

GREEN AGENDA AS A NEW PARADIGM OF AGRICULTURE IN BOSNIA AND HERZEGOVINA*

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Professional paper

Summary

By signing the Sofia Declaration on the Green Agenda for the Western Balkans, the leaders of the countries, including Bosnia and Herzegovina (BiH), committed themselves to the implementation of five basic courses of action established by the action plan, which include: 1) decarbonization, 2) circular economy, 3) depollution, 4) sustainable agriculture and 5) protection of nature and biodiversity. This commitment means that the creation and implementation of policies should be strongly marked by an environmental approach, not only because of EU requirements but also because of the practical importance for overall sustainable development. Because of this, support measures in an increasing number of countries imply the application of measures such as making direct payments subject to the fulfillment of the so-called cross-compliance or special payments for agroecological practices, sustainable land management, etc. However, the measures included in the Green Agenda in BiH are applied very modestly, which will be presented in this paper for the period 2018-2021. Practically, measures to support organic production, soil fertility control, and the protection of genetic resources are the only ones on track with the Green Deal goals. It is expected that the new strategic documents in the field of agriculture will take into account the objectives of the CAP, and thus the Green Deal, and will bring the agriculture policy of BiH closer to the policy of the EU, for which BiH decided a long time ago.

Key words: *green agenda, measures, support, Bosnia and Herzegovina, agriculture*

INTRODUCTION

Climate changes affecting both the world and Bosnia and Herzegovina (BiH) affect all spheres of life of its inhabitants. Climate change affects both the world and BiH, impacting all aspects of life for its inhabitants. Policies currently in place with no additional action are projected to result in global warming of 2.8°C over the twenty-first century (UNEP, 2022). Unhindered growth of greenhouse gas emissions raises the temperature of the Earth. Consequences include melting glaciers, more rainfall,

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extreme weather, and seasonal changes. The rapid pace of climate change and population growth threaten food security everywhere (Nelson *et al.*, 2009). To reduce the negative effects and mitigate climate change, it is necessary to reduce greenhouse gas emissions. To begin limiting global warming to 1.5°C, annual greenhouse gas emissions worldwide must be reduced by 45% compared to emissions projections under current policies (UNEP, 2022). Mitigation strategies include increasing energy efficiency in the building sector, increasing the use of renewable energy sources, developing sustainable transportation, and promoting more sustainable land and forest use (MOFTER, 2017; GEF, 2022). In parallel to climate change mitigation measures, climate change adaptation measures must be intensified, i.e., steps must be taken to reduce the negative effects of climate change. To combat these problems, Europe adopted a new strategy - the Green Deal in which:

- no net emissions of greenhouse gases by 2050,
- economic growth is not related to the use of resources,
- no person or region is neglected (Camille *et al.*, 2022; EFB, 2022).

In order to achieve this goal, signatory countries must work progressively to introduce clean energy to all economic processes. In this way, the negative impact of fossil fuel use on the whole economy - production and consumption, taxation, and social benefits - would be reduced.

All Western Balkan countries are signatories to the Paris Agreement, which as potential candidates, are encouraged to work on reducing gas emissions, improving energy efficiency, and increasing renewable energy. The impetus for implementing the Paris Agreement was made possible by adopting the Economic Investment Plan (EC, 2020a) and the Green Agenda for the Western Balkans (EC, 2020b), which aim to accelerate green and digital transformation, i.e. sustainable growth. In the European Green Deal, the European Commission stated, among other things, that the environmental transition for Europe will only be fully effective if the countries in its immediate vicinity take effective action for the energy transition (EC, 2019). In this regard, the countries of the Western Balkans signed the Sofia Declaration (RCC, 2020) in November 2020 committing to deliver on agreed commitments/activities in five key areas:

- climate action, including decarbonization, energy, and mobility,
- circular economy with a special focus on waste, recycling, sustainable production, and efficient use of resources,
- biodiversity, the aim of which is to protect and restore the natural wealth of the region,
- combating air, water, and land pollution,
- sustainable rural areas, and food production chains.

To achieve this, a new political framework is needed, accompanied by appropriate legislation, new technologies, a support system, infrastructure, and new consumption and lifestyle models (Mugge, 2018; D'Adamo *et al.*, 2020).

As a country aspiring to the EU, BiH has committed to a stronger obligation to harmonize its environmental protection policy with the EU legal acquis and fulfill the obligations stipulated in the Green Agenda for the Western Balkans. Agriculture and rural development are essential components of the European Green Deal. The future CAP will be a key tool in achieving the “Farm to Fork” goals and the biodiversity strategy (Matthews, 2020). The new CAP will strive for the sustainability of every farmer with more focused support for smaller farms and greater flexibility for EU member states in adapting to new measures³. Agriculture is important not only for EU policy but also for other countries, including BiH. New strategic documents such as the Strategy of Agriculture and Rural Development of the Federation of BiH for the period 2021-2027 in the framework of the objectives for the development of agriculture in Bosnia and Herzegovina show compatibility with the Green Deal EU CAP 21-2027. In the Republic of Srpska, the strategy follows the continuity of the previous strategy, but with certain steps to introduce new measures, especially in terms of increasing the competitiveness of the agricultural sector and greater attention to the needs of environmental protection and rural development. However, the implementation of the measures must be included, which is a particular challenge after the changed market situation following the outbreak of the pandemic COVID-19 and due to the war in Ukraine. The adoption of the Green Agenda for the Western Balkans obliges all members to contribute to the further greening of their agriculture.

In recent years, the concept of sustainable development has attracted increasing attention. The EU Green Deal provides a roadmap for a sustainable economy in the EU and the Western Balkans by turning climate and environmental challenges into opportunities in all policy areas and making the transition equitable for all (EC, 2019). The countries of the Western Balkans, including BiH, considering their decision to join the EU, need to step up their efforts in this area in order to achieve the goals agreed upon in Sofia. In the field of agricultural and rural policy, which is recognized as the basis for the concept of greening in the Western Balkan countries, the aspects of sustainable development, climate and ecology are increasingly present, including national strategies, but also support programs for agriculture and rural development, which serve as initiators for the implementation of relevant measures in all countries. Therefore, the aim of the paper is to examine the current state of agricultural policy in BiH in terms of greening measures and progress towards Green Agenda policies, as well as the possibilities for further progress towards them.

MATERIALS AND METHODS

Data for this research were collected based on an overview of public and internal documents of the responsible institutions. Considering the state organization of BiH, each entity has its agricultural policy. In the analysis of budgetary support for agriculture in BiH and the measures on the way to the Green Deal, the aggregated database of BiH on agricultural policy measures (BiH APM database) was used. A unique Agricultural

³ https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/new-cap-2023-27_en, last accessed 2022/10/18

policy measures (APM) classification of agricultural budgetary support was created using the EU concept based on policy pillars as a basic starting point, combined with the OECD classification (Rednak and Volk, 2010). The EU concept of support is used for higher levels of aggregation, while the OECD PSE classification is used for lower levels. Mentioned pillars relate to the market and direct producers' support measures, structural and rural development measures, and general measures related to agriculture. However, in addition to its broad analytical value for EU countries, the OECD database cannot be used in acceding countries due to its concept (EC, 2021). Therefore, the APM model was created, which, thanks to its concept, enables a comparison of the support of countries that are not EU members with those that are.

The APM database of BiH covers a longer period, 2002-2021, and the paper presents data for total budget support from 2012-2021 and for green measures since the signing of the Sofia Declaration, i.e., for 2020 and 2021.

RESULTS AND DISCUSSION

The greener policy is a new concept that includes various activities that take into account the sustainable use of natural resources (soil, water, air, biodiversity, breeds and varieties, conservation of pastures and forests, etc.). This concept is increasingly discussed in BiH and is one of the challenges faced by strategic decision-makers at all levels of government.

With the signing of the Dayton Agreement, the state organization of BiH was established in the form of two entities and the Brčko District of Bosnia and Herzegovina. This division also conditioned the division of agricultural policy by administrative units, which differs but also has common features that often refer to unrealized measures on the way to adaptation to the CAP.

Although the entity's strategic documents in agriculture in BiH in the period up to 2019 in the Federation of BiH and 2020 in the Republic of Srpska highlighted a clear commitment to European integration and harmonization with the CAP, there were no necessary reform changes that would mean approximation to the EU CAP. According to the EC report, no common institutions for agricultural policy, including the Agency for Payments, were formed. A significant part of direct payments to producers based on production was retained. The increase in total budget allocations for the agriculture sector planned in previous strategic documents was not achieved either. Support for the second pillar - structural and rural development measures - is almost absent, while support for the third pillar, general services, is still insufficient qualitatively and budgetary. There has also been no progress in harmonizing rural development programs and support measures across the country. Unfortunately, there is very limited progress in development of Agricultural information system components such as Land Parcel Identification System LPIS, Farm Accountancy Data Network FADN, etc. in BiH (FMPVŠ, 2015).

As for the total allocations for agriculture, it can be said that they have mostly increased during the ten years (2012-2021). Since 2014, when there was a decrease compared to

previous years, the amount has constantly been growing, especially in the last two years. In 2020, more funds were allocated by 27% compared to the previous year due to the mitigation of COVID-19, and the highest value was reached in 2021 of 117.7 million euros as a result of the increase in budget allocations.

Table 1. Budgetary expenditure for the agro-food sector and rural areas, period 2012-2021, Bosnia and Herzegovina, in mill. EUR

Measures	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Market measures	1.4	3.7	2.6	1.2	0.8	0.3	0.4	0.6	2.0	3.0
Direct producers support measures	48.7	56.9	52.6	58.5	69.0	73.2	75.8	74.2	91.4	90.8
Rural development measures	29.6	6.8	9.2	5.1	4.4	3.3	5.2	6.7	12.0	16.9
Other measures	3.0	3.6	3.0	3.3	3.4	4.0	4.8	5.2	4.6	6.9
Sum	82.7	71.0	67.4	68.0	77.6	80.9	86.3	86.6	110.0	117.7

Source: BA APM database

In the budget structure for 2021, direct producer support measures account for the largest share at 79.7%, followed by rural development measures at 14.4%, and in third place are general measures at 5.9%

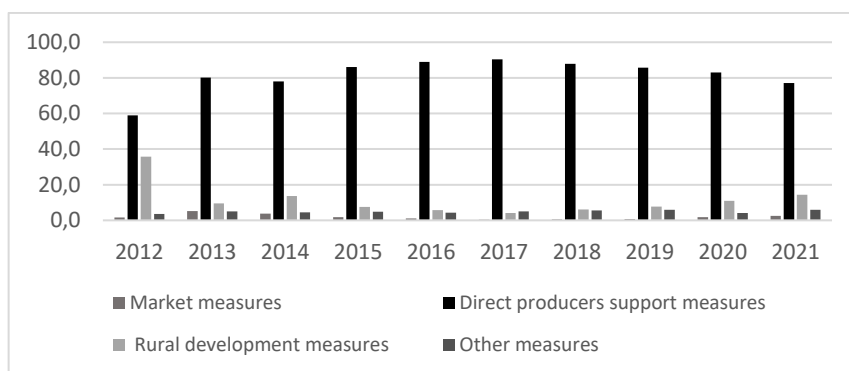


Figure 1. The structure of budget support for the agriculture sector in BiH for the period 2012 – 2021, in %

Allocations for direct support dominated throughout the period under review. Moreover, most direct payments were based on production, which has not been the case in the EU for a long time. In 2020 and 2021, with the increase in the overall budget for agriculture, there were also larger allocations for rural development. However, if we look at the development component of rural development measures, we can say that they have only a modest budget throughout the observed period, especially considering that the ratio between direct support measures and rural development should have been 55:45 in the

Federation of BiH and 60:40 in Republic of Srpska according to the previous strategies (RS) (FMPVŠ, 2015). In any case, these investments for rural development measures should be higher, as they are essential for the modernization and restructuring of the sector in order to increase competitiveness. Adequate support should also be provided for improving the quality of life and employment in rural areas, especially for the promotion of environmental and agricultural public goods (FMPVŠ, 2022). The third pillar is almost negligible in the Federation of BiH, while the amounts in RS are increasing annually and will represent 11% of the total agricultural budget in 2021. There are no general service measures in the Brčko District.

By signing the Sofia Declaration, BiH undertook to implement a greener policy. From the aspect of agricultural and rural policy, sustainable development and green economy are increasingly being discussed as goals that need to be realized. The concepts are represented in strategic documents at the entity and state levels, which recognize agriculture as the most favorable area in the greening process. However, a big problem is the lack of appropriate indicators for monitoring and evaluating the achieved goals because the authorities in BiH do not consider the greening of agriculture as a priority (Martinovska Stojcheska *et al.*, 2021). The reason for this is primarily the lack of political will, i.e. the courage to change, and the lack of awareness among both producers and decision-makers about the importance of sustainable agriculture that can be realized in the market. This is supported by allocations from the budget for "green" measures, i.e., those that are on the way to the goals of the Green Deal. In BiH, for now, this can only be said for payment measures for breeding grazing livestock (sheep, goats, cow-calf system) and organic production. The amounts allocated for these measures are shown in Table 2.

Table 2. The greener measures, Bosnia and Herzegovina, in mill. EUR

Green measures	2020				2021			
	FBiH	RS	DB	BiH	FBiH	RS	DB	BiH
Organic production	0.02	0.08		0.1		0.2		0.2
Breeding of goats, sheep, and cow	2.6	1.4	0.8	4.8	4.9	1.1	0.9	6.9
SUM	2.62	1.48	0.8	4.9	4.9	1.3	0.9	7.1
%	4.2	3.4	9.2	4.5	8.0	2.5	11.0	6.0

Source: BA APM database

Table 2 shows that allocations for measures classified as green in BiH are modest. For organic agriculture in the Federation of BiH, EUR 0.02 million was allocated in 2020, while there was no allocation in this entity in 2021. In the RS, the shares are higher than in the Federation of BiH and amount to EUR 0.08 million in 2020, while in 2021 the amount increased to 0.2 million KM. For the second measure, the breeding of sheep, goats, and cows, there are allocations in all three administrative units for which the most was allocated in the Federation of BiH, 2.6 million euros in 2020 and 4.9 million euros in 2021. In the Republic of Srpska these amounts range from 1.4 million in 2020 to 1.1 million euros in 2021 in the Brčko district from 0.8 to 0.9 million euros. Thus, the total

budget for environmental policy measures in BiH in 2020 is 4.9 million euros, which is 4.5% of the total budget for agriculture, or 7.1 million euros in 2021, which is 6% of the total budget.

CONCLUSIONS

Based on the measures presented, we can see that the greening of agriculture in BiH is still at the beginning. On the other hand, BiH is a country that does not produce enough food for its needs (high self-sufficiency is present only for milk, fruit, and vegetables) and primarily depends on imports. Therefore, the focus will certainly be on intensifying agricultural production, which may conflict with some greening efforts (e.g., reducing the use of inputs that would allow for higher yields). This challenge becomes even more critical because we are in a time of geopolitical crisis and growing demand for our food production.

However, in order to achieve the necessary sustainable development and compliance with the Sofia Declaration, decision-makers in BiH must find a solution that, on the one hand, meets the requirements of the Green Agenda and, on the other hand, creates the conditions for the production of the required quantities of food. Overcoming the challenges will depend primarily on the government's interest in recognizing the importance of sustainable development and the green economy. First, this means adopting strategic documents, appropriate laws, and defined measures followed by proper budgetary support. The inadequate reaction of the authorities, i.e., avoiding the application of measures/standards of the green economy concept, can make it impossible to export agricultural food products to the EU. We must remember that the EU is the primary export market for BiH producers (Martinovska Stojcheska *et al.*, 2021).

One of the possibilities to overcome the challenge is to increase the sown areas, but with proper soil use that will not lead to soil impoverishment. To ensure sufficient quantities of food, it should also improve the operation of commodity reserves, promote the importance of food availability throughout the chain and draw attention to the problem of food waste. An opportunity for BiH can be the significant presence of extensive agriculture, which would certainly contribute to the realization of harmonization with the goals of the Green Deal addition to extensive production, there are large areas that are not cultivated and are used as meadows and pastures. Of the total agricultural area of 1.84 million ha (Čustović *et al.*, 2020), about half of the agricultural land is under permanent meadows and pastures⁴.

These areas indicate great opportunities for the development of animal husbandry, which should be seen as a priority for the development of agriculture in the future. We also need to strengthen the food sector, which will base its operations on inputs produced in BiH, thus contributing to food security in the country, which is especially important during the war in Ukraine and all the changes in the geopolitical scene. It is

⁴ FAOSTAT database, <https://www.fao.org/faostat/en/#data/RL> (2020) last accessed 2022/10/15

also necessary to motivate farmers to receive training to improve their knowledge, accept new production technologies and increase recycling, thus enabling sustainable production. To realize the tasks set by the Green Agenda, in addition to improving the use of resources, BiH should, like other countries, focus on regional cooperation to solve cross-border issues, such as climate change (Martinovska Stojcheska *et al.*, 2022).

All three administrative units of BiH made efforts to prepare and adopt strategic documents aimed at adopting EU regulations as much as possible, which means the introduction of new measures requiring the adoption of new laws and financial incentives for agriculture. In the Federation of BiH, several changes have been proposed, while in Republic of Srpska work is underway to introduce a new law on agriculture. The strategy in the Federation of BiH is adopted under the conditions of a new legal framework that connects it with three-year and annual planning, which provides a better insight into the types of measures and their implementation methods (Martinovska Stojcheska *et al.*, 2022). There is not much time left; it remains to be seen to what extent decision-makers and implementers will be willing to make numerous changes to comply with the declaration signed in Sofia.

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ZELENA AGENDA KAO NOVA PARADIGMA POLJOPRIVREDE U BOSNI I HERCEGOVINI

Rezime

Potpisivanjem Sofijske deklaracije o Zelenoj agendi za Zapadni Balkan lideri država uključujući i Bosnu i Hercegovinu su se obavezali na provedbu pet osnovnih pravaca djelovanja utvrđenih akcionim planom a koji podrazumijevaju: 1) dekarbonizaciju, 2) cirkularnu ekonomiju, 3) smanjenja zagađenja, 4) održivu poljoprivredu i 5) zaštitu prirode i biodiverziteta. Ovakvo opredjeljenje znači da bi kreiranje i provođenje politika trebalo biti snažno obilježeno ekološkim pristupom ne samo zbog zahtjeva EU već i zbog praktične važnosti za cjelokupni održivi razvoj. Zbog toga mjere podrške u sve većem broju zemalja podrazumijevaju primjenu mjera kao što su direktna plaćanja pod uslovom ispunjavanja tzv. unakrsne usklađenosti ili posebnih plaćanja za agro-ekološke prakse, održivo upravljanje zemljištem itd. Međutim, mjere sadržane u Zelenoj agendi u Bosni i Hercegovini se vrlo skromno primjenjuju, što je prikazano u ovom radu za razdoblje 2018.-2021. Praktično, mjere podrške organskoj proizvodnji, kontroli plodnosti tla i zaštiti genetskih resursa jedine su koje su na putu prema ciljevima Green Deal-a. Očekuje se da će novi strateški dokumenti u oblasti poljoprivrede uvažiti ciljeve CAP-a, a time i Green Deal-a, te približiti poljoprivrednu politiku BiH politici EU, za koju se BiH davno opredijelila.

Ključne riječi: zelena agenda, mjere, podrška, Bosna i Hercegovina, poljoprivreda