure of exports and imports in terms of the level of product processing. In both segments (exports and imports), primary agricultural products were still dominant in 2019, making up 72 % and 62 %, respectively. Processed agricultural products account for slightly more than a quarter of the value of exports (27 %), while they account for a third of the imported value (33 %). Traditionally, the EU is the most significant export destination for agricultural and food products from Serbia, as almost half of the export value (48.9 %) is delivered to the EU market. Central European Free Trade Agreement (CEFTA) countries are the export destination for 28.5 % of exports, and 22.5 % of products were sold in other countries (MAFWM, 2019a).

Most of imported agricultural and food products originate from EU countries, making up 65.3 % of the imported value. About a quarter of imports (25.2 %) were from other countries and 9.5 % were from CEFTA countries. Among other countries, Russia is Serbia's most significant trade partner, as one third of trade with EU and CEFTA countries represents trade with Russia. This trade is supported by the free trade agreement between the two countries and preferential access for their products (MAFWM, 2019a).

7.3. Socioeconomic issues underlying rural areas

One of the most important limitations in research of rural socioeconomic issues is that the socioeconomic indicators ([38]) in Serbia at the state level are not established completely. Predominantly rural regions are represented by the two types of settlements: 'urban' and 'other'. Serbia uses the simple OECD regional typology (at the local level, the population density criterion). This classification has proved in practice to be insufficient. A second limitation is that Serbia has not prepared a typology of the region (a classification of NUTS level 3 areas) ([39]) according to the urban–rural typology recommended by the Directorate-General for Agriculture and Rural Development ([40]).

The lack of socioeconomic indicators is obvious. A number of indicators per type of region are missing. In more detail, the indicators missing in this segment are the following: population, according to the urban–rural typology; age structure, according to the urban–rural typology (predominantly rural, intermediate and predominantly urban regions); territory, according to the urban–rural typology (predominantly rural, intermediate and predominantly urban regions); employment and unemployment rate, according to the degree

([38]) The socioeconomic and other common context indicators are used as a framework for monitoring and evaluating the CAP and rural development policy in the EU countries.

([39]) For the 2021 census (once the SORS has the available data on the spatial distribution of the population up to the level of the house number and has formed a network of population grids of 1 km^2), the SORS is expected to classify the spatial units for the municipality level (LAU level 2), according to the degree of urbanisation in accordance with the degree of urbanisation (DEGURBA) classification, which will be the basis for the development of the typology of the region (NUTS level 3), according to urban–rural typology of the European Commission (predominantly urban regions, intermediate regions and predominantly rural regions).

([40]) For more information, see Eurostat's degree of urbanisation territorial typologies manual (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_degree_of_urbanisation).

of urbanisation LAU level 2 spatial units (scarcely/intermediate/densely populated areas); and GDP per capita, according to the urban–rural typology (predominantly rural, intermediate and predominantly urban regions).

In addition, the SORS does not monitor employment, total or by sector of activity, according to the concept of national accounts, which makes it impossible to calculate the derived indicator 'Labour productivity, total and by sector: primary, secondary and tertiary sector'. The SORS collected data on the number of employees according to the concept of national accounts for 2015–2017, but these data are experimental and not for public use. It is necessary to continue further harmonising the SORS methodology with that of Eurostat, and to introduce new, currently missing, indicators by the SORS, especially in the segment of national accounts and economic accounts of agriculture. Additionally, it will be crucial to establish a classification of spatial units at the municipal level (LAU level 2) according to the degree of urbanisation methodology, and to apply the European Commission urban–rural typology at the area level (NUTS level 3), as only a proper definition of rural areas can provide the basis for establishing relevant indicators for assessing the state of development of rural areas.

According to the existing data, the rural population of Serbia is made up of 2.73 million people, making up about 39 % of the total population. The number of inhabitants living in rural areas, and their proportion of the total population, has slightly decreased, reaching its lowest level at the end of 2018 (MAFWM, 2019a). This negative trend is caused by migration into urban areas and follows a general trend in Europe.

The total number of employees in the agricultural sector has also decreased, reaching 452 700 (15.6 % of total employment). With an average net monthly salary of EUR 402 (and an average gross monthly salary of EUR 555), employees in agriculture receive 14 % less than the national average net monthly salary. The active workforce rate of the total population was 54.6 % in 2019. The majority of this workforce are male (63 %), with a similar gender distribution also in the employment rate. The unemployment rate has seen a downwards trend in the last decade, reaching its lowest level in 2019 at 10.4% (MAFWM, 2019a). The majority of unemployed people are women.

Regarding the education of the labour force, the most dominant group are people with a high school education in all categories. About 57 % of employees have a high school education, while those with a higher education accounted for 26 %. Within the unemployed population, 62 % have a high school education (SORS, 2013).

Concerning the structure of the labour force according to age, those between 34 and 65 years of age dominate in all categories, making up 68 % of the employed population and 52 % of the unemployed population (SORS, 2013).

7.4. National policy framework

In the last decade, there appreciable progress has been made in adopting legal and strategic documents that define the long-term strategic goals of Serbian agriculture and the pathway for the implementation of agricultural and rural development policies. The EU negotiating process itself had a significant influence on these activities, in particular after 2013.

Currently, agricultural and rural development policies are based on several strategic and legal documents, governing the implementation of agricultural and rural development support. Two basic legal acts establish the legal framework for the implementation of subsidies. First, the law on agriculture and rural development (Official Gazette of the Republic of Serbia Nos 41/09, 10/13 and 101/16) establishes the basic bodies, mechanisms and instruments and provides the environment for the implementation, monitoring and evaluation of policies. Second, the law on subsidies in agriculture and rural development (Official Gazette of the Republic of Serbia Nos 10/13, 142/14, 103/15 and 101/16) defines subsidies in agriculture and rural development (direct payments, rural development measures, credit support, specific subsidies and IPARD measures), the manner of implementation, beneficiaries, eligibility criteria, the requirements for exercising the right to subsidies and the minimum level of support per measure.

The allocation of budgetary funds, allocated to the subsidies within the MAFWM's budget, is carried out annually by the regulation on the allocation of subsidies in agriculture and rural development for a calendar year. This regulation defines allocated funds per type of subsidy and the maximum level of support per measure, which will be implemented in a calendar year. It is adopted by the government, within 30 days of the adoption of the budget of the Republic of Serbia for a calendar year.

Several strategic and programme documents direct agriculture in the long and medium term. The main strategic document, which provides a strategic framework for medium-term programmes, is the strategy for the

agriculture and rural development of the Republic of Serbia for 2014–2024. The strategy defines the strategic framework, vision and objectives, indicators, and measures and activities for achieving defined strategic goals in the 10-year period. The strategy takes into account the process of EU integration and the necessary activities for working towards Serbian membership in the EU.

The vision of the development of agriculture and rural areas in Serbia reflects the projected state of the agricultural sector. The vision is as follows: (i) agriculture in Serbia is a sector whose development is based on knowledge, modern technologies and standards that offer national and demanding foreign markets innovative products and provides producers with sustainable and stable income and (ii) natural resources, the environment and the cultural heritage of rural areas are managed in accordance with the principles of sustainable development, in order to make rural areas attractive for young people to live and work in, as well as for other people living in rural areas.

The strategy defines five strategic goals: (i) a growth in production and an improvement to the stability of producers' incomes, (ii) an increase in competitiveness while adapting to the demands of domestic and foreign markets and the technical and technological progress of the agricultural sector, (iii) achieving sustainable resource management and environmental protection, (iv) an improvement in the quality of life in rural areas and poverty reduction and (v) achieving effective management of public policies and the improvement of the institutional framework for the development of agriculture and rural areas.

Based on the strategy, two medium-term programmes have been adopted, containing detailed 3-year plans and dynamics for the implementation of the policy, as well as the main activities for the harmonisation of the national agricultural and rural development policies with the appropriate CAP schemes in the pre-accession period.

The national agriculture programme for 2018–2020 provides a strategic medium-term framework for the implementation of direct payments, credit support and specific subsidies in 2018–2020. The national agriculture programme also defines the dynamics of the transposition of these schemes towards the CAP, as well as an estimated budget and indicators, which are the basis for monitoring, evaluation and reporting results.

The national programme for agriculture for the period 2018 - 2020 defines national rural development measures only. The document completing the rural development policy in Serbia is the IPARD II programme, which is the basis for the implementation of IPARD measures in 2014–2020, co-financed by the European funds. The IPARD II programme for 2014–2020 aims to strengthen the competitiveness of the production and processing sector, which will help in the gradual adaptation to the EU standards in the areas of hygiene, food safety, veterinary and environmental protection, and the diversification of the rural economy. IPARD II offers investment support at a value of about EUR 225 million, of which EUR 175 million is EU contributions. There are six IPARD II programme measures: (i) investments in physical assets of agricultural holdings (44 % of the total allocation; measure 1); (ii) investments in physical assets for the processing and marketing of agricultural and fishery products (38 %; measure 3); (iii) agri-environmental-climate measures and organic production (4 %; measure 4); (iv) the implementation of local rural development strategies – the LEADER approach (3 %; measure 5); (v) the diversification of agricultural holdings and business development (9 %; measure 7); and (vi) technical assistance (2 %; measure 9).

The implementation of the IPARD II programme in Serbia began at the end of 2017, while the official accreditation came into force on 12 June 2018 with the signing of the financing agreement between the Government of the Republic of Serbia and the European Commission. Currently, the IPARD II programme is implemented through measures 1, 3, 7 and 9, and a procedural framework for the accreditation of measures 4 and 5 is being prepared.

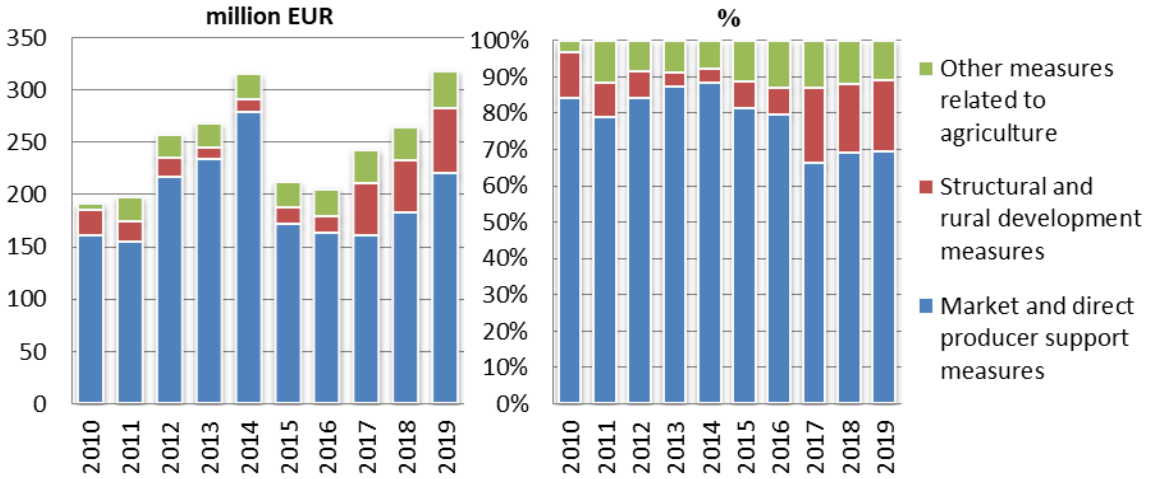
The IPARD funds used are lower than planned (for measure 1, EUR 6.103 million was used, and this made up the total funds used in the IPARD II programme in 2017–2019, as there were no disbursements for measure 3). The most important factors that influenced the deviation of the implementation of the IPARD II programme from the plan were (i) a delay in the accreditation of all planned measures, (ii) a longer application-processing period at all stages, (iii) uncertainty among applicants regarding the exercising of their rights to IPARD II assets, (iv) a lack of opportunities to use support in the financing of IPARD projects, (v) administrative obstacles for the involvement of more beneficiaries, such as the inability to initiate start-up investments (beneficiaries of both measures 1 and 3 must prove, when applying, that they are already engaged in the sector), facilities on the Directorate-General for Health and Food Safety list not applying, etc., (vi) the submission procedure in terms of the need for three offers and (vii) insufficient information about beneficiaries (which the analysis showed to be the most common reason for rejection).

In a broader sense, the agricultural and rural development policy is directed partially by certain national documents, prepared as a part of the negotiating process, with the goal to provide a plan for the harmonisation of national legislative with the *acquis*. The national programme for adoption of the *acquis* is a detailed, multi-annual plan for harmonisation of the domestic legislation with the EU legislation. It connects European legislation and the domestic legal system, in order to monitor the dynamics, scope and quality of the harmonisation at all times. In the national programme for adoption of the *acquis*, the EU *acquis* is presented in accordance with the competence of state bodies as the leaders of negotiations in the negotiation chapters, which enables regular planning and monitoring of their legislative activities. The action plan for the harmonisation, adoption and implementation of the EU *acquis* in the field of agriculture and rural development has been prepared as a part of fulfilling the opening benchmarks for Chapter 11. The action plan provides the manner and dynamics through which the national policies will be adjusted in line with the CAP policies. The action plan was adopted by the government and delivered to the European Commission at the end 2018.

7.5. Measures and budgetary support for agriculture and rural development

Budgetary support for Serbian agriculture, after a decline in 2015, experienced a resurgence in 2016–2019 (Figure 53). The highest budget support was achieved in 2019 at EUR 318 million. The budgetary support is characterised predominantly by first pillar measures (direct support mostly), with a noticeable increase in structural and rural development measures in 2017–2019.

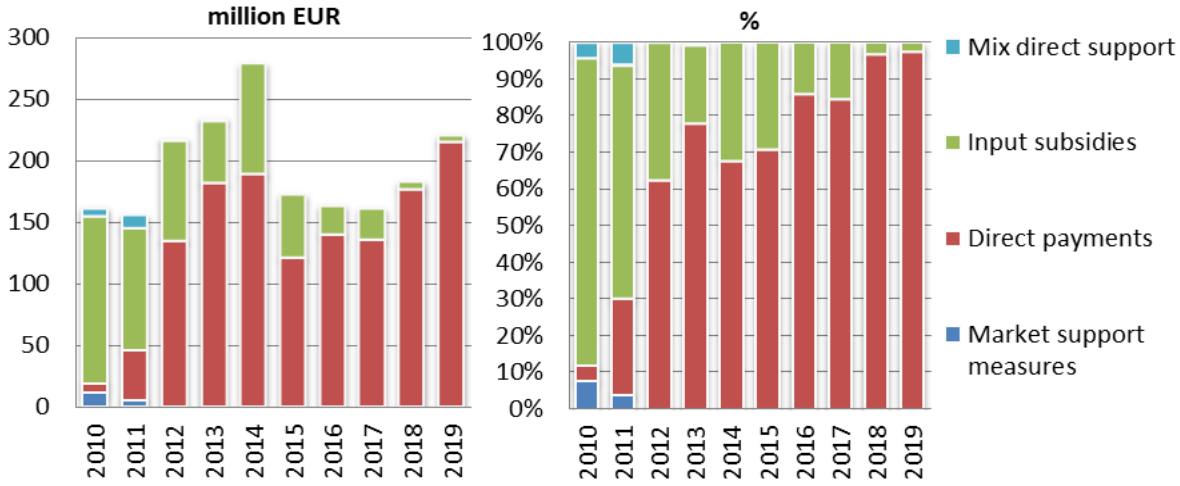
Figure 53. Total budgetary support to agriculture (2010–2019)



Source: RS APMC database (2020).

Market and direct support measures are dominant in budgetary support; these measures reached their maximum in 2014 (EUR 279 million, which was almost 90 % of total support) and decreased to around EUR 240 million (i.e. 70 % of total support) in 2019. All direct payments to producers in the previous period were coupled direct payments (Figure 54).

Figure 54. Market and direct producers support measures (2010–2019)



Source: RS APMC database (2020).

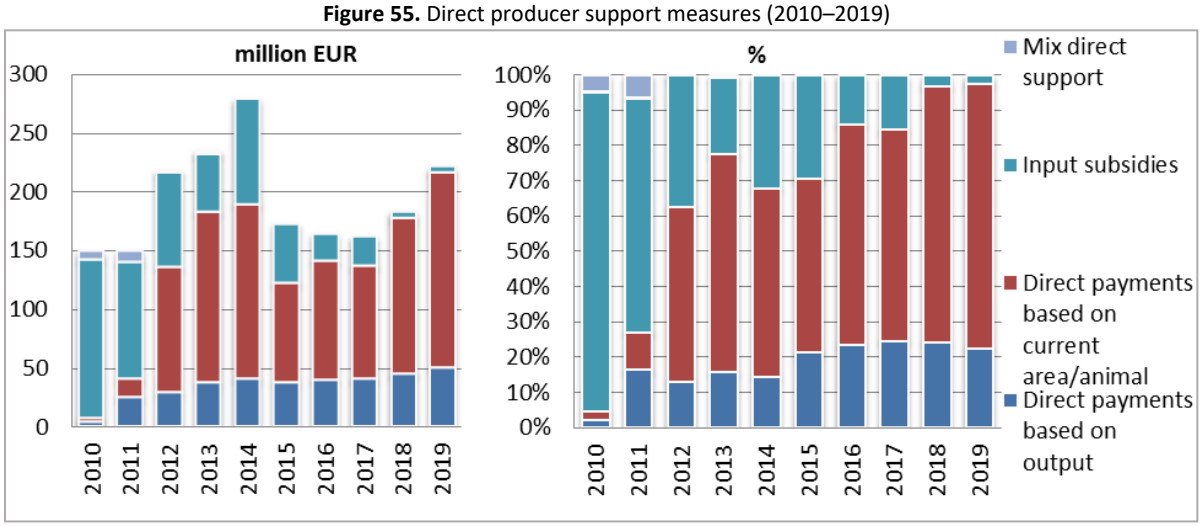
After 2011, the market measures, which were based on export subsidies only, were abolished in accordance with the World Trade Organization (WTO) negotiating process, as this measure was not in line with the WTO trade policy. There has been a tendency towards decreasing input subsidies (excluding insurance premium subsidies) and their transformation into direct payments to producers (per head/area), directed by the plan for the harmonisation of national direct payments with the CAP. Variable input subsidies saw a decreasing trend in 2010–2019. At the beginning of the period, input subsidies contributed about 70 % to total support for agriculture, with the highest level being EUR 135.1 million. In the following years, variable input subsidies decreased, reaching EUR 5.1 million at the end of the period analysed. Subsidies for insurance premiums grew, in terms of both allocated funds and number of beneficiaries.

The direct payments based on output (price support) had showed a strong upwards trend over the last decade, reaching a maximum of EUR 50 million in 2019, almost 14 times higher than in 2010. The only scheme for this type of subsidy is milk premiums, which is one of the long-lasting support measures in Serbian agricultural policy.

Direct payments based on area/animal have increased over the last 10 years (Figure 55). After the implementation of the law on subsidies in agriculture and rural development, there was a significant increase in funding for this type of subsidy, with a maximum amount of EUR 166 million in 2019 (75 % of direct support). A drop in the funds level was seen in 2015–2017, caused by the rationalisation of the Serbian budget.

Direct payments based on area are paid for sown arable land and were limited to a maximum of 20 ha per holding from 2015. Direct payments based on animals were introduced by the law on subsidies in agriculture and rural development in 2013, including subsidies for quality breeding animals, subsidies for cattle, pigs, lambs and kids fattening, subsidies for suckler cows, subsidies for cows for breeding calves for fattening, subsidies for beehives and subsidies for fish production.

Figure 55. Direct producer support measures (2010–2019)



Source: RS APMC database (2020).

Support for rural development experienced a downwards trend for most of the period analysed (2010–2016) and then saw a significant increase from 2017, achieving a maximum of EUR 62.2 million in 2019, namely 2.6 times higher amount than in 2010. One of the reasons for this increase could be the introduction of IPARD measures (and EU co-financing) and the release of funds for national rural development measures. The allocated fund for IPARD II is EUR 175 million from the EU and EUR 50 million from the national budget ([41]). Nevertheless, the IPARD funds used were much lower than those planned and hence the actual budgetary contribution is still small. Regardless of the overall level of funds for rural development throughout the whole period, most of the budgetary funds were intended to improve competitiveness, namely 92 % on average (Figure 56).

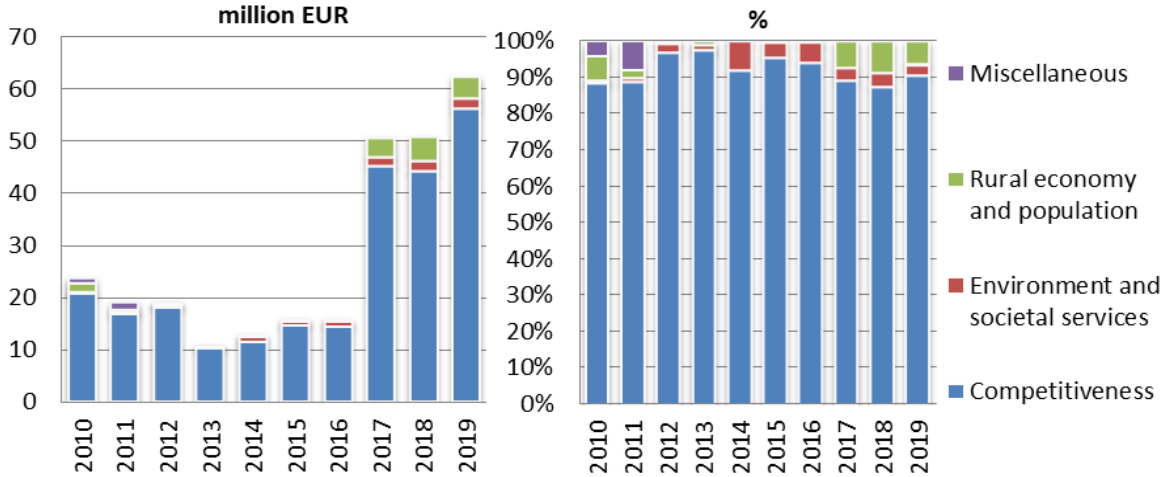
Support for rural development in terms of on-farm investment during the last decade has been increasing steadily. Furthermore, these funds make up the majority of the rural development funds, namely 57 % in 2010 and as high as 94 % in 2016. On-farm investment support reached its maximum value in 2019, namely EUR 55.8 million (90 % of rural development funds and 17.5 % of total support for agriculture).

Support for the processing and marketing of agricultural products includes subsidies for improving the quality of wine and spirits, as well as for the procurement of equipment in the meat, milk, fruit, vegetables, grape, wine, spirits and beer production sectors. The current support level is 50 % of the investment value and, in areas with difficult working conditions, 65 % of the investment value.

The agri-environment measures slightly increased over the period analysed, but are still at a low level. This type of support includes subsidies for the conservation of plant and animal genetic resources and subsidies for organic production. The IPARD II agri-environmental measure is in the accreditation process. Subsidies for organic production are calculated based on the amount of support in conventional production (direct payments based on area/animal) increased to 120 % in plant production and 40 % in livestock production, currently.

([41]) For more information on IPARD II, see the IPARD programme for the Republic of Serbia for 2014-2020 and Official Gazette of the Republic of Serbia, 'Conclusion on the adoption of the IPARD programme for the Republic of Serbia for the period 2014–2020' (Nos 30/2016-3, 84/2017-30, 20/2019-22, 55/2019-55).

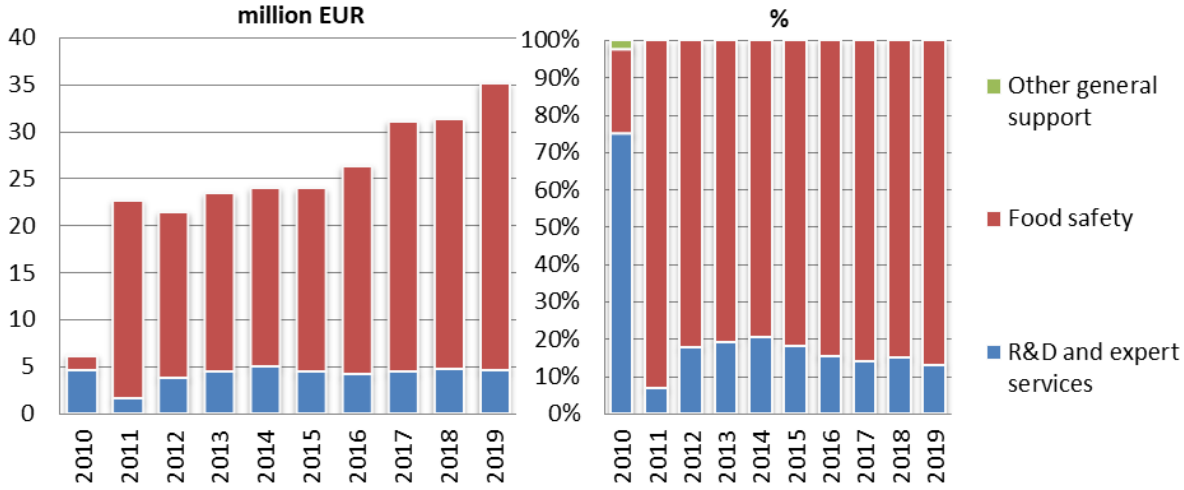
Figure 56. Structural and rural development measures (2010–2019)



Source: RS APMC database (2020).

Other measures related to agriculture in the previous decade were focused mostly on food safety and research, development, advisory and expert services (Figure 57). Funds for these purposes increased through the period, reaching a maximum level in 2019 of EUR 35.1 million, namely 5.7 times more than in 2010.

Figure 57. Other measures related to agriculture (2010–2019)



Source: RS APMC database (2020).

Unlike in 2010, when research, development, advisory and expert services dominated, the rest of the period was characterised by a dominance of food safety measures. All these measures, especially food safety measures that include veterinary and phytosanitary programmes, are implemented by the MAFWM regularly.

Other transfers (not to agriculture directly) also increased, reaching their maximum in 2017 of EUR 6.6 million. Almost all of these funds are intended for the forestry sector for sustainable forest development and improvement.

7.6. EU approximation process

After the European Commission's recommendation in October 2011, Serbia gained EU candidate status on 1 March 2012. The EU accession negotiations for Serbia's membership of the EU were opened officially on 21 January 2014 at the Intergovernmental Conference. The screening process for the negotiating chapters related to agriculture (Chapters 11, 12 and 13) lasted from September 2013 to March 2015.

In the screening report for Chapter 11 (agriculture and rural development), the European Commission defined two opening benchmarks for this chapter: (i) Serbia presents to the Commission an action plan, which will serve as a basis for the transposition, implementation and enforcement of the *acquis* in agriculture and rural

development and (ii) Serbia has submitted the request for entrustment with budget implementation tasks for IPARD II to the Commission, in accordance with the provisions of Commission Implementing Regulation 447/2014.

Both opening benchmarks were fulfilled by negotiating group 11. The second opening benchmark was fulfilled in December 2015, by submitting a request for entrustment with budget implementation tasks for IPARD II to the Commission, whereas the first benchmark was fulfilled at the end of 2018, adopting the action plan for Chapter 11 by the Government of the Republic of Serbia. Preparation of the opening benchmark assessment report by the European Commission is still pending.

The negotiations in Chapter 13 (fisheries) were not conditioned by any opening benchmark and they were opened in June 2018 by presenting the Serbian negotiating position for Chapter 13. In the area of Chapter 12 (food safety, veterinary and phytosanitary policies), three opening benchmarks have been received, whose fulfilment is ongoing.

Serbia has developed a strategic framework for the harmonisation of the national agricultural and rural development policies with the CAP. In that sense, all strategic and programme documents are in line with the action plan for Chapter 11, which contains all of the steps and activities planned, and their interactions, for adjusting to the CAP.

Serbia already applies some CAP-like agricultural and rural development schemes, but they are not fully harmonised with the *acquis*. Nevertheless, there is a clear plan for achieving compliance with the CAP, but the level of realisation of this plan must be monitored in the future.

The most significant progress made has been in starting the IPARD II process. It is a demanding process requiring the establishment of a fully functional paying agency, including an appropriate administrative and IT infrastructure and environment, among others.

Agricultural statistics, provided by the SORS, are harmonised largely with the EU *acquis*, ensuring that data are comparable with EU statistics. The most extensive source of data is the 2012 agricultural census, followed by the orchard survey for 2017 and the farm structure survey for 2018. In addition, a lot of annual surveys are conducted by the SORS in the fields of crop production, livestock production, fisheries, forestry and environmental protection, as well as in other fields of agriculture. Data are sent to Eurostat regularly in accordance with *acquis* requirements. The MAFWM is the administrative source for some statistical data too (organic production, milk delivered by dairies, pesticide statistics, subsidies payments, FADN data ([42]), etc.).

7.7. Discussion, conclusions and recommendations

Serbian agriculture in the last decade has been characterised by overall slow growth. The farm structure, in terms of farm size, indicates an uneven distribution and uneven development of farms across the country. While medium- and large-scale holdings dominate in Vojvodina, south and east Serbia are characterised by small-scale holdings. This indicates significant differences not just in the farm structure between these regions, but also in the possibilities for growth and modernisation through increasing productivity, decreasing costs, the use of technologies and economic diversification.

Trade value has a steady increased owing to increasing exports and an export growth rate that was faster than that for imports. Therefore, the trade balance has also experienced increasing trend. A possible reason for this is that free trade agreements, which have allowed Serbia to gain preferential access to certain markets, have started to be used to a wider extent. In the previous period, Serbia implemented greater trade liberalisation under the SAA and signed several new free trade agreements, which called into question its ability to face competition in the international markets. Nevertheless, foreign trade data show that increasing exports and a growing trade balance, as well as an agriculture and food industry sector that remains one of the few sectors in the Serbian economy with a positive trade balance, justify the opening of the sector to international markets.

Agriculture is one of the few sectors in the Serbian economy with a positive foreign trade balance. The structure of exports is not optimal, as imports are dominated by primary agricultural products (two thirds), while processed agricultural products make up only about a third of exports.

Cereals are the most dominant type of crop in crop production, and the growing exports are based mostly on cereals, oilseeds and fruit and vegetables. This shows that Serbia has significant untapped possibilities, which

([42]) www.fadn.rs

could be improved through increasing irrigation infrastructure, increasing production in protected areas (greenhouses) and adding value through on-farm processing. By focusing on high-value products, Serbia could improve the foreign trade balance and sector profitability. Serbia's farm land is small and fragmented and, as a consequence, competitiveness in most cases cannot be achieved through economies of scale, but can be improved by adding value to products by improving processing, the implementation of quality standards, etc. The path for achieving this goal lies in increasing cooperative activity, knowledge transfer, financial support, etc.

The current policy framework has a strong emphasis on direct support per area and animal, and it funds rural development measures only modestly. This distribution of subsidies is slowing structural reforms. In recent years, the situation has been improving; marketing and direct support is decreasing, accounting in the last 3 years of the period analysed for slightly more than 60 % of the agricultural budget. Positive trends were seen in 2017–2019 in terms of increased support for structural and rural development measures, accounting for between EUR 50 million and EUR 60 million annually. Major changes in policy led to increases in direct payments to producers (based on output and area/head) from EUR 6.8 million in 2010 to EUR 216 million in 2019 and increases in their proportion of total market and direct producer support measures, namely by 93.5 percentage points in the last decade. From the other side, input subsidies have decreased, from EUR 135.1 million in 2010 to only EUR 5.1 million in 2019, with a tendency for total transformation into direct payments to producers (except insurance subsidies). The maximum eligible area for per-hectare payments for crops is still 20 ha, which was set in 2015.

Unbalanced support among farmers, for example those in the central part of Serbia receiving lower amounts than farmers in the province of Vojvodina, who receive the majority of funds, is worsening the (already deep) regional disparities. There were higher compensatory stimulating allowances for holdings in less-favoured areas, but the measures are not tailored to their specific needs and there is a lack of knowledge and information, capacities, etc.

The policy framework has been significantly improved by the adoption of several key legal and strategic acts, which directed policy development towards harmonisation with the CAP. Direct payments (in livestock production particularly) are still dominant in the agricultural policy, but rural development has been increasingly supported, aided by the beginning of the use of IPARD funds.

Agricultural policy needs to tackle the ban on GMO products, as this a significant limiting factor for the Serbian livestock sector. Serbian producers are not allowed to use GMO feed and, as a consequence, production is more expensive. On the other hand, animal products produced using GMO feed are imported freely in Serbia.

The slow progress in inspection service reform is evident. Phytosanitary and veterinarian border inspection and country inspection services are not performing inspections based on risk analyses, causing inefficient inspection control, long time retentions at the borders, etc.

Some progress was made in harmonisation with the *acquis* in the pre-accession period. The process of making adjustments to domestic agricultural policy in line with the CAP has so far been insufficiently coordinated. The low level of usage of IPARD funds is a consequence of insufficient capacities of the paying agency, insufficient coordination between IPARD authorities and an inadequate legal framework.

Policy recommendations

Serbia has significant potential for improving the competitiveness of the agricultural sector and for rural development, namely by setting up an adequate policy framework and enhancing the capacities for its implementation. To increase the competitiveness of the agriculture sector and improve the position of producers, the following activities need to be considered.

There are several recommendations in terms of **data collection and statistics**. Namely, it is recommended that the current statistical classification of settlements by type (urban and other) be abandoned and the classification of NUTS level 3 areas according to the accepted urban–rural typology of the European Commission and Eurostat be applied instead. It is also recommended that the SORS classify the spatial units at the municipal level (LAU level 2) according to the degree of urbanisation DEGURBA methodology (which is expected after the 2021 census of the population, households and dwellings). Finally, the monitoring of labour consumption in agriculture in AWUs should be included within the economic accounts for agriculture and a farm structure survey should be carried out in the inter-census period every 3 years.

The farm register needs improvement: as the main database for policy implementation, it needs to be structured at the most detailed level, with a possibility for data cross-checking and to obtain timely information for decision-making. The annual renewal of registrations must be mandatory, regardless of whether the parameters of production or the farm status change. Promotion and awareness raising of the advantages of registration would lead to an increased number of registered holdings.

With regard to the **agrarian policy**, the budget structure needs to be updated further by decreasing the allowance for direct payments in favour of allowances for rural development measures. Furthermore, the inclusion of larger areas in the system of subsidies deserves attention: from 2015, the eligible area for payment per area was decreased from 100 ha to 20 ha per holding. It resulted in the splitting of farms between family members to avoid limitation. This limitation did not achieve the budget savings planned, and instead created an additional administrative burden. A possible compensation for the inclusion of larger areas in the payment system is to adjust the limitation on total received payments (the level of modulation). This policy measure would be directed towards introducing decoupled area payments (which would be more in line with the CAP).

Subsidies for organic production are based on measures for conventional production (with a certain percentage added). Organic production measures need to be decoupled from conventional production support, as the organic sector has different requirements.

Equal access to the state land lease needs to be facilitated: currently, livestock producers are prioritised in state land utilisation, namely the possibility of renting state land is based on owning a certain number of animals on a holding. Public debate sets out the demands for equal treatment of all participants in agriculture, and this should direct the land policy transformation.

A (CAP-like) scheme should be created for small farmers who declare themselves to be non-commercial (and/or meet certain eligibility criteria), granting them a certain fixed amount annually, replacing all other payments. This would reduce the administrative burden, as there would be a smaller number of applications for other (commercial) schemes, which would save time and mean funds were better targeted.

The revolving fund for agricultural loans should be (re)established: the current implementation mechanism for agricultural loans, implemented by the MAFWM, through subsidising part of an interest rate, should be replaced with a revolving fund, which will raise funds from loan repayments and provide additional funds through the payment of (preferential) interest rates. The loans should be for an investment purpose and should have a medium-term repayment period (3–5 years). The implementer of the scheme would be the MAFWM or another authorised body, and the processing of credit would be delegated to contracted banks.

Market and quality standards should be introduced (SWG, 2020). Introducing market standards is necessary primarily for the fruit and vegetable sector, but also in the grain, eggs and meat sectors. Therefore, introducing CMO rules is required in the future, which not only would lead to better product valorisation on the market, but would also be a step forwards in alignment with the CAP. These standards would include market standards for fruit and vegetables, standards for eggs, carcass classification on slaughtering lines, etc. In addition to market standards, quality standards should also be established. The sectors that require quality standardisation are primarily the dairy and grain sectors. In the area of grain production, there is a need to introduce quality standards for wheat, which is required by the strong export orientation of the commodity. Furthermore, introducing quality standards for wheat would require investments in warehouses and warehousing equipment for categorisation. This should be an object of support by the state bodies, and it would facilitate the transit period for producers and processors. A similar need also exists in the dairy sector, as dairies themselves are authorised to assess raw milk quality, which can lead to an underestimated price, to the detriment of primary producers. Therefore, the national reference laboratories need to be involved in milk control at the level of facilities. Moreover, payments per quality class should be implemented in the milk premium, which would lead to budgetary savings and would improve raw milk quality.

In terms of agricultural associations and cooperatives, establishing a stimulating legal framework for agricultural associations is one of the most important milestones for improving Serbian agriculture's competitiveness. Agricultural cooperatives are lagging tens of times behind the EU in number, activity and assets. The greatest barrier to cooperative development is the inadequate legal framework. The law on cooperatives (Official Gazette of the Republic of Serbia No 112/2015) has shortcomings, such as the fact that legal entities cannot be members of cooperatives, agricultural saving cooperatives are not allowed, ownership is unclear (i.e. members' shares cannot be sold to other members), cooperatives' reserve fund is not clearly established, cooperative audits are lacking guidance, cooperative auditors are not licensed and, in the case of a cooperative closing, the remaining

assets go to the cooperative association without a clear procedure. Additionally, Serbia is among the few countries in the world with cooperative ownership as a third type of ownership defined in the constitution of the Republic of Serbia, which creates uncertainty among cooperative members regarding if their cooperative shares are at their full disposal. Another recommendation is that producers' organisations be established in accordance with CMO rules.

Support for producers' associations needs to be predictable in the long term and needs to be available only for real cooperatives doing business with their members. The current support for cooperatives is ad hoc and rare. Good examples of this can be found in the EU; for example, in Italy, agricultural cooperatives doing business with more than 50 % of their members receive tax reliefs. This approach could avoid the establishment of associations only to receive support, without any other intention, which has often happened previously.

Other recommendations can also be derived from the situation and policy analysis. The ban on GMO products is one of the most important limiting factors of the Serbian livestock sector. Serbian producers are not allowed to use GMO feed and, as a consequence, production is more expensive. On the other hand, animal products produced using GMO feed are imported freely in Serbia. This creates unfair conditions for the Serbian livestock sector. The solution can be found in two areas: first, GMO production should be allowed and, second, an effective national non-GMO animal products quality scheme should be introduced, which would allow provide a dedicated source of animal products produced without GMO use and create the possibility for higher pricing.

Conditions need to be created for the removal of the pork EU export ban. Serbia is not permitted to export swine meat or to transport swine meat through the EU owing to the outbreak of swine plague. The first step towards this goal has been taken, namely vaccination against this disease has stopped. The second step will be the introduction of a veterinarian indemnity fund or other compensation schemes to compensate farmers in the case of the necessity for heard eradication. The main purpose of compensation schemes is to motivate farmers to report any suspicions of the disease.

Foodstuff geographical indication schemes should be further developed. The current law on indications of geographical origin (Official Gazette of the Republic of Serbia Nos 18/2010 and 44/2018) is not harmonised with the EU *acquis*. The new draft law is, according to an SWG analysis (SWG, 2020), fully compliant with EU regulation and could enable Serbian producers to register products under a geographical indication in the EU. In addition, introducing protected designations of origin and protected geographical indications should be supported to a wider extent, focusing on geographical indication protection at the EU level. There is an insufficient number of products protected within the EU framework.

Risk management instruments in agriculture need to be developed. Serbia is among the last countries in Europe to implement agricultural insurance. It is estimated that only 5 % of parcels are insured. The recommended measures include the improvement of hydrometeorological data, coupling subsidies with mandatory insurance of the subsidy's investments (which has often been a successful practice in the EU and the United States), appointing a central organisation to be in charge of collecting the data on agricultural insurance, the introduction of new technologies that are important for area based insurance and so on.

Finally, phytosanitary, veterinarian and agricultural inspections need to introduce inspection based on risk analyses in line with EU practice.

There are many issues in transitional agricultural sectors such as that in Serbia, and the recommendations presented are the most important, for now. It can be concluded that there is a distinct need for well-planned structural reforms on Serbia's long journey towards improving the agricultural sector's competitiveness and rural development.

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8. CASE STUDY: TURKEY

Ahmet Ali Koç ([43]) and Ahmet Bayaner ([44])

8.1. Introduction

The Turkish economy is among the 20 largest economies in the world. It is an upper-middle-income country and has a population of approximately 83 million with just over 1 % growth rate annually. Turkey has been undergoing a significant socioeconomic transformation since the 1980s. An economy-wide agenda of policy reform has been reshaping the country since 2001. The Turkish economy has experienced high rates of average annual growth, except for the years of the global economic crisis, thanks to these economic reforms. This growth performance is a record among OECD countries (OECD, 2011; TurkStat, 2020a).

A number of laws and regulations have also contributed to this economic performance. In the area of agriculture and rural development, the laws enacted are related to sugar, tobacco, pasture, fresh fruit and vegetable wholesale markets, agricultural sales cooperatives and unions, food, breeder rights, producer organisations, animal health arid surveillance, animal welfare, soil conservation and land use, agricultural insurance, organic agriculture, seeds, the veterinary framework, phytosanitary and quarantine issues, organised agricultural regions and the agricultural framework. The agriculture law adopted in 2006 created the legal basis for the management systems necessary for the implementation of the *acquis*. The Ministry of Agriculture has been reorganised twice, in 2011 and in 2018.

The state economic enterprises have carried out agricultural policy measures for decades including after they were privatised and restructured during the 1990s and early 2000s. For instance, agricultural sales cooperative unions (ASCUs), the Turkish Grain Board, the state-owned tobacco monopoly TEKEL, the state-owned sugar enterprise TŞFAO, the Meat and Milk Board and the state-owned Agricultural Bank were the main state economic enterprises. These institutions were responsible for price support levels, purchasing crops, providing credit, distributing budgetary support, instigating marketing regulations and providing inputs to farmers. ASCUs were reoriented and became limited to their duties on behalf of government support. TEKEL and some of the sugar factories were privatised during the 2000s. The Turkish Grain Board, the Meat and Milk Board and Agricultural Bank are still active in the agricultural sector. In addition, the Agricultural Credit Cooperatives of Turkey has played an active role in input distribution and the marketing of agricultural and processed food products.

The need to reform the country's agricultural policies stems not only from the EU, as Turkey is a candidate country, but also from the changing domestic environment and bilateral and multilateral trade relationships (i.e. WTO commitments). Although Turkey has made progress towards full EU membership, more attention needs to be given to the adjustment of the agri-food sector to the new policy environment and to CAP harmonisation.

The national rural development strategy for 2007–2013 was adopted in January 2006, and later revised and adopted in 2014 for 2014–2020. Along with the strategy, the rural development action plan for 2013–2015 was put in place in 2015. The national rural development strategy drew up a comprehensive policy framework for rural development in the country. The IPARD programmes are important parts of this strategy (MoAL, 2015).

8.2. State of the agri-food sector

Agriculture is a very important economic activity in Turkey. The sector was the largest employer in the country until recently. It used to be a major contributor to the country's GDP, although it has been declining in importance compared with the service and industrial sectors owing to rapid industrialisation and government policies. Nevertheless, it accounts for a significant percentage of exports and is key to rural development. Its contribution to GDP was almost 50 % in 1950, 25 % in 1980, 15.3 % in 1990, 11 % in 2005 and about 8 % in 2019 (Kaul and Hoelgaard, 2019). Some key macroeconomic indicators are reported in Table 28.

Turkey is the 12th largest country in the world in terms of agricultural land. Cultivated land takes up about 24 million ha. Turkey is the world's seventh largest agricultural producer and is an important exporter of agricultural commodities on world markets. Agriculture still plays a fundamental role in Turkish society, employing about one fifth of the workforce and generating most of the income and employment in rural areas. According to the data obtained from the Turkish Statistical Institute (TurkStat, 2020b), the proportion of total employment contributed by primary agriculture has declined, and was about 18 % in 2019; its contribution to

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GVA was about 6.5 % in 2019 and agri-food products made up around 12.5 % of total exports in 2019, having remained stable at this level over the period analysed.

Table 28. Key macroeconomic indicators

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Population (thousand persons)	73 723	74 724	75 627	76 668	77 696	78 741	79 815	80 811	82 004	82 886
Population density (inhabitants/km^2)	94.1	95.4	96.5	97.8	99.2	100.5	101.9	103.1	104.7	105.8
GDP (at current prices, million EUR)	583 112	600 447	681 136	716 619	707 130	778 906	786 440	761 739	663 697	680 590
Value added (at current prices, million EUR)	512 685	528 202	601 180	627 765	625 823	686 826	693 731	675 715	594 971	613 125
GDP growth (%)	8.5	11.1	4.8	8.5	5.2	6.1	3.2	7.5	2.8	0.9
GDP per capita (EUR)	7 910	8 035	9 006	9 347	9 101	9 892	9 853	9 426	8 093	8 211
GDP per capita in PPS (EUR)	13 143	14 131	16 036	16 766	18 044	23 093	23 656	24 733	23 859	24 896
GDP per capita in PPS (EU=100; %)	52	57	59	62	65	67	66	67	65	64
Inflation (%)	8.6	6.5	8.9	7.5	8.9	7.7	7.8	11.1	16.3	15.2

PPS, purchasing power standards.

Note: The total area of Turkey is 783 577 km^2.

Source: TurkStat (2020b).

Family owned farms are dominant in Turkish agriculture. Most of the farm labour comes from family members (half of the labour force is female) and works mainly as unpaid family labour. The agriculture structure is characterised by a large number of small and fragmented farms. The 2001 agricultural census recorded over 3 million agricultural holdings. The number of farmers registered to the farmer registry system surpassed 2.7 million in 2003 and 2004. Thereafter, the number started to decline and during recent years has been around 2.2 million and agricultural employment has reduced in line with this. The average number of farmers registered across the period analysed (2010–2019) is about 2.2 million (with 15 million hectares of land).

Despite the country's large number of small farms, commercial farms have emerged in the last 20 years. The pattern of land ownership is highly skewed; it varies regionally owing to differences in geography and the crops grown. A high proportion of farmers cultivate their own small area of land. About 65 % of farms have less than 5 ha of land and 83 % have less than 10 ha. These small farms are mainly self-sufficient and have a lower than average income. Farms cultivating more than 20 ha of land make up about 6 % of all farms. According to the 2001 agricultural census, the national average size of farm holdings is 6.1 ha, with an average number of six plots (Bayaner, 2007; TurkStat, 2020a). The size of the average land parcel has, until recently, been decreasing, largely because of inheritance laws. However, the inheritance law was changed in 2012 and parcels under 2 ha in dry areas (and 1 ha in irrigated areas) are not allowed to be divided among the successors of farmers. According to the farm holding structure survey of 2016, the average farm size is 7.6 ha (TurkStat, 2018).

A relatively large number of the country's more specialised farms are located in the Aegean and Mediterranean regions. In subsistence and semi-subsistence farming, productivity is low, hidden unemployment is high and competitiveness is poor; nonetheless, these farms are of crucial importance in providing income security and represent the source of livelihood for the majority of Turkey's rural population (OECD, 2011).

A wide range of farming activities are carried out in Turkey owing to its climatic and geographical conditions. Good soil fertility, an adequate climate and abundant rainfall in some regions permit almost any kinds of crops to be grown. Arable crops cover more than 50 % of the agricultural area, of which about 11 % is fallow land and

18 % is irrigated land. Permanent crops occupy 8 % of UAA. Permanent meadows and pastures take up about 38 % of agricultural land. Arable farming accounts for about 75 % of output value. Fruit and vegetables make up about 44 % of crops. The main crops are wheat, barley, maize, sugar beet, cotton, potatoes, tobacco, tomatoes, cucumbers, dried onions, watermelons, apples, citrus fruit, grapes, figs, hazelnuts, olives and tea. The livestock subsector consists of cattle, dairy, buffalo, poultry, sheep and goats. Turkey is a food self-sufficient country and is a net exporter of agri-food products (TurkStat, 2020a). According to the farm holding structure survey of 2016, irrigated land accounts for 31.4 % of total agricultural land (TurkStat, 2018).

Turkey is the world leader in the production of hazelnuts, sultanas/raisins, dried figs and dried apricots. It is the second largest producer of chestnuts, pistachios, cucumbers and watermelons, the third largest producer of apples, chickpeas, onions, olives and sheep's milk, and the fourth largest producer of fresh vegetables and grapes, tobacco, tea and raw wool. The production of wheat and cotton is also important, with Turkey being one of the top 10 producers of fruit, wheat and cotton in the world. The country is also one of the leading honey producers in the world (OECD, 2011).

Turkey produces annually on average 35.3 million tonnes of cereals, 30.3 million tonnes of vegetables, 18.9 million tonnes of fruit, 18.5 million tonnes of milk, 1.9 million tonnes of poultry and 1.2 million tonnes of red meat. The major industrial crops produced in Turkey are cotton, sugar beets and tobacco. Turkey is one of the largest producers of cotton in the world, which is a key element in the country's wider economy, providing fibre for textiles. Therefore, Turkey is among the world's leading textile exporters, with textiles accounting for a large percentage of its exports. Turkey has a comparative advantage in many agricultural products. Its foreign trade balance in agriculture is positive and its main trading partners are the EU, the United States, the Middle East and Russia (TurkStat, 2020a).

8.3. Socioeconomic issues underlying rural areas

There are two different definitions of rural areas in Turkey, namely based on population and on administrative units classified by TurkStat. Settlement areas with a population less than 20 000 are classified as rural areas, and counties and villages are also assumed to be rural areas. The village law sets out that areas with a population under 2 000 are villages, areas with a population between 2 001 and 20 000 are counties and areas with population of more than 20 000 are cities (KB, 2018).

Law No 6360, enacted in 2012, created new metropolitan cities, whereby 10.4 million people living in 16 000 villages and counties were regarded urban citizens. There are, based on this law, 34 434 villages and 41 004 counties in Turkey. There are also 4.3 million households in rural areas, constituting 21 % of all households in Turkey. The average household size is 4.8 persons. About 5.1 % of the total rural population lived on under USD 4.3 per day in 2013, whereas this was true of only 0.6 % of the population in cities and 2.1 % of the total population. The percentage of those classified as the rural poor is, however, declining, namely it is now below 5 % (Doğan and Yardımcı, 2019). Before law No 6360 was enacted in 2012, 25 % of the total population was rural. However, this percentage declined dramatically in 2013 to 14 % (TurkStat, 2020a) owing to new definition of rural areas introduced. An OECD-type classification of rural areas has been developed by TurkStat, but has not yet been published for wider public use.

The active and non-active labour population by gender is presented in Table 29. The proportion of people older than 65 years in rural areas is increasing; this group made up 9.6 % of the rural population in 2007, which increased to 11.3 % in 2012. This is also evident from the farmer registry system. This trend is an indication of increased migration of young people out of rural areas. On the other hand, all rural areas have access to electricity, drinking water and hygienic conditions (Doğan and Yardımcı, 2019). According to the Turkish agricultural outlook field research farm survey of 2019, which was undertaken by the Credit Registry Office of Commercial Banks (KKB), the average age of farmers was 46 years (KKB, 2019).

The employment statistics for agriculture are presented in Table 30. Agriculture accounts for a large percentage of rural income. However, agriculture accounts for only about 6.5 % of GDP and employs more than 5 million people (making up about 18 % of total employment). Women make up 28.5 % of the labour force employed in agriculture, whereas 15.5 % of all men are employed in agriculture. The per capita GDP in agriculture is about half of the national average. About 7.3 % of the rural population is illiterate, 52.3 % graduated from secondary school, 8.9 % graduated from high school and 2.9 % are university graduates (KB, 2018; TurkStat, 2020b).

Table 29. Active and non-active labour population numbers in Turkey (by gender, 2010–2019)

Population characteristic	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Active and non-active population (over 15 years of age)	52 541	53 593	54 724	55 608	56 986	57 854	58 720	59 894	60 654	61 469
Male	25 801	26 320	26 951	27 411	28 145	28 573	29 031	29 649	30 007	30 372
Female	26 740	27 273	27 773	28 197	28 841	29 281	29 689	30 244	30 647	31 097
Employed population	22 595	24 110	24 821	25 524	25 933	26 621	27 205	28 189	28 738	28 080
Male	16 170	17 137	17 512	17 883	18 244	18 562	18 893	19 460	19 720	19 156
Female	6 425	6 973	7 309	7 641	7 689	8 058	8 312	8 729	9 018	8 924
Unemployed population	3 047	2 615	2 518	2 747	2 853	3 057	3 330	3 454	3 537	4 469
Male	2 088	1 730	1 635	1 714	1 813	1 891	2 006	2 024	2 081	2 707
Female	959	885	883	1 033	1 040	1 167	1 325	1 430	1 455	1 762
Non-active population (not in labour force)	26 901	26 867	27 385	27 337	28 200	28 176	28 185	28 251	28 380	28 920
Male	7 544	7 453	7 804	7 814	8 088	8 120	8 132	8 165	8 206	8 509
Female	19 357	19 414	19 581	19 523	20 112	20 056	20 052	20 085	20 174	20 411

Source: TurkStat (2020b).

Problems in Turkish agriculture are generally related to production factors: illiterate and unqualified human resources, insufficient capital and abundant but unproductive land in some regions. Implementing the EU rural development policy in Turkey would increase the size of holdings and reduce the number of agricultural employees. It is expected that product quality increases within agriculture could be more integrated with the processing industry and the market.

Table 30. Employment in agriculture forestry, hunting and fishery sector, in 000, 2014–2019

Employment statistics	2014	2015	2016	2017	2018	2019
Total number employed in the sector	5470	5483	5304	5465	5298	5098
Male	2937	2956	2920	2993	2944	2856
Female	2533	2527	2384	2472	2354	2242
<34 years	1610	1553	1441	1473	1375	1356
35–65 years	3362	3400	3342	3439	3365	3190
Without education	1298	1213	1068	1076	1051	950
With primary education	3723	3779	3704	3818	3649	3520
With high school education	358	382	405	430	460	455
With higher education	91	109	127	141	138	173

Source: TurkStat (2020b).

National policy framework

Turkish agricultural policy has not changed considerably over time. The principal objectives of the policy are (RG, 2006) (i) to meet the food security needs of a growing population, (ii) to increase productivity and reduce vulnerability to adverse weather conditions, (iii) to improve self-sufficiency levels, (iv) to raise farm incomes and provide more stability, (v) to enhance competitiveness, (vi) to develop rural areas and (vii) to ensure food safety and harmonise the country's agricultural and rural development policies and institutions with those of the EU.

Turkish agricultural policy has a long history of agricultural price intervention; its roots go back to the early 1930s. The objectives of the agricultural policy in Turkey used to be set by annual programmes and development plans until the early 2000s (Bayaner, 2007). Before 2000, the Turkish government had implemented a variety of measures to fulfil these objectives. Domestic price support programmes were extended by means of intervention purchases and quantitative import restrictions and tariffs. In addition, farm inputs including credit and investments in infrastructure supported these measures. Regional programmes are developed and implemented to reduce regional disparities in income and technology. Agricultural research, extension and training services are still funded by the government (Bayaner, 2007). Livestock sector policies include border measures, veterinary services and animal disease control, milk and suckler cow premiums, fodder crop input subsidies, and agricultural credit support.

The inefficient and costly system of agricultural support policies has been criticised heavily. These policies have not only manifestly failed to enhance productivity, but have been a heavy burden on consumers and taxpayers and have been a source of Turkey's macroeconomic problems. The Government of Turkey embarked on a structural adjustment and stabilisation programme of historical dimensions – the agricultural reform and implementation programme – in 2001 focusing on several elements. The unsustainable and distorting system of subsidies for fertilisers, credit and price support that only benefited large-scale farmers and regressively taxing consumers were all phased out so that prices were in line with world market prices. Most of the state economic enterprises were privatised to reduce government involvement in the marketing and processing of agricultural products. An annual direct income support payment was granted per hectare to all farmers to cushion the losses associated with the removal of administered prices and input subsidies. Price premium payments were implemented for oilseeds. Tea growers needing to prune trees were fully compensated for the costs incurred. A one-off farmer transition payment has been granted to cover the costs to divert farmers from over-produced hazelnuts and tobacco to other commodities. Agricultural sales cooperatives and their unions (ASCUs) were granted financial aid for restructuring and transformation.

The agricultural law enacted in 2006 moved Turkey further away from the principles of the reformed CAP. Producer support based on commodity output increased, while decoupled direct income support payments decreased gradually at first and thereafter were eventually abolished in 2009. Direct payments are now a fully coupled system in which payments are linked with production in plant and livestock sectors. Area-based payments (so-called 'fertiliser' and 'diesel' payments) are increasing. Fertiliser and diesel subsidy payments are based on cultivated land areas at varying rates differentiated according to the product groups. Moreover, import protection by *ad valorem* tariffs remains unchanged.

The measures of agricultural support used until 2010 were direct income support payments, price premium payments, compensatory payments for farmer transition, livestock support (for fodder crops, artificial insemination, breeder incentives, milk premiums, risk-free livestock regions, beekeeping and fisheries), crop insurance support, rural development support and environmental set-aside (i.e. the conservation reserve programme (CATAK)). Although direct income support has been implemented for fertiliser and diesel, other forms are still applied.

Turkey has taken additional measures to harmonise its agricultural policies and institutional framework with those of the EU. These include agri-environmental issues and good practices in land management and rural development in general. In the area of rural development, the EU's IPARD programme facilitates Turkey's alignment with the *acquis* concerning the EU CAP (OECD, 2011).

A new support programme for agricultural products in Turkey was put in place in 2017. In total, 21 crops were determined to be strategic crops, with production most efficient in 30 basins characterised by different climate and soil characteristics. These crops ([45]) are strategically important, specific to the region, competitive in the

([45]) The crops in question are wheat, barley, corn, rye, oats, triticale, cotton, paddy rice, tea, lentils, dry beans, chickpeas, safflower, soybean, sunflower, canola, hazelnuts, olives, potatoes, onions and forage crops.

market and have a supply deficit. Only wheat and forage crops are eligible for support payments in all of the basins (Kaul and Hoelgaard, 2019).

As regards risk management in agriculture, the agriculture insurance law (No 5363), enacted on 14 June 2005, provided for a comprehensive and sustainable agricultural insurance system called the agricultural insurance pool (TARSİM). The objective of the system is to provide income stability for producers by protecting them against all kinds of natural disasters. It provides farmers with insurance premium support. Government premium support and premiums paid by farmers are collected under the pool and used for compensation of farmers' losses. The amount of the premium that farmers pay differs depending on the crop produced, namely between 50 % and 67 %. Government premium support is included in the agricultural support budget. Participation in the scheme is voluntary for farmers (Kaul and Hoelgaard, 2019).

The national rural development strategy for 2007–2013 first set out the priorities. These priorities are still covered in the strategy paper (2014–2020), which can be categorised under five pillars: the rural economy, the rural environment, rural settlements, rural society and rural capacity development (MoAL, 2015), with the six priorities: (i) increasing employment and income generating activities in rural areas, (ii) strengthening the capacity for the efficient utilisation of natural resources, (iii) increasing the living standards of the rural population through the application of modern agricultural techniques, (iv) creating employment opportunities in diverse livelihoods (including tourism, textiles, handcrafts and forestry products) and promoting these in disadvantaged areas, (v) promoting small and medium-sized enterprises and providing support for micro-finance and marketing and (vi) reducing inter- and intraregional disparities, reducing the migration flow from rural areas and strengthening participatory approaches though vocational training, extension and consultancy services.

The Agriculture and Rural Development Support Institution (TKDK) implements the rural development programmes using EU funds under IPARD I and IPARD II based on the principles and objectives in the national action plan, programme and strategies. TKDK is the implementing institution, with coordination offices in 42 provinces. The objectives of IPARD is to modernise the agricultural sector and rural areas of Turkey in a sustainable manner in accordance with the EU *acquis*. Other strategic targets include the development and diversification of the rural economy, attracting people to rural areas and increasing the quality of life in these areas, and the preventing migration out of rural areas. IPARD I funds covered 2007–2013 and IPARD II funds covered 2014–2020 (MoAL, 2015). A total of EUR 1 048 million was granted under IPARD I, of which 25 % were domestic contributions from the government budget. IPARD II was initiated in February 2016, with a planned budget of EUR 813.8 million, of which EUR 615.5 million were EU contributions. The aid to be granted by the Turkish government amounted to EUR 198.3 million and the rest would be funded through private contributions. In the EU, 12 746 IPARD II applications were received and 3 446 projects were contracted, with the EU's contribution amounting to EUR 244.1 million by the end of 2020 (TKDK, 2020). The areas in which investments were made were agricultural holdings, processing and marketing activities, and farm diversification (European Commission, 2019; TKDK, 2020).

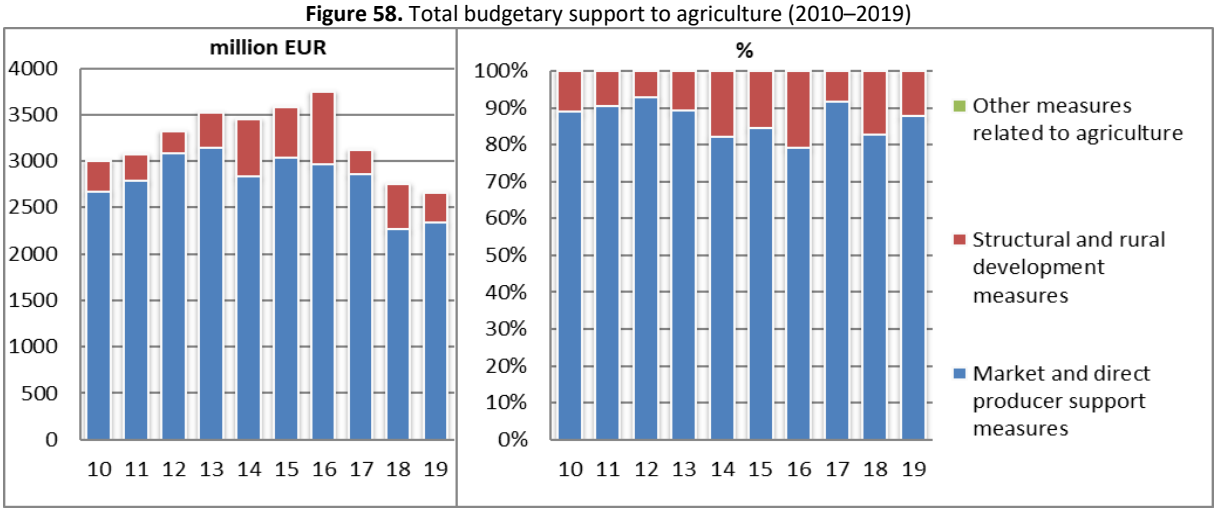
The main goals and objectives of the Turkish agricultural policy, defined in the strategic plan of the Ministry of Agriculture and Forestry for 2018–2022, follow the main principles of the CAP. The goal of Turkish agricultural policy is to achieve a more competitive and sustainable agricultural sector, with increases in agricultural production and rural income. In addition, it aims to increase efficiency, quality and sustainability, while taking into account the WTO rules and the EU CAP (Kaul and Hoelgaard, 2019).

8.4. Measures and budgetary support for agriculture and rural development

The agricultural budget in Turkey has increased over the last 10 years in terms of Turkish lira. However, the budget has decreased in terms of euros. The budget was EUR 2.7 billion in 2019. The proportion of the agricultural budget in terms of GDP has been stable, amounting to 0.5–0.6 %. The proportion of the total government budget allocated to agriculture has stayed between 2.0 % and 3.0 %. The largest proportion of agricultural payments go to market and direct producer support measures. The proportion going to structural and rural development measures has varied between 8 % and 21 % (Figure 58).

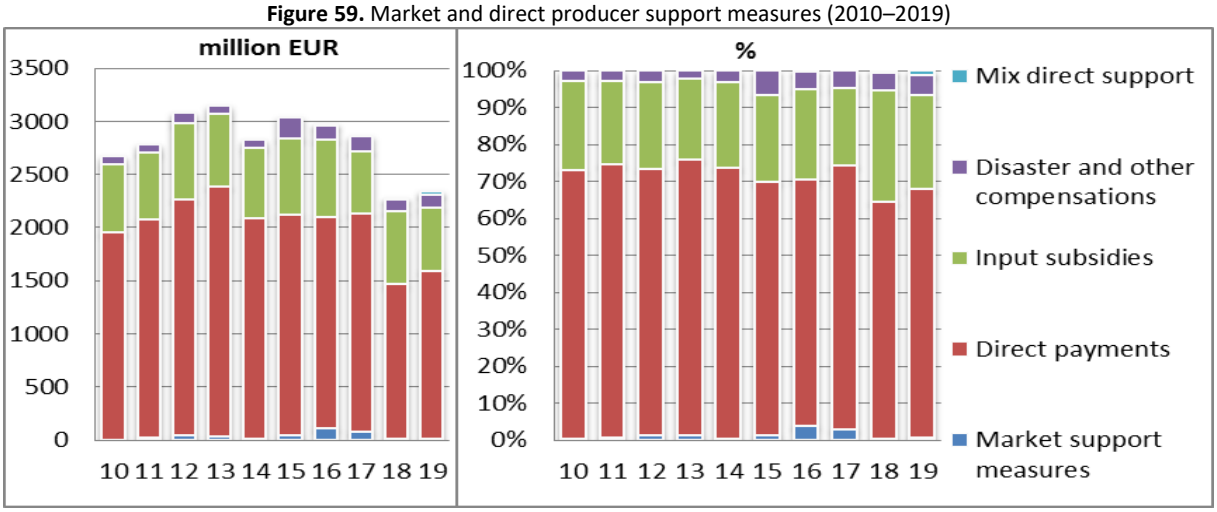
There are two main measures making up market and producer support mechanisms: direct support and input subsidies. Direct payments account for about 70 % of the total market and direct producer support measures. Input subsidies follow these payments, making up about 25 % of the total payments. Disaster and other compensation payments and market support payments account for less than 5 % of the total payments (Figure 59).

Figure 58. Total budgetary support to agriculture (2010–2019)



Source: TR APM database (2020).

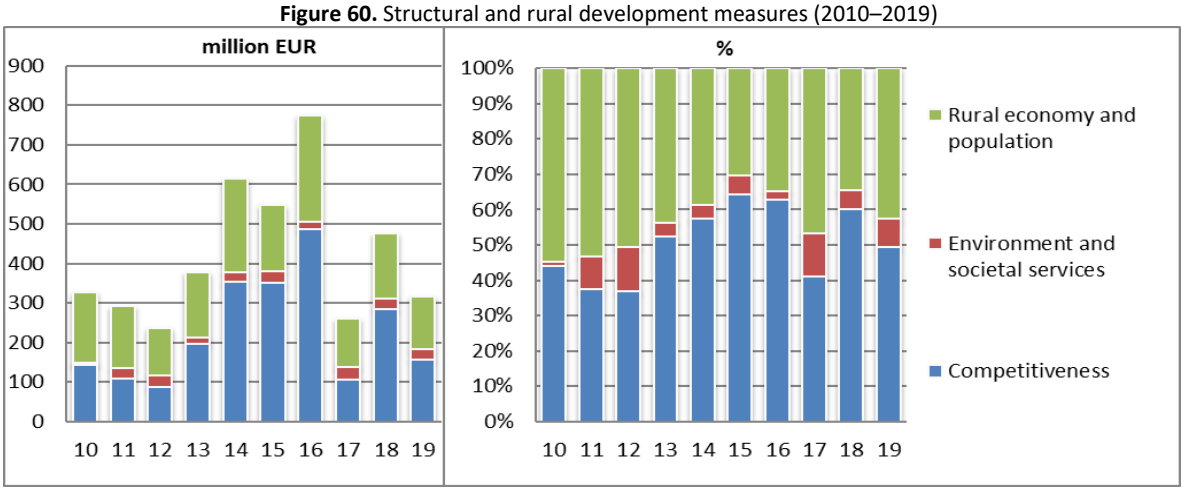
Figure 59. Market and direct producer support measures (2010–2019)



Source: TR APM database (2020).

About half of the payments under the umbrella of structural and rural development measures are paid for rural economy and rural population measures. Payments for competitiveness measures make up the second largest group of payments, accounting for about 40–60 %, on average. Environmental and societal services account for about 6 % of total payments, on average (Figure 60). These transfers include IPARD payments.

Figure 60. Structural and rural development measures (2010–2019)

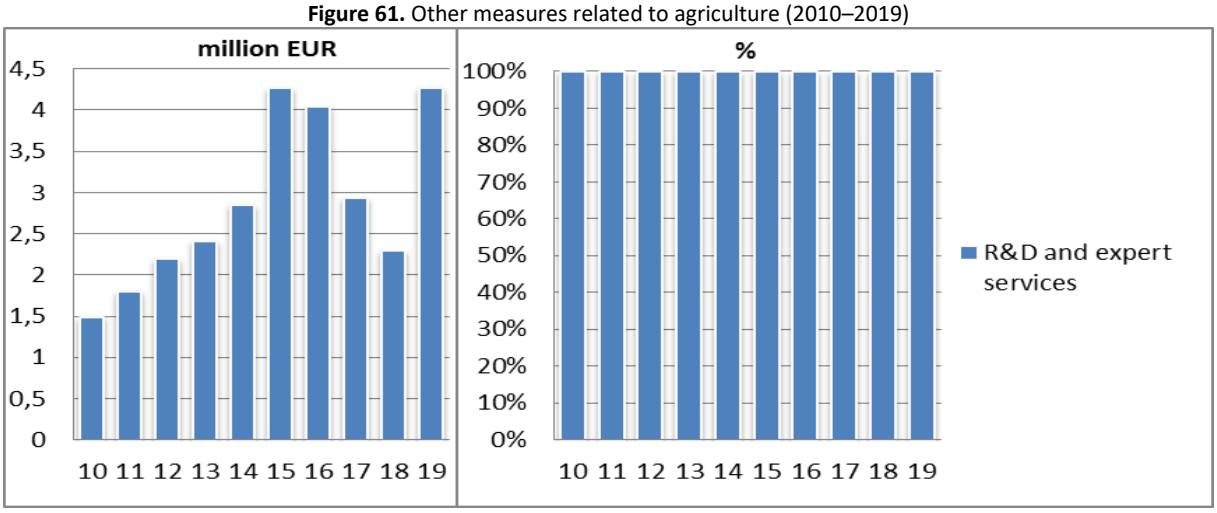


Source: TR APM database (2020).

The EU rural policy has a strong bias towards agriculture, as the funding for rural policy comes from the agriculture budget. Likewise, the Turkish policy paper for 2006–2010 sets a target of rural development accounting for 10 % of total agricultural support payments. The policy paper resulted in the country's rural development approach becoming more in line with that of the EU.

Under the other measures related to agriculture, rural development and expert services receive all of the payments. Food safety and other general support measures did not receive any payments in this category (Figure 61).

Figure 61. Other measures related to agriculture (2010–2019)



Source: TR APM database (2020).

Agriculture law No 5488 states that the financing of agricultural support programmes must be provided from budgetary and external sources. The law also indicates that the resources allocated from the national budget must not be less than 1 % of the gross national product, but the present implementation is very far away from this target.

8.5. EU approximation process

Adapting to the *acquis* would make farming more difficult in the current production environment and most of the farms will go out of business. Only labour-intensive small- and medium-scale farms may continue to produce.

Turkey adopted the CATAK; however, its current alignment with the environmental *acquis* is limited. CATAK was designed to provide compensatory payments to farmers in areas facing environmental degradation in order to help them shift to permanent crops. Small farmers cannot make the necessary investment owing to insufficient own resources and the problems faced in accessing external credit to provide the safe and high-quality food that the industry requires. Turkey's current trade situation is expected to change when becomes a full member. The country will adopt the common external tariff of the EU for every agricultural product. Turkey's current tariff bindings are higher in some areas than those of the EU. Thus, the tariff gap between Turkey and the EU could increase.

The implementation of the CAP requires strong management and control systems. EU rules for quality policy and organic farming should also be aligned with the rules. Turkey has been harmonising its policies with the EU CAP for about two decades. Recommendations by the Commission have been taken up, but not fully accomplished. Turkey still needs to adopt a strategy for producing agricultural statistics and aligning its agricultural support policy (European Commission, 2019).

An IACS has been developed and put in place recently. The FADN, covering all 81 provinces, has been integrated into the agricultural production and registration system. Payments need to be linked to cross-compliance standards. Under the LEADER programme, 25 local action groups were established, which have been developing local action strategies. Through the LEADER and the National Rural Network (NRN) measures, the implementation of the successful IPARD programme also involved civil society.

CMO legislation should be developed and aligned with the EU CAP/CMO legislation. Turkey agreed to broaden the scope of the tariff quota for meat products exported from the EU. This is important for transparent management of the import quota. The intellectual property law was adopted in 2017, which increased Turkey's

level of alignment with the EU geographical indications legislation. In addition, further implementing regulations were adopted concerning the quality policy. The mutual registration of geographical indications has been relaunched. Turkey's organic farming legislation has been aligned with the EU *acquis*. The Turkish Accreditation Agency accredits organic agriculture control bodies (European Commission, 2019).

Food safety in the EU requires a high level of hygiene rules for foodstuff production. There has been some progress in the area of food safety, veterinary and phytosanitary policy in the past year and in the enforcement capacity for animal welfare, food, feed and animal by-products and food safety legislation. Turkey has ratified the European Convention for the Protection of Animals kept for Farming Purposes. The full implementation of the *acquis* in this area will require food establishments to be upgraded, including submitting a national programme and a monitoring plan, and progress to be made on addressing zoonoses. Some progress has made in aligning and implementing the *acquis* on general food safety, but it has been limited. Veterinary policies have not yet been fully aligned with the EU *acquis*. The identification and registration of bovines and small ruminants has continued. The regulation for identifying and monitoring of equine species and that concerning cats, dogs and ferrets were adopted (European Commission, 2019).

Turkey has been applying measures for disease outbreaks. As a result, the region of Thrace was declared a disease-free zone and strict movement controls have been maintained since then. A regulation on disease-free compartmentalisation and another on protection against and combating bluetongue were passed by parliament. Attention should be paid to fully aligning transmissible spongiform encephalopathies and surveillance systems, animal welfare and the trade regime for agricultural products with the *acquis*. A regulation has also been adopted on the minimum rules for the protection of chickens kept for meat production. The administrative capacity of official controls for the placing on the market of food, feed and animal by-products has improved. Substantial work on animal by-products is still required. Food safety rules on issues such as labelling, additives and purity criteria, flavourings, food supplements and enzymes have been aligned with the *acquis*. Progress on the specific rules for feed has been limited. Phytosanitary policy should be further developed. Rules for new foods and for GMOs need to be aligned (European Commission, 2019).

Some progress was made on resources and fleet management, inspection and control, and on international agreements. Turkey should, in particular, adopt a fisheries and aquaculture law aligned with the EU *acquis*. Institutional capacity has further improved. The new vessel monitoring system monitors sea fishing activities, as well as the registry, location, time, speed and destination of the vessels, and of the fishery catch data. Electronic logbooks have been implemented with the new system. In terms of inspection and control, some progress has made in legislative alignment on bluefin tuna. Progress needs to be made on market policy. The EU has demanded from Turkey the establishment of sound institutions governed by well-trained staff with rigorously tested procedures in connection with the management and implementation of IPARD. TKDK is consequently a good candidate for the paying agency, when accession happens (European Commission, 2019).

Full liberalisation reduces income inequality among farmers, as large and wealthy farmers receive most of the gains in producer surplus resulting from current price support. On the other hand, liberalisation leads to a better distribution of real income owing to lower food prices. Cakmak (2004) indicates that Turkey could still be a significant net exporter in agricultural production. With no trade restrictions with the EU, livestock imports will increase considerably. Wheat, maize, oilseeds and livestock production will decline, and barley, rice and fruit and vegetable production will expand. Industrial crops will most probably remain competitive, and their production will also expand.

Discussion, conclusions and recommendations

These findings can help in the decision-making process to develop the sector in accordance with development plans and strategies, taking into account EU integration. Among the principles for designing and implementing the future agricultural policies are a holistic approach that considers international agreements, decoupling agricultural payments to farmers, improving the of organisation and strengthening institutional capacity and the private sector's role, considering consumer and farm workers' health issues, adapting environmentally friendly agricultural practices, a participatory approach, a science-oriented approach and promoting young farmers.

Turkey is an upper-middle-income country and its economy has grown at a rate above the world average, except for that of China. A number of laws and regulations have been adopted related to both national issues and agriculture, which have accelerated development in all aspects. Laws on agricultural issues have enhanced the transformation of the agricultural sector. Special attention has been paid to rural development, but challenges still lie ahead. Turkey's agricultural trade balance has historically been consistently positive.

The importance of agriculture in the overall economy is high in terms of employment and GDP. Agricultural GDP per capita is about half the national average. Despite these developments, Turkish agriculture is characterised by a large number of small farms, while the number of commercial farms has been increasing over the last 20 years.

Turkey's climatic and geographical conditions, such as its good soil fertility, adequate climate and abundant rainfall in some regions, allow almost any kind of crops to be grown. Turkey is the world leader in the production of hazelnuts, sultanas/raisins, dried figs and dried apricots and is in the top 10 countries in the world in terms of most of the products it produces.

Law No 6360, enacted in 2012, has changed the Turkish rural setting. The number of villages and the rural population has declined dramatically. Approximately 21 % of all households in Turkey are in the rural areas, with an average household size of 4.8 persons. All rural areas have access to electricity, drinking water and hygienic conditions.

The objectives of the Turkish agricultural policy have not changed radically over time. The objectives are to meet the country's food security needs, to increase productivity, to improve self-sufficiency levels, to raise farm incomes, to enhance competitiveness, to develop rural areas and to harmonise the country's agricultural and rural development policies and institutions with those of the EU.

Regarding the key strategic documents, the agricultural policy paper for 2006–2010 delineates the strategic objectives, principles and priorities of the agricultural policies to be implemented. The first national rural development strategy for 2007–2013 was developed to meet the main objective of increasing employment and income-generating activities in rural areas. TKDK implements the rural development programmes using EU funds under IPARD I and IPARD II.

The agricultural budget has increased over the last 10 years in nominal terms, while the proportion of the agricultural budget in GDP has almost been stable, namely at 0.5–0.6 %. TKDK implemented quite a number of projects funded from EU IPARD programmes, the national budget and farmers' own contributions.

Turkey needs to adapt to the EU agricultural policy *acquis*. There are currently no cross-compliance rules in Turkey, and they need to be accepted under the CAP. Turkey has already taken an important step in terms of passing the necessary legislation in some areas of agriculture. CATAK has been in place for many years. An IACS has developed and put in place recently. The FADN has been integrated into the agricultural production and registration system. The agriculture insurance law provided for a comprehensive and sustainable agricultural insurance system, the agricultural insurance pool, with the objective being to provide income stability for producers.

Turkey's CMO legislation should be developed and aligned with the EU CAP/CMO legislation. There has been some progress made in the area of food safety, veterinary and phytosanitary policy. Turkey has been applying mass vaccination for foot and mouth disease outbreaks. Some progress has been made in terms of resources and fleet management, inspection and control, and international agreements. The Turkish rural development strategy paper is in line with the EU rural development programme. In the pre-accession period, Turkey plans to establish a paying agency and a rural development agency.

The current price support favours large and wealthy farmers. Empirical studies have indicated that full liberalisation reduces income inequality among farmers. The full adoption of the EU agricultural policy *acquis* would have some impact on Turkish agriculture. Turkey would still be a net exporter of agricultural products, but some subsectors would decline, while some would increase in importance and be developed.

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List of abbreviations

AFSARD	Agency for Financial Support of Agriculture and Rural Development
AL	Albania
APM	agricultural policy measures
APMC	Agricultural Policy Measures Classification
ARDP	agriculture and rural development plan
ARDPF	agriculture and rural development programme fund
ASBiH	Agency for Statistics of Bosnia and Herzegovina
ASCU	agricultural sales cooperative unions
AWU	annual work unit
BA	Bosnia and Herzegovina
BD BiH	Brčko District of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
CAP	Common Agricultural Policy
CATAK	conservation reserve programme
CEFTA	Central European Free Trade Agreement
CMO	common market organisation
DCM	Decision of the Council of Ministers
EAFRD	European agricultural fund for rural development
ERP	economic reform programme
FADN	farm accountancy data network
FAO	Food and Agriculture Organization
FBiH	Federation of Bosnia and Herzegovina
GDP	gross domestic product
GFF	Grant Fund Facility
GIZ	German Development Agency
GMO	genetically modified organism
GVA	gross value added
ha	hectare
IACS	integrated administration and control system
ILO	International Labour Organization
INSTAT	Albanian Institute of Statistics
IPA	instrument for pre-accession assistance
IPARD	instrument for pre-accession assistance for rural development
ISARD	inter-sectoral strategy for agriculture and rural development
JRC	Joint Research Centre
KAS	Kosovo* Agency of Statistics
LAU	local administrative unit

LEADER	*liaison entre actions de développement de l'économie rurale* (links between actions for the development of the rural economy)
LPIS	land parcel identification system
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MAFWE	Ministry of Agriculture, Forestry and Water Economy
MAFWM	Ministry of Agriculture, Forestry and Water Management
MAP	medicinal and aromatic plant
MARD	Ministry of Agriculture and Rural Development
ME	Montenegro
MIDAS	Montenegro institutional development and agriculture strengthening
MK	North Macedonia
NRN	National Rural Network
Monstat	Statistical Office of Montenegro
NARDS	national agricultural and rural development strategy
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
PSE	producer support estimate
RoS	Republic of Srpska
RS	Serbia
SAA	stabilisation and association agreement
SORS	Statistical Office of the Republic of Serbia
SRD	structural and rural development
SWG	Regional Rural Development Standing Working Group
t	tonne
TKDK	Agriculture and Rural Development Support Institution
TR	Turkey
TurkStat	Turkish Statistical Institute
UAA	utilised agricultural area
UNDP	United Nations Development Programme
WB	Western Balkan
WTO	World Trade Organization
XK	Kosovo*

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