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State of affairs for fostering green economy in agriculture and rural development: Comparative analysis of national programs and measures in the Western Balkan countries and Croatia

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Contents

Chapter 1. Green economy in agriculture and rural development in Western Balkan countries and Croatia.....	4
Chapter 2. Croatia.....	13
Chapter 3. Albania	34
Chapter 4. Bosnia and Herzegovina	49
Chapter 5. Kosovo.....	66
Chapter 6. Montenegro	83
Chapter 7. North Macedonia.....	102
Chapter 8. Serbia.....	118

Chapter 1. Green economy in agriculture and rural development in the Western Balkan countries and Croatia

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1.1. Background

The concept of green economy is still new to the Western Balkan countries. Being one of the richest parts of Europe in natural resources, the Western Balkans countries face number of challenges in terms of economic development, job opportunities, infrastructure, social services etc. Farmers and rural population are a particularly vulnerable group in sustaining their economic standing, providing for livelihood and ensuring sustainability. The lack of competitiveness, limited access and sources of rural finance, poor rural infrastructure, trends of land abandonment and depopulation of rural areas, unfavourable structure in terms of education, qualifications and lack of knowledge and skills, as well as an overall unattractive social image of agriculture and living in rural areas, all represent serious constraints for the development of agriculture and the rural economy.

Environmental aspects, affecting mostly resource use, waste and biodiversity, are putting additional strains, not least connected to agricultural and development of rural areas. The success of agriculture profoundly depends on its ability to coexist sustainably with the natural environment. Farmers are required to manage their production in a sustainable manner, protecting their surroundings, ensuring public health, plant health, animal health and welfare. This involves a mind-set change, level of social responsibility and ability to use pressures as opportunities. To this end, it is necessary to increase the awareness on sustainable rural diversification and introduction/promotion of green economy practices. All relevant stakeholders in the sector, primarily agricultural producers and rural entrepreneurs, but also policy and decision makers in the Western Balkan countries, need to be alerted on the importance of the green economy concept for achieving sustainable rural development and urged to undertake specific measures that would advance green economy and entrepreneurship.

1.2. Objective

The overall objective of the project “Networking and Advocacy for Green Economy-NAGE” is to provide support to enhance the policy and decision-making impact of the Balkan Rural Development Network (BRDN) and its constituents, through involvement in the agricultural and rural program and policy reform processes for introduction of the green economy concept. The purpose of the document is analysis of the legal documents of non-EU member countries to the EU Common Agricultural Policy (CAP), in particular:

- evaluation of the national programs and measures for agriculture and rural development in the WB countries and Croatia in terms of green economy concept;
- assessment and elaboration of relevant measures/incentives for supporting green economy practices in WB countries and Croatia to be combined with complementary measures (cross-cutting) from other sectors (environment and economy) for the purpose of fostering the concept of green economy in the WB countries.

In that context, this document provides an overview of the Western Balkan countries' national programs and measures for agriculture and rural development to the EU CAP, with emphasis on the green economy cross-cutting issues. The study analyses the national strategies and programs of the target non-EU member Western Balkan countries (Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia) and Croatia as an EU member country. This endeavour aims to contribute to the achievement of one of the project's expected results, i.e. to support the initiative for comprehensive and civil society organisations (CSO) participatory policy development process through identification of

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the gaps of the national agricultural and rural development programs to the CAP 2013-2020 and analysis of the impact to the natural environment and sustainable development.

The comparative analysis will serve as basis to identify the progress and to draw attention to the main hindrances, driving forces and boosters in relation to the introduction and/or promoting green economy on national level, taking into consideration process of approximation to the EU CAP, particularly in regards to the green economy cross-cutting issues. The analysis can further serve as foundation for opening dialogue with the relevant stakeholders and carrying out the environmental and green economy advocacy process planned within the project that should support the countries' approximation to the EU CAP, while engaging the grassroots organisations and encouraging participative rural policy decision-making processes. Croatia is included and referred to as a benchmarking country in regards to the policy amendments, negotiations and participation in the decision-making process.

1.3. Study structure, method and data

The study was prepared in the period April-July 2020. Given the limited time frame and restricted conditions caused by the Covid-19 pandemic, the work was done primarily through desk research on relevant sources (notably policy-related documents and academic papers, with focus on Rural Development Programs, but also non-RDP funded mechanisms). Where needed and possible, the country experts contacted representatives from the main stakeholders (policy-makers, donors, green economy cases).

The study focuses on the six Western Balkan countries: Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia; and Croatia as a country from the region and an EU member since 2013. The subsequent chapters present the national reports containing the following elements:

- Introduction on the current state of affairs in the country - level of awareness of the green economy concept; reference to green economy or related terms in current legal, strategic/programming and institutional set-up; priorities and logic of the country strategic approach; important sources and funds used to implement sustainable development and green economy related priorities.
- Country-specific overview of national strategic and programming documents that provide green economy application in agriculture and rural development, linked to the green economy concept, emphasizing cross-cutting issues with other areas where possible.
- List and description of concrete measures and support mechanisms, relevant to the issue of green economy, in terms of being already existing (AE), need to be extended (EX) or introduced (IN) in the respective programs. The rural development policy measures, where applicable, follow the CAP logic as bundled in the second pillar; additional relevant measures are also noted, being channelled from the line ministries of agriculture or other cross-cutting key measures linked to green economy through different state funds.
- Discussion on the key identified hindrances, driving forces and boosters applied on national level that support and facilitate the process of approximation to the EU CAP, especially in regards to the green economy cross-cutting issues.
- Concluding remarks along certain steps required to introduce and promote green economy in the relevant WB country's national agricultural and rural development programs, as well as potential cross-cutting measures to be introduced by relevant ministries (agriculture-environment-economy).

1.4. Green economy as a concept

Over the past decade, the 'green economy' concept has emerged as an important policy framework for sustainable development, as it presents an attractive agenda to use resources more efficiently, cause less environmental damage and lower carbon emissions, and enhance social inclusiveness (Georgeson et al., 2017). Green economy as a term refers to an economy resulting into improved human well-being and reduced inequalities over the long term, while not exposing future generations to significant environmental risks and ecological scarcities (UNEP, 2011). As a one of its main features, green

economy promotes (public) investments in specific areas or green sectors that can either restore and maintain natural resources or increase the resource use efficiency, and as such can lead to new jobs and income generation, but with less emissions, resource degradation and environmental pollution (Weick, 2016).

The concept of green economy does not replace that of sustainable development, but instead can be understood as a tool to achieve sustainable development (Bowen, 2012). Green economy in its various forms has been proposed as a way for catalysing national policy and international support towards sustainable development. Originally seen as a useful policy approach to tackle the economic and financial crisis, the concept has received significant international attention over the past decade as a tool to address the 2008 financial crisis as well as one of two themes for the 2012 UN Conference on Sustainable Development (Rio+20). Nowadays, it is seen as a strategic way of delivering a fairer society living in a better environment, with three key interlinked objectives underling the green economy approach: improving resource efficiency, ensuring ecosystem resilience, and enhancing social equity (EEA, 2014).

Sustainability is a key long-term goal and the green economy concept is describing a pathway to sustainable development (Weick, 2016). “A green economy is a means to sustainable development ... essentially, the concept postulates that the transformation of the economy is a precondition for sustainable development” (Eurostat, 2013). With its economic, social and environmental pillars, sustainable development is arguably a wider concept than the green economy. Sustainable development emphasizes the broader sense of enhancement of environmental, social and economic resources, all three of them being seen as critical in meeting the needs of current and future generations. Nevertheless, despite the increased presence of environmental aspects in various policies, the impact on environmental trends worldwide has been limited. Hence the green economy concept gains increasing attention since it offers overcoming the association of environmental protection as a cost factor which slows down economic development and in turn, brings positive connotation between the environment and the economy, in which “environment becomes an opportunity rather than a constraint, and a new driving force for economic development” (Weick, 2016).

There are several other concepts, arguably narrower in scope, that are connected to the green economy. *Green growth* refers to “fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies” (OECD, 2011). *Circular economy* is another concept, narrower in scope than green economy, as it refers mainly to the physical and material resource aspects of the economy — water, fuel, biomass, minerals, etc. It does not place emphasis on human well-being or social inclusion, but rather it focuses on recycling, limiting and re-using the physical inputs to the economy, and using waste as a resource, leading to reduced primary resource consumption.

The agricultural sector plays a vital role in the transition to a green economy. Agriculture depends first and foremost on natural resources as core production factor and as such can cause both environmental harm and/or provide environmental benefits. At global scale, agriculture, forestry and other land use contribute to around one-fourth of greenhouse gas emissions; it is thought possible to significantly reduce or even achieve carbon-neutral sector status by applying good management practices, creating environmental services, producing renewable energy, whereas also attaining food security. The agricultural sector can support economic development, with balanced resource use, creation of green jobs, while ensuring food and nutrition security. Hence, agriculture, dealing with climate change, degradation of resources and poverty, faces the same problems addressed by the green economy paradigm.

1.5. EU promotion of green economy and Rural Development Policy interactions

Implementing the universal *Agenda 2030* is high on the list of EU priorities; the current crisis caused by Covid-19 pandemic spread has particularly put forward the importance of attaining the Sustainable Development Goals (SDGs), stressing the links between the economic, social and environmental domains. The Agenda, being a pioneer bold development push supported globally, stipulates governments to devote resources to developing rural areas and sustainable agriculture and fisheries, supporting smallholder farmers, especially women farmers, herders and fishers. SDG 2 (end hunger) is the primary goal associated with agriculture and rural economy, but many others, such as those dealing with water, energy, infrastructure, equality, climate change and the environment are of great importance to the sector and to rural populations as well. Within the assessment of progress towards the SDGs in the EU context (Eurostat, 2020), green economy advancement is recognised as driver in decoupling environmental impacts from economic growth, as well as bring important socio-economic benefits in terms of value added and employment.

Resource efficiency and environmentally-led businesses are strongly promoted by the European Union, as both benefit the environment and reduce greenhouse gas emissions; the EU recognizes a greener economy as a means for new growth and job opportunities. The *Europe 2020 Strategy* is the European Commission's agenda for smart, inclusive and sustainable growth; the goal is resource-efficient, green, and competitive low-carbon economy.

In December 2019, the new EU growth strategy was presented - *The European Green Deal*, aiming to transform EU into a modern, resource efficient and competitive economy where climate and environmental challenges are addressed and turned into inclusive opportunities. The *EU Farm to Fork Strategy* aims to make food systems fair, healthy and environmentally-friendly and as such is a key component of the European Green Deal. The strategy aims to significantly reduce the use and risk of chemical pesticides, as well as the use of fertilisers and antibiotics. In addition, it contributes to achieving a circular economy by reducing the environmental impact of food processing and retail sectors. The strategy also promotes affordable healthy food for all and stimulate sustainable food consumption in the EU.

Sector-specific strategies and policies at EU level connected to the green economy transition include: climate and energy, agriculture and forestry, rural development, jobs and growth, waste management, circular economy, bio-economy, food sector, water, biodiversity (ENRD, 2017). The transition to the green economy in rural areas aims at improving lives and livelihoods of rural people, balancing natural resource use while maintaining incomes, and trading the risks of making a change with the opportunities that change will bring; in order to achieve that, it requires political will, technological developments and encouragement from consumers, through a sequence of progressive steps (*ibid*).

The Common Agricultural Policy supports the economic viability and vibrancy of rural communities through rural development programmes and measures (so called second pillar); the rural development measures underpin CAP's market and income support with funding that strengthens the agri-food sectors, environmental sustainability and overall quality of life in rural areas. Green economy conversion in rural areas can be in large part channelled through the Rural Development Programmes. The design, programming and implementation of the RDPs measures can support various activities and promote a different economic, environmental and social benefits linked to the green economy concept, making the RDPs a very useful and adaptable instrument for promoting green economy. The main activities supported by RDPs include green technologies in waste management, sustainable water management, eco-tourism, sustainable buildings, services and infrastructure investments in natural capital, for example, wetlands, forests or floodplains, "green" infrastructure, providing ecosystem services, sustainable management of agriculture and forestry, adaptation to climate change, improving energy efficiency and developing renewable energy, green public procurement (ENRD, 2017).

The EU Rural Development programming is defined by the regulation for the European Agricultural Fund for Rural Development (EAFRD). Although 'green economy' is not explicitly used, nearly every measure in the RDP can be connected to the set of goals promoted by the green economy concept:

- Knowledge transfer (M1)
- Advisory services (M2)
- Quality schemes (M3)
- Physical Investments (M4)
- Restoring agricultural production potential (M5)
- Farm and business development (M6)
- Basic services (M7)
- Investment in forestry (M8)
- Producers organization (M9)
- Agri-environment climate (M10)
- Organic farming (M11)
- Natura 2000 and WFD (M12)
- Areas of Natural Constraints - ANC (M13)
- Animal welfare (M14)
- Forest environmental climate (M15)
- Cooperation (M16)
- Risks management (M17)
- LEADER (M19)

The case of Croatia, presented in Chapter 2 (D. Znaor), lines up the following key RDP measures in terms of promoting the transition to green economy:

- Agri-environment climate measures (M10)
- Organic farming (M11)
- Areas of Natural Constraints - ANC (M13)
- Forestry measures (M8)
- Investments in physical assets (M4) - primarily investments with environment/climate benefits
- Knowledge transfer (M1) and Advisory Services (M2) - indirect role in boosting green economy

1.6. Western Balkan countries agriculture and rural development and links with green economy

The contribution of agriculture is obvious in the rural areas in all Western Balkan countries, where it is the main economic activity. Agriculture represents one of the major sectors in these countries - its share in the countries' national 2010-2019 average gross value added ranges from around 8 percent in Bosnia and Herzegovina, Serbia and Montenegro, 10 percent in North Macedonia, 14 percent in Kosovo and up to 22 percent in Albania; the sector is major absorber of labour force, dominantly in rural areas (around 20 percent in Serbia, North Macedonia and Bosnia and Herzegovina, and in average 46 percent in Albania, but with declining trend in the last years), which further emphasizes the vital role of this sector in the national economies (STAT Ag policy database, 2020). Western Balkan countries are in general characterized with pronounced dual farm structure and dominant majority of (very) small farms (the average farm size ranging from 1.2 ha in Albania to less than 4 ha in Serbia). There are various factors hampering the sector development and its competitiveness, related to the policy strategies and institutional frameworks, socio-economic conditions and technological setbacks. Rural households, particularly those with limited means, have limited access to the production resources (land, labour, capital), as well as limited entrepreneurial, information and knowledge base. Entrepreneurship is hampered by factors such as underdeveloped infrastructure, lack of skilled labour, limited access to markets and to finance, lack of investment support and low entrepreneurial potential. In that respect, rural development policies should assist more intensely the diversification of rural economies, to improve the quality of life and encourage young people to remain in rural areas.

The strong interlinkages that agricultural production has with the social, economic and environmental dimensions of sustainability are part of the UN General Assembly Sustainable Development Goals guiding the forward-looking Agenda 2030. The Western Balkan countries, in the global comparison framework, obtain relatively good performance in reducing poverty (Albania and North Macedonia still with progress to make); the goals linked to nutrition, food production and security improve moderately, yet remain a significant challenge for all the Western Balkan countries, as do the challenges related to

affordable and clean energy; issues that require most imminent policy attention are climate mitigation and biodiversity protection (Sachs et al., 2020)². Targeted agricultural and rural development policy can help in the achievement of these goals.

Different countries have different priorities and capacities to initiate and implement policy reforms and deal with the changes. The EU approximation process and the prospect of accession and full membership to the Union has been a driving force for the Western Balkan countries in the past decades. Montenegro and Serbia have already started the negotiations with the EU; North Macedonia and Albania were recently endorsed the decision to open accession negotiations, while Bosnia and Herzegovina and Kosovo are potential candidates. The EU value-set and commitment to sustainable development and hence green economy are reflected in the individual countries frameworks, albeit to different degrees. Since all the WB countries have declared EU membership as their key priority, relevant legal, strategic/programming and institutional adjustments are continuously ongoing: national legislation is being gradually harmonized with the *acquis communautaire*; national strategies generally track EU strategic documents' patterns, goals and objectives; relevant institutions are set to reflect the infrastructure need for executing EU policies.

The Western Balkans countries' aspiration to join the EU poses similar challenges in transforming and modernising their highly fragmented agri-food sectors, to ensure they can be competitive in the EU market. National agriculture and rural development funds deliver the core funding for support and development of the sector³. The composition is varying among the countries; in the period 2013-2017, it mainly consists of direct producer support in Bosnia and Herzegovina, North Macedonia and Serbia; structural and rural development measures take more balanced part in Kosovo and Montenegro, whereas they dominate in Albania (Volk et al., 2019). Nevertheless, structural and rural development measures in most WB countries are primarily directed towards competitiveness and on-farm investments, except North Macedonia, which within this pillar dedicates some support to rural economy and environmental services.

In addition to national budgetary support, the current candidate countries to the EU (Albania, Montenegro, North Macedonia and Serbia) are beneficiaries of the Instrument for pre-accession assistance for rural development (IPARD), which focuses on rural areas and the agri-food sectors. IPARD provides the beneficiaries with financial and technical help with the aim of making these countries' agricultural sector and rural areas more sustainable and aligning them with the EU's CAP. IPARD programmes are constructed with measures set at European level, concerning investments in physical assets of agricultural holdings or processing and marketing of agricultural products, farm diversification and business development, agri-environment, climate and organic farming, implementing bottom-up local development strategies (LEADER approach), advisory services, as well as technical assistance for monitoring and capacity building. Currently, these four WB countries run the IPARD II programme for the period 2014-2020 and have a combination of measures operational within their country programme. Still, successful use of the IPARD funds requires full local structures to be in place for effective implementation and control; absorption rates are still low which pronounces the need for significant investment in the preparatory phase, both by the country and the potential beneficiaries. The IPARD management and control principles and procedures should be simplified in order to encourage the WB countries to make better use of measures. Taking into account Croatia's case where pre-assistance programs for rural development were mainly used to support farm investments and rural infrastructure, the Western Balkan countries should build up on that experience and focus more substantially on the introduction of measures that support the green economy more closely (e.g. agri-environment measures).

From the overview of relevant documents (provided in detail within the WB country reports - Chapters 3 to 8), it can be observed that sustainable development is present in most, including the national strategies for agriculture and rural development, which act as the cornerstone of the respective policy in all countries. Green economy as such is still lacking and is not being explicitly included in many of

² The most recent Sustainable Development Goals report (Sachs et al., 2020) includes ranking of the countries in terms of the composite SDG index: Croatia is placed 19th, followed by Serbia (33rd), Bosnia and Herzegovina (50th), North Macedonia (62nd), Albania (68th) and Montenegro (72nd).

³ Respective Western Balkan countries' policy frameworks and cross-country analysis is presented in e.g. Volk et al. (2014), Volk et al. (2017), Erjavec et al. (2020).

them, but references to the concept are contained in many of the strategies, related specifically to agriculture and rural development as an area that is recognized as vital to the greening concept, and also as a cross-cutting issue in other sectors. What is missing in practice, is the pursuing of the defined strategic priorities and objectives and often lack realistic action plans and appropriate tools/indicators to control and evaluate the implementation process.

Overview of the key relevant WB countries documents linked to agriculture and rural development, sustainable development and green economy

Albania	<ul style="list-style-type: none"> • Inter-sectoral Strategy for Agriculture and Rural Development (2014-2020) • Instrument for Pre-Accession Rural Development Programme (2014-2020) • Document of Forestry Policies (2019-2030) • Integrated Programme for Rural Development (2018-2020) - 100 Villages • Draft Sector Strategy for Irrigation and Drainage (2019-2023) • National Strategy for Development and Integration (2015-2020) • National Programme for European Integration (2017-2021) • The 2030 Agenda for Sustainable Development (2016-2030) • National Strategy on Climate Change and Action Plans (2018-2030)
Bosnia and Herzegovina	<ul style="list-style-type: none"> • Strategic Plan for Rural Development of Bosnia and Herzegovina - Framework Document (2018-2021) • Program of Rural Development of Federation of Bosnia and Herzegovina (2018-2021) • Strategy for Development of Agriculture and Rural Areas of Republika Srpska (2016-2020) • Mid-term Strategy of Agricultural Sector Development of Federation of Bosnia and Herzegovina • Strategy of Agriculture and Rural Areas Development of Brcko District (2019-2025) • Strategy of Forestry Development of the Republika Srpska (2011-2021) • Strategy of Climate Change Adaptation and Low-emission Development for Bosnia and Herzegovina • Strategy of Nature Protection of the Republika Srpska • Strategy of Environment Protection of Federation of Bosnia and Herzegovina (2008-2018)
Kosovo	<ul style="list-style-type: none"> • National Development Strategy (2016-2021) • Agriculture and Rural Development Programme (2014-2020) • Strategy for Climate Change (2019-2028) • Strategy for Local Economic Development (2019-2023) • Energy Strategy (2017-2026) • Sustainable Development in Kosovo 2018
Montenegro	<ul style="list-style-type: none"> • National Strategy for Sustainable Development (2016-2030) • Strategy for agriculture and rural development (2015-2020) • Instrument for Pre-Accession Rural Development Programme IPARD II (2014-2020) • National Strategy on climate change to 2030 • The innovated Montenegrin Strategy for the transposition and implementation of the European Union environmental chapter 12 - Food Safety, Veterinary and Phytosanitary policies with a General Action Plan • Forests and Forestry Strategy with Development Plan - National Forest Strategy (2019-2023) • National biodiversity strategy (2016-2020)
North Macedonia	<ul style="list-style-type: none"> • National Agriculture and Rural Development Strategy (2014-2020) • National Program for Agricultural Development and Rural Development (2018-2022) • Instrument for Pre-Accession Rural Development Programme IPARD II (2014-2020) • National Plan for Organic Production (2013-2020) • National Strategy for Sustainable Development (2009-2030) • Strategy for Environment and Climate Change (2014-2020) • National Strategy for Biological Diversity with action plan (2018-2023) • Industrial Strategy with Action Plan (2018-2027) • National Strategy for Small and Medium Enterprises (2018-2023)
Serbia	<ul style="list-style-type: none"> • Strategy of Agriculture and Rural Development of the Republic of Serbia (2014-2024) • National Program for Agriculture for the period (2018-2020) • National Program for Rural development for the period (2018-2020) • Instrument for Pre-Accession Rural Development Programme IPARD II (2014-2020) • National Strategy for Sustainable Use of Natural Resources and Goods (2012-2022) • Water Management Strategy on the Territory of the Republic of Serbia (2017-2034) • National Strategy for Sustainable Development (2007-2017) • National Programme for the Adoption of the <i>Acquis</i> (2018-2021)

1.7. Concluding remarks

Green economy is still an evolving concept, that stems upon the premise of sustainable development and envisions growth benefiting in economic well-being, social equity and environmental protection. The green economy concept highlights the need to invest in natural capital, sustainable consumption and production patterns and circular economy, in order to achieve environmental objectives, but also growth and job creation. Key drivers to the transition to green economy in the Western Balkans are adequate policies (national and EU-driven), technological innovations and assenting market forces. In order to be effective, the “green” policy toolkit supporting the process should contain a combination of instruments (Stevens, 2011), in terms of: regulation (alignment with the *acquis*, increased green regulative and green procurement); support measures (decoupling farm support, increased support for environmental practices, extended cross-compliance requirements); economic instruments (simplified property and user rights in the agricultural sector, imposed charges on excess use of environmentally-damaging inputs); research and development (increased funds for research on green agricultural technologies, as well as promotion of public/private partnerships for green agricultural research). In parallel, increased awareness and commitment to global initiatives brings a significant contribution to sustainability development and transition to green economy. In that sense, the economic growth in the agricultural and rural sector guided through green economy frameworks can potentially have a much greater impact in reducing poverty in Western Balkan countries’ rural areas, than urban or industrial growth.

The main hindrances linked to the green economy transition recognised in the Western Balkan countries relate to: structural deficiencies present in all respective countries (small farm size, low skilled labour, depopulation of rural areas and lacking market participation); unbalanced use of the natural resources; low prioritization and political will dedicated to the green economy shift; insufficient control and monitoring of the relevant policies; lack of coordination and intra-sectoral connections on cross-cutting issues; weak capacities of local communities in the context of natural resources management and solving environmental problems; complicated and demanding RDP (IPARD) procedures aggravating the application process for the applicants and administering of the measures.

Major drivers to the process involve: raising the awareness about the green economy paradigm and mainstreaming green economy principles, initiatives and actions into agriculture sector development; establishing clear coordinated policy agenda, supported by achievable and measurable objectives; strengthening institutions and building capacity (e.g. for implementation of RDP measures), which will in turn create conditions for more successful and prompter use of IPARD funds; higher level of harmonization national policy with the CAP - especially in the part that is on the line of greening of agriculture; encouraging private sector investments and green business models.

There are number of (rural development) measures across the countries, but almost none address the green economy directly and explicitly. In promoting the transition to green economy, Rural Development Programmes can play a key role by supporting resource-efficient, low-carbon, and socially justifiable investments, as well as by encouraging sustainable management of natural resources in agriculture, but also other economic sectors. Also, the EU supported IPARD programmes should be used more intensely for going through the process of designing, programming, administering and implementing green economy-related measures.

The process needs to be reinforced by raising and building fluid knowledge on green economy across the sector, involving all key stakeholders (producers, processors, suppliers, advisory service, research community, CSOs, consumers). To shape a sustainable environmental future, all the actors in the countries, but also across the region, need to cooperate and jointly address key challenges.

It is furthermore important to have in place adequate measurement tools to help policy makers evaluate the efficiency of the policies and measure the extent to which the shift into a greener path is occurring. A set of indicators is necessary to monitor and evaluate the progress toward green economy in agriculture and rural development, in terms of policy, but more importantly, in assessing its effect on economic outcomes in agriculture, pressures on the environment and quality of life aspects, especially in rural areas.

The role of national governments in the process of transforming the existing economic models towards greening is undisputed; nevertheless, active involvement of local communities, civil society sector and inter-sectoral horizontal and vertical interactions can prove to be similarly significant. Other supporting actions are therefore needed to increase capacity and strengthen institutions and relevant actors, provide training and skill enhancement to the workforce, and improve general education on sustainability and green economy.

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Chapter 2. Croatia

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2.1. Introduction

Croatia profiles, and in a way brands itself as the “Green Croatia” – a country of unspoiled environment and beautiful nature – notably in the promotion of its tourism (WB, 2019). But the term “green economy” is not consistently defined in the Croatian legislation as it is still an emerging concept. However, most citizens are likely to have heard for green economy as this is often mentioned in the media – particularly by the politicians and environmental advocates. The term “green economy” is used in various occasions and in various contexts. Broadly speaking, in Croatia it refers to the economic activities and/programs resulting in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In Croatia, the concept of green economy is often associated (but also mixed-up) with the terms/concepts of sustainable development, circular economy, low-carbon economy, environmental protection, etc. Green economy in Croatia refers mostly to the energy, tourism and manufacturing sectors. It is also associated with pollution reduction and/or polluter pays principles, as well as environmental policies and the mainstreaming of environmental standards and policies into sectoral policies.

The concept of green economy is getting more attention as the Croatian economy is relatively carbon intensive (its carbon intensity is about 20 percent higher than the EU average) and because Croatia experiences serious delays in achieving compliance with several EU environmental legislative acts, notably with the waste management and urban wastewater treatment directives (WB, 2019). Croatia has only recently started the transition from a linear to circular economy, and there is, as of right now, no long-term push in terms of policymaking, incentives and other tools to bring about systematic changes in business and market models, public awareness campaigns, etc. (WB, 2019). The lack of research and development, eco-design, and eco-innovation has hindered the development of the green economy in Croatia and a comprehensive policy on green cities still needs to be developed (WB, 2019).

Croatia is fully committed to comprehensive implementation of Agenda 2030 and its green economy-related goals, both within the framework of the United Nations and within the framework of the EU (GoRC, 2019). Bearing in mind the complexity of Agenda 2030 and its inevitable impact on the overall social and economic development, the Government of Croatia, established the National Council for Sustainable Development. The establishment of the Council ensures political importance and visibility of the long-term process of implementation of Agenda 2030, as well as compliance with other policies, strategies and activities of the Croatian Government (GoRC, 2019). The 2018 Sustainable Development Goals Index and Dashboards Report (Sachs *et al.*, 2018) ranks Croatia 21st out of 156 countries. Integrated approach to sustainable development, green economy and the implementation of Agenda 2030 is expected to be reinforced by a recently finalized 2030 National Development Strategy (NDS), prepared by the World Bank. The green economy concept is one of the pillars of this strategy, whose adoption is expected in the first half of 2020. Green economy in Croatia is expected to create around 80,000 new jobs (Raguzin, 2015).

The coordination and planning for green economy policy measures rests with the Ministry of Environmental Protection and Energy, which on this task closely works with the Ministry of Economy, Entrepreneurship and Crafts, and other relevant authorities, as well as with the Croatian Chamber of Commerce. Croatia also has an Inter-Sectoral Coordination Commission for Policy and Measures for Climate Change Mitigation and Adaptation. It links ministries of environment, economy, work and representatives of the business community. In 2020, Croatia adopted the National Strategy and Action Plan for Adaptation to Climate Change.

Croatia has been implementing several programs promoting green economy. The COVID-19 crisis does not seem to have distracted Croatia’s efforts in pushing forward a greener economy agenda, quite on the contrary (Simmonds, 2020). The green economy concept has taken off the ground quite well in the energy sector. Croatia reached the goal of 20 percent energy from renewable sources (due to the hydropower capacities and increasing use of solar and wind power). In 2019, as much as 72 percent of the money invested in the energy sector went to renewable energy projects (Simmonds, 2020). This is

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in line with the national policy and programs stimulating less carbon intensive, preferably carbon-neutral business solutions. Green tourism is also on the rise, largely because one-third of the Croatian territory has been designated as part of the European network of nature protection areas (Natura 2000). Croatia is one of the very few EU countries that developed a funding mechanism for sustainable forest management in the form of a "green tax". It is based on the charging of a fee for the use of public benefit functions of forests (climate and water regulation, prevention of soil erosion, etc.). All legal persons conducting an economic activity in Croatia are obliged to pay this tax in the amount of 0.0525% of their revenue. The concept of green economy has been endorsed and occasionally also promoted through various visibility, networking and awareness raising activities run by the Croatian Chamber of Commerce.

The Government has recently initiated several initiatives promoting sustainable consumption and production. In 2015, Croatia adopted a National Action Plan for Green Public Procurement, followed by the adoption of a public procurement legislation favouring environmentally friendly products and services. The Government also promotes green/eco-labelling and eco-certificates because Croatia's public authorities are major consumers. By making a full use of green-labelling, eco-certificated and notably by practicing green public procurement instrument, Croatian public sector significantly contributes to boosting transition to a greener economy. There is also a well running Environmental Protection and Energy Efficiency Fund (EPEEF). It is the central point for collecting and investing extra budgetary resources in the green economy programs and projects, notably those dealing with energy efficiency and use of renewable energy sources. The popular financing schemes include subsidy provisions for the purchase of electric, plug-in hybrid and hybrid vehicles for citizens, companies and public organizations, as well as for the installation of renewable systems at stand-alone houses. Croatia also has a Partnership for Sustainable Tourism – an organizational network of tourism stakeholders of the public and private sectors, as well as a Green Building Council (set up in 2009), which strives to greening the use of energy in the construction/building sector.

However, in spite of all this, Croatia has no comprehensive set of legislative, economic and informative (awareness raising, research, demonstration, advisory, etc.) policy instruments geared towards pushing up green economy. A systematic monitoring and evaluation of the current green economy-related policies and programs is lacking, too. Currently, assessments address policy questions in specific but generally narrow areas, for example, related to an increased proportion of renewable energy or to green public procurement. The assessments, even those of the more strategic variety are not being used to drive new policy initiatives. Croatian green economy efforts are mainly based on a sectoral approach and linear thinking and green economy-related policies and measures are not well integrated into sectoral policies. Green economy is rarely put high on the Croatian political agenda. Green economy-related policy in Croatia is mainly based on following EU initiatives and transposition of relevant EU regulations and requirements. This is largely because Croatia suffers from a lack of green economy leadership and champions and has inadequate institutional capacities. Due to this, Croatia has severely underutilized the EU funds available for the development of green economy (e.g. only a few percent of the funds available for waste and water sector by the EU structural funds has been utilized) (WB, 2019).

2.2. Main findings - Country-specific overview

2.2.1. Greening of agriculture and rural development sector

Being an EU Member State, Croatia is obliged to follow and implement the EU's Common Agricultural Policy (CAP). The CAP is the EU's answer to the questions on how to ensure food security, balanced development of the EU's rural areas and the sustainable use of natural resources. The sustainable use of natural resources and greening of the agriculture and rural areas is an important CAP's element. There is a link between CAP payments for farmers and respect for other EU rules concerning environmental protection. In order to receive income support, Croatian farmers must respect a set of basic environmental rules. The interplay between this respect for rules and the support provided to farmers is called environmental cross-compliance. This mechanism ensures that support granted to farmers contributes to promoting sustainable agriculture and the environmental objectives of the EU.

The environmental cross-compliance is made up of:

1. Standards for Good Agricultural and Environmental Conditions (GAEC) – a set of standards protecting the soil against erosion, maintaining soil organic matter and soil structure, water management and safeguarding landscape features. The exact standards that farmers must meet in these cases are set at the national, not EU level.

2. Statutory Management Requirements (SMR) - a selected number of obligations incorporated in the scope of cross-compliance rules from existing EU directives and regulations concerning environment. They are agricultural management standards (provisions) drawn from the application of relevant articles of these directives and regulations, including the Birds Directive, the Habitats Directive, the Water Framework Directive and the Nitrates Directive.

Farmers who are found to be in breach of the environmental cross-compliance obligations face penalties and/or a reduction of the support provided by the public money. These comprise direct payments, wine sector payments and rural development payments. Among these the most important are direct payments – as nearly all Croatian farmers receive them. Direct payments have a component called a Green Direct Payment (also known as “Greening Payment”). This accounts for 30 percent of the Croatian direct payment envelope and rewards farmers for respecting three obligatory agricultural practices:

1. Maintenance of permanent grassland
2. Maintenance of ecological focus areas (EFAs), and
3. Maintenance of crop diversification (a farmer must cultivate at least 3 crops on his arable land none accounting for more than 70 percent of the land, and the third at least 5 percent of the arable area).

In 2018, as much as 993,614 ha of agricultural land was eligible for the “greening” payment (66 percent of UAA). This accounts for 92 percent of the area that received direct payments in 2018 (Karoglan Todorović and Znaor, 2019). In 2018, 84 percent of arable land & permanent grassland was subject to at least one greening measure (Karoglan Todorović and Znaor, 2019). Promotion of the SMRs and GAECs is carried out by the Ministry of Agriculture (MoA) and Farm Advisory Service (FAS) through Web pages, mass media channels, lectures and publications.

The most important mechanism for greening Croatian rural areas is the Croatian Rural Development Programme 2014-2020. A total contribution of 2.3 billion EUR of public money (2 billion EUR from the EU budget and 0.3 billion EUR of national funding) is allocated for the implementation of this programme. At least 30 percent of the budget has been reserved and must be spent on voluntary measures that are beneficial for the environment and climate change (this is a mandatory requirement imposed by the European Commission on all Member States). The key RDP measures boosting green economy comprise the following:

- Agri–environmental-climate measures (Measure 10)
- Organic farming (Measure 11)
- Areas of Natural Constraints (ANC) (Measure 13)
- Forestry measures (Measure 8)
- Investments in physical assets (Measure 4) – but only investments which are beneficial for the environment and/or climate.

RDP Measures 1 and 2 on knowledge transfer and advisory services also play very important, but indirect role in boosting green economy in the Croatian rural areas.

The programing, monitoring, evaluation and the entire co-ordination and supervision of the implementation the Common Agricultural Policy mechanisms, including the Rural Development Programme rests by the Ministry of Agriculture. On the green economy-related aspects, this Ministry coordinates its efforts with the Ministry of Environmental Protection and Energy, Ministry of Economy and other relevant authorities.

2.2.2. List and overview of relevant country documents linked to a green economy

Title	Rural Development Programme of the Republic of Croatia for the Period 2014-2020
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture of the Republic of Croatia
Short description of the document and its main objectives	This is the key document defining needs, priorities, measures (with corresponding targets, eligible beneficiaries, support mechanisms, etc.) and other aspects of the rural development policy. It also contains a comprehensive monitoring and evaluation framework. The programme targets rural areas as a whole, with a focus on ensuring the competitiveness of farms and forestry, delivering sustainable management of natural resources and climate action as well as creating growth and jobs in rural areas.

Elaborate if green economy is included in the objectives	Yes, promotion of green economy and greener use of natural resources is one of the key objectives and an important element of the programme.
Cross-cutting issues with other strategies	Multiple links with other strategies and programs promoting economic development, sustainable energy use, environmental/climate and nature protection, social/demographic revival, etc.

Title	National Action Plan for Green Public Procurement for the period 2015-2017 with an Outlook to 2020
Period referred to	2015- 2017 with an Outlook to 2020
Key responsible institution(s)	Ministry of Environmental and Nature Protection of the Republic of Croatia
Short description of the document and its main objectives	This document sets the framework and explains the needs and benefits of green public procurement and its contribution to sustainable development and green economy. Its objective is to boost sustainable/green production and consumption in Croatia through green procurement. Its goal is that by 2020 as much as 50 percent of the Croatian public procurement becomes green. The document defines a set of measures that would enable reaching this goal. It also provides a progress monitoring and evaluation framework. Promotion and adoption of green/eco-labelling and eco-certificates are also an important element of the document.
Elaborate if green economy is included in the objectives	Yes, green economy is in the core of this document.
Cross-cutting issues with other strategies	Public procurement in general; Strategy for Sustainable Development of the Republic Croatia from 2009 (still valid)

Title	National Action Plan to Achieve Sustainable Use of Pesticides for the period 2013–2023
Period referred to	2013–2023
Key responsible institution(s)	Ministry of Agriculture of the Republic of Croatia
Short description of the document and its main objectives	The objective of this plan is to reduce pesticide use-related risks to human and animal health and to the environment, as well as to stimulate integrated and alternative measures for controlling pests. It establishes the quantitative assumptions, objectives, measures and timetables to reduce the risks and impacts of pesticides. The objectives cover different areas of concern, including farmers' protection, protection of the environment; pesticide residues-related problems, the use of specific techniques or pesticide application in specific crops, etc. The document also deals with pesticide authorization, trade/sale issues, monitoring of pesticide residues in food and the protection and pesticide fate in the environment and nature. It also provides indicators for monitoring the pesticide use, as well as mechanisms for monitoring and evaluation of the implementation of this plan.
Elaborate if green economy is included in the objectives	This document does not specifically mention green economy, but it promotes a greener agricultural production.
Cross-cutting issues with other strategies	Rural Development Programme of the Republic of Croatia for the Period 2014-2020; Strategy for Sustainable Development of the Republic Croatia from 2009 (still valid)

2.2.3. Concrete measures linked to the green economy

Rural development programme measures

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer (M1)	Ministry of Agriculture	<p>The relevant operations (O_) are 1-3 and 5:</p> <p>O_1: Vocational training for cross-compliance, agriculture, environment and climate measures and organic farming</p> <p>O_2: Vocational training for farmers</p> <p>O_3: Vocational training for young farmers</p> <p>O_5: Support for demonstration activities and information actions</p> <p>O_1-3 provide specific (free of charge) training to farmers and foresters on sustainability, resource efficiency and environmental performance of agricultural and forestry holdings.</p> <p>O_5 delivers demonstration activities on resource and energy efficiency, application of environment and climate measures, preserving biodiversity, forestry and organic farming and innovation - e.g. a new technology, specific production technique, practices to preserve biodiversity, etc. These activities can take place in farms, research centres, exhibition buildings.</p>	AE	<p>O_1: Training courses are obligatory for M10 and M11 beneficiaries, voluntary for others. Topics: environmental cross-compliance, climate change adaptation and mitigation practices; agri-environmental practices; sustainable forest management, sustainable soil management, crop rotation; preservation of landscape features, etc.</p> <p>O_2: Short term training courses are also provided on manure management practices; sustainable fertiliser and pesticide use and principles of integrated/ organic farming.</p> <p>O_3: Medium term training courses are provided for young farmers who do not have any vocational qualification, an agricultural diploma or relevant higher education. Topics: cross-compliance; organic farming.</p> <p>O_5: Demonstration projects/activities illustrating e.g. a new technology, specific production technique, practices to preserve biodiversity. These activities can take place in farms, research centres, exhibition buildings and will supplement the training courses offered in M1.1.</p> <p>In 2018, 20 percent of all direct payment recipients (and since 2015 more than 50 percent) received training/ information on environmental cross-compliance requirements, via workshops, lectures, demonstrations and face-to-face advice (Karoglan Todorović and Znaor, 2019).</p>

Advisory services (M2)	Ministry of Agriculture	The relevant operation is O_1: Advice on cross-compliance and agri-environmental-climate and organic farming measures. The direct beneficiary is the Farm Advisory Service (FAS). The indirect beneficiaries are all Croatian farmers and foresters – as all of them can receive free of charge advices.	AE	The FAS is very well organized, has regional offices all over the country and offers a range of advisory, promotion and education services, including training on various green economy-related topics listed under Measure 1. However, beyond this, there is no targeted, specific advisory programme focusing alone/primarily green economy. The FAS is also one of the key institutions providing compulsory training/advice on the sustainable use of pesticides, prescribed by the National Action Plan to Achieve Sustainable Use of Pesticides for the period 2013–2023.
Quality schemes (M3)	Ministry of Agriculture	This measure has a modest relevance for green economy. Its objective is to stimulate agricultural producers to participate in quality schemes, which contributes to the increase of added value, as well as protect products with quality designations from misuse and imitation. Its beneficiaries can be all agricultural holdings. Support under this scheme is provided in the form of annual payments covering costs for entry and participation in quality schemes in accordance with EU legislation, a quality scheme in accordance with national legislation, an organic production scheme in accordance with EU and national legislation. The intensity of the support amounts to 100 % of defined fixed costs within a maximum amount of public support not exceeding 3,000 EUR/year per agricultural holding. Support is granted as a non-refundable annual subsidy, determined in accordance with the level of fixed costs actually incurred for a maximum duration of five years.	AE	This measure is popular among organic farmers. It helps them to establish a quality scheme and standards superior to those prescribed, including environmental care. Those contribute to a greener economy and the cross-cutting objectives by rationalizing and optimizing natural resource usage.

Physical Investments (M4)	Ministry of Agriculture	<p>This measure provides support for a range of green economy-related investments. It helps farmers and foresters to increase the competitiveness through enabling an increased production capacity, the modernization of existing production methods, innovation and the creation of sustainable market economies. It also enables replacement of fossil fuels with renewable sources of energy and the supply and use of renewable sources of energy. Farmers can also get support for the construction of manure storage facilities, the technological modernization of barns, construction of compost, and machinery for the efficient use of nitrogen and equipment for animal secretions that will reduce the emission of greenhouse gases and ammonia. There is also a scheme for investments in irrigation aiming at providing economic and environmental benefits, notably less use of water for irrigation.</p> <p>Foresters can get support for an easier access to newly constructed and better maintained forest roads, which contributes to a more efficient way of producing, supplying and mobilizing wood biomass as a renewable source of energy. This measure also finances construction of new and reconstruction of existing forest infrastructure (forest roads, skid roads) and fosters sustainable forest management and helps to increase economic efficiency, reducing production costs in forest area with insufficient accessibility. Investments in forest infrastructure enable protection, maintenance and improvement of forest ecosystem biodiversity and of other natural values, such as the restoration of habitats and landscapes.</p> <p>Measure 4 finances also non-productive investments related to environmental protection. These are intended to protect, maintain and restore biodiversity and other natural resources, such as the restoration of habitats and landscapes, including the construction and reconstruction of ecological infrastructure, to enable the management of habitats associated with agriculture.</p>	AE	<p>Quite some investments supported by Measure 4 can positively contribute to the development of green economy. They can have direct impacts on climate through reduction of emissions, e.g. through more efficient manure management and more efficient machinery. They can also contribute to more efficient water use, use of renewable energy, improved resource efficiency at holding level and protect biodiversity. Measure 4 is by far the most popular (and most heavily budgeted) RDP measure – mostly because it enables farmers to buy new agricultural machinery (tractors are the most popular choice), build barns, storage and irrigation facilities, establish permanent crops, etc. However, from the green economy point of view, most important are investments in renewable sources of energy, manure storage and irrigation systems – as these prevent water, soil and/or air pollution, reduce greenhouse gas emission and help adapt to climate change.</p> <p>The most important scheme for biodiversity protection and biodiversity green-oriented economy is the Sub-measure M4.4: Support for non-productive investments linked to the achievement of agri-environment climate objectives. Its objective is to contribute to the restoration goal of the EU 2020 biodiversity strategy (restoring 15 percent of degraded habitats). By restoring degraded habitats and landscape features on agricultural land these investments enhance biodiversity and improve the conservation status of habitats and species. Eligible investments are:</p> <ul style="list-style-type: none"> • Investments in building terraces; • Investments in building stonewalls and planting hedges; • Removing invasive alien species from agricultural land; • Procuring electric shepherds with related equipment and/or indigenous sheepdogs; • Building new and restoration of existing livestock housing in areas of natural distribution of large carnivores;
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<p>Restoring agricultural production potential (M5)</p>	<p>Ministry of Agriculture</p>	<p>This measure is relevant for green economy because it helps farmers to cope with climate-related risks and adapt to a more climate-resilient economy. It supports investments for the restoration of agricultural land and production potential damaged by natural disasters, rehabilitation after adverse climatic events and catastrophic. This includes investments linked to restoring agricultural land, construction and reconstruction of farm buildings and related infrastructure, restoration or purchase of machinery and equipment for agricultural production, purchase of a basic herd of animals and the purchase and planting of perennial plants. Through restoration of soils, crops and vegetation this measure can help to re-establish carbon sequestration potential on farms following loss through catastrophic events. Support is awarded as a grant, ranging from 10-100 percent of eligible expenditures.</p>	<p>In 2017 the Paying Agency approved 201,000 EUR to 20 beneficiaries under this measure (out of 99 who applied) (Karoglan Todorović and Znaor, 2018). More recent, reliable data is difficult to obtain.</p>

Farm and business development (M6)	Ministry of Agriculture	Under this measure support is given to small and young farmers as well to on-farm diversification activities. There are four sub-measures and all have potential for green economy. Two sub-measures supporting non-agriculture activities (e.g. rural tourism, processing, marketing and direct sale of local products, traditional crafts, handicrafts, etc.) can contribute to improvement of farms' "green" economic resilience. The value of the grant per beneficiary varies and goes up to 50,000 EUR (100 percent of the eligible costs), while the grant for the small farmer schemes is 15,000 EUR.	AE	This is one of the most popular RDP measures. Small farms are encouraged to invest in improving their energy efficiency and use of renewable energy by getting extra evaluation points (so called "green points") if 10 to 30 percent of their investment is related to renewable energy sources and or energy savings. This could be, for example, setting up solar panels on a barn, purchasing new, more energy-efficient agricultural machinery and equipment, such as milking machines, etc. Young farmers are encouraged to take part in agri-environment operations or practice organic farming by giving them extra evaluation points for these practices.
Basic services (M7)	Ministry of Agriculture	The following support provided by this measure can benefit green economy: 1. Drawing up and/or updating strategic and planning documents and development strategies. These can have a range of green economy elements, but all are requested to consider climate adaptation for floods, droughts, hail, heat waves and the prioritization of climate resilient rural infrastructure and services. Beneficiaries are not farmers and foresters but municipalities and cities of up to 10,000 inhabitants. Intensity of the support amounts to 100 percent of total eligible expenditures. The support value per project ranges from 5,000 to 70,000 EUR. 2. Construction and/or reconstruction of the water supply, sewerage system and wastewater systems. The beneficiaries are providers of public water supply or public sewerage services. Intensity of the support amounts to 100 percent of total eligible expenditures. The support per project ranges from 30,000 EUR to 1 million EUR. 3. Investments in establishing, improving or expanding local basic services for the rural population. These include investments in public areas (public green areas, walking trails, walking zones, open drainage canals, local food market, squares, cemeteries etc.). units. Beneficiaries are (i) local self-government, (ii)	AE	There is no information about how many and which green economy components municipalities and cities included in their planning documents and strategies.

		companies with a majority share ownership by local self- government units, (iii) public non-profit institutions established by local self-government, (iv) associations/ civil society organizations and religious organizations dealing with humanitarian and social sectors of particular interest to local residents, and (v) Local Action Groups (LAG). Intensity of support amounts to 80 percent of eligible expenditures. The support per project ranges from 15,000 EUR to 3 million EUR.		
Investment in forestry (M8)	Ministry of Agriculture	This measure supports the following green economy-related investments: 1. Conversion of degraded forest stands and forest cultures. Intensity of support amounts to 100 percent of eligible expenditures. The support per project ranges from 5,000-700,00 EUR. Beneficiaries include (i) private and public forest holders, (ii) public/state entities managing state forests and forest land according to the Forest Act, and (iii) associations of private forest holders according to the national legislation. 2. Establishment and improvement of walking trails, look-out points and other small-scale investments. The beneficiaries and the intensity of the support is the same as above. But the support per project ranges from 5,000-100,000 EUR.	AE	Only 22 percent of forests in Croatia are privately owned. The average size of private forest holdings is only 0.43 hectares. The vast majority of 78 per cent of forests and forest land are owned by the state. The public company Croatian Forests manages 96 per cent of state-owned forests and is the main beneficiary of the support under M8.
Producers organization (M9)	Ministry of Agriculture	The objective of this measure is to enhance association of agricultural producers with lower production into producer groups and organizations which will enable them to become more competitive and easier penetrate to the market. This can also be considered a green economy measure because it can benefit producers practicing greener agriculture. Beneficiaries are producer groups or organizations from agriculture sector under the definition of small and medium enterprises and officially recognized, or in the process of recognition by the competent national authority – Ministry of Agriculture. Support is limited to a maximum of 10 percent of value of the annual marketed production and cannot exceed 100,000 EUR per year.	AE	As per May 2020, Croatia had 17 registered producer organizations benefiting from M9.

<p>Agri-environment climate (M10)</p>	<p>Ministry of Agriculture</p>	<p>The M10 measure encompasses as many as 16 operations – all of which are expected to contribute to greener agriculture, notably soil, water and biodiversity protection. Most operations are designed to protect specific habitats and/or species. All operations under this measure are considered to be relevant for green economy:</p> <p>O_01: Tilling and sowing on the terrain with slope for arable annual plants O_02: Grassing of permanent crops O_03: Preservation of high nature value grasslands O_04: Pilot measure for the protection of corncrake (<i>Crex crex</i>) O_05: Pilot measure for the protection of butterflies O_06: Establishment of field strips O_07: Maintaining extensive orchards O_08: Maintaining extensive olive groves O_09: Preservation of endangered native and protected breeds of domestic animals O_10: Preservation of dry stonewalls O_11: Preservation of hedges O_12: Installing pheromone, visual and feeding traps O_13: Confusion technique in permanent crops pest protection O_14: Improved management of inter row area in permanent crops O_15: Organic fertilizers in permanent crops O_16: Mechanical weed control within rows of permanent crops</p> <p>Support under M10 is available for all types of farm, farmer and land qualifying under the operation-specific eligibility criteria. In practice this means that all fruit growers can take part in operations on permanent operations, except the one meant for extensive orchards/olive groves, which is targeted only at growers who have those. All farmers who have dry stone walls and hedges can apply for O_10 and O_11.</p> <p>Payment rates equal 100 percent of income foregone + additional costs + transaction costs. Payments are per</p>	<p>All farmers taking part in M10 have to enrol in compulsory training and/or demonstration programs provided by the Farm Advisory Service through M1 and M2. Each year, over the course of 5 years, beneficiaries must attend six hours of training or demonstration programs. The Farm Advisory Service and MoA take care of the promotion of operations under M10 through web pages, mass media channels and by delivering lectures and free-of-charge publications.</p> <p>M10 operations are practiced on a relatively small area, accounting for just 0.8 per cent of the land listed in the Farm Register. In 2018, just 8,661 ha participated in this measure, which is 16 per cent of the area target for 2014-2020. The majority of the agricultural land (55 percent) is in the Natura 2000 network (Karoglan Todorović and Znaor, 2019).</p> <p>M10 operation O_09 - providing payments for preservation of endangered native and protected breeds (NEBs) is a very important measure for supporting green economy in rural areas, notably marginal ones practicing extensive livestock husbandry. However, this operation seems to have a negative impact on the number of NEBs (Karoglan Todorović and Znaor, 2019). Namely, before joining the EU in 2013 and started implementing the CAP, Croatia ran a national support programme for NEBs, with relatively high payment rates. The current CAP payment rates for preservation of NEBs are lower by 14-63 per cent (except for equidae), than the payment rates beneficiaries received in 2014, before the implementation of the RDP 2014-2020. Consequently, the number of NEBs (in terms of livestock units) in the period 2014-2018 decreased by 12 per cent (Karoglan Todorović and Znaor, 2019).</p>
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		hectare basis (ranges a lot from one operation to another - but typically a few hundred EUR per ha), except for the operation O_09 Preservation of endangered native and protected breeds of domestic animals, in which support is paid per livestock unit (ranges a lot per livestock breed – but mostly 200-300 EUR per livestock unit).		
Organic farming (M11)	Ministry of Agriculture	<p>M11 comprises two operations:</p> <p>O_01: Payment to convert to organic farming practices and methods</p> <p>O_02: Payment to maintain organic agricultural practices and methods</p> <p>Payment rates for both operations equal 100 per cent of income foregone + additional costs + transaction costs, for all operations under M11.</p> <p>Support under M11 is available for all types of farm, farmer and land.</p>		<p>Support for both operations has been available in Croatia since 2002, following a similar set of rules as the current M11.</p> <p>All farmers taking part in M11 have to enrol in compulsory training and/or demonstration programs provided by the Farm Advisory Service through M1 and M2. Each year, over the course of 5 years, beneficiaries must attend six hours of training or demonstration programs. The Farm Advisory Service and MoA take care of the promotion of operations under M11 through web pages, mass media channels and by delivering lectures and free-of-charge publications.</p> <p>M11 is practiced over a substantially large area, approximately 100,000 ha, making up 9 percent of the Farm Register area. In the period 2014-2018 the area under organically managed land increased by 78 per cent (Karoglan Todorović and Znaor, 2019). In 2018 the area uptake in M11 surpassed the target for 2015-2018 by 459 per cent. The majority of the agricultural land (51 percent) included in M11 is in the Natura 2000 network (Karoglan Todorović and Znaor, 2019).</p> <p>Croatia is, it seems, the EU champion in terms of parallel production in organic farming. As many as 70 per cent of all organic producers practice parallel production. In fact, for every 10 hectares under organic farming there are 8.6 "sister" hectares under conventional production – most of which seem to be located on the same farm (Karoglan Todorović and Znaor, 2019). Although this practice is perfectly legal, such a high share of parallel production raises</p>

				<p>some doubts. Another interesting phenomenon is the livestock density in organic production. It is extremely low – just 0.13 LU/ha (although a stocking density of 0.3 LSU per ha of grassland is compulsory), which is 5 times lower than in conventional production. On the other hand, as much as 65 per cent of the total area under organic farming is made up of permanent grasslands and fodder crops on arable land (Karoglan Todorović and Znaor, 2019). It remains unclear what organic producers do with so much organic fodder if they do not have many livestock. Of course, one cannot exclude the possibility that the legumes and grass-clover mixtures occupying 44 per cent of organic arable land are cultivated primarily in order to maintain soil fertility. But even if this is the case, the question remains about the fodder crops from nearly 36,000 ha of permanent organic grasslands, which alone can feed more than the 10,000 LU that are being farmed organically at present.</p>
Natura 2000 and WFD (M12)	Ministry of Agriculture	Croatia has not included this measure in its RDP	IN	<p>Croatia decided that support to farmers in Natura 2000 areas would be funded under M10 and not under M12.</p> <p>Roughly one third of the Croatian Natura 2000 network is agricultural land. The Natura 2000 network covers 384.642 ha of agricultural land, accounting for 26 per cent of UAA and 35 per cent of the agricultural land inscribed in Farm Register (Karoglan Todorović and Znaor, 2019).</p>
ANC (M13)	Ministry of Agriculture	<p>M11 comprises three operations:</p> <p>O_01: Compensation payment in mountain areas - all agricultural land in areas 700 m above sea level or in areas 500-700 m above sea level with a slope steeper than 15 percent;</p> <p>O_02: Compensation payment for other areas facing significant natural constraints - all agricultural land in areas with unfavourable climate and soil features</p>	AE	<p>The ANC-M13 measure was politically very important because support to less-favoured areas has a long-standing tradition within agricultural policy in Croatia. But support to ANC was not seen primarily as a response to green economy needs. Although the operations of this measures do not pro-actively promote and support green economy, they enable farmers on marginal agricultural land to continue with extensive farming, which “passively” contributes to a greener economy. Besides, M13 is</p>

		<p>O_03: Compensation payment to other areas affected by specific constraints - the specific constraint area in Croatia is the karst region.</p> <p>Payment rates for all three operations equal 100 per cent of income foregone + additional costs + transaction costs. Areas up to 20 ha receive full payment; from 20-50 ha it is reduced by 20 per cent, from 50-100 ha reduced by 30 per cent and for areas larger than 100 ha reduced by 50 per cent. Support under M13 is available for all types of farm, farmer and land located in an area designated as an area of natural constraints.</p>		<p>important because it covers a huge area – 43 percent of the agricultural land included in the Farm Register. Of this, 39 per cent is in the Natura 2000 network (Karoglan Todorović and Znaor, 2019). Large parts of M13 of agricultural land enrolled in in M13 are karst areas – one of the Europe's most biodiverse regions.</p>
Animal welfare (M14)	Ministry of Agriculture	Croatia has not included this measure in its RDP	IN	
Forest environmental climate (M15)	Ministry of Agriculture	Croatia has not included this measure in its RDP	IN	
Cooperation (M16)	Ministry of Agriculture	<p>Support is provided for the establishment and operation of operational groups of the European Innovation Partnership (EIP) for agricultural productivity and sustainability. The objectives of the measure boost green economy: reduction of negative environmental impacts and improvement of environmental performance, including the protection of soil and water degradation, water efficiency; development and improvement of manure storage and usage methods. The payment rate per project ranges from 5,000 to 200,000 EUR.</p>	AE	<p>The implementation of this measure has started just recently and there is not much information about the uptake.</p> <p>This measure benefits soil, water, air and climate but there is no evidence that it is used for actions preserving biodiversity.</p>
Risks management (M17)	Ministry of Agriculture	<p>Support under M17 is a financial contribution for the insurance premium for crops, animals and plants against economic losses caused by adverse climate change effects (which has to be declared/proclaimed by competent authority) and animal and plant diseases, pest infestation and environmental incidents. Maximum aid amount is 75.000 EUR per beneficiary annually and the co-financing rate is 70 per cent of the insurance premium costs. Beneficiaries are all natural or legal persons, or groups of natural or legal persons defined as farmers.</p>	AE	<p>M17 contributes to farm economic resilience. Providing insurance premiums helps to improve farms' resilience to shocks linked to climate change and mitigate the risks related to weather conditions (e.g. adverse climatic events, economic loss). It also supports the adaptation of holdings to climate change.</p>

LEADER (M19)	Ministry of Agriculture	This measure supports establishment and work of Local Action Groups (LAG), which are its sole beneficiaries. LAG is a partnership of public, economic and civil sector at local level which is established for the purpose of drawing-up and implementing a Local Development Strategy (LDS) of that area. The LAG area represents a rural area with more than 10,000 and less than 150,000 inhabitants. A range of green economy-related activities can be included in the LDS. Support is provided as a grant. The work of the LAGs is covered by 100 percent of eligible costs (up to a maximum of EUR 100.000 for LAG's setting-up/ preparation). The maximum allocation per LAG for the implementation of projects is 3 million EUR.	AE	Currently, there are no significant green economy related EIP or LEADER projects, but a few seem to be in the pipeline.
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Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Measures other than RDP

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
National Project of Irrigation and Management of Agricultural Land and Waters	Ministry of Agriculture and public company Croatian Waters	This is a huge programme financed by the Croatian Government. In the 2010-2019 the Government spent approximately 130 million EUR on its implementation. The programme beneficiaries are local and regional authorities. It assists them in setting to set-up major irrigation works (backbone infrastructure: construction of irrigation channels, dams, cardinal pipes, etc.). In theory – this project is also supposed to stimulate a greener agriculture production by boosting production and by reducing the environmental stress on water resources caused by inefficient irrigation methods. Criteria and support mechanisms are not well developed because these are huge, centrally planned and agreed projects between just a few state institutions and regional and local governments.	AE	The end users (farmers) are expected to finance the purchase of irrigation equipment at farm level and the cost of connection to the main irrigation channels. The RDP M4 is supposed to be the main financing source both for regional authorities (counties) and farmers. However, in 2018, only 54 agricultural producers and 6 out of 20 counties managed to get financing for their irrigation projects from M4 (Znaor and Karoglan Todorović, 2019).
Tax paid for the ecosystem services provided by forests	Ministry of Finance and public company Croatian Forests	According to the Forest Act, all legal entities performing economic activities in Croatia are required to pay a fee (equivalent to 0.0265 per cent of their total revenue) for the ecosystem services provided by forests. This money is used for various works in forest management, including maintaining biodiversity and ensuring sustainable principles of management. The beneficiary of the support is the public company Croatian Forests.	AE	Most companies, regardless their size, complain about this tax and consider it completely unnecessary – and just another burden imposed by the government on the economic development.
Various programs and funding schemes run by the Environmental Protection and Energy Efficiency Fund (EPEEF)	Environmental Protection and Energy Efficiency Fund	This fund finances a range of green economy related activities – including those in the agriculture and rural development sector. However, most resources are directed to energy efficiency, such as construction of renewable energy facilities, improvement of energy efficiency of buildings and the purchase of electric, plug-in hybrid and hybrid vehicles. The intensity of the support varies from programme to programme but never matches 100 percent of the investment.	AE	Most agriculture and rural development related efforts of the Fund are directed to benefit local governments and medium/big agricultural/food processing and other companies in rural areas.

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

2.3. Hindrances, boosters and steps to promote green economy

Croatia practices a range of green economy related measures in agriculture and rural development sector, which is applaudable. However, it is important to realize (especially for the other WB countries) that these measures were not in the focus of the Croatian policy makers and experts who designed Croatian CAP 2014-2020 instruments. Before 2014, apart from payments for the protection of native and endangered breeds, Croatian agricultural policy did not have any significant green economy related measures. Support was provided to organic farming, too, but largely “because of Brussels” and the emerging organic market – rather than because of the green economy merits of organic farming.

Like in other WB countries, a majority of the Croatian agriculture and rural development sector is characterized by low competitiveness caused by high production costs due to a lack of economy of scale, poor physical infrastructure, and an unfavourable farm structure in which small farms with low economic power prevail, along with elderly and poorly-educated farmers. Therefore, Croatia’s priorities for CAP 2014-2020 were enhancing farm viability and competitiveness of agriculture, processing and marketing of agricultural products and economic development in rural areas. Green economy was not considered as an important issue. It was given a more prominent role in the agricultural policy than in earlier times mainly because it was a CAP requirement and because of pressure from the Ministry of Environment. The latter was a particularly important driver that enabled stronger incorporation of environmental/nature protection measures in CAP 2014-2020. During the preparation of CAP 2014-2020, the Ministry of Agriculture took into consideration relevant green economy related data and evidence provided by the Ministry of Environment and the State Institute for Nature Protection and was in regular communication with these institutions. An agreement was also reached with the environmental/nature protection sector that green economy support to farmers in Natura 2000 areas would be funded under M10 and not under M12. This was a logical decision because Croatia did not have sound background data and information to programme M12 and most Natura 2000 sites were without management plans.

During RDP preparation, the Ministry of Agriculture undertook several consultation meetings with stakeholders (farm representatives, foresters, local authorities, environmental NGOs, etc.). But green economy was not a topic much discussed with them. Both the Ministry of Agriculture and stakeholders were much more interested in other priorities and aspects and did not put much emphasis on green economy considerations when implementation decisions were being taken. The RDP money was considered as a tool to boost investments in rural areas and most efforts were directed towards measures enabling purchase of agricultural equipment, construction of rural infrastructure, etc.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
Legislative instruments and administrative requirements	
<ul style="list-style-type: none"> • Previous experience with the IPARD and SAPARD pre-accession rural development programs was of very little use for designing, programming, administering and implementing many green economy-related RDP measures. Both SAPARD and IPARD provided only support to investments in farms and rural infrastructure. They for instance did not include any agri-environment (pilot) measures and Croatia did not gain any practice in programming and administering them. • The uptake in some green economy related RDP measures (notably in M10) has been low also because of the: <ul style="list-style-type: none"> - Eligibility criteria for certain types of production, notably permanent grassland (in particular karst) where the area eligible for payment is reduced by a certain percentage (because of rocks and woody vegetation) and excludes some areas or makes support much less attractive to farmers; - Complicated and demanding “paper work” to apply for the support and to administer the implementation of the measures. 	<ul style="list-style-type: none"> • M13 is very popular among farmers because they do not have to do anything extra in order to receive this payment, and the “paper work” is relatively simple – much simpler than for other RDP measures, including M10 and M11. Basically, all farmers who are entitled to M13 payments, claim them.
Economic instruments	
<ul style="list-style-type: none"> • The uptake in some green economy related RDP measures (notably in M10) has been low also because of the payment rates, resulting in questionable/negative economic feasibility. Following the EC rules, the payment rates cover just the income foregone and/or additional costs incurred – but they do not include any incentive to farmers. • CAP support beneficiaries comply with environmental requirements mainly in order to obtain higher payments and avoid penalties, rather than out of their own conviction, awareness, or understanding that implementation of green economy measures is important and beneficial for the environment, economy and society. 	<ul style="list-style-type: none"> • The “watchdog” role of the Ministry of Environmental Protection and Energy resulted in much more green economy operations being included in RDP than initially envisaged by the Ministry of Agriculture. • The Ministry of Environmental Protection and Energy was particularly instrumental in designing biodiversity-related operations in M10. It initiated on time an international institutional strengthening and capacity-building project on agri-environment, financed by the World Bank. This project was of a paramount importance for pushing the green economy agenda and including more green economy measures in the RDP’s M10. • High payment rates for M10 and M11 are attractive to many farmers. • Organic farming has become particularly attractive not just because of quite high payment rates, but also because of a good image and the possibility to attain a premium price for produce bearing the organic logo. In addition, organic farmers get extra points when applying for some RDP measures, which was also a decisive reason why some farmers took part in M11.

Technological requirements and innovations	
<ul style="list-style-type: none"> • Most M10 operations require beneficiaries to make significant management changes compared to their practices before 2014. • The uptake in some green economy related RDP measures (notably in M10) has been low also because of the demanding management requirements/prescriptions. 	<ul style="list-style-type: none"> • Farmers and notably big agricultural companies are mainly interested in technological innovations, primarily modern equipment and IT solutions enabling more efficient production. Their main driver for this is of an economic (e.g. saving on water and energy bills), rather than of environmental, nature. • Some M10 operations, such as maintenance of extensive orchards, olive groves and stone walls did not require beneficiaries to introduce substantial much management changes compared to pre 2014 practices – most farmers were already doing what are now requirements of those operations – but can now get paid for it.
Informative instruments (research, advice, innovation, demonstration, training, etc.)	
<ul style="list-style-type: none"> • The uptake in some green economy related RDP measures (notably in M10) has been low also because of the insufficient promotion of those measures and their benefits for farmers and society in general. 	<ul style="list-style-type: none"> • Well organized and well-functioning Farm Advisory Service providing free of charge, quite professional information and advice to farmers and foresters. • Data, mapping and various other expert support provided to the Ministry of Agriculture by the Ministry of Environmental Protection and Energy.

Specific steps/measures to be taken to promote the green economy	Relevant institution(s)
Simplify the administrative procedures and management requirements of green economy related measures in RDP. Many of these are not required “by Brussels” at all.	Ministry of Agriculture
Establish a proper monitoring and evaluation framework for assessing performance of green economy measures and their environmental and socio-economic achievements. The methodology should include monitoring both at beneficiary and non-beneficiary sites, which is not the case at present.	Ministry of Agriculture
Undertake a thorough analysis of the administrative costs related to the implementation of green economy related CAP measures. So far, no efforts have been made to simplify or to make these measures more cost-effective.	Ministry of Agriculture
Introduce result-based payments. These payments reward beneficiaries for the environmental outcome they deliver. This contrasts with the standard “prescription-based” model, where payments are awarded for complying with certain conditions, whether prohibitions or mandatory actions.	Ministry of Agriculture
Speed-up the implementation of M4.4. This can provide a range of green economy benefits, notably for farmers in marginal areas. Regrettably, M4.4. has hardly taken off the ground.	Ministry of Agriculture
Increase payment rates for native and endangered breeds because the current payments are lower than those pre-2014, resulting in the declining number of these breeds.	Ministry of Agriculture
Control better the parallel production in organic farming because signals from farmers and media suggest that parallel production involves substantial fraud.	Ministry of Agriculture

Specific steps/measures to be taken to promote the green economy	Relevant institution(s)
Provide additional incentives to increase the area under organic farming. The new EU target presented in the EC's strategy From Farm to Fork from May 2020 is 25 percent, which is much higher than 7 percent Croatia has now.	Ministry of Agriculture
Enhance green procurement, so that more Croatian agricultural producers practicing green economy can easier penetrate the market and increase the volume of their sales.	Ministry of Environmental Protection and Energy
Increase awareness raising, demonstration, information and other outreach activities on green economy in agriculture and rural development. Most current and potentially new beneficiaries still have a limited degree of awareness, understanding and engagement with green economy issues. For most of them, green economy related RDP measures are still primarily seen as an opportunity to get higher payments – rather than contribute to a greener economy.	Ministry of Agriculture

2.4. Concluding remarks

Among Croatian CAP efforts promoting green economy, the following measures can be considered to be most instrumental for promoting green economy:

1. **“Greening” payment:** this additional payment ensures that farmers practice a set of greener production practices. In 2018 it covered 93 percent of the agricultural land included in the Farm Register, which is far greater coverage than by any other measure.
2. **M4: physical investments:** this measure is very popular among farmers. It stimulates development of green economy through the purchase of more energy efficient agricultural machinery, more environmentally friendly manure management, more efficient water use, use of renewable energy and improved resource efficiency at holding level.
3. **M10 AECM:** Croatia has as many as 16 operations under M10 – all of which stimulate adoption of greener practices and contribute to green economy. They make a great contribution to biodiversity, soil and water protection and reduce pesticide use.
4. **M11 organic farming:** organic farming is practiced on approximately 7 percent of the agricultural area and makes multiple contributions to green economy.
5. **M13 – ANC:** this measure does not pro-actively promotes green economy but is instrumental for maintaining agricultural production (notably extensive livestock husbandry) and rural vitality in areas that are marginal and less favourable for agricultural production. In 2018, as much as 43 percent of the agricultural land included in the Farm Register benefited from M13 payments.

The implementation and administration of the above-mentioned measures is running well. However, their monitoring and evaluation is insufficient. Croatia lacks a sound monitoring and evaluation of the achievements, goals and targets of these measures. Except for obligatory administrative monitoring and evaluations, performance of past or current green economy measures is rarely analysed in a systematic way through performance indicators, benchmarking, distance from reaching targets, reputation, compliance, liabilities, etc. Lessons learnt are rarely used in formulating new policies stimulating further adoption of green economy.

Without the CAP framework, the Croatian government would not pay so much attention to green economy measures in the agriculture and rural development sector. The CAP instruments and measures have allowed for more incentives to adopt green economy practices than could have been done through national initiatives. The previous policy focused mainly on forbidding certain green-economy adverse agricultural measures without providing sufficient incentives for their adoption. So, in case of Croatia, the EU framework has created an extra added value and helped the country to stimulate the development and adoption of green economy in a more vibrant and more structural manner.

2.5. References and other relevant sources

Strategic and programming documents

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- MoENP (2015) National Action Plan for Green Public Procurement for the period 2015.- 2017. with an Outlook to 2020. Ministry of Environmental and Nature Protection of the Republic of Croatia.

Legislative documents

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- Act on the Environmental Protection and Energy Efficiency Fund (Official Gazette of the Republic of Croatia 107/2003,144/2012)
- Act on Nature Protection Act (Official Gazette of the Republic of Croatia 80/2013)
- Air Protection Act (Official Gazette of the Republic of Croatia 130/2011 and 47/2014)
- Environmental Protection Act (Official Gazette of the Republic of Croatia 80/2013, 153/2013 and 78/2015)
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- Rulebook on the Control System of Organic Agriculture (Official Gazette of the Republic of Croatia 11/2020)
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Chapter 3. Albania

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3.1. Introduction

The concept of green economy in Albania has been rarely used in strategic documents. There exist more than 20 strategies that are interlinked with the concepts of green economy. Albania has no National Green Economy or Sustainable Development Strategy but has one National Strategy for Development and Integration (NSDI II) (2015-2020), several sector specific strategies and a dozen of intersectoral strategies which use concepts, provide objectives or set indicators related to green economy. Considering the main strategic document related to environment and economic development, is found that there is not a clear and explicit reference to the green economy concept. However, related terms such as sustainable development, sustainable growth and circular economy are present⁶. None of documents refer to their interpretation of Sustainable Development and Green Economy concepts, using recognized international standards, international agreements and scientific literature.

The Cross-cutting Strategy for Rural and Agricultural Development (2014- 2020), Draft National Strategy on Water Resources Management (2017 – 2027) and the National Strategy for Energy emphasise concepts related to the use of renewable energy in various spheres of economy. Moreover, developed definitions are used for sustainable coastal and marine related sectors as referred in the Strategic Program (2015-2020) for Protected Areas. In 2016, the strategic document for the protection of diversity for the period 2016-2020 and the recognition of 5 protected areas in 2017. National Territorial Planning Plan, Albania 2030, Local Territorial Planning Plans, Local Development Strategies inserts concepts of sustainable use of land and local resources. The Cross-cutting Strategy on Public Administration Reform (2015-2020-2018-2030), National Public Financial Management Strategy (2014–2020) emphasise the coordination of institutions in integrating institutional and financial mechanism which refer to sustainable development.

The current legal framework, including national regulations and national strategic documents and action plans, does provide conditions but not stimulus for green economy in the country. There is a fragmenting structure of laws and other legal acts that does not regulate the legal framework of the country's ability to apply green economy concepts. Albania has a relatively comprehensive legislative framework governing energy and climate change, but there is limited legal base on energy conservation and renewable energy. The reason is that legal frame has been developed in sector basis, for instance there is no comprehensive legal base for green economy but there are laws for use of renewable sources of energy, recycling of waste and ultimately collection of carbon in forests. Similar to the legal base, also the institutional base is fragmented, where no institution is in lead. Ministry of Infrastructure and Energy (MoIE), and the Ministry of Tourism and Environment (MoTE), are the government bodies responsible for energy and environmental issues. Ministry of Agriculture and Rural Development (MoARD) has been considering the use of biomass in agriculture, while additional studies have been carried for exploring biomass use by the MoIE.

In Albania there are no consistent, long endured and coordinated actions on regards to green economy. Albania does not earmark financial resources to green economy but there are scattered cases in terms of time and sectors such as measures for the use of biomass at heated greenhouses (support measure in 2018 by Agricultural and Rural Development Programme (ARDP)), establishment of photovoltaic

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⁶ For instance, the concept of sustainable development is included in the Constitution of the Republic of Albania, which has a specific article on the subject. The article states that “the State ...aims d) a healthy environment and ecologically sustainable environment for the today and future generations, h) a rational use of the forests, waters, pastures, and of the other natural resources on the base of the sustainable development” (Albanian Constitution, Chapter V, Article 59). At the NSDI II (2015-2020), the term “sustainable development” is often mixed with the term “sustained economic growth”. The concept of green is mentioned at the National Strategy of Integrated Energy and Climate. National Energy Sector Strategy (2017-2030) calls for the regional integration and diversification of the sector and includes plans for developing all energy resources, including renewable sources like solar. Principles of the circular economy are mentioned also at National Strategy for Integrated Management of Waste Management (2018-2023) and also in the Draft-Intergovernmental Environment Strategy (2015-2020). The National Strategy for Biodiversity Protection (2016), the National Strategy for the Environment (2014) and the National Environmental Air Quality Strategy (2014) explain elements of sustainable development.

panels for dairy farms in mountainous areas (MoARD in support by Society for International Cooperation (GIZ) and The United Nations Development Programme (UNDP) new Green Economy Financing Facility (GEFF) project) and use of plastic waste for recycling purpose. Few donors have been implementing projects which are of relevance. For instance, following MoIE request to increase the share of solar thermal energy in the country, UNDP supported solar water heating technology through legal and market-based instruments. GIZ also supported supplied guesthouses with photovoltaic panels. New GEFF was established for supporting investments in the residential sector to improve energy efficiency. GEFF function based on a coordinated support of European Union (EU), Austrian Development and the Western Balkans Investment Framework.

The ongoing legal alignment and further integration into international pact and commitments for sustainable environment and mitigation to climate change may ease both the creation of an attractive business environment for green economy and the increase of financing to related projects. It is important to assess the main policies and strategic measures related to green economy and provide a deep understanding at specific spheres. The overall objective of this report is to provide an evaluation of the national programs and measures for agriculture and rural development of Albania in terms of green economy concept and relevant measures/incentives for supporting green economy practices. Given the time frame and current limited work conditions the Study was conducted primarily through desk research on relevant materials (notably policy-related documents and some academic sources, with focus on RDP, but also non-RDP funded mechanisms).

The second section provides an overview of the current legislative and strategic framework linked to rural development. The third section summarises main crosscutting measures of green economy and rural development policy both at Instrument for Pre-Accession Assistance for Rural Development (IPARD) sub-measures and national policy measures in support of green economy. The third section identifies the hindrances, driving forces and boosters applied on national level that support and facilitate the process of approximation to the EU Common Agricultural Policy (CAP), especially in regards to the green economy cross-cutting issues. The last section is focused on recommendations, mainly specific steps/measures to be taken to introduce/promote the green economy in Albania's national agricultural and rural development programs as well as potential cross-cutting measures potentially to be introduced by relevant ministries.

3.2. Main findings - Country-specific overview

Climate and the structure of agriculture sector in Albania create suitable conditions for green economy. However, despite the vision explained at Inter-sectoral Strategy for Agriculture and Rural Development (ISARD) 2014-2020, the political and decision-making has not been able to apply the concept of the green economy into the programming and budgetary measures for agriculture and rural development.

3.2.1. List and overview of relevant country documents linked to a green economy

Agriculture and rural development is very important for Albania given that it currently contributes around 20% to the country's Gross Domestic Product (GDP) and employs nearly half of the workforce. Albanian government, in efforts to align the sector with EU's common market policy and its agricultural policies, has drafted and approved several policy and strategic documents that are in line with EU requirements. Some of these key strategic documents incorporating both concepts of green economy and agriculture and rural development include the updated NSDI II (2015-2020), the National Programme for European Integration (NPEI) 2017-2020 and the Action Plan for the alignment with Agenda 2030 of Sustainable Development Goals (SDGs).

The NSDI II (2015-2020), supports the sustainable socio-economic development of Albania and the EU integration process by reasserting the commitment of Albanian growth through Sustainable Use of Resources (Pillar 4). The vision of NSDI II is reflected at ISARD (2014-2020) which aims for development of all rural regions in Albania, to improve the quality of life in Albania's rural area in a sustainable way. MoARD is in the phase of the preparation of the ISARD (2021-2027).

Main legal framework for ISARD is the Law "On agriculture and rural development" ((2007). Following this Law is adopted also Decision of Council of Ministers (DCM) "For the implementation of Intersectoral Strategy for Agriculture and Rural Development" (2014), amended "For the design of the Integrated Programme for Rural Development of 100 villages" (2018). These laws regulate the programming of policy measures related to agriculture and rural development, provide for public advisory services for

agriculture, research and training, and provide for the setting up of an information database. The Law and the before mentioned DCMs also lay down the legal basis for the national support schemes, which are set out annually in the National Action Plan, and define the institutions responsible for the implementation of agriculture policy by establishing the Agriculture and Rural Development Agency (ARDA)⁷.

The agricultural and rural development policies are also applied in territorial basis, mainly through Integrated Programme for Rural Development (IPRD) (2018-2020). In this strategy, a strong focus is placed on the sustainability element related to management of natural resources, promoting diversified economic activity and also strengthening capacities to improve living conditions.

Additional components related to water, land and forests mentioned respectively at i) the Albanian National Land Consolidation Strategy (2016) ii) the Draft Strategy for Irrigation and Drainage (2018-2030) iii) the draft Law on Local Action Groups vi) the Document of Forestry Policies (2019-2030) v) the Cross-Sector Strategy on Environment (2013-2020) which create the basis for the new Forest Law.

Other crosscutting strategic documents cover some components of green economy, such as the Intended National Determined Contribution (INDC) 2015⁸, National Strategy on Climate Change (NSCC) and national plans for greenhouse gas (GHG) mitigation and adaptation to climate change, the Law on climate change⁹ and the National Strategy of Integrated Energy and Climate¹⁰. The Law on climate change regulates the green investments and financing (Section 6 Acts 29 to 34).

Alignment to EU CAP is a motivation for incorporating the green economy concepts in the activities related to agriculture and rural development. Although Albania is not yet an EU member-state, still the EU provides financial support to aspiring countries through the Instrument for Pre-Accession Assistance (IPA), a component of which is its rural development component IPARD.

Ratification of international agreements and agendas as well commitment to adopt in national policies such as the 2030 Agenda for Sustainable Development¹¹ and to ratification of the 2015 Paris Agreement at the UNFCCC Conference of Parties (COP) 21¹² in combating climate change are pushing factor for the agriculture and rural development policy, among other policy spheres, to include green economy definitions. The Government has expressed a clear political will and commitment to comply with the requirements and obligations embedded in the UNFCCC and global climate change agenda: there are submitted three national communications (2002, 2009, 2016), while the 4th National Communication to UNFCCC and the 2nd Biennial Update Report is underway.

The MoIE, MoARD and MoTE and dependant agencies as well as the municipalities are the main responsible institutions. The next tables summarize the main strategic documents incorporating the concepts of green economy and rural development.

Title	National Strategy for Development and Integration (NSDI II)
Period referred to	2015-2020
Key responsible institution(s)	Council of Ministers (Albania)
Short description of the document and its main objectives	Achieve sustainable socio-economic development of Albania and the EU integration.
Elaborate if green economy is included in the objectives	Pillar 4 - Securing growth through sustainable use of resources and territorial development. The NSDI promote agriculture and rural development aiming to: “promote sustainable food production and quality by developing a competitive and innovative agrifood sector that is able to cope with competitive pressures”.

⁷ DCM No. 1443 date 31.10.2008 “For Establishment of ARDA as Paying Agency” later amended with the DCM No. 719 date 31.10.2014 “For Establishment and organization of ARDA”.

⁸ INDC document by the DCM No. 762 of 16.09.2015, as our national Intended Determined Contribution the global efforts for GHG emission reduction, and submitted it to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat by 24 September 2015.

⁹ DCM No. 499, date 17.7.2019

¹⁰ An engagement of the Republic of Albania at the Ministerial Meeting of the Energy Community (Dec 2017).

¹¹ <https://sustainabledevelopment.un.org/?menu=1300>

¹² <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

Cross-cutting issues with other strategies	The NSDI is linked the SDGs and converges with key goals for sustainable development settled forward by UN and aimed to be met by 2030 as related to SDG 13, covers. NSDI II is a key component of the Integrated Planning System (IPS). IPS includes two main pillars of strategic planning and policy coordination which is the medium-term strategic planning and medium-term budgeting program.
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Title	Inter-sectoral Strategy for Agriculture and Rural Development (ISARD)
Period referred to	2014-2020
Key responsible institution(s)	MoARD
Short description of the document and its main objectives	ISARD 2014-2020 prioritizes policies that promote the development and growth of agricultural production and it targets the improvement of competitiveness, harmonization of policies and institutional settings with the EU <i>Acquis</i> , the sustainable use of natural resources and social inclusion of the rural population.
Elaborate if green economy is included in the objectives	Topic 1.4 of the strategy covers environment, forest, water management and biodiversity.
Cross-cutting issues with other strategies	ISARD provides interventions in three policy areas: i) rural development policy; ii) national support schemes for farmers, development of rural infrastructure, and ensuring equal opportunities; and iii) institutional development, implementation and enforcement of EU regulatory requirements.

Title	Instrument for Pre-Accession Rural Development Programme (IPARD)
Period referred to	2014-2016 and 2018-2020
Key responsible institution(s)	MoARD
Short description of the document and its main objectives	The IPARD II Programme was adopted by the Government of Albania (GoA) and approved by the European Commission (EC) in July 2015 and subsequently ratified by the Albanian Parliament in March 2016. The objective of IPARD is two-fold: a) to aid with the implementation of the <i>Acquis</i> concerning CAP, and b) to contribute to the sustainable adaptation of the agricultural sector and rural areas in the candidate country.
Elaborate if green economy is included in the objectives	Explicit suggestions for green economy type investments are made without mentioning the concept.
Cross-cutting issues with other strategies	IPARD II objectives are in line with objectives in ISARD 2014-2020.

Title	Document of Forestry Policies
Period referred to	2019-2030
Key responsible institution(s)	MoTE
Short description of the document and its main objectives	Based on principle of good management it is expected that families and communities in rural areas are given the right to use forest fund. The strategy paves the way for the creation of National Forest Fund (NFF) and aims for commercialisation of use of timber and non-timber product in sustainable basis.
Elaborate if green economy is included in the objectives	Aims at coordinating and implementing a more integrated development intervention in rural areas (in 100 villages) including here the sustainable use of local resources.
Cross-cutting issues with other strategies	The strategy priorities are linked with NSDI 2015-2020.

Title	Integrated Programme for Rural Development IPRD (2018-2020) - 100 Villages
Period referred to	2015-2020
Key responsible institution(s)	Council of Ministers (Albania)
Short description of the document and its main objectives	The main objective of this programme is a) to improve public infrastructure, b) the economic development through diversification of economic activities, and c) the development of social and human capital.
Elaborate if green economy is included in the objectives	Aims at coordinating and implementing a more integrated development intervention in rural areas (in 100 villages) including here the sustainable use of local resources.
Cross-cutting issues with other strategies	The IPRD is reflected in the annual program of MoARD and is linked with the ARDPF.

Title	Draft Sector Strategy for Irrigation and Drainage
Period referred to	2019-2023
Key responsible institution(s)	MoARD
Short description of the document and its main objectives	Expanding the land area covered by irrigation and drainage systems is one of the six key priorities of the GoA and substantial investments in the irrigation and drainage, complemented by the land reform are supporting improvements in the agricultural sector.
Elaborate if green economy is included in the objectives	These documents do not integrate specific measures related to sustainable food production, resilient agricultural production, or address ecosystems needs and adaptation to climate change.
Cross-cutting issues with other strategies	Draft Strategy for Irrigation and Drainage is linked with SDG Goals 6.1 - 6.4.

Title	National Programme for European Integration (NPEI)
Period referred to	2017-2021
Key responsible institution(s)	Ministry of Foreign Affairs and Integration (MoFAI)
Short description of the document and its main objectives	The NPEI is primarily focused on setting forward the activities and measures that need to be taken in order to approximate and harmonize the national legal with the EU legislation.
Elaborate if green economy is included in the objectives	Chapter 11 and Chapter 12 is concerned on the legal alignment of the agriculture and rural development as well as environment spheres.
Cross-cutting issues with other strategies	Priorities settled in the NPEI are reflected in the annual action plans of MoARD.

Title	The 2030 Agenda for Sustainable Development
Period referred to	2016-2030
Key responsible institution(s)	Council of Ministers, Inter-Institutional Working Group for SDG Road Map and Integrated Policy Management Group (IPMG) (coordinated by Prime Minister (PM) Office).
Short description of the document and its main objectives	The SDGs seek to achieve sustainable food and agriculture, in particular through three goals i. SDG 2: “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”; ii. SDG 14: “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” and iii. SDG 15: “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”.
Elaborate if green economy is included in the objectives	Aims at coordinating and implementing a more integrated development intervention in rural areas (in 100 villages) including here the sustainable use of local resources.
Cross-cutting issues with other strategies	The GoA aims to embark upon a comprehensive implementation of the Agenda and the SDGs in line with the NSDI II (2015-2020) and the EU Integration Agenda.

Title	National Strategy on Climate Change and Action Plans
Period referred to	2018-2030
Key responsible institution(s)	Council of Ministers, Inter-Institutional Working Group for SDG Road Map and IPMG (coordinated by PM Office).
Short description of the document and its main objectives	Strategic priority 1. Ensuring a sustainable growth of the economy in line with the GES discharge routes set out in the NDC (National Contribution), and moving towards a goal in a low-carbon economy for which all sectors contribute. Outcome 2. Improving agriculture's ability to recover from floods.
Elaborate if green economy is included in the objectives	Concepts of green procurement are included which obliges public procurement to use green indicators of assessment. A separate action is provided in the Action plan for establishing a National Authority defined for green Climate Fund.
Cross-cutting issues with other strategies	Linkage with ISARD 2014-2020 and IPARD

3.2.2. Concrete measures linked to the green economy

In recent years, Albania has been making efforts to reform its agricultural and rural development policy and align it with the EU CAP. The vision of agricultural policy is based on the priorities of the ISARD (2014-2020), objectives for legal and institutional alignment toward CAP as guided by the NPEI (2019-2021), and yearly MoARD priorities provided at the Action Plan for Agriculture and Rural Development.

Since 2015, Albania has benefitted from EU's IPARD which aims at coordinating and implementing a more integrated policy for development of rural areas. The program was implemented into two stages mainly: IPARD I (in the form of IPARD-like) in 2015 and IPARD II in 2018. In 2015, funding was provided for the Investments in Physical Assets of Agricultural Holdings (Measure 1) and Investments in Physical Assets Concerning Processing and Marketing of 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).

In order to explain the measures, the same coding with budgetary groups was used as allocated at European Agricultural Fund for Rural Development (EAFRD). Measures grouped under the label Rural Development, include budgetary support for interventions to increase competitiveness of agricultural and forestry sector, foster diversification, sustainable development and diversification.

In order to implement and determine specific modalities of agricultural policy support, based on national budget, MoARD has established the Agriculture and rural Development Program Fund (ARDPF). ARDPF is guided by the priorities of the ISARD 2014-2020 and Government's Program 2017-2021, while yearly priorities are detailed in MoARD's early Action Plan. Since 2016 the ARDPF in principle supports only investments below IPARD thresholds. The implementation of the national action plan is the responsibility of the ARDA and the Rural Development Directorate within MoARD under the supervision of the Inter-Ministerial Committee for Agriculture and Rural Development. A number of measures related to green economy are not applied currently. The ARDPF, is not consistent during the years, therefore new measures are created and other measures cease to exist during the years.

In 2018, Albania launched a four-year Integrated Rural Development Programme (IRDP "+100 villages"). This program co-funded a spectrum of investments related to infrastructural improvements, rural diversification, and development of social and human capital. It also foresees, for example, the establishment or reconstruction of spaces for rural tourism and investments in agritourism.

Albania's main agricultural policy documents and IPARD included priorities, relevant to macro environmental measures. Thus, country's IPARD framework also includes agri-environmental and climate change measures, local development strategies (LEADER), and Technical Assistance and Agriculture Advisory Services, but no accreditation is foreseen for these measures up to 2020 due to unmet institutional conditions (Rama et al., 2018). Moreover, components of CAP's Rural Development pillar which are interrelated with green economy are lacking. For example, co-operation measure (M16), the measure on setting-up of producer groups (M09) can contribute to the management of supply and market losses, while farm business development measure (M06) can facilitate product diversification and off-farm. An increase of farmer awareness on green economy can be substantially improved also through better knowledge and information (measure M01) and advice (measure M02).

MoTE, with the support of World Bank and Swedish Government, implements the Competitive grant "Forest Development and Protection Measures". The main objective of the project is to restore, preserve and improve mountain ecosystems, improve agriculture, forestry, support the expansion and improvement of forest resources, and prevent forest fires. The measure of support is "Development and Protection of Forests, Pastures and Ecosystems mainly in the High Rural Areas". ARDA is the implementing agency, which in cooperation with the MoTE will implement this component from application to disbursement. Potential applicants for this component are: Association of Forest and Pasture Users, farmers, individuals, who may be owners of forest / pasture areas or those individual users of forest/pasture areas who have a legal contract of use with the former commune or municipality. Potential applicants may also be a part of the farmers of agricultural lands, whose properties are planned to be supported with specific activities within the framework of sustainable land management practices. These specific activities are planned with the drafting of 30 microbase management plans.

The main measures which contains concept of green economy are reported in the next table which lists cross-cutting key measures linked to green economy.

Measures related to RDP implemented by IPARD

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer	MoARD	No measure developed	IN	Support is provided through Agriculture Agency for Technology Transfers mainly through national budget.
Advisory services	MoARD	No measure developed	IN	Design of this measure is to be developed during 2021 with the support of GIZ Sustainable Rural Development (SRD) project.
Quality schemes	MoARD	No measure developed	IN	Protected Designation of Origin (PDO) and Geographical indication (GI) legal base is established and institutional framework is defined. Support is provided through MoARD budget for promotion and awareness raising.
Physical Investments	MoARD	Support is provided through Measure 1 (Investments in Physical Assets of Agricultural Holdings) and 3 (Investments in Physical Assets Concerning Processing and Marketing of Agricultural, Livestock and Fishery Products) of the IPARD-like scheme	EX	The two measures are related to investments in physical assets concerning processing, marketing of agricultural, livestock and fishery products.
Farm and business development	MoARD	No measure developed	IN	
Basic services	MoARD	No measure developed	IN	
Investment in forestry	MoARD	No measure developed	IN	MoARD has no competence to provide support for forestry. This is competence of MoTE. However, ARDA depended from MoARD is managing agroforestry measures, as supported by national measures.
Producers organisation	MoARD	No measure developed	IN	Budgetary measures were provided through ARDPF in the past.

Agri-environment climate	MoARD	No measure developed	IN	Design of this measure is to be developed during 2021 with the support of GIZ SRD project.
Organic farming	MoARD	No measure developed	IN	Legal base is established and institutional framework is defined. Support is provided through MoARD budget for promotion and awareness raising and through ARDPF for organic farmers' support.
Natura 2000 and Water Framework Directive (WFD)	MoARD	No measure developed	IN	
Areas with Natural Constrains (ANC)	MoARD	No measure developed	IN	No definitions exist for ANC and no support is planned to be designed.
Animal welfare	MoARD	No measure developed	IN	
Forest environmental climate	MoTE	No measure developed	IN	
Cooperation	MoARD	No measure developed	IN	
LEADER¹³	MoARD	No measure developed	IN	Design of this measure is to be developed during 2021 with the support of GIZ SRD project. Legal base to be enacted in 2020 and measure is to be certified.
Other measures	MoARD	Financial instruments	IN	No measure developed

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

¹³ Liaison Entre Actions De Développement De L'économie Rurale / Links Between Actions for the Development of the Rural Economy.

Measures other than RDP implemented by national budget

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Agroforestry	MoTE and ARDA	Competitive grant "Forest Development and Protection Measures", 2018	AE	Started in 2016. There are approximately 60 beneficiaries in each call.
Plantation of fruits	MoARD	Planting new orchards for area ≥ 4 dy: ALL 300,000 (EUR 2,420)/ha	EX	Started in 2008. Ceased to exist in 2018.
Plantation of nuts	MoARD	Support for planting walnuts with grafted seedlings and with cultivars demanded by the market at the value of 300,000 ALL / ha	EX	Started in 2011. Ceased to exist in 2018.
Plantation of olives	MoARD	Planting olives at the amount of 350,000 ALL / ha for intensive forms of cultivation, and in the amount of 250,000 ALL / ha for traditional forms of cultivation.	AE	Started in 2008
Plantation of vineyards	MoARD	Support for planting vineyards with cultivars for table grapes at the value of 300,000 ALL / ha	EX	Started in 2008
Planting autochthonous vegetables	MoARD	Planting autochthonous vegetables (tomato, cucumber, pepper, onion, potato) ≥ 2 dy ≤ 1 ha for individual farmers and ≥ 1 ha and ≤ 5 ha for a group of farmers – ALL 200,000 (EUR 1,449)/ha	EX	Implemented in 2009
Biomass heating equipment	MoARD	Support for installing biomass heating system, in greenhouses with central heating system in the value of 1,800,000 ALL	EX	Implemented only in 2015 and 2018
Support to organic certification	MoARD	For certifying bio agricultural products from cultivated plants: up to ALL 70,000 (EUR 565) /farm.	AE	Since 2008 Ceased in 2018 reopened in 2019
Plantation of Medicinal and Aromatic Plants (MAPs)	MoARD	Support for planting MAPs, such as thymus, oregano, <i>helichrysum italicum</i> , thyme, mountain tea, rosemary, ginger and saffron, at the amount of 200,000 ALL / ha.	EX	Started in 2012. Ceased to exist in 2018
Support for honey production	MoARD	Payments of 1,000 ALL / hive to bee-keepers with min. 50 beehives but the support shall not exceed 150,000 ALL.	AE	Since 2009, More than 200 beneficiaries per year
Polenization of vegetables in greenhouses	MoARD	Polenization of vegetables in greenhouses with pollinating bee, not honeying, at the amount of 35,000 ALL/ ha for an area not more than 5 ha and -50% of the total value in the tax invoices-	EX	Only in 2018
Establishment of drip irrigation systems	MoARD	Establishment of drip irrigation systems in nuts, hazelnuts, almonds and pomegranates, for all intensive forms of their cultivation, orchards, citrus, olive, for all intensive.	AE	2007-2019

Protection of olive groves from pests		Protection of olive groves from pests with a value at 20000 ALL/ha.	EX	2014-2017
Mushroom cultivation	MoARD	Up to 50% of equipment and instalment purchases but no more than 500 thousand ALL per farm.		
Supporting cooperation	MoARD	Supporting agricultural cooperatives for projects to build storage facilities for the production, production standardization lines for agricultural machinery, to be financed up to 50% of the project, but no more than EUR 35.714 per subject.	EX	
	MoARD	Support for the establishment or reconstruction of environments for rural tourism activities.	EX	
	MoARD	Support for the establishment or reconstruction of environments for rural tourism activities ranging from 6 to 10 rooms, up to 50% of the total value on the tax invoice, but not more than 1,500,000 ALL.	EX	

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

3.3. Hindrances, boosters and steps to promote green economy

NSDI II (2015-2020) has many objectives relating to sustainability, relevant to main sectors such as agriculture environment, energy, but the *de facto* implementation depends by the sector-or cross-sector strategies and action plans. As reflected in section 1 there is no National Green Strategy in Albania. The main components of green economy face a fragmentation of institution, responsibilities, decision making authorities and management tasks. The main components of green economy such as sustainable use of resources, support of ANC, support of LEADER as well as use of agro-environmental schemes have been foreseen at the ISARD 2014-2020. However, MoARD due to limited budget and focus on competitiveness has not created space for the insertion of these measures.

National support program of ARDPF have been guided mainly toward increase competitiveness of products and ensure a sustainable market supply (food security). This objective is reflected in the major part of measures. Based on a review of policy documents, except the objective to enhance farm and agrifood sector competitiveness, there are no explicit and directly financed objectives on regards to issues which are key for rural development, namely sustainable use of natural resources, balanced territorial development and improvement of rural livelihood. Meanwhile other stated policy objectives have been vaguely reflected at ARDPF. Moreover, measures related to green economy, as illustrated at in the previous chapter, have been lacking consistency.

The various stakeholders, except Albanian Rural Development Network for the case of LEADER reform, have been not able to press effectively introducing green economy relevant activities. Although the Government Open Partnership Pact define clear consultation and participation mechanisms, the level of interest and awareness of other stakeholders to conceive bring into agenda these concepts have not been strong enough. Pivot actors, especially business, has not been able to explore new opportunities coming from green economic projects, with few exceptions supported by donors (such as GIZ, Swedish Government and UNDP). Different from developed countries case, there is not an empowered mass of stakeholders in agriculture and rural development (entrepreneurs, Non-Governmental Organizations (NGOs), farmers, ...) able to bring forward an agenda for advocating for a change of support measures related to IPARD and ARDPF.

Administrative capacity to implement ISARD 2014-2020 planned activities has been slow. Progress in carrying legal amendment and develop institutions for developing green economy activities has been hampered by low administrative capacities. Setting up a management and control systems such as the Integrated Administration and Control System (IACS) has been not achieved (EC, 2018). The lack of IACS elements has not led to the development of direct support based on current area planted. This is an obstacle for providing farm support related to environmental conditions. Moreover, as in other WBCs, decoupled payments implementation is not achieved due to failure to establish Land Parcel identification System. The limited budget and low capacity for legal and institutional alignment on regards to design of macroenvironmental measures, LEADER support and definition of ANCs has not made possible a further development of green economy activities.

There is a proper momentum for incorporating green economy measures. Level of commitment of government/public administration, is high due to continuing pressure for alignment with EU. Central institutions such as MoARD ad MoTE have expressed their interest in other spheres such as renewable energy, circulatory economy and water management by joining or organizing conferences and meetings but these have been endeavours pushed by donor communities.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • Weak commitment to adopt objectives of NSDI II 2015-2020 and ISARD 2014-2020 into action plans and weak capacities to implement the action plans. • Limited budgetary support from national budget • Limited administrative resources • Slow institutional development • Slow legal alignment • Policy focus on competitiveness • Weak bottom up mechanism for legal and institutional change • Limited awareness of business community on green economy opportunities. 	<ul style="list-style-type: none"> • EU alignment through NPEI • Commitment to international agenda SDG and Paris Agreement • Bilateral donor financing • Business initiatives in search of opportunities • Opportunities created by legal amendment and institutional development in other sectors such as energy, infrastructure, tourism.

Domestically financed market-based green economy activities have been not developed due to lack of legal mechanism. For instance, the photovoltaic investments in agriculture and rural development are expected to develop in the future, with the legal improvement. New legal changes in the spheres of forests (Law on Forest) might enable activities of carbon footprint accumulation. A more in-depth study should be done in order to assess the business environment for incorporating green economy in agriculture and rural development.

Albanian engagement into international agreements and agenda obliges to use targets, measures, tools and indicators on cross-cutting issues related to sustainability, such as, among others, health, education, environment, climate change, social cohesion, etc¹⁴. Albania should review and update ISARD in light of these new international commitments. Therefore, given that green economy in rural development is cross-sector, it is required a higher coordination and stronger commitment which can be institutionalized through an action plan which can be designed by MoARD. This action plan should adopt a part of network of indicators established for the implementation of 2030 Agenda on SDGs.

Strategic documents are insufficiently communicated; therefore, a more intense information and better awareness campaign should be prepared for the Action Plan. In order to reduce the gap between the policy formulation and de facto implementation, there should be a better and more systemic inclusion of stakeholders which can meticulously track the work of MoARD and other partner institutions. Due to budgetary limits and not inclusive financial markets, there are weak supporting finance and implementation mechanisms in place to adopt green economy in agriculture and rural development. Therefore, the action plan should be a stimulus for including more measures at ARDPF and expanding the budget of the ARDPF.

Higher promotion of green economy business opportunities accompanied with cost-benefit results, has to be done by responsible institutions in order to attract commercial capital. Information in terms of fiscal and non-fiscal stimulus provided for investments in this milieu has to be provided for increasing stakeholder engagement.

The Rural Development framework provides for the payments to farmers located in areas facing natural constraints, such as difficult climatic conditions, steep slopes, or low soil quality. These payments are intended to mitigate the risks of land abandonment and desertification, loss of biodiversity, and valuable rural landscape. To grant ANC payments, Albania alike to EU Member States, should designate contiguous areas where such disadvantages are observed¹⁵. Therefore, Albania is required to enhance the efforts on adoption of legal and institutional requirements for developing these measures with EU CAP.

¹⁴ SDGs shape common objectives for all developed and developing countries through green and inclusive economy. Paris Agreement on Climate Change reinforces mitigation and adaptation actions especially in the energy sector while providing a robust framework on climate finance.

¹⁵ The area designation is based on objective biophysical criteria laid down in the respective Rural Development legislation (Article 31 of Regulation (EU) 1303/2013). Beyond support from rural development funds, EU Member States can choose to provide a specific income support payment to ANCs.

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
A more in-depth study should be done in order to assess the business environment for incorporating green economy in agriculture and rural development.	MoARD and donors
Prepare and action plan with incorporated activities for green economy.	MoARD, MoTE and ARDA
Prepare a monitoring mechanism for the action plan and increase awareness for stakeholders.	MoARD, MoTE and ARDA
Update by extending or introducing green economy activities at ARDPF.	ARDA and donors
Expand the budget of MoARD being oriented for ARDPF	MoARD and MoEF
Speed up legal and institutional process for IACS.	MoARD and MoFAI
Speed up on introducing measures of LEADER, Advisory services and Agro-environmental measures in the framework of IAPRD.	MoARD and ARDA
Enhance efforts for adopting other measures related to RDP in order to be eligible for accessing EAFRD upon EU Accession.	MoARD and ARDA as well MoFE and MoFA

3.4. Concluding remarks

Albania has been reviewing its agriculture and rural development policies due to the reforms required for the opening of negotiations with the EU. On 17 April 2018, the EC issued a recommendation to open the accession negotiations with Albania. This has increased the pressure to orient agricultural and rural development policy towards sustainable agricultural production, improvement of rural livelihoods, as well as improvement of agricultural competitiveness. In this context, considering that approaches to green economy are still unexplored in Albania, the policy vision of the MoARD and MoTE should be more oriented toward the green economy.

Key components of green economy are covered in several national policy documents but no one specifically refers to green economy as a target for the future. The legal base creates conditions for initiatives on renewable energy, efficiency of water and land use and recycling in several spheres such including agriculture and rural development, but those are not managed under a common framework referencing the principles of green economy. Moreover, there is no stable economic instrument for financing components related to green economy.

The alignment of CAP like RDP measures in Albania is slow due to insufficient experience with programming approach, the existing legal, administrative and institutional gaps, and low awareness of potential beneficiaries. MoARD should take address these weaknesses through better policy cycling and larger budget. The programming of the ARDPF in the future is not cumbersome due to a sufficient level of relevance of several measures. Moreover, recent introduction of support to rural economy (+100 villages program) increase funding provision from other institutions and donors in rural areas. The policy fine tuning can use the momentum provided in the framework of preparation of ISARD 2020-2027. In this context, it is necessary to explicitly formulate support priorities, support measures, and eligibility criteria on relation to green economy by preparing an action plan that can be coordinated closely with MoTE. The changes can be formulated in a separate action plan or incorporated within the upcoming ISARD. In line with approximation efforts towards the EU CAP, in the area of environmental protection and sustainable development, a wide-stakeholder participative approach is required in order to promote and facilitate the introduction of the concept of green economy.

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Chapter 4. Bosnia and Herzegovina

Sabahudin Bajramović*

4.1. Introduction

The complexity of the political system and decentralization of power in Bosnia and Herzegovina (BiH) caused, according to the Dayton Peace Agreement (1995), the largest number of competencies have the institutions of the two entities, the Federation of BiH (FBiH) and the Republika Srpska (RS), and the Brčko District of BiH (BD), while through the state level and their institutions (Ministries within the Council of Ministers of BiH) coordination activities and activities related to integration affairs take place. Thus, the largest number of issues (institutional, legislative, public policy) that are in the field of green economy such as agriculture and rural development, environmental protection, natural resource management and energy efficiency are exclusively within the competence of the 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 (MoFTER).

As a consequence of the mentioned facts, in BiH there is no any state strategic document that regulates the issues of sustainable development or environmental protection, as integral elements of the concept of green economy. However, there are several documents whose purpose is to regulate the mentioned issues. Activities to achieve the goals of sustainable development in BiH are a continuous task that affects 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 in addition, several documents related to sustainable development have been developed, such as the one prepared with the Johannesburg Summit (2002) or the document entitled BiH in the Rio + process (2012).

The concept of green economy as integrated economic, social and environmental issues and activities in the form of a sustainable economy in both BiH entities, the FBiH and the RS has not yet begun. In none of the BiH entities is there a strategic and legal framework that would have an integrated development policy in the field of green economy, and in fact the practical implementation of green economy segments is at the very beginning.

Entity strategies and programs in the FBiH and the RS do not directly address green economy issues, nor is there a comprehensive policy framework in both BiH entities to address sustainable needs. green economy. However, analysing a number of strategic and program documents in both BiH entities related to different sectors (agriculture, rural development, economy in general, energy sector, environmental protection, etc.) there is a "green" transition in the field of policy, legislation or institutions with different levels of success and different levels of intensity.

Although in BiH and its entities there is a significant number of documents that are in line with the harmonization of policy and legislative framework with EU standards such as climate change and CO₂ emissions, environmental protection and waste management, land, air and water protection, it is still weak, and the implementation of existing policies and regulations is insufficient and without adapted mechanisms (taking into account the EU standards) for successful functioning.

The FBiH and the RS face a number of challenges related to the use of cleaner energy, energy efficiency, adaptation to climate change, management and control of pollution (especially air) that significantly harm the economy and the population. The general impression is that there is more declarative talk about the importance of these challenges, without doing anything to address them. This is supported by the beginning of the construction of a new thermal power plant in the FBiH (Tuzla) as well as minor activities related to the prevention of high air pollution, which makes BiH cities, in the winter, at the very top of the world scale.

Bosnia and Herzegovina is rich in natural resources and that wealth is reflected in the quality of arable land, forests, water resources and biodiversity¹⁷. Insufficient and poor management of natural resources, the effects of climate change and the increasing depopulation of rural areas in both the FBiH

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¹⁷ BiH is considered to be among the top five countries in Europe in terms of biodiversity, with a large number of endemic and relict species. More than 5,000 species and subspecies of vascular plants, more than 100 species of fish, more than 320 species of birds and other components of biological diversity have been identified in BiH.

and the RS have a major impact on the rural economy and the degradation of resources and the environment.

Regarding the harmonization of agricultural policy and legislation of the FBiH and the RS with the *Acquis*, as well as CAP, there is still no necessary progress and the level of harmonization is quite low. Insufficient compliance is present in both direct payment measures (significant share of output payments) and rural development measures. Taking into account the context of the green economy in both BiH entities, there are very few measures that address environmental issues (2nd axis of rural development policy) and natural resource management. In the FBiH, only organic production (certification) is supported, while in the RS the list of measures is somewhat broader (organic production, protection of indigenous genetic resources, support for the development of mountain areas). What both entities have in common is that budget allocations are very modest and insufficient. The current rural development policy is mainly related to strengthening the competitiveness of agriculture (investments in physical assets), while measures to address environmental issues are practically neglected.

Funding of measures and activities that are in the context of the green economy in the agricultural sector come from entity budgets. In the Federation of BiH, funding is additionally provided from the cantonal level with significant oscillations from canton to canton. Unfortunately, in BiH, due to the lack of political will, IPARD funds were not activated, although in 2019 certain means from this fund were implemented, but not through BiH institutions, but through UNDP. Additional funding that is in line with the green economy in both BiH entities are the Ministries of Environment, as well as Environmental protection funds, but they are not implemented through systemic measures just in the form of projects through public calls.

4.2. Main findings - Country-specific overview

4.2.1. List and overview of relevant country documents linked to a green economy

As stated in the introduction, there is no strategic document in BiH, both at the state and entity level, that integrally encompasses sustainable development and the green economy. However, there are a number of sectoral and multi-sectoral strategic and program documents at the state and entity levels that are linked to the green economy.

The overview of these documents is divided into three groups:

1. Sectoral strategy and programs;
2. Strategies and programs concerning to environmental issues, natural resources and climate change;
3. Other strategic and programming documents linked to green economy.

Sectoral strategy and programs

Title	Strategic Plan for Rural Development of Bosnia and Herzegovina - Framework Document (SPRDBIH)
Period referred to	2018-2021
Key responsible institution(s)	Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina – Division for Agriculture, Food, Forestry and Rural Development
Short description of the document and its main objectives	The document was made with the aim of fulfilling one of the conditions for withdrawing IPARD funds in BiH - the existence of the state strategy of rural development and in fact it represents an aggregate of the current entity strategies of rural development. The primary goal of the SPRDBIH is to provide a framework for the gradual harmonization of rural development goals, establish programs, measures and other activities to achieve these goals, establish monitoring and evaluation, and outline the necessary financial resources and procedures for their use. In this context, the SPRDBIH aims to provide a broad framework that will lead to the gradual alignment of BiH agriculture and rural development with EU best practices. These goals are in line with the Law on Agriculture, Food and Rural Development of BiH (2008). The more important priorities are: 1) Strengthening the competitiveness of agriculture, forestry and rural areas by increasing the investment and improving the transfer of knowledge and

	promoting innovation 2) Improving the marketability of agri-food products by increasing added value, improving quality and safety standards, and strengthening ties within value chains, 3) Sustainable management of natural resources and adaptation to climate change, 4) Improving quality of life in rural areas through creation of new sources of income and improving physical infrastructure, social inclusion and accessibility of public services.
Elaborate if green economy is included in the objectives	SPRRBIH as one of the most important goals sets sustainable management of natural resources which will be reflected through various activities (measures) such as: promoting and strengthening agricultural practices that are environmentally friendly; equalization of business conditions in areas with natural constraints and preservation of valuable landscapes; raising awareness of climate change, its consequences and methods for mitigating or protecting the sector from such changes; promotion of the use of renewable energy sources and the use of agricultural waste; revitalization and preservation of pastures; improving biodiversity and conserving indigenous genetic resources; protection and improvement of soil fertility. Support for organic agricultural production should also be added here.
Cross-cutting issues with other strategies	A number of other strategic and programming documents on state and entity level have cross-cutting issues with SPRRBIH and mainly relate to sustainable land management and adaptation to climate change: Program of Rural Development of FBiH 2018-2021, Strategy for Development of Agriculture and Rural Areas of the Republika Srpska for the period 2016-2020, Strategy for Development of Agriculture and Rural Areas of Brcko District BiH 2019-2025, Medium-term strategy for the development of the agricultural sector of the Federation of Bosnia and Herzegovina for the period 2015-2019, Strategy for adaptation to climate change and low-emission development for BiH 2019-2025, Strategy of Nature Protection of the RS, Strategy of Environmental Protection of FBiH 2008-2018, Framework Energy Strategy of BiH until 2035 and others.

Title	Program of Rural Development of Federation of Bosnia and Herzegovina (PRDFBIH)
Period referred to	2018-2021
Key responsible institution(s)	Federal Ministry of Agriculture, Water Management and Forestry
Short description of the document and its main objectives	PRDFBIH is created to be compatible with IPARD principles, so the structure of the Program and the measures that should be implemented follow, as far as possible, the IPARD principles. In this way, the Government of FBiH with this Program wants to introduce IPARD principles in the management of financing of rural development of FBiH and thus show that it seriously intends to strengthen its capacity to meet obligations in this key area in the process of approaching EU standards and requirements. Unfortunately, by 2020, the parliamentary adoption of this document was missing, as well as the implementation of most of the envisaged measures. The five main objectives of the Program are: a) Increasing the competitiveness of agricultural products, b) Improving the environment, c) Strengthening the diversification of the rural economy, d) Supporting the establishment of the LEADER approach and e) Supporting forestry.
Elaborate if green economy is included in the objectives	Most of the Program goals and priorities are directly in line with the green economy, especially issues related to environmental improvement where there are measures such as support for organic production, support for protection and strengthening of genetic resources and agri-environment and climate change mitigation measures.
Cross-cutting issues with other strategies	A significant part of the measures in this document have cross cutting with the measures from the state Program of Rural Development of BiH 2018-2021 (sustainable management of natural resources), part of the measures related to climate change with the state Strategy for Adaptation to Climate Change and Low Emission Development for BiH 2019-2025, while the part related to the environmental issue cross cutting with the Strategy of Environment Protection of FBiH (2008-2018).

Title	Strategy of Development of Agriculture and Rural Areas of the Republika Srpska (SDARARS)
Period referred to	2016-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management
Short description of the document and its main objectives	SDARARS defined the directions of development of the agricultural sector, structural changes and rural development for the five-year period 2016-2020, where, among other things, the commitment to EU integration and harmonization with the standards and policies of EU member states was emphasized. This document defines six goals: 1) Increasing the volume and productivity of agricultural production and ensuring income stability of agricultural producers, 2) Strengthening the competitiveness of the agricultural sector by increasing investment levels, 3) Increasing the degree of marketability and finalization of production, 4) Sustainable resource management and climate change mitigation, 5) Balanced integrated rural development and 6) Systemic support for the development of the agricultural sector and rural areas.
Elaborate if green economy is included in the objectives	Sustainable management of resource and climate change mitigation measures together with the priorities arising from balanced integrated rural development are included in a certain way in the green economy of this entity. Some of the measures that are in line with the green economy are support for organic producers, support for indigenous plants, support for farmers' crafts and support for SMEs that have a role in the development of rural areas and include young people and women.
Cross-cutting issues with other strategies	A significant number of other documents have cross cutting issues like state Program of Rural Development 2018-2021 (environmental issues, organic production), National Strategy for Adaptation to Climate Change and Low Emission Development for BiH 2019-2025 (climate changes), Strategy of Nature Protection of the Republika Srpska (2011) (sustainable use of natural resources).

Title	Mid-term Strategy of Agricultural Sector Development of Federation of Bosnia and Herzegovina (MTSASDFBIH)
Period referred to	2015-2019 (By the Decision of the Government of FBiH from 05/12/2019, the validity of the Strategy was extended until the end of 2020)
Key responsible institution(s)	Federal Ministry of Agriculture, Water Management and Forestry
Short description of the document and its main objectives	The strategy recognized the need for a turnaround in the approach to sector development and proposed a new consistent and stable concept of agricultural policy which emphasizes the importance of harmonization with the EU CAP and the need for significant budgetary changes that will give much more "space" for development. The document defines 4 strategic goals: 1) Development of agriculture and related sectors with raising the technical and technological level, more efficient use of available resources and respect for modern market requirements, 2) Providing conditions for stronger income generation, 3) Sustainable management of natural resources and adaptation to climate change and 4) Adaptation of institutional and legislative framework and agricultural policy of the EU CAP.
Elaborate if green economy is included in the objectives	Part of the strategic goals related to sustainable management of natural resources, such as support for organic production, and part related to adaptation to climate change are part of the goals that can be linked to the green economy in Federation of BiH.
Cross-cutting issues with other strategies	The Program of Rural Development of BiH 2018-2021, the Program of Rural Development of the Federation of BiH 2018-2021 and the Strategy of Environmental Protection of the Federation of BiH 2008-2018 are important documents they have cross cutting issues (sustainable use of natural resources) with MTSASDFBIH.

Title	Strategy of Agriculture and Rural Areas Development of Brcko District BiH (SARADBDBI)
Period referred to	2019-2025
Key responsible institution(s)	Department for Agriculture and Rural Development of Government of Brcko District BiH
Short description of the document and its main objectives	SARADBDBI created as a necessary and missing political document of the Brčko District of BiH. In elaboration, preparation and drafting of this document active role had FAO staff. The drafting of this document has additional importance, if we take into account that all previous agricultural and rural development policy of the Brcko District was without an official, adopted by the parliament, such a strategic document. This Strategy has 4 general objectives: 1) Improving the sustainability and competitiveness of agriculture and food processing, 2) Support through advisory services and technology transfer to agriculture and agricultural processing, 3) Promotion of quality of life through social inclusion, poverty reduction and balanced economic development through investment diversification activities, including tourism and 4) Restoration, preservation and improvement of ecosystems dependent on agriculture and forestry.
Elaborate if green economy is included in the objectives	As one of the four main goals of the SARADBDBI is restoration, preservation and improvement of ecosystems dependent on agriculture and forestry. Sustainable management of natural resources and climate action in water management resources, the introduction of agricultural production methods that protect the environment and mitigate climate impacts, the introduction/strengthening of agricultural practices that contribute to the environmentally friendly development of the sector are part of the proposed measures that can be classified as green economy issues.
Cross-cutting issues with other strategies	The national Program of Rural Development of BiH 2014-2020 have cross cutting issues (sustainable management of natural resources) with SARADBDBI.

Title	Strategy of Forestry Development of the Republika Srpska (SFDRS)
Period referred to	2011-2021
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management of RS
Short description of the document and its main objectives	Having in mind the importance of forestry and the need for strategic management and management of forests by the Government of RS, a document of SFDRS was prepared. The general purpose of the document is the sustainable use of forests and forestry from the economic, social and environmental aspects. There are 12 defined strategic goals, some of them are: i) Forest management based on efficient and effective maintenance standards, ii) Increasing the economic contribution of forestry to social and rural development of RS, iii) Management of forest ecosystem, environmental protection, protection of priorities and biodiversity iv) Sustainable development of the forestry sector with optimal use of multifunctional potentials of forest ecosystems v) Sustainable development of private forestry and improvement of private forests vi) Breeding, protection of wildlife and development of hunting and hunting tourism according to the principles of balanced development, vii) Care of wood industry, market chains wood products.
Elaborate if green economy is included in the objectives	Development of partnerships between RS and stakeholders in sustainable forest management, Construction and use of forest infrastructure in rural areas, creation and promotion of specific tourism products of forest ecosystems, encouraging the development of all forms of tourism related to forestry (mountain, hunting, recreational), integrating biodiversity protection into forestry practice, preservation, protection and creation of environmental conditions for indigenous species, actualization of the balance of accumulation- emissions of CO ₂ , the impact of climate change and the consequences for forest management, conservation of forest genetic resources are just some issues from SFDRS that can be directly address to green economy.

Cross-cutting issues with other strategies	Strategy of Agriculture and Rural Areas Development of RS 2016-2020, Rural Development Program of BiH 2018-2021, Climate Change Adaptation and Low Emission Development Strategy for Bosnia and Herzegovina until 2025, and Strategy of Nature Protection of RS are documents which have cross cutting issues with SFDRS.
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Among other important sectoral documents that are still valid, it is the Medium-Term Strategy for the Agricultural Advisory Services in the Federation of BiH (2017-2021): The first such document in the FBiH that provides a framework for the provision of extension services (ES). The document defined 4 strategic goals: 1) development of ES which will help farmers and other rural population to increase competitiveness, 2) development of ES which will help in implementation of strategic documents related to the agricultural sector, 3) the development of the EC that will implement rural development projects and 4) the development of the EC either as a public or as a private service.

Strategies and programs concerning to environmental issues, natural resources and climate change

There are a number of strategic documents that address to issues of environment, natural resources and climate change, as well as water management, biodiversity, sustainable use of resources, renewable energy resources and energy efficiency, mainly on entity level. Some of them are in the given form, while for some documents only the more important features are given.

Title	Strategy of Climate Change Adaptation and Low-emission Development for Bosnia and Herzegovina (SCCALEDDBIH)
Period referred to	It is not stated, the document mentions the period 2013-2025
Key responsible institution(s)	Bosnia and Herzegovina Council of Ministers
Short description of the document and its main objectives	SCCALEDDBIH is a document created in parallel with the preparation of the Second BiH National Climate Change Report (SNC) and according to the United Nations Framework Convention on Climate Change (UNFCCC), and under the auspices of the UNDP BiH. The vision of the country's development is that by 2025, Bosnia and Herzegovina will be a sustainable and prosperous "green economy". The transition to a 'green economy' will be achieved through the realization of two main goals in the areas of adaptation to climate change and reduction of greenhouse gas emissions, which are: 1) increasing resistance to climate variability and climate change, while ensuring development gains; and 2) reaching the highest value and stopping the growth of greenhouse gas emissions in approximately 2025 at a level below the EU27 average per capita emissions.
Elaborate if green economy is included in the objectives	The low-emission development component is based on the creation of a low-emission economy based on: a) more efficient use of resources, b) increasing energy efficiency levels, c) greater use of renewable energy sources and d) improving energy transport infrastructure and services.
Cross-cutting issues with other strategies	National Energy Efficiency Action Plan (NEEAP), Framework Energy Strategy of Bosnia and Herzegovina until 2035, Rural Development Program of BiH 2018-2021 have cross cutting issues with this document

Title	Strategy of Nature Protection of the Republika Srpska - SNPRS (2011)
Period referred to	It is not stated, (In Bosnia and Herzegovina strategic document are valid for five years)
Key responsible institution(s)	Ministry of Spatial Planning, Construction and Ecology of the Republika Srpska
Short description of the document and its main objectives	SNPRS is an expression of efforts to awaken the growing awareness of the need to preserve and protect nature as an essential part of the RS environment, turning it into a long-term development concept. This is a comprehensive document that looked at the problem of preservation, promotion and development of RS natural resources from various aspects. The strategy defines five goals, which are accompanied by an Action Plan for the implementation of the proposed measures. The goals are: 1) protection of biodiversity and geodiversity of RS through the establishment

	and strengthening of the institutional framework for the implementation of effective nature protection measures, 2) Sustainable management of natural resources, 3) Equal distribution of revenues from natural resources, 4) Reducing pressure on biological and geological diversity and 5) Establishment of financial mechanisms for sustainable management of biological and geological diversity.
Elaborate if green economy is included in the objectives	Some of the issues related to sustainable management of natural resources (establishment and strengthening of economic incentives, development and promotion of sustainable tourism) and climate change mitigation directly imply a green economy.
Cross-cutting issues with other strategies	Program of Rural Development of BiH 2018-2021 and Strategy of Agriculture and Rural Areas Development of the RS for period 2016-2020 are the documents that have cross cutting issues with SNPRS.

Title	Strategy of Environment Protection of Federation of Bosnia and Herzegovina
Period referred to	2008-2018
Key responsible institution(s)	Federal Ministry of Environment and Tourism
Short description of the document and its main objectives	SEPFBIH is a comprehensive strategic document that looks at environmental issues in the Federation of BiH from all aspects. The document defines strategic and operational goals and measures related to the legislative and institutional framework of environmental protection, economic instruments of environmental protection, nature protection, land protection, air protection and waste management. The main goal of the SEPFBIH is to protect the environment, promote and encourage the sustainable use of natural resources through the establishment of an integrated system for managing natural - biological and geomorphological diversity. The strategy also provides an action plan in which, at the level of all proposed measures in all seven fields of action, the time of implementation and the approximate amount of necessary financial resources are given.
Elaborate if green economy is included in the objectives	Protection of biodiversity and geodiversity through strengthening the institutional framework for more efficient measures, sustainable use of resources, development and promotion of sustainable tourism, establishment of a sectoral approach in biodiversity and geodiversity management, promotion of traditional knowledge through sustainable use of natural resources, promotion of indigenous resources, climate change mitigation, reduction of pressures in the FBiH, establishing a flow of permanent budget allocations for nature protection and natural heritage, strengthening the development of rural areas such as sustainable pasture management, implementation of agro-environmental programs, promotion based on the tradition of the area, promotion of sustainable forest management, encouraging the use of renewable energy sources and others are numerous measures that are directly related to the issue of the green economy.
Cross-cutting issues with other strategies	Rural Development Program of BiH 2018-2021, Rural Development Program of Federation of BiH 2018-2021, are documents that have cross cutting issues with this document.

- *Strategy of integrated water management of the Republika Srpska 2015-2024.* The main goal of the Strategy is optimal water management within the integrated arrangement, use and protection of the unique water management area of the RS. The document is based on current international conventions and EU directives, UN positions on the environment and relevant domestic documents.
- *Strategy of Water Management of the Federation of BiH 2010-2022.* Taking into account the relevant documents of the FBiH, EU directives and current international conventions, the Strategy clearly set nine strategic goals with elaborated operational goals. Among the most important that are in the line with green economy are the legal reform of the water sector adapted to EU requirements and the provision of conditions for sustainable water use in areas whose development depends on market interests.

- *Land Management Strategy in the Federation of BiH.* Knowledge of land resources is an important precondition for planning land use. This comprehensive document, based on land legislation in the Federation of BiH, the European Soil Protection Strategy and other relevant EU directives, provides a strategic framework for land management in the Federation of BiH. The Land Management Strategy is based on the rationality and preservation of agricultural land in which the emphasis is on sustainable agriculture.
- *Framework Energy Strategy of Bosnia and Herzegovina until 2035.* The aim of this document is to prioritize the key energy strategic guidelines of Bosnia and Herzegovina with clearly set goals and priorities for implementation in the coming years, taking into account the principles of the free market and market factors that cannot be centrally controlled. The clear strategic guidelines of this document are the basis for the application and withdrawal, among others, of IPA and WBIF funds for energy in Bosnia and Herzegovina, as well as for attracting other investors in the energy sector. The strategy defines five key strategic goals until 2035, namely: 1) efficient use of resources, 2) safe and available energy, 3) efficient use of energy, 4) energy transition and environmental responsibility, and 5) development and harmonization of regulatory-institutional framework.
- *Framework Energy Strategy of Federation of Bosnia and Herzegovina until 2035.* The document is fully based on the same document at the level of Bosnia and Herzegovina in all its parts, including all five defined strategic goals.
- *Strategy of Energy Development of the Republika Srpska until 2035.* This document presents a set of goals and measures for the implementation of the policy of the Government of the Republika Srpska in the energy sector. The strategy defines five key strategic goals until 2035, defined at the level of Bosnia and Herzegovina, as well as: 1) efficient use of resources, 2) safe and available energy, 3) efficient use of energy, 4) energy transition and environmental responsibility, and 5) development and harmonization of regulatory-institutional framework. In the context of the green economy, one of the principles on which this document is based is the principle of creating an environment in the energy sector that does not jeopardize future generations, and especially refers to the rational use of local resources (primarily coal). The Strategy focuses on the development of energy in Republika Srpska, the use of domestic resources, the inclusion of renewable sources in meeting energy needs, the introduction and encouragement of energy efficiency measures and the application of modern energy technologies. At the same time, it is required to preserve the environment and reduce the harmful effects of the energy sector to a minimum.

Other strategic and programming documents linked to green economy

Other relevant strategic and programming documents linked to the green economy in some of their strategic goals are only listed without any elaboration. They are:

- Strategy of Development of Federation of Bosnia and Herzegovina (2010-2020)
- Strategy of Small and Medium Enterprises Development of the Republika Srpska (2016-2020)
- Strategy of Wood Industry Development of Federation of Bosnia and Herzegovina (2016-2025)
- Strategy of Tourism Development of the Republika Srpska (2011-2020)
- Strategy of Tourism Development of Federation of Bosnia and Herzegovina (2008-2018)
- Strategy of Development of the Textile, Clothing, Leather and Footwear Industry in the Federation of Bosnia and Herzegovina (2013-2023)
- Strategy and Policy of Industry Development of the Republika Srpska (2016-2020)
- Federal Plan of Waste Management (2012-2018)

4.2.2. Concrete measures linked to the green economy

In Bosnia and Herzegovina, agricultural policy and rural development policy are conducted separately by entities, and therefore the elaboration of measures related to the green economy is separate for the RS and the FBiH.

Before to this, it should be noted that in BiH, due to a lack of political will, the IPARD structure has not yet been established. Although at the beginning of 2019, formal preconditions were created for the withdrawal of IPARD funds in full (a coordination mechanism was established and a Rural Development Program was developed at the level of the state of BiH), this did not happen. Instead to that, the EU decided that UNDP should implement certain grant funds for the agriculture and food processing sector through the EU4Business program. At the suggestion of the relevant institutions, UNDP tried to adjust the measures/implementation as similar as possible to IPARD, but this is still quite far from the "real measures of the IPARD program.

In the RS, the process of "greening" agriculture is at a very low level and is the result of a lack of a clear vision of the importance of this process, limited financial resources and modest institutional capacity. Rural development measures, as part of the most important measures, which should participate in the mentioned transition processes, are mainly refers to measures aimed at increasing the competitiveness of agricultural producers. These are measures of investment in physical assets in plant and animal production, while there are no measures related to the improvement of the agri-environment. These measures include support for organic production, protection of indigenous genetic resources, and support for the development of areas with limited conditions (mountain areas). Budget funds come from the MAWMF of the RS, and the proposed measures are based on the current Strategy for the Development of Agriculture and Rural Areas of the RS. Among other line ministries, the Ministry of Physical Planning, Construction and Ecology of RS should be mentioned, which finances various projects in the field of environment, remediation of polluted land and others, but there are no clearly defined measures that will be systematically accompanied by adequate budget transfers.

In the FBiH, the issue of rural development is contained in the Rural Development Program of the Federation of BiH (2018-2021), which unfortunately was never adopted by the Parliament, but was only verified as a document of the Government of Federation of BiH, without validity. However, on the basis of this document, the Rulebook of Rural Development of the Federation of BiH was made, which serves to create rural development measures that are in the annual programs of financial support in agriculture and rural development.

Regarding measures for support the transition to green agriculture in this BiH entity, it can be said that this process has not actually begun. Measures in the field of agri-environment do not actually exist and only a measure of support for the certification of organic production can be singled out, for the implementation of which a very small fund is allocated. All support to rural development from the level of FMAWMF refers to capital investments and support to increase the competitiveness of the agricultural sector.

In addition to budget support provided at the entity level, cantonal line ministries of agriculture as well as local self-government units create and implement their own rural development strategies/programs. These programs are designed to address the specific needs of their farmers/communities, and are often aimed at promoting traditional local food products, rural services like rural tourism or agritourism, as well as the rational use of local natural resources. In the last few years, budget allocations from the cantonal level have been the only allocations for rural development in this BiH entity.

Among other line ministries that provide some support for "greening", mention should be made of the FBiH Ministry of Environment and Tourism, which, as in RS, finances various projects in the field of environment, land reclamation and other problems of sustainability use of natural resources. In this ministry also, there is no clear strategy that has defined measures and a permanent budget, but environmental problems are solved ad hock.

The Republika Srpska

Agriculture and rural development measures

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer	MAWMFRS	Support for the introduction of technological innovations in agriculture - Incentives for legal entities in activities related to research in the field of agricultural production in cooperation with scientific research institutions.	EX	RFSAVRS
Advisory services	MAWMFRS	Support for the transfer of knowledge and skills in agricultural production - It is achieved through support for consultations in agriculture, rural development issues, veterinary medicine, development programs in certain areas and others.	AE	RFSAVRS
Quality schemes	MAWMFRS	Support for standardization and branding of agricultural products and participation in quality systems - The measure refers to the introduction of quality and safety standards for agricultural and food products (good agricultural practices, integrated and organic agricultural production), branding of agri-food products intended for the market and preparation of studies necessary for registration of the designation of origin. The amount of incentives is 50% of the invested funds.	EX	RFSAVRS
Physical Investments	MAWMFRS	Improving agricultural infrastructure and farm equipment in order to increase the competitiveness of the agri-food sector. There are a number of measures: Investments in livestock production (construction of facilities, procurement of basic livestock, procurement of equipment), investments in crop production (procurement of greenhouses, raising permanent crops, procurement of equipment for hail protection), investments in agricultural machinery, investments in agricultural processing (equipment for sorting, packaging and processing, procurement of technological equipment and cold storage) and investments in the construction and equipment of fish farms. Individuals and legal entities registered in the Register of Agricultural Holdings have the right for the support. Funds are allocated on the basis of a public call and defined eligible costs. It cannot be seen from the Rulebook that there are clear environmental preconditions in the description of measures, especially when it comes to investments in livestock production.	AE	RCIRS
Farm and business development	MAWMFRS	Support for co-financing of rural development projects - Co-financing of projects in cooperation with the international community, and co-	EX	RFSAVRS

		financing of projects for the development of rural and social entrepreneurship and diversification of income on agricultural holdings.		
Basic services	MAWMFRS	Support to physical and service infrastructure, and refers to the improvement of road infrastructure, water supply, availability of internet network, radio and TV signals, improvement of the electricity network and infrastructure for waste management in rural areas. The beneficiaries are all rural households and legal entities operating in rural areas.	IN	SARDRS
Producers organisation	MAWMFRS	Support to agricultural organizations, cooperatives and clusters for the purchase of agricultural products - Beneficiaries must be registered, and incentive funds in the amount of 10% of the value of purchased quantities of domestic agricultural products.	AE	RFSAVRS
Agri-environment climate	MAWMFRS	Support in the preservation and protection of indigenous breeds of domestic animals - the right for support have legal entities, associations and breeders who own indigenous and protected breeds (Gacko cattle, Busha cattle, Bosnian mountain horse, sheep Pramenka).	EX	RFSAVRS
Organic farming	MAWMFRS	Support to organic plant and livestock production - the right for support have users for certified organic production for areas and heads that are registered in the Register of Agricultural Holdings as organic producers. The minimum area is 0.1 ha.	AE	RFSAVRS
ANC	MAWMFRS	Support for the development of hilly-mountainous, mountainous and Mediterranean-mountainous areas - beneficiaries based in municipalities belonging to these areas - support refers to reclamation measures for grass land (meadows) and construction of infrastructure (watering places for cattle, fences, purchase stations).	EX	RFSAVRS
LEADER	MAWMFRS	Support to LAGs and rural development, support to local development strategy. The measure provides for the financing of technical costs necessary for the functioning of LAGs and co-financing of part of the costs that contribute to the implementation of the local development strategy. Beneficiaries: organized groups from local communities belonging to rural areas.	IN	SARDRS

Note: MAWMFRS - Ministry of Agriculture, Water Management and Forestry of the Republika Srpska

RFSAVRS - Rulebook on conditions and manner of realization of financial support of development of agriculture and villages

RCIRS - Rulebook on conditions and manners of realization of financial support to capital investments in agricultural production

SARDRS - Strategy of development of agriculture and rural areas of the Republika Srpska

Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Federation of BiH (entity level)

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Advisory services	FMAWMF	Support to advisory services - An integral part of all rural development measures given in the PRDFBIH.	IN	PRDFBIH
Physical Investments	FMAWMF	Improving agricultural infrastructure and farm equipment in order to increase the competitiveness of the agricultural sector. It includes the following measures: Investments in agricultural machinery and additional equipment for crop and livestock production, investments in equipment for crop and livestock production, Investments in construction or expansion, as well as equipping of buildings for the purpose of agricultural production and investments in raising permanent crops (fruit and grape). The Rulebook defines general and special conditions of eligibility, maximum values of investments, ineligible costs. All users must be registered in the Register of Agricultural Holdings or the Register of Clients. It cannot be seen from the Rulebook that there are clear environmental preconditions in the description of measures.	AE	PFSARDFBIH
	FMAWMF	Investment in infrastructure and equipment of food processing and marketing of agricultural products - The aim of the measure is to develop infrastructure and equipment to increase the ability of the agri-food sector to comply with EU standards. Eligible investments must have equipment for waste treatment and by-products, introduced a quality system (ISO 9000 and HACCP) investment in renewable energy sources such as. processing of agricultural biomass for renewable energy sources, etc.	IN	PRDFBIH
Farm and business development	FMAWMF	Diversification of economic activities on agricultural holdings and entrepreneurship development - the aim of the measure is to improve the environment for local economic growth and development of economic capacities, to encourage employment through the creation of new jobs. There are numerous non-agricultural activities that are supported -through this measure - rural tourism, traditional crafts, food processing, production of energy from renewable sources, direct marketing, etc.	IN	PRDFBIH
Producers organisation	FMAWMF	Support for the establishment of producer groups/organizations in order to enable joint placement of goods on the market, meet EU standards and requirements of the <i>Acquis communautaire</i> and enable efficient standardization of all marketing steps and deliveries in the value chain.	IN	PRDFBIH

		General and special eligibility conditions are defined. A maximum of 10% of market production is supported.		
Agri-environment climate	FMAWMF	Support for the protection and enhancement of genetic resources - Breeding of original protected breeds of animals (Bosnian mountain horse, domestic cattle busha, domestic donkey and tornjak dog) in pure blood or in type - the client is entitled to financial support for a maximum of 100 animals of the original protected breeds during the year, and for a tornjak dog a maximum of 10 animals during the year. The amount of support depends on the type of user (legal entity or individual) and ranges from 100-200 EUR / head.	EX	PFSARDFBIH
		Environmental and climate change mitigation measures relate to the reduction of fertilizer use, the creation and improvement of landscapes or ecological characteristics, land conservation and pasture management.	IN	PRDFBIH
Organic farming	FMAWMF	Support for organic production through support for organic production certification. The right to support have clients who have a certificate from an accredited body with the standard ISO/IEC 17065:2014.	EX	PFSARDFBIH
Forest environmental climate	FMAWMF	Support for the introduction of good practices in the process of management and administration of NFP (non-timber forest products) and the introduction of new technologies and construction of facilities for the production of forest biomass are planned PRDFBiH measures that are waiting to be introduced and implemented.	IN	PRDFBIH
LEADER	FMAWMF	Acquiring skills, animating residents of rural areas and the establishment of LAGs and covering costs of the management of selected LAGs and the implementation of the Local Rural Strategy (LRS) are created measures of the PRDFBIH that have not been implemented so far.	IN	PRDFBIH

Note: PRDFBIH - Program of Rural Development of Federation of Bosnia and Herzegovina

PFSARDFBIH - Program of Financial Support in Agriculture and Rural development of Federation of BiH (Official Gazette of the FBIH, No 14/20)

Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Besides the ministries of agriculture and of ministries of environment in both entities as funding sources, there are also a number of other funding opportunities with indirect effects on green agriculture provided by other ministries, organization (foundation) and/or international donors. These activities refer mainly to capacity building, trainings and workshop, research and development, pilot projects and in some cases to green infrastructure.

4.3. Hindrances, boosters and steps to promote green economy

In both the Federation of BiH and the RS, there has been some progress in aligning with EU legislation in the areas of agriculture and the environment as part of the green economy concept. There are adequate strategic and program documents that significantly follow similar EU documents, but the key problem is their implementation. It is absent in many spheres and in many measures where the key obstacles are insufficient financial support, underdeveloped institutional capacities and inadequate administration, all as a consequence of insufficient wish of the authorities in FBiH and RS to take more seriously the current and growing concept of green economy.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • Lack of political will for a more serious approach to the concept of green economy (lack of a clear political agenda) • The fragmented policy and regulatory framework • Lack of coherence between line ministries within the entities and between entities in the context of defining measures and their implementation • Unclear role of strategic documents at the state level (ex. PRDBIH) • Lack of financial resources and institutional capacity to implement green economy measures • Weak capacities of local communities in the context of natural resources management and solving environmental problems • Insufficient utilization of rich biodiversity • Lack of promotion of the green economy by all potential actors 	<ul style="list-style-type: none"> • Better policy coordination across sectors, programmes, and levels of government (better coordination in and between entities) • Establishment of a clear political agenda in both BiH entities according to the concept of green economy • Establishment of an efficient and sustainable financial system (a kind of fund) that will integrally address a number of environmental and climate change issue • Higher level of harmonization of the current entity agricultural policy with the CAP - especially in the part that is on the line of greening of agriculture • Create the necessary conditions for the withdrawal of IPARD funds as soon as possible • Raising and building the knowledge on green economy of all actors involved in this area (research community, policy makers, business sector, regional agencies, NGOs) • Strengthen the capacities of local communities for better management of natural resources and other environmental issues

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
Introduction and implementation of measures from current strategic/program documents from the domain of the II pillar of agricultural policies related to the green economy in both entities of BiH	FMAWMMF, MAFWM of RS
Considering that both BiH entities are in the phase of preparation of new strategic/program documents for the period 2021-2027 related to agricultural development and rural development, an important part should be given to rural development measures in which environmental measures, diversification of rural economy, farm investments and support for the LEADER program and the establishment of new LAGs. should find a significant place.	FMAWMMF, MAFWM of RS

Within the EU4-Agri program (as a replacement for the IPARD program) to pay attention to funds that support rural development measures, and are directly related to green economy issues	MoFTER of BiH, FMAWMF, MAFWM of RS
General awareness raising on the importance of the green economy and use of funds and resources currently offered by relevant ministries in both BiH entities	FMAWMF, MAFWM of RS, FMET, Ministry of Spatial Planning, Construction and Ecology of the RS
Coordination of relevant entity and state ministries that will promote the concept of green economy with all its components	MoFTER of BiH, FMAWMF, MAFWM of RS, FME, ME of RS
Introduce of a legislative framework related to green economy (both state and entities level)	FME, ME of RS, FMET, MSPCE of RS
Drafting of a strategic framework in the field of green economy	FME, ME of RS, FMET, MSPCE of RS

4.4. Concluding remarks

BiH faces a number of institutional, legislative and financial challenges related to sustainable development and the concept of green economy in many of its sectors, including agriculture. BiH and the FBiH and RS entities are at the very beginning of accepting the new concept, less in the context of strategic planning and programming, and much more in the context of the implementation and actual activities of the “greening” process.

Taking into account the complexity of the state of BiH, most issues in this domain of the green economy are the responsibility of the entity line ministries, while the institutions at the state level mainly have a coordinating role and activities related to integration processes. In both BiH entities, there are a number of different institutions working in the field of sustainable development, environmental issues, use of natural resources, climate change, among which there is no clear coordination. In both RS and FBiH, there are numerous strategic and program documents, which unfortunately are not accompanied by adequate action plans. If they exist, the implementation of most measures is lacking, with financial resources being one of the key obstacles.

In BiH, i.e. its entities, there is integral approach to the green economy, but it is fragmented through a number of different institutions. One of the more important sectors covered by the current approach to this issue is the agricultural sector.

Strategic and programming documents related to agricultural policy in both BiH entities do not directly mention the green economy or green agriculture. However, many aspects of the concept of green agriculture are included through the definition of strategic and operational goals, and measures, especially in the part that is rural development and the second axis of this policy - environmental protection. A number of measures have been proposed in the Federation of BiH, but they are only "on paper" and, except support to organic production and to physical infrastructure, a number of other measures are awaiting implementation. In the RS, there is a slightly larger number of measures that are implemented in the context of green agriculture, but even that number of measures is modest, accompanied by weak financial support. As in the Federation of BiH, the majority of budget support in this entity goes to investments in physical assets of agricultural holdings. Support in the preservation and protection of native breeds of domestic animals is a measure implemented in both BiH entities.

BiH is the only country in the Western Balkans that does not have an elaborate measure according to the IPARD program, does not have an established IPARD structure and does not withdraw these EU funds. This is particularly important, as these funds could significantly restructure and modernize farms, including many aspects of the green economy.

BiH is still far from achieving EU standards and harmonizing with EU policies in various areas of the green economy - from agriculture to water and air quality, waste management, environmental protection to energy efficiency and renewable energy sources. In order to get closer to these goals, BiH and its entities need far more will and courage, which is not visible at this political and economic moment.

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Chapter 5. Kosovo

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5.1. Introduction

The economy of Kosovo is characterized by low levels of industrial production, low level of investment, and an export deficit of products, and high unemployment rate, nevertheless, Kosovo is among the top ten economies showing the biggest progress in the World Bank's 2018 Doing Business Report, having moved up 35 places since 2015, ranking it 40th out of 190 economies (The World Bank, 2018). With moderate economic growth rates, Kosovo still faces major environmental concerns with air, water, soil pollution, and deforestation as environment protection is not prioritized. According to the Ministry of Entrepreneurship and Innovation, green entrepreneurship is not broadly embraced, but the Ministry is preparing measures to incorporate a 'green' aspect in the forthcoming legislative framework (Balkan Green Foundation, 2018).

There is a relatively plentiful number of Non-Governmental Organizations at the local grassroots level that have introduced or carried out projects in the field of environmental protection. Interestingly though, these projects usually fall into two categories. They are either self-funded or weakly funded initiatives that unfortunately do not last in the long term, or they are initiated by a couple of experts who note the absence of "labour force" and fail to assemble wider public participation (Balkan Green Foundation, 2018). Generally, the objectives of these projects are awareness-raising campaigns or waste management, except of Peja and Prizren (including Opoja and Dragash), where the initiatives are focused on mountaineering and biodiversity protections, respectively. In Prishtina, there is only one organization that deals with circular economy initiatives (Balkan Green Foundation, 2018). As for initiatives related to energy, they are primarily led by the business sector through sales and instalments of systems for solar energy.

As a post-conflict country, Kosovo is still rebuilding its society and institutions. The country has poor rule of law, still faces corruption, and has political instability. Economic growth has primarily been driven by consumption, remittances, and foreign aid (Conahan, 2018). Kosovo is known as an agriculture hub since it was a province of ex-Yugoslavia. Although the geographical size is relatively small, it is best known for resources such as coal and minerals. While the green economy requires the self-sufficiency of renewable resources, Kosovo is still oriented to achieve its economic development with the use of fossil energy resources. In Kosovo, Renewable Energy sources represent only 4% of the consumption and recycle only 5% of the total waste (Balkan Green Foundation, 2018). The only wastewater treatment plant existing in Kosovo has a capacity of about 8,000 p.e. (Shuku, 2018).

In 2018, EBRD provided a loan of €1.5 million to the Agency for Finance in Kosovo (AFK). This loan was provided under the Green Economy Financing Facility (GEFF) for the Western Balkans, to support residential energy efficiency investments in the Western Balkans (Reiserer, 2018). Thanks to the European Bank for Reconstruction and Development (EBRD) Kosovo received another loan of €58 million to build a wind farm (Renewable Energy World, 2019). SOWI Kosovo L.L.C a joint Kosovo and Germany venture will develop a 105 MW wind farm in the northern municipality of Mitrovica, in what will be the largest direct investment in the area ever (Renewable Energy World, 2019). The wind farm will have 27 turbines and it will contribute to climate change mitigation by increasing the share of renewable energy generation in Kosovo and add 105 MW of wind generation capacity to the national energy system. Besides producing clean energy SOWI Kosovo will invest approximately 7 million in road works (construction of a road lane that goes from Mitrovica to Bajgora) and crane pads goods/services. This is the largest private-sector project that the EBRD has signed in Kosovo to date. Altogether the EBRD has invested €413 million in 67 projects in Kosovo (Renewable Energy World, 2019).

Kosovo's Law on Environmental Protection recognizes the need to bring environmental standards in Kosovo into harmony with those of the European Union. This law of environmental protection foresees to harmonize economic development and social welfare with basic principles for environmental protection according to the concept of sustainable development (Article 1, Law No. 03/L-025) (Official Gazette of the Republic of Kosovo, 2009). Although this law supposedly targets the present environmental issues in Kosovo, there seems to be an inconsistency between the regulations on a

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national and local level and a lack of authority to ensure complete implementation (Balkan Green Foundation, 2018).

Environmental laws such as the implementation to preserve, repair the damage or otherwise protect the environment are far away from the required standards. At the end of 2015, the Government signed a contract with ContourGlobal to build a new thermopower plant “Kosova e Re” that would rely on the exploitation of the coal nearby but in March 2020 ContourGlobal, announced that it has suspended plans to go ahead with the project (Prishtina Insight, 2020). Hydropower and biomass are the only renewable energy resources currently used but despite that hydropower is considered as a renewable source, it can cause different environmental problems such as erosion, and destruction of natural habitats if they are designed and built only to maximize profit and use the maximum quantity of water. Cases like this happened in different cities in Kosovo such as Peja, Prizren, and Shterpece.

There are also existing laws on energy efficiency and obligations that Kosovo has towards European Union since Kosovo entered the Energy Community Treaty in 2006. Law No.04/L –based on Article 65 (1) of the Constitution of the Republic of Kosovo is the law on energy efficiency (The Assembly of Republic of Kosovo, 2011). This Law regulates the issue of energy efficiency, preparation, and approval of energy efficiency plans and reporting for them, determination of roles, duties, and responsibilities of the institutions as well as addressing the obligations deriving from Energy Community Treaty regarding the energy efficiency (The Assembly of Republic of Kosovo, 2011). Kosovo needs to further harmonize with the EU legislation while bringing down energy intensity and improving environmental compliance. Energy production has the greatest impact on the environment together with transportation and industry (Balkan Green Energy News, 2019).

The term ‘green economy’ is not defined in the Law on Environmental Protection neither in the National Development Strategy or Agriculture Rural Development Strategy, however, there are definitions for the following wordlist: sustainable use, sustainable development, recycling, and environmental quality (Article 4, Law No. 03/L-025) (Official Gazette of the Republic of Kosovo, 2009). The term ‘Green Economy’ is not defined in *Law on Agriculture and Rural Development* (No. 03/L-098) and *Law on Energy Efficiency* either. The related terms such as economic development, sustainability, energy efficiency, energy efficiency improvement, energy management system, energy performance contract, and energy savings are among the defined lexicon (Article 4, Law No. 06/L-079) (Official Gazette of the Republic of Kosovo, 2016). Other laws that do not include definitions of ‘green economy’ are the *Law of Nature Protection* (Law No. 03/L-233) (Official Gazette of the Republic of Kosovo, 2010), *Law on Waste* (Law No. 04/L-060) (Official Gazette of the Republic of Kosovo, 2012), *Law on Environmental Impact Assessment* (Law No. 03/L-214) (Official Gazette of the Republic of Kosovo, 2018), and *Law on Energy* (Law No. 05/L-081) (Official Gazette of the Republic of Kosovo, 2010).

Development of the agricultural sector in Kosovo is of particular importance in terms of improving the economic situation, reducing unemployment, increasing food products security, application of green economy elements and link with environmental protection. This report presents the situation and the recent trends of Kosovo on involvement in the agricultural and rural program and policy reform processes the green economy concept. The main sources of data used in the study were the Kosovo Agency of Statistics and Governmental strategic documents and the Ministry of Agriculture Forestry and Rural Development (MAFRD).

5.2. Main findings - Country-specific overview

5.2.1. List and overview of relevant country documents linked to a green economy

An overview of the key strategic and programming documents linked to the concept of the green economy is provided below.

Title	National Development Strategy
Period referred to	2016-2021
Key responsible institution(s)	Kosovo Government
Short description of the document and its main objectives	<p>The strategy provides concrete actions for the implementation of each pillar, related to other areas of planning strategic, financial aid prioritization, capacity building, progress monitoring, and creating a fund for development and employment.</p> <p>Main objectives of this strategy are:</p> <ul style="list-style-type: none"> • Human resources • Good governance and the rule of law • Competitive industries • Infrastructure • Implementation of the National Development Strategy.
Elaborate if green economy is included in the objectives	This strategy elaborates future opportunities for more sustainable energy production, reducing energy consumption through efficiency measures, rational use of renewable energy sources, rational utilization and increasing the capacity of water resources, Sustainable waste management
Cross-cutting issues with other strategies	<ul style="list-style-type: none"> • National Programme for Implementation of Stabilisation and Association Agreement (NPISAA) 2020 – 2024 • Medium Term Expenditures Framework 2018-2020

Title	Agriculture and Rural Development Programme
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Rural Development
Short description of the document and its main objectives	<p>The ARDP 2014-2020 addresses three key EU Rural Development Policy Axes such as: agriculture sector competitiveness; sustainable management of natural resources and climate actions and the balanced territorial development of rural areas. It also supports the competitiveness of the agro-food sector in alignment with EU veterinary, phyto-sanitary, food safety 5 and environmental standards, its restructuring and modernization that contributes to the development of sustainable land management practices by supporting organic farming and other agro environmental practices, sustainable forests management and forestation.</p> <p>Main objectives of this strategy are:</p> <ul style="list-style-type: none"> • Enhancing farm viability, competitiveness • Restoring, preserving, enhancing ecosystems • Promoting social, economic inclusion • Transfer of knowledge, innovation
Elaborate if green economy is included in the objectives	This strategy elaborates on the Environmental and Social Implications, activities, sustainable development of rural areas, the efficient use of natural resources and climate actions.
Cross-cutting issues with other strategies	National Development Strategy

Title	Strategy for Climate Change
Period referred to	2019-2028
Key responsible institution(s)	Ministry of Environment and Spatial Planning
Short description of the document and its main objectives	<p>This Strategy is the initial step in the management policy process of the mitigation of GHG and adaptation to climate change for the next ten years. It is also an opportunity to see the mitigation and adaptation measures that will stimulate sustainable development. It is important to react and anticipate the impacts of climate change in Kosovo.</p> <p>Main objectives of this strategy are:</p>

	<ul style="list-style-type: none"> • Establish a National Inventory System and strengthen reporting on greenhouse gases • Implementation of National Action Plan for Energy Efficiency 2010-2018 • Implementation of National Renewable Energy Action Plan (NPWR) 2011-2020 • Reconstruction and extension of district heating networks • Improve the efficiency of existing TCs • Concepts of sustainable mobility in Kosovo's cities and towns
Elaborate if green economy is included in the objectives	<p>This strategy elaborates on how The Government of Kosovo is in support of an integrated approach aiming to find a balance between economic developments, environmental protection, and land use.</p> <p>This strategy also recommends the following:</p> <ul style="list-style-type: none"> • Introducing energy efficiency standards • Implementing Kosovo Energy Efficiency Action Plan 2010-2018 • Promotion and awareness-raising • Establishing subsidy/lending schemes for energy efficiency measures • Implementing National Renewable Energy Action Plan (NREAP) 2011-2020 • Promoting the use of biomass for district heating and industrial co-generation • Setting favourable regulatory conditions for photovoltaic electricity generation (without subsidies) • Shallow geothermal for heating • Biogas production from animal husbandry waste • Introducing renewable energy and high energy efficiency (combined heat and power) energy generation • Co-generation on industrial sites for both district heating and industrial needs • Increasing the efficiency of production of electricity through replacement of TPP Kosovo A with Kosova e Re Power • Plant Preventing self-combustion of lignite\ • Sustainable mobility concepts in the cities and towns of Kosovo • Promoting public road transport (bus) Reconstruction of railways, including securing quality passenger service • Precedence of walking and cycling before cars in urban development • Developing settlements, road network and intermodality facilitating public transport • Separate waste collection and recycling • Manure storage, preparation and application methods • Proper application of mineral and organic fertilizers • Organic production • Implementing Climate Protection Strategy in the Forest Sector in Kosovo Sustainable forest management increasing resilience of forests • Protection from forest fires • Forestation and reforestation of bare lands • Integrating carbon sequestration into forest management • Parts of forests and protected areas left to natural development
Cross-cutting issues with other strategies	National Development Strategy

Title	Strategy for Local Economic Development
Period referred to	2019-2023
Key responsible institution(s)	Ministry of Local Governance Administration
Short description of the document and its main objectives	The Strategy for Local Economic Development defines the way how to make real the vision for municipalities with efficient governance, quality education, clean environment, health and social welfare, suitable business environment and developed agriculture in order to enhance the quality of life.

	<p>Main objectives of this strategy are:</p> <ul style="list-style-type: none"> • Increasing Financial Sustainability of Municipalities • Attracting Foreign Investments • Strengthening the local economy by investing in human capital • Utilization of resources in function of sustainable economic development
Elaborate if green economy is included in the objectives	Financial sustainability, utilization of resources in function of sustainable economic development, waste management, and strength of local economy including green economy itself are some of the key criteria to be assured that the local level, respectively the municipalities to have sustainable development.
Cross-cutting issues with other strategies	National Development Strategy for Kosovo

Title	Energy Strategy
Period referred to	2017-2026
Key responsible institution(s)	Ministry of Local Development
Short description of the document and its main objectives	<p>This document is drafted using the basis from the National Development Strategy 2016-2021 adopted by the Government in January 2016. It covers Pillar 4: Infrastructure and provides four priority measures for the development of the energy sector:</p> <ul style="list-style-type: none"> • Build new and sustainable power generation capacities; • Establish an open and competitive energy market; • Decrease energy consumption through energy efficiency measures; and • Rational use of renewable energy sources.
Elaborate if green economy is included in the objectives	The document foresees the contribution to the economic development forecasts according to the National Development Strategy 2016-20211 and the Economic Reform Program. It covers several measures that lead to the green economy, such as the impact of thermal network expansion, use of renewable energy resources for sanitary water heating, energy efficiency measures, and market integration.
Cross-cutting issues with other strategies	National Development Strategy 2016-20211 and the Economic Reform Program

Title	Sustainable Development in Kosovo
Period referred to	2018
Key responsible institution(s)	Balkan Green Foundation and INDEP
Short description of the document and its main objectives	The Baseline Assessment (BA) report provides a general outline regarding the current state of affairs on Sustainable Development in Kosovo. The report focuses on three domains: the presence of institutions and CSOs, and the growth potential of Sustainable Development in the local context. Relevant stakeholders and their potential for stronger engagement in this field are identified. Lastly, a list of recommendations is provided to further the progress of the sustainable development agenda in Kosovo.
Elaborate if green economy is included in the objectives	This report the result of the “Empower - Engage - Build Ownership” Project, a project that mainly explores three thematic areas: environment, energy, and circular economy. The green economy is included as part of the Sustainable Development agenda in this report.
Cross-cutting issues with other strategies	Empower - Engage - Build Ownership

5.2.2. Concrete measures linked to the green economy

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer	Advisory service of the MAFRD	<p>The knowledge transfer in Kosovo case is included in the M1 Improvement in training and Advisory services, and measure 501 on Technical assistance. However, it is still budgeted under the M1 in the ARDP 2014-2020. This measure has been implemented since 2008 under the responsibility of the Department of Advisory Services of the MAFRD. In line with knowledge transfer, there were different training organised with using private training companies as well in close cooperation with Municipal Agricultural Offices. The knowledge transfer courses focused on new agricultural production technology, environmentally friendly production and setting up cooperation's between farmers. In addition to training courses, the measure also supported the production of information material related to various relevant topics in modern farm management. The beneficiary approach is oriented towards the increase the economic viability of farms and their market orientation. Therefore, the mechanism in force should be oriented in: knowledge transfer on the application of modern agricultural production compatible with the relevant EU standards; the use of new production technologies for plant & livestock production, aquaculture and forest management as well as in food processing to cope with competitive pressure and market forces; training and knowledge transfer on resource efficiency and shifting toward a low carbon economy in agriculture; etc.</p> <p>The final beneficiaries under this measure are defined as follows: farmers as defined in the Law on Agriculture and Rural Development (No. 03/L-098) as registered in the Farm Register; natural and legal persons that fall under definition of small-sized and medium enterprises.</p>	AE	<p>Measure 1 in addition to MAFRD budget is also supported by World Bank through the project "Agriculture and Rural Development Project" This project has three components: 1) Transferring Knowledge to the Rural Sector, (a) strengthens the knowledge of farmers and agro-processors; 2) supports regional knowledge exchange through study tours for farmers and agro-processors; and provides technical training; 3) Enhancing Investments to Promote Sustainable Rural Development.</p> <p>All measures are funded by national budget. There are no funds received and adsorbed from EU on support to measures from IPARD.</p>
Advisory services	Advisory service of the MAFRD	<p>The Measure 402- Advisory Service as per ARDP 2014-2020 is an assistance in strengthening MAFRD advisory services and improving the quality of technical services provided by the MAFRD laboratories. The general objectives of the measure are as follow:</p> <ul style="list-style-type: none"> • To develop human capital in order to increase the ability of the agri-food sector to cope with competitive market as well as to progressively align with the Union standards; • To pursue economic, social and environmental goals in balanced territorial development of rural areas; 	AE	

		<ul style="list-style-type: none"> To stimulate knowledge transfer in particular smaller and medium sized farmers and microenterprises in rural areas. <p>Beneficiaries under this measure are: Ministry of Agriculture, Forestry and Rural Development (MAFRD) - Department of Technical and Advisory Services (Rural Advisory Service Network); Specialised Advisory Organisations in Agricultural and Rural Sector and NGOs.</p>		
Quality schemes	Intellectual Property Agency (within Ministry of Trade and Industry)	There is no specific measure on quality schemes. The quality is tackled through different measures. However, there is also no support policies related to products with geographical indications, no subsidies directly related to Geographical Indicators and products. Law on Geographical Indications and Designations of Origin set out the rules of the GI protection in general under the Intellectual Property Agency.	IN	No specific law on Quality Schemes. Law on Geographical Indications and Designations of Origin set out the rules of the GI protection in general (OG 05/L-051) is in force.
Physical Investments	<ul style="list-style-type: none"> Agriculture Development Agency (IPARD Agency), Regional Offices, Municipal Advisory Offices MAFRD departments 	<p>As per ARDP 2014-2020 the physical investments are presented in the measure 101: investments in physical assets of agriculture holdings and measure 103: Investments in physical assets concerning the processing and marketing of agricultural and fishery products. Measure 302. farm diversification and business development. Measure on agriculture irrigation. The measure aims to:</p> <ul style="list-style-type: none"> To increase the competitiveness of agriculture in Kosovo and substitute imports; To create new jobs and increase employment in rural areas; To support Kosovo farmers in the selected sectors in progressive alignment to EU rules, standards, policies and practices; To support economic, social and territorial development, with a view to a sustainable and inclusive growth, through the development of physical capital; To address the challenges of climate change by promoting resource efficiency and renewable energy. To increase the competitiveness of agriculture in Kosovo and substitute imports; To create new jobs and increase employment in rural areas; To support Kosovo farmers in the selected sectors in progressive alignment to EU rules, standards, policies and practices; To support economic, social and territorial development, with a view to a sustainable and inclusive growth, through the development of physical capital; To address the challenges of climate change by promoting resource efficiency and renewable energy. 	AE	<p>Specific sub measures:</p> <ul style="list-style-type: none"> Milk production Fruit production Vegetable production Table grape production Egg production Bees Machinery Land consolidation Measure on irrigation <p>Sub-measures aim to:</p> <ul style="list-style-type: none"> to gradually align with EU Standards in environmental protection, and food safety to modernize the processing, packaging and storage facilities to introduce new technology to widen the product range for high value-added products to reinforce the vertical integration of primary agricultural production with the processing of agricultural products to encourage energy and resource-saving techniques and renewable

		<ul style="list-style-type: none"> • The measure 103 focuses on the on investments in physical assets in order to increase the competitiveness of the agri-food sector to substitute food imports with high quality domestic production and improved productivity. • The measure targets support via investments in five sub-sectors of the food processing industry: milk processing, meat processing, fruit and vegetable processing and wine production. This measure is complementing the interventions under Measure 101, aimed at increasing the supply of safe and environmentally friendly farm products. <p>Beneficiaries under this measure are farmers as defined in the Law on Agriculture and Rural Development (No. 03/L-098) and other agricultural legal entities registered in the Farm Register.</p>		<p>energy generation from by-products or residual heat</p> <ul style="list-style-type: none"> • to improve the farm structure and thus to improve the overall productivity of farming • to enable a higher degree of mechanization in agricultural production.
Farm and business development	<ul style="list-style-type: none"> • Agriculture Development Agency (IPARD Agency), Regional Offices, Municipal Advisory Offices • MAFRD department 	<p>Farm diversification and business development (ARDP, donor support schemes)</p> <ul style="list-style-type: none"> • to support the diversification activities of farmers in the processing and marketing of non-typical agricultural products • to support the diversification of farmers and small business activities in rural tourism in mountain areas incl. investment in improving leisure facilities • to support the diversification of services offered to farmers and communes <p>Beneficiaries under this measure are farmers and small and medium-sized enterprises.</p>	AE	<p>Sub-measures:</p> <ul style="list-style-type: none"> - Beekeeping and honey production/ processing and marketing - Processing of collected herbs, medicinal plants, forest fruits and mushrooms - On-farm processing and marketing of small-scale agricultural products (vegetables, fruits, herbs, spices, medicinal plants, mushrooms and sheep's and goat's milk) - Rural tourism - Provision of machinery services to farmers (machinery rings, repair of agricultural machinery, farm mechanization services) <p>These sub-measures aim to create, diversify and develop rural activities through support for investments in farm diversification and the development of non-agricultural activities.</p>
Investment in forestry	Forestry Department MAFRD	Investment in forestry is presented through Measure 202. Establishment and protection of forests in ARDP 2014-2020. This measure is in line with the Strategy Paper on Forestry Sector Development 2010-2020.	AE	This measure is supported through the Twinning Project "Further Support to sustainable forestry management.

		<p>The overall objective is to increase the contribution of the forest sector to the national economy through sustainable use of forest resources and through the maximization of the potential of multi-purpose benefits from using public forest lands.</p> <p>Mechanisms control rely in efforts to increase forest cover through afforestation, whether on agricultural or other land to provide environmental services or protective functions (erosion, avalanches, landslides, desertification and drought, protection of water resources) and enhancing biodiversity and helping adapt to climate change challenges. As well as to ensure preventive actions in order to maintain and protect forests as the main provider of ecosystem services.</p> <p>Beneficiaries are: farmers and small and medium sized enterprises.</p>		<p>There are also measures on forestation and commercial and pre-commercial thinning.</p>
Producers organisation	<ul style="list-style-type: none"> • Agriculture Development Agency (IPARD, Regional Offices, Municipal Advisory Offices • MAFRD departments 	<p>There is no specific measure on producer's organization, however in ARDP 2014-2020 the producers' organization are included in: Measure 101. Investments in physical assets of agricultural holdings, and Measure 201. Agri-environment measures and organic farming. Both measures aim to:</p> <ul style="list-style-type: none"> • modernize and extend agricultural production with high quality products • encourage market integration and orientation of agricultural production • introduce environmentally friendly agricultural production (organic farming). <p>Beneficiaries under this measure are: Farmers and small and medium sized enterprises.</p>	IN	<p>Enhancing viability and competitiveness of agro-food sector; This measure should be introduced as specific measure in order to strengthen economic social territorial development, employment generation and gradual alignment with EU standards. MAFRD and USAID are implementing a measure supporting producer organisation on soft fruits all types of berries, and GIZ as well.</p>
Agri-environment climate	MAFRD department	<p>The Agri-environment climate is presented in measure 201. Agri-environment measure and organic farming in ARDP 2014-2020. This measure is in line with national strategy where agri-environmental support is a key element and in harmonization with EU RD policy. It is one of the main tools for integrating environmental concerns in agricultural policy. Agri-environmental payments contribute to sustainable rural development by encouraging and supporting environmentally-friendly farming practices and systems. The agri-environmental measure contributes to:</p> <ul style="list-style-type: none"> • Conservation of soil quality and improvement of water quality by introducing soil and nutrient management plans and developing organic farming; • Support for traditional and sustainable grazing systems and methods contributing to the conservation of biodiversity and genetic diversity; 	AE	<p>Despite the fact that Kosovo is a country of small farms, there is not yet an efficient and rational approach for maintaining rural social capital for the mutually shared interest of enjoying the best possible benefits from the natural resources available. This measure is linked with other ARDP measures such as: Measure 101 "Investments in physical assets of agricultural holdings", Measure 303 "Preparation and implementation of Local Development Strategies – Leader,</p>

		<ul style="list-style-type: none"> • Building capacity and gaining practical experience for the implementation, monitoring and control of agri-environmental payments both from the point of view of state administration and farm advisors as well as farmers and farmers' associations. <p>In general, there are four pilot agri-environmental schemes selected:</p> <ul style="list-style-type: none"> • Organic farming • Soil and nutrient management plans • Summer grazing on the mountain <p>Beneficiaries are: farmers, NGOs, small and medium-sized enterprises.</p>		Measure 401 "Improvement of training" and Measure 402" Advisory services".
Organic farming	Agriculture Development Agency (IPARD Regional Offices and MAFRD department	<p>Organic farming is presented in measure 201. Agri-environment measure and organic farming in ARDP 2014-2020. It is focused on the sustainable development of organic production while ensuring the effective functioning of the market, guaranteeing fair competition, ensuring consumer confidence, and protecting consumer interests, covering all stages of production, preparation and distribution of organic products and their control. It also addresses the development of organic farming, especially the organic cultivation of herbs, medicinal plants and berries to prevent uncontrolled gathering of wild ones.</p> <p>Beneficiaries under this measure are: Farmers, NGOs and small and medium sized enterprises.</p>	AE	<p>Currently, two control bodies are operating on the territory of Kosovo: Bioinspecta (Switzerland) in cooperation with Albinspect (Albania), mainly for certification of medicinal plants and wild fruits, and Procert (North Macedonia) in cooperation with the Organic Agriculture Association of Kosovo (OAAK), mainly for the certification of honey production.</p> <p>The organic farming sector in Kosovo is small and far below the EU average. Complementarity with other national measures and other EU/donor-funded programmes is ensured by supporting sectors and measures not supported under this ARDP and creating capacity for implementing the measures: USAID-Kosovo Private Enterprise Programme (KPEP); USAID-New Opportunities in Agriculture (NOA); Danish International Development Agency (DANIDA); Suisse Intercooperation; Austrian Development Agency (ADA); National support for rural development measures.</p>
Natura 2000 and WFD	MAFRD department	The rural development measures for IPA II, 2014 – 2020 requires that the agri-environmental measure is implemented at pilot level only. The	IN	Kosovo has not yet identified all its Natura 2000 sites, but currently the

		agri-environmental measure will implement a selected set of potential agri-environmental schemes such as: Natura 2000 and WFD pastures. The main aim of the selected schemes is to gain experience in a diverse group of schemes each targeting a distinct farm land-use (grasslands – arable). At the same time, they are selected in a way which will contribute positive to key agri-environmental issues identified in Kosovo.		work is supported by the Project of Sustainable Forest Management.
Animal welfare	MAFRD department	There is no specific measure on animal welfare. It is included in the advisory services measure (ARDP, NB, donor support schemes) and Investments in physical assets of agricultural holdings (ARDP). Animal welfare is included in the ARDP 2014-2020 on the basis of Law on animal welfare, No. 2005/02-L10. The main objectives of both measure on animal welfare are to achieve: <ul style="list-style-type: none"> • Fulfilment of EU standards and targeted improvements regarding environmental protection, food safety and quality products, animal welfare and traceability of the food chain and waste management; • Support to the farmers to comply with environmental and animal welfare standards as well as food safety standards Beneficiaries are: farmers, NGOs, small and medium sized enterprises.	IN	The sector mainly lacks compliance with EU standards (animal welfare and environment), modern in-barn equipment, collection, grading and packaging facilities, modern technology in the laboratory for diagnosing zoonosis and highly pathogenic viral diseases in poultry. Lack of compliance with animal welfare, food safety and environmental standards in the overall meat value chain.
Forest environmental climate	MAFRD department	There is no specific measure on forest environmental climate, however it is included in the Measure 202. Establishment and protection of forests in ARDP 2014-2020 and Agri-environment measure and organic farming. Both measures address the need for sting up mechanisms that protect the healthy or restored forests in order to store significantly more carbon in trees and in particular soils. Beneficiaries under this measure are: farmers, NGOs and small and medium sized enterprises.	IN	Guidance and requirements are needed for Forest Management Plans to integrate benchmarks and targets relevant for forest restoration
Cooperation	MAFRD department	There is no specific Cooperation measure but is included mostly in Measure 101 - Vocational training and strengthening regional integration and territorial cooperation and Measure 303 - Preparation and implementation of local development strategies - LEADER approach. Both measures aim to define effectively all emission reduction pathways that keep temperature increases to 1.5°C. And also to emphasize that the promoting cooperation among LAGs in Kosovo and international cooperation. Beneficiaries are: farmers, NGOs small and medium sized enterprises.	IN	Considering the fact that cooperation is needed between farmers for a stronger market position in input purchase and the marketing of products as well as the Low degree of vertical and horizontal cooperation between production and processing should be established and functional by MAFRD.

LEADER	Agriculture Development Agency (IPARD Agency), Regional Offices, Municipal Advisory Offices MAFRD departments	<p>The Leader Approach is delivered through the Measure 303 – PREPARATION AND IMPLEMENTATION OF LOCAL DEVELOPMENT STRATEGIES - LEADER APPROACH. The leader aims to: develop civil society and social dialogue within the rural population and facilitate good governance through local partnerships, foster employment and developed human capital according to the principles of the LEADER approach. The Leader had one sub-measure: Sub-measure 303.3 – Cooperation project that involved the partner's institution to finalise the strategy.</p> <p>In Kosovo Strategy there is no specific measure on Basic service M 501. Activities from that measure are elaborated in Measure 303. There is a need for more clarification and integration of that measure or combination of 303 and 501 measures.</p> <p>Beneficiaries under this measure are: farmers, NGOs and small and medium-sized enterprises.</p>		<p>Measure 501 needs to be introduced in order to help smaller farmers use the ARDP Programme; to support farmers to increase competitiveness of their holdings, as well as to support the basic service in order to comply with environmental and animal welfare standards as well as food safety standards.</p> <p>In 2019 there was a measure supported from EC office in Prishtina through EU rural grants measure aimed to support didactic farms and social farms.</p> <p>At present in Kosovo there is insufficient capacity within the National Advisory Service or other organizations to provide TA to the LAGs.</p>
Financial instruments	MAFRD and donors	<p>The financial instruments are allocated to support the development of the rural economy and closely connected to the ability to make good links to urban centres and ensure the availability of transport infrastructure. In addition to the funds of MAFRD, there are several projects from donors such as EU, World Bank, DANIDA etc. that supports the MAFRD to design, manage and implement Rural Development measures aimed at supporting the setting up and use of farm advisory services in agriculture and rural development. It also supports improving of training in agriculture harmonized with the EU requirements for FAS under CAP and the provisions for IPA pre-accession assistance for agriculture and rural development.</p> <p>Funds from the World Bank and DANIDA complement the efforts to enhance farm viability and the competitiveness of all types of agriculture and primary food-processing by supporting the ARDP with budget allocation through the nationally established structures as the Managing Authority and Paying Agency.</p>	AE	

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Measures other than rural development

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Measure #2: Reducing energy consumption through energy efficiency measures	Ministry of Economic Development	The aim of the measure is to implement energy efficiency measures in order to reduce energy consumption, aiming at achieving the goals of energy saving based on the Action Plan of Kosovo for Energy Efficiency and green economy development through the use of the renewable resources. The beneficiaries of this measure are: industry, organizations, academia, citizens.	AE	Implementation of energy efficiency measure will contribute to reducing domestic consumption and economic development.
Reform measure #5: Investment in agricultural infrastructure and agro-processing	MAFRD	This measure aims to address identified barriers related to agricultural infrastructure, diversification of products, and irrigation system coverage. The measure is in line with the local strategic framework, respectively the National Development Strategy and the Programme for Agriculture and Rural Development 2014-2020. In particular, the measure is focused on supporting the investment projects in priority sectors set out in PRDA 2014-2020 which aims increase of productivity through boosting the competitiveness and technical progress, ensuring the quality of agricultural products and increasing the farm efficiency. The beneficiaries are: farmers, small and medium enterprises.	AE	
Measure #6: Regulation and consolidation of agricultural lands	MAFRD	Consolidation of agricultural land will be done by applying structural reforms including legal and institutional measures, regulation of agricultural land plots with regular geometric shape, and investments and creation of a field road network that would facilitate immediate access to the plots and rational use of agricultural land in general. This measure is based on NDS and ARDP. The implementation of this measure is expected to facilitate a land reform through development of a land market (security of property rights, a higher volume of trading, and creation of standard lease contracts), preventing further plots fragmentation, and improving control of unplanned construction in areas covered by consolidation. The measure will help farmers to move from the current subsistence farming to competitive products and to create jobs in agricultural production, whereas passive landowners not active in farming will be able to achieve some revenue from selling or leasing the land. The beneficiaries of this measure are farmers, small and medium enterprises.	AE	

<p>Measure #7: Support the development of industrial clusters</p>	<p>Ministry of Trade and Industry</p>	<p>The measure addresses the key aspects of reforms to tackle the fragmentation and consequently poor level of coordination and interaction of private sector with stakeholders of the other sectors is considered as industrial clustering. This measure is directly related to one of the main objectives of the National Development Strategy, Networking and development of clustered enterprises within the Competitive Industry Component. Also, it is harmonized with the final draft of the Private Sector Development Strategy 2017-2021. The beneficiaries of this measure are: farmers, small and medium enterprises.</p>	<p>AE</p>	
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Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

5.3. Hindrances, boosters and steps to promote green economy

To sum up Kosovo's national development strategy flags the need for an institutional arrangement that ensures transparent and effective flows of information, knowledge and financial resources to support sustainable development through the green economy. In this regard, the government will need to identify and select measures that best suit their level of development and governance frameworks in alignment with environmental management and climate change mitigation and adaptation. Further, the concept of green economy and green growth need to be integrated insight the framework and policy design and implementation as policy measures following national priorities and circumstances. It is important to undertake policy measures and identify the synergies among economic, environmental and social objectives and use this information to set policy priorities such as: updating the fund allocation to new measures as well as provide more efforts in using the funds from IPARD, invest in green market growth, promote green business models in agriculture, encourage the participation of different stakeholders in decision making and promoting a green economy, foster the share of adequate information associated with implementing policies on green economy and application of green technology.

The table below present the main obstacles and the incentives to introduce/promote green economy.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • Lowest GDP per capita • Financial constraints to undertake on-farm investments • Lack of cooperation between farmers, public institutions, and private and public sector. • Insufficient fund for implementing all the measures targeted in the ARDP • Lack of effective agricultural trade strategy based on market analysis in order to support and help the increased market opportunities for a green economy, employment rate and incomes • No specific info on the green economy due to the lack of information between relevant institutions and inter-ministerial cooperation • Small farms and fragmented land resulting in low productivity and interest in a green economy • Outdated machinery and technical equipment • Poor monitoring system and lack of effective database and standard form for data input. 	<ul style="list-style-type: none"> • National strategies should give consideration to environmental, economic and social concerns in integrated approaches by fostering innovation for greening growth • The national budgetary support in the new strategy can reallocate more funds to the measures not covered by the ARDP • Strengthening markets • Induce greener behaviour through regulatory and information policies • Investing in low-carbon economic infrastructure • Encourage stakeholder participation (e.g., business, unions, nongovernmental organisations) in decision-making and development and implementation of national strategies aimed at sustainable development and green economy • Encourage the application of green business models in agriculture and rural development • Encourage job creation and equity for inclusive green growth • Promote a synergistic relationship between economic growth and environmental protection • Promote awareness about the renewable resources, climate change and green economy application.

Below are certain specific steps and measures to be taken to promote the green economy in the relevant programs as well as potential cross-cutting measures potentially to be introduced by relevant ministries (agriculture-environment-economy).

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
The agriculture and food industry faces a significant challenge to restructure to introduce EU standards and increase productivity and production and contribute to the application of green economy.	MAFRD, Ministry of Economic Development
The monitoring system should be upgraded by the introduction of a relational database as a tool and standard forms for data input by relevant stakeholders	MAFRD, Ministry of Economic Development, Ministry of Trade and Industry
To introduce a proper system to control and monitor the actual achievements of afforestation and to ensure that public money spent is effective	MAFRD, Ministry of Economic Development
Knowledge transfer upgrade on green economy	MAFRD, Ministry of Economic Development, Ministry of Education Science Technology and Innovation
Investment in infrastructure that contributes to innovation and green economy	MAFRD, Ministry of Economic Development
Introduce Measure on Co-operation and support the European Innovation Partnerships (EIP); and collaborative farming as well as Natura 2000 and WFD.	MAFRD, Ministry of Economic Development
Introduce Measure on Areas of Natural Constraint	MAFRD

5.4. Concluding remarks

The ARDP was formulated taking account of available financial resources and EU regulatory requirements. It is based on a thorough analysis of sectoral needs and priorities identified during an extensive process of consultation with stakeholders with the contribution to some extent to a green economy. For each ARDP measure, a budget is allocated and targets are set to quantify achievements. However, the program still didn't include all the EU CAP measures to strengthen all the capacities and involve in a larger extent the green economic development. The Programme through different projects is co-funded and supported by several donors, EU, World Bank, Danida etc.

Moreover, ARDP program didn't fully address the solution in several constraints such as fragmented agricultural land, outdated farm technologies, limited capacity and limited provision of technical support, measure on ACN, cooperation, producers' organizations, Natura 2000 and EFD etc. In general, the targets included in the ARDP measures are monitored throughout each year through the collection of various indicator data and progress towards them is included in the annual report. However, the monitoring system should be upgraded by the introduction of a relational database as a tool and standard forms for data input by relevant stakeholders. In this regard, more attention should also be given to introduce a proper system to control and monitor the actual achievements, initiate the specific measure on ACN, cooperation, Producers organizations, Natura 2000 and WFD.

Kosovo needs to benchmark its current policy against the international best practice on green economy, at the same time as aligning itself with EU policy. Therefore, more efforts should be given to improve inter-ministerial and intra-ministerial coordination including the donor's activities as well as strengthening capacities in terms of the application of green economy.

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Chapter 6. Montenegro

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6.1. Introduction

Geographical position of Montenegro, its natural resources and climate conditions make the country specific in terms of the developmental concept of green economy showing parameters of significant potentials. Forest and water resources, including the sea, are, among other, strategic developmental resources of the country (Government of Montenegro, 2011a).

Since 1991 Montenegro is constitutionally defined as an ecological state (Republic of Montenegro, 2007). Based on this strategic developmental orientation, Montenegro established the institutional framework to form the policy framework and gradual reforms necessary for the sustainable development in liaison with the similar models of the EU. One of the first documents prepared was „*Montenegro as an ecological state* (Government of Montenegro, 2011b), presented as a national response to the goals set by the Agenda 21 (UN, 1992). Consequently, the document addressing the issues of importance for country's sustainable development was the document: “*Montenegro Ecological State Development Directions*” country (Government of Montenegro, 2011a), along with the Action plan, emphasizing Montenegro's natural characteristics, integration of environmental and economical concepts, etc. The most important strategic document structured around the initiative for the green development, for the period 2007 to 2012, was the *National sustainable development strategy* (Government of Montenegro, 2007). A proposed set of measures for the promotion of the enacted National Strategy was outlined within *Communication Strategy of Sustainable Development of Montenegro for the period 2011-2013* (Government of Montenegro, 2011c), proposing the gradual approach to the development of the communication activities. Another important strategy (*Energy Development Strategy*, together with the Action Plan) (Government of Montenegro, 2007), enacted in 2007, embraced the concept of green economy and sustainable growth defining the specific objectives and mechanisms for the transition towards a safe, competitive and environmentally acceptable supply of energy services. Furthermore, based on the model of the Europe 2020 Strategy, the Government of Montenegro adopted the *Montenegro Development Directions 2013- 2016* (Government of Montenegro, 2012) that integrated the concepts of the sustainable and inclusive growth and the methods for their implementation.

Several other Strategies (Spatial Plan the Transport Development Strategy, the National Strategy of Biodiversity, the Strategy on Food Production and Rural Development) have been enacted following these initiatives. The Law on the Environment protection (Official Gazette of Montenegro, no. 52/16) sets up the legal framework for the implementation of the EU concept of green economy, especially through two essential mechanisms: introduction of the ECO LABEL and system of the ecological management (EMAS), based on EN ISO 14001.

With the new National Strategy for Sustainable Development of Montenegro by 2030 (NSSD) the policy of sustainable development of Montenegro is being improved, especially addressing the issues of efficient introduction of green economy through priority areas: mitigation of climate changes, resource efficiency, waste management based on the principle of circular economy, sustainable resource management for the coastal region and support of the blue economy, sustainable production and consumption and social responsibility.

6.2. Main findings - Country-specific overview

Since green economy is not a substitute for sustainable development but an integral part of it, Montenegro is firmly committed towards basing its economic development as much as possible on its principles. Starting from its Constitution, through the measures undertaken at the sectoral policy level to the alignment of the development needs and priorities with globally accepted principles of sustainable development, Montenegro was also the first in the region to establish the National Council for Sustainable Development in 2002 as an advisory body to the Government (<http://www.mrt.gov.me/odrzivi/odrzivi-nacionalni-savjet>).

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6.2.1. List and overview of relevant country documents linked to a green economy

Agriculture, together with tourism and energy, is a strategic orientation of the economic development of Montenegro. Despite its size, Montenegro is rich in biodiversity and genetic resources in the food production sector. When analysing the development of agricultural policy in the last two decades in Montenegro, three characteristic periods can be seen. Initial changes in agricultural policy began early this century, with the release of the agri-food sector from price controls.

Since the adoption of the first Agriculture and Rural Development Strategy in July 2006 (Government of Montenegro, 2005), significant improvements have been made to the modernization of the administration, with the focus shifting to the sustainable use of agricultural resources and the food supply chain, and to improving the living standards of the rural population. The new Strategy for the Development of Agriculture and Rural Areas with the Action Plan (Government of Montenegro, 2015), for the period 2015-2020, defines the process of the reforms in the agriculture and rural areas. The strategy responds to the changed environment, caused by external and internal factors, and sets the stage for meeting the challenges ahead on Montenegro's accession to the EU. It defines steps in the framework of direct payments, regulation of the agricultural market, rural development measures, quality policies and organic production that need to be implemented in order to comply with EU policy.

The Law on Agriculture and Rural Development defines the main strategic goals in this area: management of agricultural resources in a long-term sustainable manner, while preserving the environment; ensuring a stable supply of safe food, acceptable in terms of quality and prices; improving the living standards of the rural population and overall rural development, while preserving traditional values; strengthening the competitiveness of food producers, etc. The Law on Organic Production regulates organic production, labelling of organic, ecological and biological products, control over organic production, as well as other issues of importance for organic production. The Law on Freshwater Fisheries and Aquaculture regulates the use, protection, conservation and catch of fish, crustaceans, shellfish, frogs and other living aquatic organisms in fishing waters (as goods of general interest enjoy special protection), conditions for aquaculture and other issues of importance. The Law on Waters regulates the legal status and manner of integrated management of waters, water and coastal land and water facilities, conditions and manner of performing water activities and other issues of importance for water and water resources management. The Law on Quality Schemes of Agricultural and Food Products prescribes the manner and procedure for determining the quality schemes of agricultural and food products, as well as assessing the compliance of agricultural and food products with the specification of these products. The Law on Marine Fisheries and Mariculture defines the manner of management of living marine resources, and includes catching, collecting and protecting fish and other marine organisms on the principles of sustainable development, in the fishing sea of Montenegro. The Law on Forests regulates the cultivation, protection, preservation and improvement of forests, planning, manner and conditions of forest use, construction and maintenance of forest roads, forest monitoring, as well as other issues of importance for forests, forest land and forestry. This Law also applies to the protection, preservation and use of forest trees located outside forest and forest land.

The implementation of the activities prescribed by the Action Plan for harmonization with the *acquis communautaire* continues. The Action Plan is the main instrument for monitoring the ongoing process and will take into account all changes in the *acquis* in the field of agriculture and rural development, and if necessary, in the coming years will be subject to regular updating depending on the situation within the reporting. The *acquis* for Chapter 11 - Agriculture and Rural Development includes a large number of binding plans by the end of 2020. During 2020, the Ministry will work on the preparation of a new action document, and after the entry into force of the new CAP, this document will be updated and harmonized with the new EU legal framework.

Title	National Strategy for Sustainable Development (NSSD)
Period referred to	2016-2030
Key responsible institution(s)	Ministry of Tourism and Sustainable Development, National Council of Sustainable Development, Government of Montenegro
Short description of the document and its main objectives	NSSD is based on the developmental concepts and mechanisms of the green economy, social responsibility, and efficient resource exploitation, IT technologies along with the horizontal positioning of the issues related to the climate change, education and innovations related to all relevant priorities of the sustainable development in Montenegro. NSSD is positioned as the long term development strategy of the country establishing the principles, strategic goals and measures for the achieving sustainable development of the society

	encompassing the undertaken international obligations with the priority set up for those stated within the UN Agenda 2030.
Elaborate if green economy is included in the objectives	NSSD holds the planning of the sustainable development in its core divided into the four groups of national resources: human, societal, natural and economic. In this way the strictly sectorial approach has been overcome, while promoting the inter-sectorial one providing the holistic view of the sustainability dimension of the national development. It also proposes the financial framework for the sustainable development in Montenegro and monitoring system for the NSSD implementation. In that context the list of indicators has been devised containing: the indicators of the sustainable development from the UN list (241), specific national indicators (252), relevant indicators of the international organizations (34) and composite indicators for cumulative monitoring of the sustainable development trends in Montenegro (10).
Cross-cutting issues with other strategies	Strategy for agriculture and rural development, National Strategy on climate change to 2030

Title	Strategy for agriculture and rural development
Period referred to	2015-2020
Key responsible institution(s)	Ministry of Agriculture and Rural development Government of Montenegro
Short description of the document and its main objectives	The Strategy defines the goals and priorities and developmental path of the agriculture in Montenegro in liaison with the orientation towards the EU accession. The aim of the Strategy is to precisely define the timeframe of the reforms in the sector of agriculture and rural areas in the country. It defines steps in the framework of direct payments, regulation of the agricultural market, rural development measures, quality policies and organic production that need to be implemented in order to comply with EU policy.
Elaborate if green economy is included in the objectives	The achievement of the objectives is projected through supporting farmers, education, projects, organic farming and protection of the natural resources. The primary plant production sector, the vegetable sector, the livestock sector, the meat and milk processing sector and the organic production sector are areas in need of investment in order to increase competitiveness and sustainable use of resources.
Cross-cutting issues with other strategies	NSSD, National Strategy for Food Safety

Title	IPARD II program 2014-2020
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture and Rural Development
Short description of the document and its main objectives	The goal of the IPARD II program is restructuring and modernization of the agricultural and processing sector, in order to make agricultural farms and the processing sector more competitive, and thus more ready to join the EU and use EU funds. The IPARD II program defines three strategic objectives related to the respective measures (Strengthening the competitiveness of agriculture, Ensuring the sustainable management of the natural resources and achieving balanced territorial development of rural economies and communities, including job creation and retention of existing jobs). In addition to the measures within the three priority objectives, measure 9 - Technical Assistance is also envisaged. Montenegro is gradually establishing an Integrated Administrative and Control System (IACS), which should be fully compliant with EU rules. In terms of strengthening the absorption and administrative capacity to implement the measures of the EU CAP, one of the most important moments for Montenegro is the establishment of a fully functional IPARD Agency, accredited to manage EU funds for agriculture, rural development

	and fisheries. The establishment of the Accounting Data System on Agricultural Holdings (FADN) system is also underway.
Elaborate if green economy is included in the objectives	Sustainable management of natural resources as well as balanced territorial development of rural economies are within the objectives of the program, though green economy is not explicitly focal in the measures. When it comes to cross-compliance mechanisms, they are not fully implemented as prescribed by the CAP. In plant production, it is mandatory to respect the principles of good agricultural practice, regular application of agro-technical measures in orchards, maintaining good agricultural condition of the land. Farms are obliged to respect the recommendations set out in the Code of Good Agricultural Practice in animal husbandry and milk production. Thus, cross-compliance requirements are introduced gradually to enable farmers to be better prepared for their full implementation.
Cross-cutting issues with other strategies	Strategy for agriculture and rural development

Title	National Strategy on climate change to 2030
Period referred to	2015-2030
Key responsible institution(s)	Ministry of Tourism and Sustainable Development, National Council of Sustainable Development, Government of Montenegro
Short description of the document and its main objectives	It incorporates the provisions of a number of directives specific to the field of climate change in various activities, including agriculture. Within this Strategy the document Intended Nationally Determined Contribution (INDC) of Montenegro for the reduction of greenhouse gas emissions has also been adopted. With this document, Montenegro has committed to a 30% reduction in greenhouse gas emissions compared to the base year 1990, by 2030.
Elaborate if green economy is included in the objectives	According to the strategy, agriculture has the smallest share in final consumption and a negligible impact on CO ₂ emissions. However, agriculture is credited with the highest emissions of CH ₄ and N ₂ O. Therefore, in order to reduce GHG emissions in relation to agriculture, it is proposed: replacement of motor fuels and gradual replacement of diesel by the introduction of biodiesel; replacement of the use of heating fuels and gradual replacement of liquid fuels by the introduction of LPG, biomass and solar energy in the structure of energy sources; promoting organic agriculture; composting; anaerobic digestion; reduction of CH ₄ by reducing intestinal fermentation; animal waste management practices; use of agricultural biomass for energy purposes-anaerobic digestion. Additional measures are: improving livestock by switching to the Holstein breed; the focus should be on livestock development, not on crops and cereals; strengthening wine production; development of a marketing strategy for halal lamb slaughter for the Middle East market, focus on good animal waste management practices in line with EU veterinary requirements and improved animal sludge/manure management system by building limited reservoirs to avoid surface and groundwater contamination.
Cross-cutting issues with other strategies	NSSD, Strategy for agriculture and rural development

Title	The innovated Montenegrin Strategy for the transposition and implementation of the European Union environmental chapter 12 - Food Safety, Veterinary and Phytosanitary policies with a General Action Plan
Period referred to	2019-2020
Key responsible institution(s)	Ministry of Agriculture and Rural development Administration for Food Safety Veterinary and Phytosanitary Affairs

Short description of the document and its main objectives	In November 2019, Montenegro presented to the EC a comprehensive national strategy including an action plan, which will serve as a basis for the transposition, implementation and enforcement of EU legislation on food safety, veterinary and phytosanitary policies, including plans for the development of relevant administrative capacity and the required financial resources. This has created the conditions for the adoption of an updated document that will form the basis for further continuous transposition of EU regulations and the implementation of transposed national legislation, as well as for meeting the closing benchmarks in Chapter 12. The Strategy has four parts: the first part dealing with the harmonization of Montenegrin legislation with the <i>acquis</i> , the second part implementing, the third part strengthening administrative capacity and the fourth part assessing the necessary financial resources.
Elaborate if green economy is included in the objectives	The green economy is included into the objectives indirectly, through the transposition of the legislative related to the animal welfare, regulation on aids for plant protection, food trade and food safety, zootechnics, animal feed, phytosanitary sector, organic food production, GMO, etc.
Cross-cutting issues with other strategies	Strategy for agriculture and rural development, National Strategy on climate change to 2030, Forests and Forestry Strategy with Development Plan – National Forest Strategy

Title	Forests and Forestry Strategy with Development Plan – National Forest Strategy
Period referred to	2019-2023
Key responsible institution(s)	Ministry of Agriculture and Rural Development, Directorate for Forestry
Short description of the document and its main objectives	Emphasized the promotion of reforestation and nursing or revitalization of low-yielding forests for the first five-year period. The strategy encompasses the modalities for the dynamic development of the wood industry, based on more efficient use of wood, mobilization of investments in new plants and technology, and increased demand for wood chips and pellets derived from wood biomass. In addition to the mandatory preventive measures, in order to respond adequately to the negative effects of climate change, primarily to forest fire damage, the most important measures are the removal of burned and damaged trees from burned areas to prevent the development of plant diseases and harmful insects, as well as artificial reforestation. Certain measures are being implemented aimed at the development of the wood industry in Montenegro, the most important of which is currently the ban on the export of wood raw material.
Elaborate if green economy is included in the objectives	In order to ensure and improve the long-term resistance and the productivity of forests, all forest management activities should follow the acquisition of FSC certificates for sustainable forest management to verify the success of set targets and promote forestry activity in Montenegro. The new concept of forest utilization implies the development of wood assortment sales models instead of timber sales, with the involvement of the private sector services in forestry in wood cutting and wood assortments transport operations. An important step in this direction is the establishment of a state forest management company.
Cross-cutting issues with other strategies	Strategy for agriculture and rural development, National Strategy on climate change to 2030

Title	National biodiversity strategy²⁰
Period referred to	2016-2020
Key responsible institution(s)	Ministry of Tourism and Sustainable Development, Government of Montenegro
Short description of the document	Its vision for Montenegro until 2050 is "Functional ecosystems and wealth of biodiversity are the basis for a sustainable and harmonic framework for the

²⁰ <http://www.cbd.int/>

<p>and its main objectives</p>	<p>development of Montenegro and its citizens.” Its strategic targets are: - Until 2020, biodiversity protection is in practice as one of several most important social and political priorities in the overall development; Biodiversity is protected by multidisciplinary and multisector approach; An efficient mechanism for financing of biodiversity protection achieved, as well as a switch to sustainable biodiversity economy and necessary capacities built into 2020; Significant reduction of identified direct pressures on biodiversity until 2020 registered; Until 2020 preconditions created and targeted measures for biodiversity protection implemented; Environmental infrastructure as the basis for conservation of national biodiversity created until 2020; and knowledge of biodiversity improved, systematized, and widely and equally available through developed mechanism. Further, the Strategy asks for the preparation of the National Biodiversity Monitoring Programme until 2021, which will allow systemic collection of data on biodiversity status. The overall responsibility for monitoring and evaluation of implementation of the Strategy is primarily allocated to the Ministry of Sustainable Development and Tourism.</p>
<p>Elaborate if green economy is included in the objectives</p>	<p>Agricultural, forestry and fisheries will become more sustainable through three sets of measures: a) Integration of sustainable biodiversity economy (as a part of green economy) into main courses of national and sector policies, strategies and plans; b) Use of specific fiscal, market and policy instrument based on prices as a support to conservation of biological diversity, sustainable production and consumption; and c) Establishing a legal, institutional and implementation framework for introducing PES (payment for ecosystem services). Increased agricultural production will be ensured through environmentally sustainable practices and socially equitable manners.</p>
<p>Cross-cutting issues with other strategies</p>	<p>Strategy for agriculture and rural development, National Strategy on climate change to 2030, Forests and Forestry Strategy with Development Plan – National Forest Strategy, National Strategy for Sustainable Development (NSSD)</p>

6.2.2. Concrete measures linked to the green economy

Below is a list of concrete measures, stemming from the strategic and programmed framework.

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer	Ministry of Agriculture and Rural Development	<p style="text-align: center;">Education, Research and analysis</p> <p>Description: Implementation of the knowledge-based modern concept of sustainable development of agriculture and rural areas. Strengthening the educational component, research aimed at solving development challenges and problems and making analyses. Reforms and adjustment to the EU's Common Agricultural Policy (CAP) further impose the need for strong institutional support</p> <p>Beneficiaries: Secondary schools and faculty education, scholarships for staff in the country and abroad; Strengthening R&D with direct application in agriculture.</p> <p>Criteria: Support is given for: investments in facilities, equipment and machinery needed to conduct practical classes; Scholarships for a certain number of high school and university students, promotion of agricultural production among the school population, organizing visits of students to modern farms and events in this area; Scientific research work for projects at the request of the Ministry; Application of innovations in agriculture; Education of a certain number of postgraduates and doctoral students in areas that are important for the work of the Ministry; Preparation of economic analyses in agriculture, evaluation of projects and measures of agricultural policy, preparation of annual reports, etc. is carried out at the request of the Ministry, and other measures and activities of the Ministry can be financed and co-financed (occasional commissions, expertise, scholarships for socially vulnerable students).</p> <p>Support mechanism: Agrobudget, Support to the Basic Services in Agriculture</p>	AE EX	<p>The situation in Montenegro shows deficits in the scientific research sector, which should to a much greater extent support the development of agriculture and harmonization with the EU CAP. The goal is development of knowledge-based agriculture; strengthening institutional support for the development of sustainable agriculture; faster implementation of reforms and harmonization with the EU CAP, with full implementation of the Action Plan for harmonization with the <i>acquis communautaire</i> PP11; strengthening administrative capacity for faster application of new technologies and innovations in agriculture; establishment of a FADN system.</p> <p>The preparation of the Report on the situation in agriculture (Green Paper) contains an assessment of the situation and economic position of agriculture, as well as the effects of the implementation of agricultural policy measures.</p>

Advisory services	Ministry of Agriculture and Rural Development	<p style="text-align: center;">Support to the Advisory Services in Agriculture</p> <p>Description: In order to improve the efficiency of implementation of agricultural policy measures and advisory activities in agriculture, as well as better information of agricultural producers, in accordance with the Law on Agriculture and Rural Development, the Ministry established Agribusiness Info Centres and signed agreements with six municipalities.</p> <p>Beneficiaries: Agribusiness centres, Department for advisory work in the field of animal husbandry, Department for advisory work in plant production.</p> <p>Criteria: Support to the work of the Agribusiness Centres, as well as the regional centres of the department for advisory work in the field of animal husbandry and plant production, according to the work program and the dynamics of jobs and tasks for which they are in charge.</p> <p>Support mechanism: Agrobudget, Support to the Basic Services in Agriculture- Advisory services in agriculture</p>	AE EX	The Agribusiness Centres employ young agronomy engineers, who provide agricultural producers with expert advice, support for the development of business plans and introduce them to the possibilities and support programs from the Agrobudget.
Quality schemes	Ministry of Agriculture and Rural Development Directorate for Agriculture	<ol style="list-style-type: none"> 1. Program of product quality control measures 2. Quality policy - Quality Schemes 3. Introduction of food quality and safety standards <p>Description: Montenegro has significant potential for the production of higher quality products, which is underused. Therefore, a quality product should be accompanied by adequate marketing and information on additional quality. Support for the improvement of production and incentives to raise the quality of products and the establishment of quality schemes, can significantly improve the possibilities of marketing agricultural and food products on the domestic market, especially through tourism consumption.</p> <p>Beneficiaries: Support for the education of a group of producers, preparation and definition of the necessary documentation for the registration of a collective quality scheme is determined.</p> <p>Criteria: Support is given to groups of producers or processors who have acquired knowledge through educational activities regarding the introduction and monitoring of the quality scheme and who have submitted a request for registration to the Ministry.</p> <p>Support mechanism: Agrobudget, Support to the basic services in Agriculture</p>	AE	Quality schemes that include: "designation of origin", geographical indication, "guaranteed traditional specialty", "higher quality", "mountain product", "from my farm" and "organic product", are additional elements of product quality guarantee. So far, seven products have been protected by geographical indications. The goals are to improve the quality of products by maintaining the specificity and diversity of Montenegrin production and cuisine; protection from any abuse, imitation and deception; contribution to the sustainable development of the area; increasing the market value of products; increased consumer confidence; maintaining tradition in agricultural practice; strengthening the competitiveness of agricultural and food products; establishing and strengthening the link between tourism and agriculture; ensuring a stable supply of safe and quality food.

Physical Investments	<p>Ministry of Agriculture and Rural Development Agency for Payments in Agriculture</p> <p><i>IPARD II PROGRAM – 2014-2020</i></p>	<p>Measures to strengthen the competitiveness of food producers Description: The aim of the program is gradual harmonization of Montenegro with the common agricultural policy of the EU. The aim is the modernization of production and strengthening of competitiveness, introduction of new technologies and innovations and opening of new market opportunities Improving product quality while meeting national and EU standards in the field of food safety and environmental protection Beneficiaries: Agricultural producers, cooperatives, micro, small and medium enterprises, craftsmen and others as defined by the Regulation on the implementation and use of funds from the instrument of pre-accession assistance of the European Union and the IPARD II program. Criteria: The IPARD II program will be implemented through the publication of Public Calls, which will define in detail the beneficiaries and support criteria based on the adopted Regulation on the implementation and use of funds from the EU pre-accession assistance instrument (IPARD II program). Support mechanism: Agrobudget, Rural Development Measures, Axis 1. Measures to strengthen the competitiveness of food producers</p>	EX	<p>In 2017, the preconditions for the start of the implementation of the IPARD II program in Montenegro have been met. Investments in physical capital of agricultural holdings, physical capital related to processing and marketing of agricultural and fishery products. After the amendments to the IPARD II program, accreditation was requested for the Measure Diversification of Farms and Business Development. Promoting social and economic inclusion, in particular through the facilitation of investment by young farmers and those in areas with natural constraints; Contribute to the development of sustainable land management practices by supporting organic agriculture and other agri-environmental practices.</p>
	<p>Ministry of Agriculture and Rural Development Directorate for Rural Development</p>	<p>Measures to strengthen the competitiveness of food producers Description: Support from this segment of the agro-budget refers to support for investments in agricultural farms, support for investments in processing on family farms, improvement of product quality, promotion of agricultural products and agriculture, support for activities of cooperatives and national associations. Beneficiaries: Beneficiaries are legal and natural persons and others in accordance with the procedures/public calls/operational manuals defined by the Project Criteria: Within the implementation of the MIDAS 2 project within component 1, activities will be implemented in accordance with the plan agreed with the representatives of the World Bank. Support criteria will be defined through public calls / operational manuals or other procedures defined by the Project. Support mechanism: Agro-budget, Rural Development Measures, Axis 1. Measures to strengthen the competitiveness of food producers</p>		<p>MIDAS II- Component 1 The second project of institutional development and strengthening of agriculture in Montenegro (MIDAS 2) received the approval of the Board of Executive Directors of the International Bank for Reconstruction and Development on January 30, 2018. The loan agreement between the Government of Montenegro and the International Bank for Reconstruction and Development IBRD (World Bank) was signed on March 8, 2018. The development goal of the Project is to improve the competitiveness of agriculture and fisheries in Montenegro, by increasing the provision of state support in compliance with the requirements for EU accession.</p>

<p>Farm and business development</p>		<p>Support for starting the business of young farmers <i>Description:</i> Increasing the number of young farmers in the overall structure of agricultural producers; increasing the number of farmers with secondary/ university education, who are engaged in agriculture; creation of young leaders in agricultural production; starting an agribusiness; increase employment in rural areas and return of young people to rural areas; providing an adequate standard of living for the younger generations living and working in rural areas; better use of capital, i.e. agricultural land and human resources; increasing the area of arable agricultural land. <i>Beneficiaries:</i> Young people who are unemployed and have completed secondary agricultural veterinary school or graduated from the Faculty of Agriculture / Biotechnology / Veterinary Medicine, who own agricultural land and who want to engage in agriculture, are entitled to support. <i>Criteria:</i> The young farmer submits the business plan to the Ministry after the announcement of the Public Call for Grants, and the Ministry will, based on the approved business plan, appoint a mentor employed by the Ministry of Agriculture and Rural Development, who will be responsible for planning, monitoring and supervising the activities described in business plan. <i>Support mechanism:</i> Agro-budget, Rural Development Measures, Axis 1. Measures to strengthen the competitiveness of food producers</p>		
<p>Basic services</p>		<p>Improvement of the living conditions and quality of life in rural areas <i>Description:</i> Creating conditions for the development of agriculture and diversification of economic activities on farms and in rural areas as a whole. <i>Beneficiaries:</i> Agricultural holdings registered in the Register of Agricultural Holdings have the right to support. <i>Criteria:</i> Specific criteria are defined within the public call <i>Support mechanism:</i> Agrobudget, Rural Development Measures, Axis 3.</p>		<p>The aim is increasing income on farms through the sale of agricultural products produced on pastures; support to the traditional local economy of farmers in mountainous areas through the development of opportunities for added value in agricultural production, the complete production process and better living or working conditions on farms or pastures; contribution to preservation of biodiversity and traditional "open" landscapes; improving supply of agricultural products.</p>
		<p>Village and infrastructure construction development <i>Description:</i> Improving living conditions and quality of life in rural areas; creating conditions for the development of agriculture and</p>		

		<p>diversification of economic activities on agricultural farms and in rural areas as a whole.</p> <p>Beneficiaries: Local governments, villages, groups of villages, overhead boards, individual farms and all other types of organization.</p> <p>Criteria: The component related to projects financed with the support of the International Fund for Agricultural Development - IFAD will be implemented in accordance with the Operational Manual.</p> <p>Support mechanism: Agro-budget, Rural Development Measures, Axis 3. Measures to improve life and expand economic activities in rural areas</p>		
Investment in forestry	Directorate for Forestry	<p>Description: The Directorate is authorised for the activities in the area of forest management, development of Forest Management Program. Forest cultivation and Forest protection; Seed and nursery production; Forest use, construction and reconstruction of forest roads; Staff training; Budget of the Forest Administration and Management of special hunting grounds purposes.</p>		Forest protection plan for the territory of Montenegro is aimed at preventing illegal logging, forest protection from plant diseases, pests and fires. Forest protection from plant diseases and pests is done in accordance with legal regulations, annual plans and long-term protection program.
Producers organisation	Ministry of Agriculture and Rural Development Directorate for Rural Development	<p>1. Support for the activities of cooperatives, associations and producer organizations</p> <p>2. Support for starting a business for young farmers</p> <p>3. Support for the development of clusters in the field of agriculture</p> <p>Description: strengthening market infrastructure for agriculture; production planning according to market requirements in terms of quantity and quality; meeting the economic and social needs of agricultural producers.</p> <p>Beneficiaries: include, inter alia: individual agricultural producers, associations of agricultural producers, cooperatives, clusters, and entrepreneurs, companies in the field of agricultural production / processing and others in accordance with the Operational Manual.</p> <p>Criteria: Defined within the public call</p> <p>Support mechanism: Agrobudget, Rural Development Measures, Axis 1. Measures to strengthen the competitiveness of food producers</p>		State support for clusters is increasingly needed. In this regard, the Ministry, in cooperation with the International Fund for Agricultural Development (IFAD), has launched the Cluster Creation and Rural Development Project (RCTP), which is being implemented in seven Montenegrin municipalities. There are two basic components of the project, namely cluster development and rural infrastructure development. The objectives are the connecting agricultural producers from the municipalities covered by the project; reduction of production and transport costs with the association of agricultural producers; creating value chains that will enable a shorter connection between producers and end consumers; providing grant support for small farmers.

Agri-environment climate	Ministry of Agriculture and Rural Development Directorate for Agriculture	<p>Conservation of indigenous genetic resources in agriculture <i>Description:</i> Contribution to the preservation of overall biodiversity; conservation and sustainable use of endangered indigenous species / varieties /types; study and selection of genotypes from indigenous populations of plant species; enriching the database on genetic resources and creating predispositions for commercial cultivation of domestic and domesticated species/varieties/ breeds, which should be one of the types of recognition and quality component of Montenegrin agricultural products on the international market. <i>Beneficiaries:</i> Agricultural farms that meet the criteria. Authorized institutions for genetic resources in agriculture. <i>Criteria:</i> Producers who cultivate indigenous specie/ varieties/breeds and who agree to cooperate with the institution responsible for genetic resources in terms of submitting materials and providing the necessary information are entitled to support. <i>Support mechanism:</i> Agrobudget, Rural Development Measures, Axis 2. Measures for sustainable management of natural resources</p>		<p>Montenegro has a rich and diverse living world - biodiversity - on a relatively small area. The genetic fund of plants and animals in agriculture is extremely rich, which is reflected in a large number of species, varieties and races, and especially the indigenous populations of plants and animals used for food production. The Montenegrin gene bank will become richer over time and will take care that the existing germplasm is available to all institutions and individuals who express interest in it. This fact, as well as the obligations regarding the conservation and sustainable use of genetic resources in accordance with international conventions and principles, require i.e. they also require appropriate financial support from the budget to stimulate farms to maintain genetic resources.</p>
	MARD Directorate for Rural Development Advisory Service in Animal Husbandry	<p>Sustainable use of mountain pastures <i>Description:</i> conservation and sustainable use of natural resources; sustainable management of agricultural land; environmental protection; biodiversity conservation; maintenance of natural and cultural heritage; preservation of traditional products; restoration of pastures by removing bushes; preventing conversion to forests <i>Beneficiaries:</i> Support is given to agricultural holdings that keep cattle (their own and dairy cattle) on Montenegrin pastures for at least three months in a calendar year. <i>Criteria:</i> Support takes the form of a conditional payment. <i>Support mechanism:</i> Agrobudget, Rural Development Measures, Axis 2. Measures for sustainable management of natural resources.</p>		<p>Sustainable use of mountain pastures and raising cattle on pastures is a very important segment for preserving biodiversity (specific flora and fauna, use of adapted local animal breeds), and has a special economic significance for the farm by producing mountain cheese and cream in order to increase added value on the farm. This measure contributes to the preservation of biodiversity and traditional “open” landscapes;</p>
	MARD Directorate for Rural Development	<p>Manure management support <i>Description:</i> Support is provided for the construction and reconstruction of manure storage facilities (pools) including specialized manure storage tanks. The aim is addressing the issue of manure disposal; resolving wastewater issues; preservation of the environment</p>		<p>By reviewing the situation on the ground, a number of areas have been identified in which farmers will have to invest additional funds in order to meet the standards prescribed by the</p>

	Advisory Service in Animal Husbandry	<p>Beneficiaries: Agricultural holdings registered in the Register of Agricultural Holdings have the right to support.</p> <p>Criteria: The maximum eligible investment is € 4,000 with budget support up to 60% of the value of the eligible investment (up to € 2,400), except for young farmers (up to 40 years of age at the time of the public call) where the support is up to 70% eligible investment (up to € 2,800) and additional 5% for those applicants who perform agricultural activity as their only or main occupation, i.e. that they are registered in the Register of Farmers in accordance with the regulation governing agricultural activities as their sole or main occupation and who have paid contributions in accordance with the law entry in the Register of Farmers until the moment of submitting the request for support. More detailed criteria and conditions for exercising the right to support will be defined by the Public Invitation.</p> <p>Support mechanism: Agrobudget, Rural Development Measures, Axis 2. Measures for sustainable management of natural resources</p>		Code of Good Agricultural Practice. The most common agri-environmental risk is the risk of localized contamination of surface and groundwater with manure, liquid manure, and contaminated water and, to a lesser extent, silage wastewater.
	MARD Directorate for Rural Development Direction for monitoring and evaluation	<p>Support for investments in the adaptation of mountain catunes</p> <p>Description: increasing income on farms through the sale of agricultural products produced on pastures; support to the traditional local economy of farmers in mountainous areas through the development of opportunities for added value in agricultural production, the complete production process and better living or working conditions on farms or pastures; contribution to the preservation of biodiversity and traditional “open” landscapes; improving the supply of agricultural products.</p> <p>Beneficiaries. Agricultural holdings registered in the Register of Agricultural Holdings have the right to support.</p> <p>Criteria: Support to agricultural farms that have been entitled to subsidies for sustainable use of mountain pastures for the last three years.</p> <p>Support mechanism: Agrobudget, Rural Development Measures, Axis 3. Measures for improvement of the quality of life and expanding of the economic activities in rural areas</p>		Sustainable use of mountain pastures and raising cattle on pastures is a very important segment for biodiversity conservation (specific flora and fauna, use of adapted local animal breeds), and has a special economic significance for the farm by producing mountain cheese and cream in order to increase added value on the farm. Support is granted for investments in the adaptation of huts (on the katun) in the mountains for farmers and their families while maintaining traditional aspects of construction, regulation of water supply (reconstruction of existing drinking troughs, reconstruction of existing watering systems, as an alternative to natural water sources and purchase of plastic water tanks) and procurement and installation of photovoltaic systems and procurement of cooling devices that can be powered by a photovoltaic system.

<p>Organic farming</p>	<p>MARD Directorate for Rural Development Direction for payments in agriculture</p>	<p align="center">Support to the organic production</p> <p>Description: The aim is sustainable management of natural resources; reduction of negative impacts of agriculture on the environment; biodiversity conservation; raising the quality of agricultural products; contribution to the affirmation of Montenegro as an ecological state; introduction of new control mechanisms for direct payments through the Payments Directorate; gradual creation of mechanisms for building an Integrated Administrative Control System in the Payments Directorate.</p> <p>Beneficiaries: Support is given to producers who produce organic products in accordance with the Law on Organic Production ("Official Gazette of Montenegro", No. 56/13).</p> <p>Criteria: Support is provided per hectare of production area, bee colony, poultry units and conditional livestock.</p> <p>Support mechanism: Agrobudget, Rural Development Measures, Axis 2. Measures for sustainable management of natural resources</p>		<p>Shredded farms with a small production volume cannot be competitive if their products do not add value to product quality, which is achieved by organic production. The fact is that in recent years, the interest of producers in this type of production is growing, but it is still not enough to talk about more serious production. Therefore, it is necessary to continuously encourage this way of agricultural production. In addition, consumer awareness of the importance of healthy food is growing day by day, which encourages a constant increase in demand for organic products, both in our country and in the world.</p>
<p>Natura 2000 and WFD</p>		<p>The activities on establishing Ecological Network NATURA 2000 in Montenegro have started in 2009, through the cooperation with WWF. The project titled "Montenegro and Natura 2000: Strengthening the Capacity of Government and civil sector to adapt to EU Nature Protection Acquis" was focused on EU Habitat Directive and completed in June 2012. Desktop Inventory for the species and habitats has been carried out in the central database (GIS) in the Institute for Nature Protection. Meanwhile, the draft version of the Catalogue of NATURA 2000 habitats, which exist in Montenegro, has been prepared and used for first Fieldwork inventory training of previously identified NATURA 2000 habitats in Montenegro. Ministry of Sustainable Development and Tourism started with the implementation of the project „Strengthening the environmental protection system in Montenegro“. The objectives of this projects are to prepare the National Environmental Approximation Strategy, a strategic document needed for planning of further approximation of Montenegrin legislation to the EU environmental <i>acquis</i> and to carry out all necessary activities to start with laying foundations, including extensive field mapping and data gathering, of future Natura 2000 network in Montenegro, in full agreement with the requirements of the EU Birds and Habitats Directives.</p>	<p>NE</p>	<p>In spite of the activities overtaken, the results are still scattered and there is a need for systematic handling of the data. In the Natura 2000 areas breeding of the animals and agricultural activities, particularly agro-environmental measures (organic farming and sustainable use of mountain pastures) will improve the area. The existence of these areas depends also on the continuation of their use but they are affected due to changes in agricultural practices and the depopulation of these areas. Therefore, these support measures can contribute to its improvement.</p>

ANC		Since gradual harmonisation of the agricultural policy with CAP is one of the priorities, Strategy for development of Agriculture and Rural Areas designed Rural development policy in accordance to the new Rural development policy in the EU (programming period 2014-2020), meaning that measures grouped in the so called axes. It should be mentioned that the Strategy foresaw the fourth axis – LEADER projects; however, implementation has not been started yet. Also, one of the main measures in axis 2 will be to support Areas facing Natural Constraint (ANC).	NI	
Animal welfare	MARD Directorate for Rural Development Advisory Services	Support for achieving standards in animal welfare in livestock production <i>Description:</i> Improvement of conditions for accommodation of production; preserving the health of production animals; improving the competitiveness of agricultural holdings.		The Ministry has allocated funds for the improvement of livestock facilities through IPARD II program and similar programs. Insight into the situation on the ground, it was noticed that small producers, most of whom are in Montenegro, have problems with the procurement of equipment that would meet the needs of animals on their farms in terms of animal welfare.
Forest environmental climate		Montenegro has ratified the United Nations Framework Convention on Climate Change (UNFCCC) by succession in 2006, and became a member of the Convention as a non-Annex 1 country on January 27, 2007. The Kyoto Protocol was ratified on March 27, 2007 (Law on ratification was published in the Official Gazette of MNE, No 17/07), and Montenegro became a member on September 2, 2007.	NE	With ratification of the UNFCCC and the Kyoto Protocol, Montenegro joined the countries that share concerns and play an active role in international efforts in solving climate change problems.
Fishery	MARD, Fishery Directorate	Sustainable management and conservation of fish resources and other marine organisms <i>Description:</i> Assessment of available resources of fish and other marine organisms; monitoring the status and assessment of sustainable use of fish and other marine organisms; collection and processing of data on catch, fleet and fishing effort, as well as biological, ecological, and socio-economic data in marine fisheries; monitoring of population dynamics of fish, research of potential locations for mariculture on the high seas, conducting research and / or introduction of innovative solutions to improve the quality of the environment, introduction of more selective fishing tools in order to preserve and protect fish and other marine organisms and reduce catch costs. <i>Beneficiaries:</i> Institute of Marine Biology.		Support is provided to the Institute of Marine Biology to implement the annual marine fisheries data collection program (DCF-DCRF), conduct research on potential offshore mariculture sites and conduct research and / or introduce innovative solutions to improve the quality of the environment. Support is provided to the project for the development of more selective fishing gear for the net, as well as training for fishermen to knit these nets.

		<p>Criteria: Support is provided to the project for the development of more selective fishing gear for the net, as well as training for fishermen to knit these nets.</p> <p>Support mechanism: Agro-budget, Support to the Fishery Sector-Measure for the sustainable management of the marine fishery resources.</p>		
	MARD, Fishery Directorate	<p>Measures for the improvement of freshwater fisheries</p> <p>Description: Development of sports and fishing tourism; strengthening the control of sport-fishing activities in order to protect and improve fishing waters and fish resources; reliable assessment of available fish resources in freshwater fishing waters - fishing basis; Improving freshwater resource management based on available scientific data.</p> <p>Beneficiaries: Federation of Sport-Fishing Organizations of Montenegro and users of the fish fund. Scientific institution authorized by the Ministry. Faculty of Science - Department of Biology</p> <p>Support mechanism: Agro-budget, Support to the Fishery Sector-Measure for the sustainable management of the sweet water fishery resources.</p>		

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

6.3. Hindrances, boosters and steps to promote green economy

Agricultural producers in Montenegro face a number of different barriers, which are financial and non-financial in nature. In the national system, there are a number of financial mechanisms that are available to agricultural producers - loans with favourable conditions, various types of subsidies, donations and other types of assistance. Reliance on traditional ways of cultivating and using land as well as a low level of modern knowledge and technical equipment mean that primary production depends on natural conditions. The percentage of farms with an irrigation system, disaster protection and other modern technologies is low. In addition, the problem of land fragmentation is characteristic. Due to this situation, producers cannot have continuous production that would provide them with safe and stable yields of uniform quality, which is a barrier to entering the market. This is especially true for exports, because such production can neither by quantity nor quality meet the requirements that apply to the international market.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • Livestock breeding in general is considered to be the activity having negative impacts to the GHG emissions, quality of water and land, as well as biodiversity conservation. • Due to the low degree of processing, e.g. finalization of products in the entire Montenegrin food chain, as well as due to poor infrastructure in rural areas (lack of asphalt roads and storage facilities), there is no organized purchase for a large number of products that would guarantee adequate prices. • Producers are forced to sell their products on the doorstep, local markets and shops, or through tourism. • Producers are faced with complicated administrative procedures that present them with a barrier to registration of production and products, access to various financial mechanisms, the market and so on. • Another trend that is typical for rural areas, especially in the northern region of Montenegro, is the outflow of population. • Packaging of products represents another barrier since the packaging material is mainly imported. • The limited number of registered and certified organic producers can also be explained by the fact that many producers are still not convinced or aware of market benefits, as most producers in the country already use relatively small amounts of pesticides and more aggressive agri-environmental methods. 	<ul style="list-style-type: none"> • Through the implementation of the specific measures, incentives and education programs these impacts could be minimized thus creating a wider set of the green jobs in agriculture. • Agriculture in Montenegro can have a significant impact on increasing resource productivity, investments, and thus employment, especially in the area of organic production. • Further stimulation of the companies for the investments in this type of production could stimulate the agricultural producers for the movement towards the “greener” production, eliminating negative impacts of the agriculture to the environment. In addition, it is recommended to certify products related to greening of production and product placement by introducing regulatory instruments (quality schemes). • Beekeeping is an activity that has a small overall negative impact to the environment and a great positive impact to increase resource productivity, increased investment and thus employment, as well as the inclusion of vulnerable categories of society. • Collecting forest fruits, medicinal and aromatic plants is an activity that has a small overall negative impact and is one of the significant national potentials.

Available data on the impact of agriculture on the environment show both positive and negative trends, including an increase in areas under organic production, but also a general increase in the consumption of mineral fertilizers and a significant increase in the consumption of plant protection products. In this context, in the coming period, it is necessary to work on technological improvements in the field of agriculture, dissemination of knowledge and information on ways to preserve soil fertility, expansion of organic agriculture and development of an efficient sector of the food industry.

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
In order to ensure the sustainability of one of the key development sectors in Montenegro, it is necessary to ensure organic production in a way that through good agricultural practice contributes to the conservation of biological diversity (with special emphasis on the control of wildlife collection). It is also necessary to establish control over the impact of fertilizers and pesticides on water and soil quality, as well as to ensure the efficiency of water use in agriculture, given that adequate practice can reduce GHG emissions from agriculture.	Ministry of Agriculture and rural development Ministry of Tourism and Sustainable Development Ministry of Economy
It is necessary to increase energy efficiency in food production through e.g. the use of local products whenever possible to reduce energy consumption in the transport of food products.	Ministry of Agriculture and rural development Ministry of Tourism and Sustainable Development
Improvement in product packaging in order to reduce the environmental footprint of the final product (through the provision of packaging that is easy to recycle). Also, it is necessary to work on the promotion of composting biowaste and its use in agriculture.	Ministry of Agriculture and rural development Administration for Food Safety, Veterinary and Phytosanitary Affairs
Development of the agro tourism	Ministry of Agriculture and rural development Ministry of Tourism and Sustainable Development

6.4. Concluding remarks

In Montenegro, there is a strong need to raise awareness of market benefits, as well as measures needed to protect the environment, especially measures of mitigation and adaptation to climate change. It is necessary to connect and coordinate between the actors of the agri-food market. This activity is key to initiating the creation of value chains for “green” products in Montenegro. It is crucial to establish effective cooperation between private and public actors in order to optimize the legislative-strategic framework, achieve a better understanding of the obligations of the private sector, and establish a link between financial mechanisms/actors with the private sector. Also, such coordination is necessary for vertical integration, e.g. connecting the actors of the value chain in order to make it more efficient.

The green economy is relevant to all economic sectors in rural areas. Rural-urban links are also important, as green investments and activities in rural areas can contribute to green economic growth in urban areas and vice versa. The transition to a green economy will require activities on many fronts, and significant investment is likely to be required to create the necessary impetus in some areas. Rural Development Programs (RDPs) can play a key role by supporting low carbon, resource and socially equitable investments, as well as fostering sustainable natural resource management across a wide range of economic sectors, not just agriculture and forestry. Although often small and not branded as contributing to the growth of the green economy, there are already many examples of RDP investments and initiatives that can contribute to job creation and economic growth within a low-carbon and resource-efficient way. Combining the measures provided via European agricultural fund for rural development (EAFRD) with the support of other EU funds and working between sectors and institutional divisions could increase support for the RDP. However, achieving the full extent of the potential transition will mean adopting current good practice to a much greater extent than is currently the case within the EU, as well as investing in new ideas, technologies and actions. Planning how to combine these measures in packages to support integrated schemes to achieve certain outcomes will be as important as using financial instruments, especially if the goal is to support small investments at the local level.

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Chapter 7. North Macedonia

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7.1. Introduction

Moving towards sustainable development practices with a green direction is becoming a strategic commitment of North Macedonia, albeit through the need for a growing alignment with Europe and required focus on environmental issues. The concept of sustainable development has become increasingly present in North Macedonia's policy agenda in the last two decades, especially in view of the EU integration. The country's Constitution, refers to the fundamental principles on which sustainable development is based. The Law on Environment (2005), lists **sustainable development among the key principles**, i.e. rational and sustainable use of natural resources must be accounted for in order to meet the needs for a healthy environment, as well as the social and economic needs of current generations, without compromising the rights of future generations to meet their own needs. On strategic planning level, the initial activities regarding the promotion of sustainable development in the country occur with the preparation of "Conceptual approach in creating the National Strategy for Sustainable Development in the Republic of Macedonia" (2000). The **National Strategy for Sustainable Development for the period 2009-2030 (NSSD)** was adopted in 2010. It sets the vision, mission and objectives for an integrative approach using the rich social, cultural and natural heritage through economically, socially and environmentally balanced development. NSSD follows the commitment to the Strategy for Sustainable Development of the European Union, but also joins the globally accepted principles and sustainable development goals.

The **National Council for Sustainable Development**, an inter-ministerial body chaired by Deputy Prime Minister for Economic Affairs, was established in 2010 and constituted in 2012. The major role of the Council is in the implementation and monitoring of the NSSD and implementation of the Goals for Sustainable Development of the United Nations in Macedonia. The Council identified SDG 1 (no poverty), SDG4 (quality education), SDG8 (inclusive and sustainable economic growth), SDG 13 (climate action) and SDG16 (peace, justice and strong institutions) as five priority goals for the period 2018-2020.

The development of **agriculture as a dominant economic activity in rural areas in an ecologically sustainable way** and the provision of improved living and working conditions of the population in rural areas, are declared among the sectoral policy priorities. The Law on Agriculture and Rural Development (2010) stresses the sustainable development of rural areas and the optimal use of natural resources with respect for the principles of nature and environmental protection among its goals. Increasing budgetary funds in the last decade were allocated to agriculture and rural development policy, with the main priority being set towards improving the general competitiveness of the sector. The national agricultural and rural development policy recognizes the importance of adopting a model of sustainable agricultural development agriculture that takes into account environmental protection and biodiversity. The main strategical document, National Agriculture and Rural Development Strategy for the period 2014-2020 (NARDS) specifically states that in the forthcoming period "agricultural holdings should implement the **concept of 'green' agriculture as a logical and natural way of performing their agricultural activities**" (NARDS, p. 74). Policy priorities included in NARDS comprise improving living conditions and business environment in rural areas; application of sustainable environmental practices in agriculture, responsible management and protection of soils and water, proper use of chemicals and improvement of the efficiency of the use of natural energy resources, environmental protection and biodiversity conservation; improving and expanding organic production systems; reducing the adverse effects of climate changes.

The concept of **sustainable development and green economy in the business sector and industry** is also increasingly coming into the focus. In the National Strategy for Small and Medium Enterprises for the period 2018-2023 (NSSME) the government expresses its will to "**support the development of SMEs within the green economy**" (NSSME, p. 28). This strategic orientation includes reforming national policies, as well as designing instruments and support services to provide incentives and support for "green SMEs" in environmentally related markets, as well as supporting the adoption of environmentally acceptable business practices. This is also in line with national industrial policy,

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sublimated in the national Industrial Strategy for the period 2018-2027, where one of the key goals is to **catylse the green industry and green production support** (agri-food processing industry included), which is one of the key big difference from the previous strategies. The Industrial Strategy takes into account that the greening of an enterprise or industry is a continuous process and cannot be achieved with a single political instrument. It also transposes the EU definitions of green industry and circular economy, and emphasizes the need for appropriate green infrastructure in terms of regulative, public procurement, certification and overall business climate.

This overview of the green economy aspects linked to agriculture and rural development further lists the existing major strategic and programming framework channelled through the line Ministry of Agriculture, Forestry and Water Economy and other relevant government institutions. Furthermore, the most important measures that are connected with green economy are provided. In the end, the main hindrances and incentives are summarized with some concluding remarks.

7.2. Main findings - Country-specific overview

The umbrella document underlying sustainable development in North Macedonia is the **National Strategy for Sustainable Development for the period 2009-2030** (NSSD). Green economy is timidly addressed in several other strategical and programming documents, but is still indirectly tackled in them and programmed through various measures. These documents take into account that EU integration is not only about the harmonization of legislation, but also implementation of European standards and criteria established by national legislation, which presume changes in the institutional set-up and engagement of human and financial resources, in order to achieve the set goals, as a complete process for approximation to the specific issues, such as sustainable development, environment protection and climate change.

7.2.1. List and overview of relevant country documents linked to a green economy

Sectoral strategy and programs

The systemic legal basis governing the development of agriculture and rural development, the objectives of agricultural policy, planning, monitoring and assessment of national agricultural policy is the Law on Agriculture and Rural Development (LARD, 2010). The law includes provisions for the establishment and implementation of national agricultural policies in the country, primarily agricultural policies under the direct auspices of agriculture, organization of agricultural markets and rural development. The national institution responsible for policy planning, monitoring and evaluation is the Ministry of Agriculture, Forestry and Water Economy (MAFWE). Following are the key sectoral strategic and programming documents.

Title	National Agriculture and Rural Development Strategy (NARDS)
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Economy
Short description of the document and its main objectives	Main long-term strategic document in the field of agriculture and rural development. The primary strategic priority is increasing the competitiveness of the Macedonian agricultural sector and agri-food industry, development of rural areas and sustainable management of natural resources (in line with the strategic orientation defined in the systemic Law of Agriculture and Rural Development, LARD, 2010). NARDS specific objectives are: <ul style="list-style-type: none"> - Restructuring and modernization of the agri-food sector - Organization of markets, food chain and improvement of the quality of agricultural products - Improving living conditions and economic activities in rural areas - Continuous access to knowledge and investment in human capital in agriculture - Completing the functionality of the food safety system - Sustainable management of natural resources
Elaborate if green economy is	NARDS recognises acceptance of environmental practices in agriculture and preserving natural resources in rural areas as one of the policy

included in the objectives	priorities, where “agricultural holdings implement the concept of ‘green’ agriculture as a logical and natural way of performing their agricultural activities”. The key objectives address sustainable management and protection of natural resources, wider application of agro-ecological approaches, market oriented organic production, biodiversity protection, efficient waste management from agriculture, production and use of renewable energy sources in agriculture, and mitigating the impact as well as adaptation to climate change.
Cross-cutting issues with other strategies	NARDS objectives are referred to and largely coincide with IPARD II objectives. A number of other strategic and programming documents have cross-cutting issues (National Strategy for Organic Production 2008-2011 and National Plan for Organic Production 2013-2020; Strategy for Environment and Climate Change 2014-2020; National Strategy for Biodiversity 2020-2023; Strategy for Development of Energetics up to 2040)

Title	National Program for Agricultural Development and Rural Development (NPADRD)
Period referred to	2018-2022
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Economy
Short description of the document and its main objectives	NPADRD is a planning and operational document for implementing the national policy for agriculture and rural development that connects strategic policy documents, primarily NARDS and multi-year budget planning, with annual operational programs. According to LARD (2010, Article 7), the national program in particular contains: instruments and measures and activities for implementation of the measures; schedule and deadlines for implementation; and indicative financial framework for their implementation. The measures of the national program are grouped according to the division of policies prescribed in LARD: direct payments, rural development and organization and support of agricultural markets.
Elaborate if green economy is included in the objectives	Green economy objectives are indirectly included in a number of measures. The RD measures continue from the previous cycle in supporting sustainable management and utilization of natural resources, support for organic production and protection of biodiversity and environment. Measures design takes into account climate change effects, especially in the part of increased support for investments in efficient and economical irrigation systems and renewable energy, investments in waste treatment from agricultural production, especially livestock, as well as sustainable management of natural resources, environmental protection and biodiversity conservation, as well as direct payments for breeding of indigenous breeds of animals. Direct payments in areas with natural constraints are exempt from the progressive decrease linked to the size of reported capacities, being recognized as important for the sustainability of rural areas due to the lack of employment alternatives. Direct payments are conditioned by implementation of good agricultural practice and environmental protection that support users must meet.
Cross-cutting issues with other strategies	NARDS is the basis for defining the Program and the measures of financial support for agriculture and rural development for a period of five years. When defining the measures for rural development, the complementarity with the measures in the IPARD Program is taken into account.

Title	Instrument for Pre-Accession Rural Development Programme 2014-2020 (IPARD II)
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Economy
Short description of the document and its main objectives	The Instrument for Pre-accession assistance supports adopting and implementing political, institutional, legal, administrative, social and economic reforms in order to comply with EU values and to progressively

	align to EU rules, standards, policies and practices, with a view to EU membership. The specific objectives of the Programme include: - Enhancing farm viability and competitiveness of all types of agriculture and primary food-processing, while progressively aligning with EU standards - Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry - Promoting balanced territorial development in rural areas - Transfer of knowledge and strengthening public administration capacity in implementation of rural development programmes
Elaborate if green economy is included in the objectives	Green economy issues are related to overall IPA objective of sustainable growth and in line with the recognized needs to introduce natural resources and biodiversity protection, to strengthen advisory service supporting farmers in implementing agri- environmental practices, to increase the use of energy crops and renewable energy sources, to improve waste management and overall to support of rural economy and quality of life.
Cross-cutting issues with other strategies	IPARD II objectives correspond to the main strategic and specific objectives in NARDS 2014-2020 (enhancing farm viability and competitiveness, agro-environmental objectives for restoring, preserving and enhancing ecosystems dependent on agriculture and forestry, improving socio-economic development in rural areas and human potential). IPARD II aid should not overlap with the scope of aid granted under the national support schemes for agriculture and rural development. Other IPA policy areas have environmental actions, but there are demarcation criteria to determine the scope.

Title	National Plan for Organic Production (NPOP)
Period referred to	2013-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Economy
Short description of the document and its main objectives	Following the National Strategy for Organic Production 2008-2011, NPOP 2013-2020 is the instrument that provides the basis for development of organic production in the North Macedonia. The National Plan determines the directions, activities and measures, to be implemented by MAFWE for the period 2013-2020, and also presents a basis for planning and realization of the financial support of this sector. MAFWE has adopted the following strategic goal: to increase the competitiveness of organic production in North Macedonia for successful sales on the domestic and foreign markets.
Elaborate if green economy is included in the objectives	The specific objectives of NPOP target the following by 2020: increase the area under organic production and number of certified animals in organic livestock (including beekeeping and fishing), to 4% share; identify and support strategically important organic products; improve availability of raw materials allowed for use in organic production; diversify the industry involved in processing of organic agricultural products; increase public awareness, demand and consumption of organic agricultural products; links with eco-tourism; increase organic agricultural products exports; improve infrastructure in control, certification and supervision services; enhance education and research in the field of organic production; intensify and expand research on the potential of natural resources in the country; strengthen knowledge, human resources, and institutional infrastructure); support communication, cooperation and networking between stakeholders. It also targets wild and non-cultivated plants; increase the number of entities and areas certified for collection; establish a sustainable way of using natural resources through organic certification of entities.
Cross-cutting issues with other strategies	NPOP intervention areas and measures are foreseen to be realized primarily through the agricultural and rural policy. Also the National Extension Agency, advisory sector and educational/research institutions are to include organic production in their scope of services/curricula.

Cross-sectoral and other relevant strategies and programs

There are a number of documents that are connected to the underlying issue of sustainable development and green economy. Depending on the scope, different government institutions are responsible for their preparation and implementation.

The Ministry of Environment and Physical Planning (MoEPP) is responsible for various aspects of sustainable development, climate change, circular / green economy, etc. The key documents are list below. Besides them, other important acts include **Nature Protection Strategy** for the period 2017-2027 (Ministry of Environment, and Spatial Planning) envisions that diverse and protected nature is a basis for a healthy and prosperitive society. Among its objectives, it calls for harmonization of this Strategy with other strategic documents from other sectors (forestry, agriculture, livestock, fisheries, transport, energy, industry, mining, tourism, construction, etc.) by integrating the nature protection policy. The **Waste Management Strategy** (2009-2020) is a document that aims to mitigate the current effects of waste on the environment (inadequate waste management on air, water, soil), with a further intention to achieve full control over the generated waste flows, to reduce the amount of waste and the potential danger of the same, introducing technologies for cleaner production and sustainable management of natural resources and waste, as well as to reduce greenhouse gas emissions. The Strategy for Waste management recognizes agriculture and forestry in terms of by-products (manure, animal and crop waste) and the potentials for reusing biomass as a renewable energy source.

Last but not least, the **National Programme for Adoption of the *Acquis Communautaire* (NPAA)** is a key cross-sector strategy being implemented by the Government, being a comprehensive long-term document that defines the dynamic of the adoption of the *Acquis Communautaire*, strategic guidelines, policies, reforms, structures, resources and deadlines to be realised by the country to fulfil the requirements for European Union membership.

Title	National Strategy for Sustainable Development (NSSD)
Period referred to	2009-2030
Key responsible institution(s)	Ministry of Environment and Spatial Planning
Short description of the document and its main objectives	The far-reaching goal and direction for achieving sustainable development in North Macedonia is to join the EU as soon as possible. The goals and directions stipulate upon the natural and cultural resources, to maintain sustainable integration of tourism, forestry, agriculture and industry with sustainable support from energy sector, infrastructure and transport sector. The environmental sector is seen as inter-sectoral in the above-mentioned integration. Sustainable development is recognized as a continuous process that requires constant adjustment, monitoring and improvement.
Elaborate if green economy is included in the objectives	The strategic priorities in this Strategy include raising awareness, e-governance and institutional strengthening with regard to sustainable development. One of the strategic priorities is directing the private sector towards development based on the principles of sustainable development. Small and medium-sized enterprises are in the focus, especially operating in tourism, agriculture (primary production and biofuels), food production (canning, wine, cheese, tobacco, traditional recipes, herbs, etc.) and crafts, supporting entrepreneurship, use of the benefits of information and communication technology, research and development; ensuring the rational use of energy and other raw materials and strengthening human resources. A list of indicators for monitoring sustainable development includes those for rural development (in view of this Strategy, including agriculture, forestry and tourism).
Cross-cutting issues with other strategies	Rural development is an integral part of the sustainable development strategy – the document calls for a comprehensive strategy and planning.

Title	Strategy for Environment and Climate Change (SECC)
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Environment and Spatial Planning

Short description of the document and its main objectives	The vision stipulated by this document is "preserving, protecting and promoting the quality of the environment and the quality of life of citizens in order to enable sustainable growth that will contribute to achieving global environmental goals". In terms of sustainability, the goal is to improve overall quality of life and avoid any permanent damage to the environment, leading to sustainable growth. In terms of environmental protection, the goals are aimed at preserving and improving the quality of water, air and soil, maintaining biodiversity and conserving natural resources in the country. In terms of climate change, the goal is to reduce its negative impact. The operational objectives include: <ul style="list-style-type: none"> - Implementing environmental legislation in accordance with EU legislation; - Monitoring, analysis and assessment of the state of the environment and reporting on the situation; - Raising awareness on environmental issues; - Integrating environmental protection into sectors that affect the environment; - Reducing the negative effects of climate change and increasing the capacity for adaptation of the most vulnerable sectors to climate change; - Supporting "clean" technologies and changes aimed at using renewable energy sources and reducing energy consumption.
Elaborate if green economy is included in the objectives	Although not explicitly included as a term, the whole strategy focuses on sustainability, environmental protection and mitigation/adaptation to climate change. The strategy supports the need to incorporate environmental issues and climate change into other sectoral policies.
Cross-cutting issues with other strategies	National Agriculture and Rural Development Strategy (NARDS); Instrument for Pre-Accession Rural Development Programme 2014-2020 (IPARD II); National Plan for Organic Production 2013-2020; Strategy for Environment and Climate Change 2014-2020; National Strategy for Biological Diversity 2020-2023; Strategy for development of energetics up to 2040.

Title	National Strategy for Biological Diversity with action plan (NSBD)
Period referred to	2018-2023
Key responsible institution(s)	Ministry of Environment and Spatial Planning
Short description of the document and its main objectives	The vision of the document is that "biological diversity, unique natural resources and traditional human connections with nature in the Republic of Macedonia are preserved, valued and provide ecosystem services that contribute to human well-being." The strategic goals include overcoming the causes of biodiversity loss, reduction of direct and indirect pressures on biological diversity, preserving ecosystems, species and genetic diversity and improving the knowledge and availability of all relevant information related to biodiversity. Agriculture, forestry and water management are stressed as key sectors influencing biodiversity. The values of biodiversity should be gradually incorporated into national and local economic development policies (poverty reduction, national and local development plans, environmental accounting, etc.).
Elaborate if green economy is included in the objectives	The strategy calls for approximation of relevant policy of subsidizing agriculture, rural development and energy sectors to support biodiversity; support for action to reduce the abandonment of traditional agricultural practices (e.g. mowing) and degradation of rural areas in hilly and mountainous areas; promotion and support of biodiversity protection measures in agriculture and rural development; support farmers with indigenous crops and livestock; support the implementation of good agricultural practice and introduction of agro-ecological measures; assess the effect of renewable energy sources on biodiversity; reduction of use of biocides, hormones and chemicals; identification of high natural value areas; bio-conservation
Cross-cutting issues with other strategies	In the area linked to agriculture and rural development, NSBD has cross-cutting issues with NARDS and IPARD.

The Ministry of Economy is responsible for various policies, strategies and action plans in the country. The **Industrial Policy 2009-2020**, prepared by the Ministry of Economy (ME) and adopted by the Government in June 2009, was a national strategic document aiming to increase the competitiveness of industry and the economy in general. The policy has focused on five areas of action, as the main pillars of increasing the competitiveness of the domestic industry, namely: international cooperation and foreign direct investments; applied research, development and innovation; ecological products and services for sustainable development; development of SMEs and entrepreneurship; cooperation in clusters and networks.

Title	Industrial Strategy with Action Plan (IE)
Period referred to	2018-2027
Key responsible institution(s)	Ministry of Economy
Short description of the document and its main objectives	The vision of this document is improving industrialization by stimulating growth and development of the manufacturing industry in order to increase productivity, create good jobs, increase revenue and strengthen human capital while addressing the challenges of the circular economy. There are five strategic goals (strengthening the processing industry base; increasing productivity, innovation and technology transfer; catalysing green industry; stimulating exports; creating learning environment). Although the policy is horizontal, it foresees support of proactive companies producing high added value in the sectors agriculture and services.
Elaborate if green economy is included in the objectives	The third strategic goal, Catalysing Green Industry and Green Production, is an added strategic priority as compared to the previous strategy. This approach promotes sustainable models of production and consumption (resource and energy efficient, low carbon, low waste, non-polluting, safe and responsibly managed during their life cycle). It focuses specifically on SMEs in the manufacturing industry through introducing green regulations, green public procurement, helping businesses incorporate sustainability into their business plans, development of Industrial Green Zones, greening of supply chains through certification, increasing resource/energy efficiency and reducing carbon/cleaner production.
Cross-cutting issues with other strategies	The Industrial Strategy connects and acts as an umbrella document over several other documents under the Ministry of Economy (follow-up of Industrial Policy 2009-2020, Strategy for small and medium enterprises 2018-2023, Strategy for innovation 2013-2020, Strategy for energy development until 2030) Ministry of Education and Science (Strategy for entrepreneurial learning 2014-2020), and the government Competitiveness strategy 2016-2020. Agriculture, food industry, green energy and waste management are recognized among the sectors with biggest technological and innovative potential.

Title	National Strategy for Small and Medium Enterprises (NSSME)
Period referred to	2018-2023
Key responsible institution(s)	Ministry of Economy
Short description of the document and its main objectives	The vision of the strategy foresees SMEs to be drivers of inclusive economic growth and in the creation of productive and sustainable jobs by 2023. The general goal is to define a framework for cooperation between public and private sector stakeholders and civil society in order to support the development of SMEs and innovation in order to increase their competitiveness. Strategic goals are (1) creating favourable business environment in which entrepreneurship and investment are encouraged; (2) increasing and improving opportunities for SME growth, by helping SMEs become highly productive and competitive participants in European and other international markets; (3) encouraging economic competitiveness by increasing the entrepreneurial and innovative capacity of SMEs. The strategy is prepared in accordance with the EU Small Business Act.

<p>Elaborate if green economy is included in the objectives</p>	<p>In line with the EU Small Business Act, the Strategy adopts one of the key principle, enabling SMEs to turn environmental challenges into business opportunities: the government is to provide more information, expertise and financial incentives to help small and medium-sized enterprises seize opportunities for new "green" markets and increased energy efficiency, in part through implementation of environmental management systems in SMEs.</p> <p>In its second pillar (program 2.4), the Strategy comprises support of SME participation in strategic value chains. It is explicitly stated that the government will also support the development of SMEs in the green economy and the development of "green SMEs".</p>
<p>Cross-cutting issues with other strategies</p>	<p>The Strategy has cross-cutting issues with other documents under the Ministry of Economy (Industrial Policy 2009-2020, Strategy for innovation 2013-2020). Agriculture and food industry are recognized as key sectors.</p>

7.2.2. Concrete measures linked to the green economy

Agriculture and rural development measures are channelled through national policy and IPARD II. The national agriculture and rural development policy dedicates the majority of the budget to market and direct support to producers, while structural and rural development support measures are still below the projected 30% share in NARDS 2014-2020.

The main funding in the sector comes from the national budget, supplemented with EU funds through IPARD I (2007-2013) and IPARD II (2014-2020). National measures are listed in the Program for financial support of agriculture (mostly direct payments), Program for financial support of rural development, Programs for financial support of aquaculture. A decade ago, there was a separate program for organic production, but now, the organic production is supported as additional payments (percentage increase) to the regular direct payments, as well as with a list of measure supporting the process of certification, or promotion of organic products. (more details are given in the following table).

The objectives of the IPARD II are addressed by eleven measures and the implementation started with five measures. These five measures were foreseen to be implemented in the entire programming period 2014-2020, with the exception of measures "Investment in rural public infrastructure" and "Technical assistance" measure, which were to be implemented after accreditation. The remaining six measures were planned to be introduced at a later stage. The reasons to postpone the start of the implementation of the remaining measures, according to the program rationale, is due to the need for additional preparation and capacity building. The Measure "Agri-environment-climate and organic farming measure", was initially planned to be introduced in the first round of program modification in 2015; appropriate measure actions, guidelines, procedures, methodology for calculations of the amounts to be given to farmers are still due, as well as capacity building of the beneficiaries for better uptake of the funds.

Agriculture and rural development measures

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Knowledge transfer	MAFWE (national budget)	<ul style="list-style-type: none"> - Preparation and publishing educative, informative, scientific, promotional and professional materials, publications and journals; Implementation of research, analyses, project proposals, studies and strategic documents; - Investments for establishment of scientific-demonstrational examples (pilots); - Establishment and implementation of innovative practices. 	AE	Technical support, so far not necessarily used on green aspects on agriculture.
	IPARD II	Improvement of training (M4.1.)	IN	The measure was planned to be introduced in 2015/2016 (after establishment and entry into force of clear rules for designation of training providers, approving of training modules and curricula), but is still not.
Advisory services	MAFWE (national budget)	Use of advisory services (M114) Beneficiary: National Extension Agency	EX	This measures have been programed in Program for financial support of agriculture from 2014 to 2017, but payments are made only in 2014;
	IPARD II	Advisory services (M4.3) (planned sub-measures: advisory services to farmers – advices “on-on-one”, including IPARD projects preparation and realisation, and group advises, including sustainable agricultural production and advises regarding new technologies; training of advisors)	IN	Existing in the IPARD II program, but still not accredited. The measure’s introduction is pending the ongoing preparation of the New Law on advisory services and establishing a system for training of advisors.
Quality schemes	MAFWE (national budget)	<ul style="list-style-type: none"> - Payments per farm for soil and organic product analysis for pesticide residues, heavy metals, etc. (70% of the cost, max per farm defined); - Payments for compensation of the costs for professional control and certification, (50% of the costs). 	AE	These payments are in line with the organic production support
Physical Investments measures	MAFWE (national budget)	<ul style="list-style-type: none"> - Investments for modernization of agricultural holdings - establishing new crop plantations, purchase of livestock, bee queens, bee swarms, tractors or a drip irrigation system, construction of wells and other intervention of surface water (M121); - Investments for processing and marketing of agricultural products (M123); - Capital investments in hydrological infrastructure, access to agricultural land (M124); 	AE	These measures are not necessarily green, if not used for organic production, in LFA areas; still good agricultural practice is required.

	IPARD II	<p>- Investment in physical assets of agricultural holdings (M1.1) to modernize and restructure physical potential, to improve the overall performance of agricultural holdings in the primary agricultural production, as well adding value to the production and marketing; It promote EU standards, especially related to environment protection and animal welfare (these projects are given a priority), and promote the use of renewable energy. Beneficiaries: agricultural holdings (individual and companies) and cooperatives, subject to common eligibility criteria.</p> <p>- Investments in physical assets (M1.3) concerning processing and marketing of agriculture and fishery products – to improve the overall performance, economic productivity and competitiveness of the food processing entities through: better use of production factors; introduction of new products, processes and technologies; strengthening the supply chains and integration between processors and agriculture producers; improving quality and safety of foods and their traceability; achievement of compliance with EU standards; and improvement of environmental protection. Beneficiaries: legal entities and cooperatives. Priority is given to projects related to environmental protection (investments aimed at decreasing negative impact on the environment through energy efficiency, waste and by-product treatment and valorisation, water/sewerage treatment or introduction of energy production from renewable resources)</p>	AE	Interest is primarily for purchase of equipment and machinery. No interest in investments for (re)construction of agricultural facilities, development of ag. infrastructure or facilities for post-harvest activities and direct marketing of holdings. One reason is inability of applicants to obtain building/reconstruction permits (legalization of agricultural holdings, lack of detailed urban plans in villages and poor capacity of rural municipalities responsible for issuing documents to applicants are additional problems). Similar to M1.1, in M1.3 most investments are for purchase of machinery and equipment for specialized manufacturing activities. However, few applications include investments in (re)construction of operational facilities. Interest is low for investing in improving animal welfare standards, waste water management, or improving infrastructure for businesses (MAFWE/IPARD, 2019).
Farm and business development	MAFWE (national budget)	<p>-Aid for young farmers for starting an agricultural activity (M112);</p> <p>-Organization and implementation of events and fairs for promotion of agricultural products in the country;</p> <p>-Aid for marketing of agricultural products and processing (M1.3)</p>	AE	Not necessarily green, if not being for organic production or in ANC
	IPARD II	Farm diversification and business development (M3.2) - Sustain the agricultural activities in the rural area through provision of specific services; Develop and promote rural tourism services and activities; Develop non-agricultural micro and small enterprises based on local resources and related to the improvement of the quality of life in rural area; Preserve and develop traditional handcraft activities; Promote entrepreneurship in rural areas; Increase primary energy consumption from renewable energy resources. Beneficiaries: agricultural holdings (individual and companies) and cooperatives, subject to common eligibility criteria.	AE	Interest for investing in the construction and reconstruction of operational facilities for the respective economic activities prevails, as well as investments for improving the infrastructure of the applicants.

Basic services	MAFWE (national budget)	<ul style="list-style-type: none"> - Consolidation of agricultural land (M124.5.); - Improvement of quality of life in rural areas (M321); - Village renewal and development (M322); - Preserving and promoting traditional values in rural areas (M323); - Aid to preserve rural areas and their traditional features (compensation of costs for maintenance of high pastures and meadows, and support of traditional sheep-breeding.) (M213); - Investments for state owned pastures (access to pastures, access to water and electricity at pastures) (M124.3) 	AE	Indirect link to green economy.
	IPARD II	Investments in rural public infrastructure (M3.1) - Provide infrastructure needed for the development of rural areas; Contribute towards the improvement of living standards for rural population; Support public investments necessary to achieve development and environmental aims; Increase the attractiveness of rural areas for local and external investors. Beneficiaries: local authorities and selected public enterprises.	IN	Accreditation of this measure is still ongoing.
Investment in forestry	MAFWE (national budget)	Investments for increasing the economic value of the forests (M122)	AE	
	IPARD II	Establishment and protection of forests (M2.2)	IN	Programmed measure, still not introduced.
Producers organisation	MAFWE (national budget)	Economic association of agricultural holdings for joint performance of agricultural activity (for establishing and maintaining cooperative, and organizing and performing joint activities) (M131)	AE	
	IPARD II	Support for the setting-up of producer groups (M1.2)	IN	The measure is planned pending new regulation for establishment and functioning of agriculture cooperatives.
Agri-environment climate and organic farming	MAFWE (national budget)	<p>Agri-environment measures are to some extent included in the national agriculture and rural development policy.</p> <p>The main focus is organic farming with few related measures:</p> <ul style="list-style-type: none"> - Organic farming support (M215), with increased direct payments for certified plant and livestock organic production or production in transition: from 30% (for seeds and seedlings), 50% (livestock), 70% (orchards and vineyards), to 100% (for vegetables); - Additional payments are given for processing and packaging of organic products and organic products in transition (2% of the value products); 	AE/EX	<p>Measure 214 fosters maintaining the biodiversity, especially local breeds and varieties.</p> <p>Since the number of bees is decreasing worldwide, any attempts to preserve and increase the species is significant and green.</p>

		<p>as well as for trade or export of fresh and processed organic products and organic products in transition (5% of the value).</p> <ul style="list-style-type: none"> - Payments per area used for green manure (areas with grass mixtures that serve for green manure) or set-a-side (one year only); <p>The biodiversity is being supported with:</p> <ul style="list-style-type: none"> - Additional direct payments per head of indigenous breeds of cattle, sheep, and goat (given to producers) - Aid for establishing, monitoring and analysis of the state with the indigenous agricultural plant species and livestock breeds, and payments for conservation of the genetic biodiversity of the indigenous livestock breeds / given as grant to responsible institution for biodiversity keeping (M214); <p>Some measures are not explicitly identified as but are such in its nature: most of all payment for registered wintered bee hives, and the additional payment for beehives included in production of breeder queen.</p>		
	IPARD II	<p>Agri-environment-climate and organic farming measure (M2.1) (planned sub-measures: protection of local varieties and breeds - local breeds of sheep and cattle and traditional plant varieties; water and soil protection through sustainable methods of agricultural production - soil and water conservation by planting green areas and crop rotation; organic plant production - vegetables, medicinal and aromatic plants.</p>	IN	<p>Introducing the measure assumes prepared Agro-ecological programme, Paying Agency procedures, memorandum of understanding, intervention in LARD, system of sanctions etc.</p>
Areas with natural constraints (ANC)	MAFWE (national budget)	<p>Aid for agricultural production in ANC (at an altitude of over 700 meters or settlements with less than 100 population), the allocated direct payments increase by 15%, and the reduced minimum required capacity of agricultural land, livestock or bee hives (M211)</p>	AE	
Implementation of Local Development Strategies – Leader Approach	MAFWE (national budget)	<ul style="list-style-type: none"> - Establishing Local Action Groups (M412); - Realization of Strategies for local development of rural areas (M413); - Support of establishment and activities of national rural network 	AE	<p>Recently introduced measures; National rural network planned to be established</p>
	IPARD II	<p>Implementation of Local Development Strategies - LEADER Approach (M3.3) (planned sub-measures: acquiring skills and animating the inhabitants of the LAG territories, for building capacities and animation of selected LAGs; operating costs and expenses for realization of small projects, for implementation of strategies for local development; cooperation projects, for inter-territorial or transnational projects)</p>	IN	<p>Existing in the IPARD program, but still not accredited</p>
Financial instruments	MAFWE (national budget)	<p>Subsidized interest rate</p>	AE	<p>Already existing</p>

Direct payments	MAFWE (national budget)	<ul style="list-style-type: none"> - Payments based on output (price aids): for produced and sold tobacco, cow, sheep and goat milk, day-old chicks, produced seeds and seedlings, as well as additional payments for fruits, vegetables and wine grapes delivered to processing industry, as well as for rice. - Payments based on area: Payments for field crops (excluding tobacco), with additional payments if sown with certified seed, or forage crops; Additional payments for conversion from cereal to vegetable, fruit and vine production; Payments for vegetables, with additional payment if produced in controlled conditions; Payment for orchards and vineyards with additional payments if changed variety structure; Payments for arable crop and tobacco seeds, for decorative and fast-growing seedlings, and for snail farming; and Payments for honey plants - Payments based on livestock numbers: Payments for breeding cattle, sows, sheep, goats, and laying hens, and ostrich farming. Additional payments for increased livestock capacities, for kept offspring as well as for slaughtered heads (cattle, young bovines, pigs and poultry) 	AE	The beneficiaries of direct payments need to meet the minimum requirements of the good agricultural practice, environmental protection, and the cross-compliances. Among the payments based on area; greenest areas are the payments for production of honey plants (thus supporting bee production), for production of green manure, or payments for set-a-side (for one year only). In addition, to these payments, producers are granted additional 15% if in ANC, or additional 30-100% if organic production. Among the payments based on livestock, measures linked to agri-environment are the payments for indigenous breeds and bees.
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Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Measures other than Agriculture and RD

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Catalysing Green Industry and Green Production	Ministry of Economy	The set includes eight measures (within Strategic goal 3 Industrial policy 2018-2027) linked to green economy (measures 3.1. to 3.8): introducing green regulatory reform; green public procurement of goods and services; incorporating sustainability as basic business strategy of processing companies; supporting green initiatives in the processing industry (green value chains); development of Industrial Green Zones with a focus on the processing industry; stimulating resource / energy efficiency and low carbon / resource efficiency / best available processing techniques; supporting SMEs in re-production.	IN	Still not in process of introduction

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

7.3. Hindrances, boosters and steps to promote green economy

Besides from having a solid legal framework backed up with a number of EU aligned acts and a strategical orientation towards sustainable development, green economy has not been so far a major focus in practice. Promoting the concept requires strong policy will and policy support, institutional strengthening and a system of incentives to motivate green economy practices.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • The national policy (and its objectives) is less visible for the applicants, due to number of amendments of the national programs, which confuses all users, especially the less educated ones • The administrative requirements and paperwork required for application for IPARD are overwhelming for applicants • Certain measures in IPARD II are still not introduced (e.g. agri-environment-climate and organic farming, LEADER-approach) and some still lack conditions for introduction and accreditation (e.g. advisory services, improvement of training), • The process of programming, inclusion and accreditation of measures for the next programming period to start in a timely manner so that the use of the funds can be initiated on time, • Structural weaknesses of the agricultural system (large share of small agricultural holdings, fragmented land); • Low level of education, qualifications, entrepreneurial skills of the labour force in agriculture and rural population; no knowledge regarding green economy - advisory services access and professional training opportunities need to be strengthened; the whole agricultural knowledge, innovation and information system needs a boost. • Lack of own capital and difficult access to finance, for small holdings in particular; • Lack of vertical and horizontal integration; • No green regulative harmonized with EU • Competence and technical capacity are an obstacle to adopting green economy initiative • Equipping the relevant institutions with sufficient human capacities remain a challenge 	<ul style="list-style-type: none"> • Political will for promotion of sustainable development in the country • The existing legal framework is solid, but in some segments overlapping or not being clear • Coverage of strategic and programming documents; need for following the action plans with consistent, stable and multi-annual budgets • The national budgetary support for agriculture and rural development is more flexible and (can) support operations not covered in IPARD • Encourage green business models in agriculture and rural development • Encourage sustainability and green economy as business strategy for agri-food processors • Encourage green technological solutions • Possibilities for cost reductions through efficient use of resources; can be a major incentive to adopting green economy • Support diversification of activities through green economy development • Supporting local authorities in implementing policies and actions aimed at sustainable development and green economy • Encourage a participatory process to increase awareness about natural resources depletion, climate change and the need to adopt green economy measures. • Instigate and promote knowledge and innovation related to the concept of green economy in academia-industry-government-public-environment interactions

Certain steps and targeted measures need to be taken in order to promote the green economy in the agricultural and rural development programs, as well as potential cross-cutting measures to be coordinated by relevant ministries (agriculture-environment-economy).

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
Accreditation and implementation of the remaining, not yet introduced IPARD II measures (especially in the area of agri-environment, climate and organic farming, LEADER-approach, advisory services)	MAFWE, IPARD Managing Authority, AFSARD
Raise the awareness among potential applicants about green economy related opportunities offered by national program and IPARD II, as well as other related measures	MAFWE
Further simplify the administrative and paperwork requirements for applicants (including for measures linked to green economy).	MAFWE; AFSARD
In national programs and in the next IPARD programming period, direct more attention and funds towards the measures for development of rural areas (investments in rural public infrastructure, diversification, LEADER, etc.)	MAFWE, IPARD Managing Authority
Establish indicators to monitor green economy performance	MAFWE
Enable accessible and quality advisory services, focusing on green economy practices. More use of knowledge-in-practice measures, but also enabling a functional agricultural knowledge and innovation transfer system.	MAFWE; National Extension Agency
Introduce green regulative	Ministry of Economy, Ministry of Environment and Spatial Planning
Introduce green public procurement	Ministry of Economy, Ministry of Environment and Spatial Planning

7.4. Concluding remarks

Common denominator in the current strategic and programming documents in the country are the cross-cutting priorities, such as promoting activities benefiting the environment; addressing adaptation to climate change and mitigation of its effects; balanced development of rural, less economically viable or naturally constrained areas; encouraging local development; and, among others, preserving of local traditions and cultural heritage and its promotion through (rural) tourism. Many aspects are covered by the vast number of strategic and programming documents, linked to the agriculture and rural development and green economy, covering economic, environmental and social dimensions. However, the large number of documents poses challenges for coordination and accountability of the different policies' goals and institutional responsibility. Many include action plans, but the projected time frames are often ambitious and many activities are not implemented.

Although declared among the key priorities of the agricultural and rural development policy, the use of measures aimed at sustainable, environmental, climate-aware and green practices is still marginal. The measures from the national budgetary support are numerous, very diverse and often are being changed in the annual programs, which often causes confusion for the beneficiaries. Even though certain steps have been taken to simplify the procedure and administrative requirements, it is still complicated and time-consuming. Notable national budgetary support is provided for organic production, which is gradually growing; yet, the projected 4% share of area under organic production in NPOP 2013-2020 is still far-fetched (in 2019, organic production took 1% out of the total agricultural area). Increased actions in the agri-environmental domain, aligned with EU CAP, will importantly boost the spread and adoption of green practices. Even though the physical investments measures in both the national and IPARD II program include investments related to environment protection and renewable energy resources, very little of these funds have so far been used for such purposes. This, coupled with adequate training and support, leaves room for increased green economy related applications.

Overall, further approximation with the EU CAP could provide structure for promoting green economy. Coordination between the relevant stakeholders, especially the government institutions, as well as building competence and technical capacity, is necessary to pursuit the strategical goals and facilitate comprehensive and not-overlapping array of measures, that will ultimately provide conditions for adopting green economy practices.

7.5. References and other relevant sources

Strategic and programming documents

- MAFWE (2007) National Strategy with Action Plan for Organic Production 2008-2011. Skopje: Ministry of Agriculture, Forestry and Water Economy.
- MAFWE (2013) National Plan for Organic Production 2013-2020, NPOP. Skopje: Ministry of Agriculture, Forestry and Water Economy.
- MAFWE (2014) National Agriculture and Rural Development Strategy for the period 2014-2020, NARDS. Skopje: Ministry of Agriculture, Forestry and Water Economy, OG 197/2014.
- MAFWE (2018) National Program for Agricultural Development and Rural Development 2018-2022, NPADR. Skopje: Ministry of Agriculture, Forestry and Water Economy, OG 32/2018.
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- MES (2014) Strategy for entrepreneurial learning 2014-2020. Skopje: Ministry of Education and Science.
- MESP (2010) National Strategy for Sustainable Development 2009-2030, NSSD. Skopje: Ministry of Environment and Spatial Planning.
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- RNM (2020) Strategy for development of energetics up to 2040. Skopje: Government of the Republic of North Macedonia, OG 25/2020.

Legislative documents (published in OG - Official Gazette of the Republic of (North) Macedonia)

- Law on Agriculture and Rural Development (OG 49/2010, amended 49/2010; 53/2011, 126/2012; 15/2013; 69/2013)
- Law on Organic Production (OG 146/2009)
- Law on Agricultural Land (OG 135/2007, 17/2008, 18/2011, 42/2011, 148/2011, 95/2012, 79/2013, 87/2013, 106/2013, 164/2013 and 39/2014)
- Law on Consolidation of Agricultural Land (OG 187/2013, last amended 83/2018)
- Law on Environment (OG 53/2005)
- Law on Seeds and Seedlings (OG 55/11)
- Law on Quality of Agricultural Products (OG 140/2010, 53/2011; 55/2012)
- Law on Livestock (OG 7/2008, 116/2010 and 23/2013)
- Law on Forests (OG 64/09, 24/11, 53/11, 25/13, 79/13, 147/13 and 43/13)
- Law on Fisheries and Aquaculture (OG 7/08, 67/10, 47/11, 53/11 and 95/12)
- Law on Waters (OG 87/08, 06/09, 161/09, 83/10 and 51/11)
- Law on Water Economy (OG 85/03, 95/05, 103/08, 1/12 and 95/12)
- Law on Water Communities (OG 51/03, 95/05, 113/07 and 36/11)
- Law on Pasture Management (OG 3/98, 101/2000, 89/2008, 105/2009, 42/10 and 164/2013)
- Law on Tourist Development Zones (OG 141/12)
- Law on Protection and Welfare of Animals (OG 113/2007 and 136/2011)
- Law on Food Safety (OG 157/10)
- Law on Energy Efficiency (OG 32/2020)

Other documents and sources

- MAFWE/IPARD Managing Authority (2019) Annual report for implementation of the implementation of the IPARD Program 2014-2020 (for the period until November 2019), Sixth Meeting of the Monitoring Committee of the IPARD Program 2014-2020.

Chapter 8. Serbia

Natalija Bogdanov*

8.1. Introduction

The Serbia's sustainable development path started since the beginning of 2000s, by including the Rio Declaration, Agenda 21 and Rio Conventions in relevant national policy documents²³. In a coming years the initial enthusiasm for and commitment to economically, socially and environmentally sustainable economy slowed down, as well as resources devoted to sustainable and green issues and activities. The consequences are that the concept of green economy is not yet well mainstreamed and integrated into development policies, sector plans, legislation and budgeting, while practical implementation in many aspects is only at an early stage.

National strategies and programs in Serbia do not explicitly address green economy issues, neither there is a comprehensive policy framework for addressing sustainable and green economy needs. Nevertheless, it should be noted that a green transition of different sectors, institutions and thematic areas is progressing at different pace, with varying degrees of success, and that there are examples of good cooperation, practice and innovation.

Over the last years some progress has been made in harmonization policy and regulatory frameworks with the EU *acquis* in the field of climate change, environment (nature protection, water quality, pollution, waste management, civil protection), as well as in food safety, veterinary and phytosanitary policy. However, the implementation of most of the policies and regulations is rather weak, and still requires a lot of adjustments as most mechanisms are still not fully operational.

The key challenges still to be addressed are related to areas of energy efficiency, clean energy, climate change, agricultural drainage water management and pollution control, which cause serious damage to the economy and the population well-being. Addressing these issues will require a shift from the reactive to proactive approach, i.e. from current strategies focusing on emergency response, to building resilience and risk management.

Serbia is endowed with a diverse landscape and rich natural capital, including productive land, biodiversity, water resources and forests. However, recent trends have shown that climate change, changes in land use and mismanagement of natural resources, as well as rapid population declines, have great negative impact on rural economy and the environmental degradation. Climate change and the increased frequency of extreme weather events have brought new risks for farmers, while the mismanagement of natural resources and biodiversity has resulted in adverse effects on the rural landscape and in the degradation of resources. On the other side, the potential benefits of abundant natural resources are little or no exploited for generation of economic gain.

Over the last years Serbia has made significant progress in align its agricultural policy and legislation with the EU agricultural *acquis*. The agro-environmental concerns and benefits of biodiversity and natural resource management are addressed across the main policy documents, and some agro-environmental measures are designed to compensate for the costs faced by farmers when implement certain practice (organic producers), when keep genetic resources etc. The current rural development policy is largely concerned with the farmers' economic welfare and market competitiveness, while the opportunities of green agriculture have remained out of focus.

The key funding sources for green-related activities and investments in agriculture sector are the national agricultural budget and Instrument for Pre-accession Assistance for Rural Development programme (IPARD II). In addition to these funding sources which primarily are intended to support farmers' investments, there are several other funding opportunities available which are available for green agriculture activities and projects, provided by local public funds, other ministries and government agencies. However, these funds are intended to support businesses with indirect impact on green agriculture.

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²³ Serbia committed to and signed the Paris Agreement on Climate Change (2016) and ratified it in (2017), pledging to cut 9.8% of CO₂ emissions by 2030.

8.2. Main findings - Country-specific overview

8.2.1. List and overview of relevant country documents linked to a green economy

Despite the absence of single and overarching strategic document on sustainable development and/or green economy, its key aspects are well covered with public policies in Serbia. This includes a number of sectoral and multi-sectoral policy documents, as well as cross-cutting policies guiding reforms related to EU accession.

The policy framework for implementation of a green economy in the agriculture sector is complemented and supported by, and integrated with, a range of national, sub-national and international strategies and multi-annual programmes.

Sectoral strategy and programs

Title	Strategy of Agriculture and Rural Development of the Republic of Serbia for the period 2014-2024 (SARD)²⁴
Period referred to	2014-2024
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia
Short description of the document and its main objectives	<p>The SARD is umbrella document that articulates the development objectives and priorities of the agriculture sector and rural development. It is based on the following vision for the development of agriculture and rural areas:</p> <p>“An efficient and innovative agri-food sector based on knowledge, modern technologies and standards, offering high quality products to domestic and foreign markets, and sustainable development of the natural resources, environment and cultural heritage of the rural areas, providing economic activities and employment opportunities and quality of life for young people and other rural inhabitants”.</p> <p>SARD defines five strategic goals, accompanied by 14 priority areas for intervention. Strategic goals as defined by SARD are:</p> <ol style="list-style-type: none"> 1. the production growth and stability of producers' incomes; 2. an increase of competitiveness while adapting to the demands of domestic and foreign markets and the technical and technological progress of the agricultural sector; 3. sustainable resource management and environmental protection; 4. the improvement of the quality of life in rural areas and poverty reduction; 5. the effective management of public policies and the improvement of the institutional framework for the development of agriculture and rural areas/
Elaborate if green economy is included in the objectives	<p>The concept of green economy has not been per se elaborated in the SARD. However, its components are covered by several priority areas, which include:</p> <p>Priority area 3. Efficient land management and increased accessibility land resources</p> <p>Priority area 4. Improving the conditions of natural resources</p> <p>Priority area 5. Improvement of the knowledge transfer system and human resources development</p> <p>Priority area 6. Adjustment to and alleviation of climate change effects</p> <p>Priority area 7. Technology development and modernization of the agricultural production and processing</p> <p>Priority area 8. Market chains and logistic sector support development;</p> <p>Priority area 9. Protection and improvement of environment and preserving of the natural resources</p> <p>Priority area 10. Preserving agriculture, natural and human resources in the areas with limited conditions for agricultural production;</p>

²⁴Official Gazette of the Republic of Serbia, No. 85/14

	<p>Priority area 11. Diversification of rural economy and preserving the cultural and natural heritage</p> <p>Priority area 12. Improvement of the social structure and strengthening of the social capital;</p> <p>Each priority area is briefly explained and highlighted with a list of specific operational objectives.</p>
Cross-cutting issues with other strategies	<p>SARD objectives are coinciding with objectives of NPA, NPRD and IPARD II. A number of other strategic and programming documents have cross-cutting issues with SARD, mostly in the fields of: food safety, environment protection, waste, water and land management, EU approximation as well as related to employment and social inclusion.</p>

Title	The National Program For Agriculture for the period 2018-2020 (NPA)²⁵
Period referred to	2018-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia
Short description of the document and its main objectives	<p>The NPA for the period 2018-2020 year provides mid - term policy and management guidance for implementation of agricultural policy, as it is defined in SARD. It defines general and specific objectives, types of measures to be implemented (direct payments, market regulation measures, special incentives and credit support for farmers), dynamics of their adjustment, amount of support, basic implementation rules and performance indicators for measuring the achievement of each objective.</p> <p>The NPA stipulates to achieve partial compliance with the CAP First Pillar measures during the implementation period.</p>
Elaborate if green economy is included in the objectives	<p>Regarding the green economy, NPA emphasizes that the special attention in the programming of support measures will be focused on sustainable management of natural resources, environmental protection and conservation of biodiversity. The planned measures and activities are designed to contribute to the adaptation of green technologies and best practices and achievement of national goals in the field of renewable energy sources.</p> <p>The NPA lists different direct payment schemes, some of which will be transformed to a production decoupled payments, while keeping the schemes of production-coupled payments in certain sectors i.e. those eligible in EU.</p> <p>The implementing rules which set out details regarding the eligibility criteria and conditions for exercising the right to certain types of incentives are prescribed by the Law on Incentives for Agriculture and rural development and number of bylaws (which will be subject to harmonization with European legislation).</p> <p>According to this Law, to exercise the right to state support, the beneficiaries are required to meet environmental quality standards, public health protection, animal health and plant protection, animal welfare and protection of agricultural land.</p>
Cross-cutting issues with other strategies	<p>The NPA has been developed on the basis of principles and objectives of SARD and it is harmonized with the National Program for the Adoption of the <i>Acquis Communautaire</i> 2014-2018.(NPAA), which defines activities aimed at harmonization with the <i>Acquis Communautaire</i> in all relevant fields (food safety, environmental protection, conservation of biodiversity etc.).</p>

Title	The National Program for Rural development for the period 2018-2020 (NPRD)²⁶
Period referred to	2018-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia

²⁵ Official Gazette of the Republic of Serbia, No. 120/17

²⁶ Official Gazette of the Republic of Serbia, No.82/2019

Short description of the document and its main objectives	The National Rural Development Program for the period 2018-2020 represents operational program for implementation of the rural development policy, and its objectives (as defined in SARD). It prescribes medium-term priorities of rural development and describes in more detail rural development support measures to be implemented in programming period.
Elaborate if green economy is included in the objectives	In this document the green economy issues are not explicitly considered, but they are addressed within the key objectives of NPRD and are integrated in the most of proposed measures. The key objectives of NPRD are as follows: modernization of facilities and equipment; sustainable risk management in agriculture; improvement of food processing capacities and strengthening of organizations for logistical support to the agricultural sector; improvement of the natural resources management system; improving the quality of life in rural areas by diversifying the rural economy and strengthening the social structure; establishing more efficient and operational systems for the implementation of existing and the creation of new knowledge and its transfer; modernization of bodies and organizations and adjustment of agricultural policy to the CAP model. NPRD states as one of its key priorities to contribute to reducing natural resource degradation to a sustainable level, increasing resource productivity and conserve genetic resources and biodiversity. The primary tools to be used to achieve listed objectives will be capacity building and investment support, gender mainstreaming, strengthening national capacities and local collaboration. The NPRD describes a wide range of support measures aimed at modernization of farm machinery and equipment, application of new technologies, strengthening the market value chain and improving energy efficiency. The specific eligibility criteria and requirements are defined for each of the proposed measures by accompanied regulations and bylaws.
Cross-cutting issues with other strategies	The NPRD has been developed on the basis of principles and objectives of SARD and it is harmonized with the National Program for the Adoption of the <i>Acquis Communautaire</i> 2014-2018(NPAA), NPA and IPARD II.

Title	The Instrument for Pre-accession Assistance for Rural Development programme for the period 2014-2020 (IPARD II Programme)
Period referred to	2014-2020
Key responsible institution(s)	Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia
Short description of the document and its main objectives	The main objective of the IPARD program is to support Serbia's preparation for implementation of EU CAP and farmers to comply with new regulations and standards. It is aimed at farms that tend to modernize their production, improve and expand existing capacities and production, increase competitiveness and to meet EU standards in the fields of hygiene, food safety, animal welfare and environmental protection.
Elaborate if green economy is included in the objectives	IPARD programme is designed to contribute to the overall competitiveness of the agriculture sector, while preventing resource degradation due to unsustainable farming practices. Out of 11 measures available under the IPARD II, which provide for different intervention tools and diverse target groups, six measures have been selected to be included in the IPARD II Programme for the period 2014-2020. The selection of measures to be implemented was based on the need assessment for priority sectors of agriculture and food processing industry, assessment of the needs and potential for diversification of the rural economy and analysis of the environmental situation. A total of 13 priorities were identified, most of which are compatible with objectives of green economy: Need 1: Improve competitiveness of the agricultural sector Need 2: Upgrade of the processing sector to EU-Standards Need 3: Diversify activities and sources of income in rural areas

	<p>Need 5. Improve the quality of vocational training and information services to farmers and small scale local business</p> <p>Need 4. Develop non-agricultural sectors of rural economy</p> <p>Need 6: Improve management of natural resources and resource use efficiency</p> <p>Need 7: Maintenance of biodiversity and environment value of agricultural surfaces and agricultural systems and maintenance of water resource quality</p> <p>Need 8: Promotion of sustainable forest management (SFM), improving forest accessibility and access to environment-friendly technologies in the forestry sector</p> <p>Need 9: Maintenance of a low level of greenhouse gas emissions (GES) from agricultural sector and rural space and support for passing to an economy with low carbon emissions</p> <p>Need 10: Reduction of poverty degree and risk of social exclusion</p> <p>Need 12: Creation of jobs in rural environment</p> <p>The planned IPARD II measures to address all these priorities are as follows:</p> <ul style="list-style-type: none"> - Investments in physical assets concerning processing and marketing of agriculture and fishery products, - Investments in physical assets of agricultural holdings - Agri-environmental-climate and organic farming measure, - Farm diversification and business development. - LEADER (only for the Need 10).
Cross-cutting issues with other strategies	<p>IPARD II objectives correspond to both strategic and specific objectives of SARD 2014-2020 (enhancing farm viability and competitiveness, agro-environmental objectives improving socio-economic development in rural areas and their social structures and capital). The IPARD II is complementary with NPRD and NPA, in terms of objectives, planned measures, allocated funds and eligibility criteria for beneficiaries.</p>

There are a number of strategic and planning documents which indirectly deal with certain aspects of the green economy in the agricultural sector, including:

- **National Strategy for the improvement of animal origin food** facilities for the period from 2016 to 2021. The strategy defines the main directions of facility improvement, in order to enable food business entities to meet the new legal requirements on food hygiene and become more competitive in the domestic and international markets. The National Strategy defines long-term goals and measures for the improvement of facilities as well as an Action Plan for their implementation. The basic goal is to improve the general and special hygienic conditions in the facilities, in accordance with EU regulations.
- **Programme for the improvement of the management of animal by-products** for the period from 2020 to 2024 - This program regulates the management of animal by-products management, in accordance with the Strategy of Agriculture and Rural Development of the Republic of Serbia and defines the main directions of future reforms. This program will enable the growth of the competitiveness of companies in this sector on the domestic and international market, contribute to the protection of the environment and the social status of all participants in the sector.
- The **Strategy for the Development of Forestry**²⁷ (along with the National Strategy for Sustainable Use of Natural Resources and Goods) is a key document dealing with the sustainable forest management. The main objective of the Strategy is to preserve and develop the condition of forests and support the development of forestry as an industry sector. The implementation of the Strategy is regulated by the National Forestry Programme which defines the guidelines, measures and activities for the development of forestry sector.

²⁷ Official Gazette of the Republic of Serbia, No. 59/2006

Strategies and programs for natural resources, environment and climate change

The issues of natural resources, environment and climate change are strategically defined in a number of strategies pertaining to the water management, biodiversity, sustainable use of resources, renewable energy resources and energy efficiency, and risk management.

Title	National Strategy for Sustainable Use of Natural Resources and Goods²⁸ (SSUNRG)
Period referred to	2012-2022
Key responsible institution(s)	Competence over this issue is divided between the ministries in charge for mining, environment and spatial planning, infrastructure, energy, and to a lesser extent to the MAFWM.
Short description of the document and its main objectives	The SSUNRG defines a framework for the sustainable management and protection of natural resources up to 2020 and beyond. The main objective is to ensure sustainable economic development by the efficient use of natural resources, while simultaneously reducing negative impacts on the environment. The Strategy describes the existing legal, strategic and institutional framework and states the indicators of achieving their sustainable use.
Elaborate if green economy is included in the objectives	The focus of the SSUNRG is on increasing the efficiency of use of natural resources (including biodiversity, landscape diversity, water and land resources) thereby reducing the negative environmental impact of economic growth. Its objective is to contribute to sustainable economic development through an efficient management of natural resources.
Cross-cutting issues with other strategies	SSUNRG objectives are coinciding with the objectives of SARD related to environmental protection and management of national resources.

Title	Water Management Strategy on the Territory of the Republic of Serbia (WMS)²⁹
Period referred to	2017-2034
Key responsible institution(s)	Water management is the responsibility of the Government of the Republic of Serbia. The Government carries out this activity through the Ministry of Environmental protection, and other ministries, bodies of the autonomous province, bodies of local self-government units and public water management companies.
Short description of the document and its main objectives	The WMS defines long-term reforms in water sector, in order to achieve the necessary standards in water management, including organizational adjustments, through strengthening professional and institutional capacities at the national, regional and local levels.
Elaborate if green economy is included in the objectives	The key objective of WMS is to achieve integrated water management, which guaranties maximum environmental, economic and social benefits, and improvement of natural ecosystems, and with respect for international agreements. The operational objective 4 is described as aiming to provide “protection from external and internal waters and protection from erosion and torrents, in order to reduce harmful consequences for human health, the environment, cultural heritage and economic activities”.
Cross-cutting issues with other strategies	The objectives of WMS are in line with the priority areas of SARD, related to water and land management, as well as to quality of life of rural population (access to communal services, rural infrastructure etc.)

Title	Biodiversity Strategy of the Republic of Serbia and Action Plan for the period 2011-2018³⁰ (BSRS)
Period referred to	2011-2018
Key responsible institution(s)	Ministry of Environment and Spatial Planning, Republic of Serbia

²⁸ Official Gazette of the Republic of Serbia, No. 33/2012

²⁹ Official Gazette of the Republic of Serbia, No. 3/2017

³⁰ Official Gazette of the Republic of Serbia, No. 13/2011

Short description of the document and its main objectives	The BSRS is the main instruments for the implementation of the Convention on Biological Diversity at national level. It includes an overview of the status of biological diversity in Serbia, the factors threatening biodiversity, and overview of human activities which trigger changes in ecosystem. It describes basic principles for biodiversity protection, as well as the institutional, legislative and financial framework for the conservation of biodiversity.
Elaborate if green economy is included in the objectives	The Strategy identifies threats to biodiversity from economic activities, including those from agriculture, forestry, water management, fishing and hunting. The Strategy and its Action Plan define 11 strategic areas and 28 objectives for protection of biodiversity in line with national needs and capacities, and lists 140 different activities to support the achievement of the objectives. One of the BSRS objectives (5.2) is to integrate biodiversity conservation into other sectors, including agriculture, through integration of the principles of conservation of biodiversity and sustainable utilization into sectoral policies, plans and programmes.
Cross-cutting issues with other strategies	BSRS and its Action Plan are in full accordance with the SARD, IPARD II and NPRD objectives. Nevertheless, agricultural policy still shows deficit and not supporting schemes intended to protect the biodiversity from impacts of climate change, from the threat of human activities and to conserve and manage ecosystems

The **climate change strategy**, as one of a key multi-sectoral strategic document has not been adopted yet. However, the Republic of Serbia has adopted a set of strategic documents dealing with climate change-related risk management, which include the National Disaster Risk Management Programme and accompanying Action Plan (2016-2020). The general objective of the Action Plan is that by 2020, the Republic of Serbia has a disaster risk management system developed, a solid inter-institutional coordination system established, is resilient to disasters and other hazards and is capable to do retrofitting after disaster or any other hazard. Specific objectives are set so as to be able to attain the general objective, and each specific objective is defined in line with one of the six components of the National Programme (institution building and development; disaster risk identification and monitoring; structural and non-structural risk reduction; early warning systems and preparedness; risk financing strategies; resilient recovery).

Draft Energy Development Strategy of the Republic of Serbia until 2025 (with indications until 2030). The main objective is to support and enable a better balance between energy production and consumption, and a more efficient use of a “cleaner” energy from renewable energy sources (RES). This Strategy emphasizes commitment to and focuses on creating favourable business environment for increasing the share of energy from renewable energy sources. It emphasizes the importance of agriculture and rural-based energy production, as well on the need to promote and enhance the *use of renewable energy sources in agriculture*.

The **Strategy of Nature Protection of the Republic of Serbia** for the period 2019 to 2026 is drafted, but has not been adopted yet. Consultations were carried out in 2014, but progress was stalled by end of 2016.

Cross sectoral strategies and programs

Title	National Strategy for Sustainable Development (NSSD)
Period referred to	2007-2017
Key responsible institution(s)	Office of the Deputy Prime Minister ³¹
Short description of the document and its main objectives	NSSD defines sustainable development as a goal-oriented, long-term, continuous, comprehensive and synergic process affecting all aspects of life (economic, social, environmental and institutional) at all governance levels. The Action Plan for the implementation of the Strategy for the period 2009–2017 defined in more detail measures and activities, as well as institutions in charge of implementation. It also includes deadlines for implementation, costs and sources of funding, as well as indicators for the monitoring of implementation. The Strategy is integrated into other programmes and strategies, including sectoral ones.
Elaborate if green economy is included in the objectives	The list of indicators to measure the achievement of the specific objectives (among others related to social and economic objectives), includes indicators of the following groups relevant for agriculture sector: Climate change, Land use and status, Desertification, Agriculture, Forestry, Fishery and Biodiversity. A number of planned measures have already been implemented, although with some delays.
Cross-cutting issues with other strategies	NSSD was created to serve as an umbrella development document, and its key principles are reflected in all sectoral strategies adopted after 2007.

Title	National Programme for the Adoption of the <i>Acquis</i> (NPAA)³²
Period referred to	2018-2021
Key responsible institution(s)	Ministry of European Integration
Short description of the document and its main objectives	The National Programme for the Adoption of the <i>Acquis</i> is a detailed, multi-annual plan for the alignment of domestic legislation with EU regulations. The NPAA defines development and strategic objectives, and policy reforms and measures necessary for the implementation of these objectives. It also defines a detailed plan, timetable and priorities for the adoption of the regulations and determines the bodies responsible for their preparation.
Elaborate if green economy is included in the objectives	The parts related to agriculture and rural development, food safety, veterinary and phytosanitary policy and fisheries (3.11-3.13), as well as environment (3.27) describe the level of alignment with implementation and enforcement of the EU <i>acquis</i> , and provide measures and reforms envisaged to be taken by 2021. The Plan defines in details methods of legal transposition, legal changes to be introduced and required capacity building interventions.
Cross-cutting issues with other strategies	The objective of NPAA is to serve as guide of the process of European integration of Serbia. In addition to harmonising the legislation with the EU <i>acquis</i> , it also requires the strengthening of administrative capacities during accession negotiations with the EU, as well as long-term financial planning and responsible budget planning. Therefore, it is highly relevant for strategic goals of SARD: “the effective management of public policies and the improvement of the institutional framework for the development of agriculture and rural areas”.

³¹ Originally, the Strategy was drafted under the auspices of the Office of the Deputy Prime Minister. In accordance with the Strategy, the responsibility for monitoring and coordination of its implementation is vested in the Office for Sustainable Development. As of March 2014, the Office for Sustainable Development of Underdeveloped Areas under the jurisdiction of the Minister without Portfolio had a strong focus on regional development;

³² https://www.mei.gov.rs/upload/documents/nacionalna_dokumenta/npaa/third_revision_npaa_18.pdf

National Priorities for International Assistance³³(NAD) 2014-2017 (with projections until 2020), is strategic programming document which provides a means for alignment of international assistance with national priorities. Under the Agriculture and Rural Development (Section 9) NAD defines the following priorities: i) Increasing the competitiveness of agribusiness sector and created conditions for the sustainable growth of farmers' incomes; ii) Improving the quality of life of the rural population and attractiveness of rural areas; iii) Strengthening administrative capacities for alignment of agriculture and rural development policies and institutions with EU *acquis*; and iv) Improving standards and systems for food safety, plant health, animal health and welfare.

Economic Reform Program³⁴ (ERP) is main national reform program coordinated with EU through EU semester “light” framework, which entails procedures of regular reporting, assessing achievements by EC and providing recommendations for next policy cycle. ERP defines two key priorities in the mid-term period: i) maintaining of macroeconomic stability, and ii) continued implementation of structural reforms, particularly in the domain of public enterprises and increasing efficiency of the public sector. In addition to structural reforms related to the economy, document presents reforms planned in the areas of research and innovation, education and skills, social inclusion, poverty reduction and equal opportunities for all.

8.2.2. Concrete measures linked to the green economy

The major challenges that Serbia is facing in adoption and implementation of economic instruments and measures to support green agriculture transition are the shortage of financial resources dedicated and institutional capacities to develop, implement, manage and monitor the sound measures and activities in this field.

However, Serbia has been applying a wide range of economic instruments (mostly in form of eco charges, taxes, fees, levies) that contribute to environmental protection, including nature protection, and the sustainable use of natural resources. Some of these are relevant for agriculture sector and/or rural economy, such as: charges for the harvest and use of wild flora and fauna, fees for use of fishing areas (inland waters), fees for hunting permit, forest taxes, charges for use of protected areas etc.

A parallel overview of support schemes available in NPRD and IPARD II to support the “greening” of agriculture and for provision of public goods associated by agriculture are presented in Table 1. According to the **Law on Incentives in Agriculture and Rural Development**³⁵beneficiaries of state support for agriculture and rural development can be agricultural holdings registered in the farm register, units of local self-government, and other persons and organizations. Furthermore, the eligibility criteria include the obligation to register all animals eligible for direct payments and registration in official registers by processors, exporters and buyers³⁶.

The eligibility criteria of both IPARD II and National Programme for Rural Development (NPRD) limit support to priority sectors and target groups based on the necessity of upgrading to EU standards, production level, sustainability of production, and size of potential recipients. Recipients supported under both programmes also should meet the relevant national rules and standards as regards registration in the farm register, animal welfare and environmental protection, food and feed hygiene, and identification and registration of animals. Basically, the conditions laid down in NPRD are relatively comfortable in terms of eligible farms (a threshold value of farm size is not set or is very low). IPARD II, however, was created for large farms and processing units, commercial agricultural holdings, with the idea of directing these farms to this source of financing so that the national budget remains available to smaller farmers.

In addition to budgetary support provided at the national level, the Autonomous Province of Vojvodina and local self-governmental units create and carry out their own rural development programmes in their own territories. These programmes are designed to address the specific needs of local farmers/communities, and often target promotion and branding of traditional local food products and rural services (including rural tourism), as well as maintenance of local natural resources.

³³[http://www.evropa.gov.rs/Documents/Home/DACU/12/74/NAD%202014-2017%20with%20projections%20until%202020%20\(english\).pdf](http://www.evropa.gov.rs/Documents/Home/DACU/12/74/NAD%202014-2017%20with%20projections%20until%202020%20(english).pdf)

³⁴<https://www.mfin.gov.rs/UserFiles/File/strategije/2018/ERP%202018-2020%20ENG%20FINAL.pdf>

³⁵ Official Gazette of the Republic of Serbia No. 10/2013, No. 142/2014, No. 102/2015 and No. 101/2016.

³⁶ In 2010 and 2011, direct support recipients (with the exception of farmers in areas with difficult working conditions for agriculture) were obliged to pay mandatory pension and disability insurance contributions.

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Investments in Physical Assets of Agricultural Holdings	MAFWM	Improving production infrastructure and farm equipment to achieve better competitiveness in sectors: milk, meat, fruits and vegetables, other crops (cereals, oil crops, and sugar beet). Also upgrading quality standards, animal welfare conditions and environmental standards; support related to EU standards on animal welfare and manure storing and handling (milk and meat); improving storage facilities and buying tractors (crops). Besides the mentioned sectors, the national funding also includes support for egg production, beekeeping and aquaculture.	AE	IPARD and NPRD; Pursuant to the Rulebook on Environmental Conditions Required by the users of the IPARD ³⁷ , beneficiaries must meet a corpus of standards, which include protection against noise and wastewater, air protection, waste management and nature protection.
Investments in Physical Assets Concerning Processing and Marketing of Agricultural and Fishery Products	MAFWM	Improving production techniques and technologies in milk and dairy sector, meat processing, and fruit and vegetables processing sectors, to meet the international standards ((GHP, GMP, HACCP and ISO); support to introduction of food safety and quality standards to achieve better competitiveness; improve the treatment and handling of waste (milk and dairy sector). Support from national funding (NPRD) refers to improving the quality of wine and brandy and agri-food products; it also includes procurement of control and registration stamps for agri-food products and wine.	AE	IPARD and NPRD
Risk management	MAFWM	Reimbursement of part of the cost of insurance fees for crops, fruits, perennial crops, nurseries and animals.	AE	NPRD
Agri – environment climate and organic farming	MAFWM	Support the conversion to and maintenance of organic farming; support the mitigation and adaptation to climate change activities; Increasing the competitiveness of organic agricultural production and export of organic products. Considering the complexity of IPARD requirements and the implementation mechanism for the “Agri-environmental-climate and organic farming” measure, its implementation from IPARD funding is planned to be introduced in a later stage.	IN	IPARD
	MAFWM	So far the national funding includes support for organic farming and for conservation of plant and animal genetic resources. In addition to organic farming and genetic resources, NPRD envisages incentives to support good agricultural practice and other environmental policies, as well as incentives for sustainable use of forest resources.	EX	NPRD

³⁷ Official Gazette of the Republic of Serbia, No. 26/2019

Implementation of Local Development Strategies – Leader Approach	MAFWM	Support the development of civil society and fostering social dialogue within the rural population; support of good governance, promotion of employment and development of human capital, which, all together, by implementing the measure through the local partnerships, contributes to the sustainable development of rural areas.	IN	IPARD
	MAFWM	Strengthening the capacity of rural population, CSOs and established partnerships through training and education, to develop, organize and lead the partnership, to prepare and implement local development strategies.	EX	NPRD
Farm Diversification and Business Development	MAFWM	IPARD: Investment supports to the development of tourist facilities and services; support the development of tourist recreational activities, especially for family and children's tourism.	AE	IPARD
	MAFWM	NPRD: Incentives for the improvement of economic activities in the countryside through support for non-agricultural activities; support for young people in rural areas; support for on-farm processing; certification of the quality of food, organic products and products with a geographical indication on farms.	AE	NPRD
Advisory services	MAFWM	support for the development of technical-technological, applied, development and innovative projects in agriculture and rural development, as well as support for the provision of advice and information to agricultural producers, associations, cooperatives and other legal entities in agriculture.	AE	NPRD; Beneficiaries are entrepreneurs and legal entities that fulfil the conditions for carrying out advisory and expert activities in agriculture
Special incentives	MAFWM	Incentives for the implementation of breeding programs- control of productivity, selection and production of breeding and quality breeding animals; controlled breeding of domestic animals; keeping a register of domestic animals; production of new breeds; other breeding and zootechnical measures.	AE	NPRD
	MAFWM	Incentives for the production of planting material and certification and clonal selection - aimed for raising primary planting basic categories of fruit trees, vines and hops for purchased seedlings, including payments for the specific installations; incentives for produced seedlings of fruit trees, vines and hops of certain maximum amount.	AE	NPRD
	MAFWM	Incentives for promotional activities in agriculture and rural development (measures and actions in agriculture) - support promotional activities (fairs and exhibitions), as well as for educational events (trainings, seminars, workshops, trainings, etc.).	AE	NPRD
Credit support	MAFWM	Subsidizing part of the interest on the loan	AE	NPRD
Technical Assistance		To assist implementation and monitoring of the program and its possible subsequent modification.	AE	IPARD

There is no specific measure to prioritize farmers in areas facing natural and other specific constrains for agricultural production. Nevertheless, the farmers in areas with such handicaps can benefit from lower minimum eligibility threshold applied for milk premium (direct payments) and higher subsidies for on-farm investments (rural development).

Measures other than RDP

Measures	Responsible institution(s)	Description, beneficiaries, criteria, support mechanism	Status	Comment
Annual Programs for performing works on protection and management of agricultural land	MAFWM, Forestry Directorate	Protection of forests from diseases and pests, as well as from fires; a forestation of bare lands and planting of plantations and intensive plantations; reclamation of degraded forests; forest care; construction and reconstruction of forest roads; production of forest seeds and forest planting material; education and promotion; development research projects; other plans and projects relating to the RS forestry development strategy	AE	
Annual Programs for Protection, Management and Use of State Owned Agricultural-Land	MAFWM, Land Directorate	Purchase of irrigation equipment, drilling of wells, research projects, programs and projects in the field of protection and use of agricultural land, (Conversion of uncultivated agricultural land into arable land, Reclamation of meadows and pastures, Improvement of physical, chemical and biological properties of land	AE	

Note: Measures and support mechanisms: already existing (AE), need to be extended (EX) or introduced (IN).

Green Innovation Vouchers Scheme The EBRD launched the Green Innovation Vouchers Scheme as an innovative instrument to scale up green economy in Serbia. The scheme aims to boost the innovation capacity of small and medium-sized enterprises in the field of green technologies and resource efficiency. The following types of services are eligible for funding: proof of concept development (prototyping/testing/certification) of a new product, service or process; innovative improvement of an existing product, service or process; and tailored training/consulting in innovation management and intellectual property. The significant number of approved projects is related with green economy and innovative energy efficient technologies and solutions linked with agriculture and food processing³⁸.

Besides the above described funding sources, there are also a number of other funding opportunities with indirect effects on green agriculture provided by other ministries, government agencies and/or international donors. These measures include various activities on green infrastructure, capacity building, trainings, research and development, pilot projects etc.

8.3. Hindrances, boosters and steps to promote green economy

The Republic of Serbia has made important progress in alignment with agricultural, environmental and climate *acquis*. However, much remains to be done, mostly in terms of meeting the administrative, financial and technical preconditions for implementation of legislative acts pertaining to the sphere of green economy and green agriculture.

Main hindrances (obstacles)	Main drivers and boosters (incentives)
<ul style="list-style-type: none"> • The fragmented policy and regulatory framework • The complex institutional framework and lack of coordination mechanisms between the institutions in charge • Low capacities of local self-governments to deal with the entrusted competence in the field of environmental protection and natural resource management. • The low priority given to green economy issues on the political agenda; Insufficient control and monitoring of all relevant policies • The lack of staff and funding for green initiatives and policies • Lack of knowledge on environmental friendly practices and on opportunities from environmental and climate change related investments • The deficiency of organisations and capacities of institutions that support the promotion and implementation of green transition • The progress made so far in tackling climate change in agriculture, complex set of environmental problems and opportunities of green economy in agriculture sector is modest • Existing agri-environmental measures are not targeted towards biodiversity conservation, land use, land and water management, ecological sustainability etc. 	<ul style="list-style-type: none"> • Better policy coordination across sectors, programmes, and levels of government • Establishment of an efficient and sustained financial system for the environment and climate actions, including stable funding • Raising and building the knowledge on green economy of all actors involved in this arena (research community, policy makers, business sector, NGOs) • Mainstreaming green economy principles, initiatives and actions into agriculture sector development • Strengthen the capacities of local-self-governments to manage natural resources and run effective environmental policies in their competence. • Foster private sector investments and participation in promoting green practices into agriculture sector • Further reforms of relevant environmental legislative, regulatory and administrative provisions in agriculture sector • Better targeted and more diverse agri-environmental <i>measures</i> are needed

³⁸ <http://inovacionivauceri.ebrd.rs/projects/>

Specific steps/measures to be taken to introduce/promote the green economy	Relevant institution(s)
Raise the awareness among the policy makers about the opportunities of green economy and environment mainstreaming, and exploit them actively, especially in the frame of coordination and cooperation across vertical and horizontal governance levels.	The Government, together with concerned ministries
Improve the legal framework by adapting laws to the green economy concept and supporting the efficient application of laws.	The Government, together with concerned ministries
Further develop and adopt the missing strategic and programming policy documents to harmonize the policy framework with the European Union	The Government, together with concerned ministries
A national programme to put green public procurement into action should be prepared, as well as economic and fiscal policy measures for greening the economy in order to stimulate the creation of new jobs	Ministry of Economy, Ministry of Environmental Protection, Ministry of Finance
Accreditation and implementation of the remaining IPARD measures (especially the agri-environmental measures and LEADER-approach)	MAFWM, IPARD Managing Authority,
Better integration of environmental and green economy considerations in agricultural policy, including development of specific support measures	MAFWM, IPARD Managing Authority, Local self-governmental units
Include green economy performance indicators and set specific targets for agro-environmental policy assessment	MAFWM
Strengthening capacities of advisory services in order to transfer the knowledge green economy practices. It also relevant for academic institutions, Regional Development Agencies and NGOs dealing with rural development issues who also lack the knowledge and expertise in modern concepts rural development and green rural economy	MAFWM; National extension service, academia, NGOs

8.4. Concluding remarks

Serbia faces numerous institutional and financial challenges in implementing sustainable and green initiatives and activities in economic sectors, including in agriculture.

Some strategic documents, legislation and regulations still need to be developed and/or updated. Often changes in the distribution of responsibilities among different institutions in charge with sustainable development, environmental and climate change issues caused severe delays in policy-making, implementation and delivery.

In many cases, strategies and programmes were prepared without action plans which led to further delays in implementation of legislation, activities and measures. All these resulted in failure to achieve some operational targets and planned results within set time frame.

Even though there has been progress in integration of environmental and climate change considerations into sectoral strategic and planning documents, *integration of many aspects of these concerns in implemented policies and measures is still missing.*

Besides the lack of policy coordination and institutional capacities, the funding is also critical. *Absence of clear financial frameworks and lack of financial resources required for the achievement of planned policy objectives related to environment, pollution, management of natural resources and climate change* led to limited progress and delays in the implementation of planned activities.

The state of the environment (in almost all of its aspects), calls for more political will at national and local level to tackle challenges faced. The strengthening farmers' resilience to volatile weather patterns, as well as their capacities to implement sustainable technologies and practices, is one of key priorities that should be addressed and integrated as a cross-cutting component of sectors' development framework.

The agricultural policy documents make no explicit mention of the green agriculture/economy. Nevertheless, all relevant aspects of this concept are covered by strategic goals and objectives of agricultural policy, and set of measures has been proposed to address identified needs.

The NPARD and IPARD measures to support farm restructuring, modernization and technological renewal are in place and a wide range of funds and financial services, as well as loans with subsidized interest rates, are available in the agriculture sector. However, demand is variable (depending on sector and region) and generally is a low, due to the complex socio-economic environment.

The compensation payments for farmers in areas with natural constraints are in place, but these payments are not conditioned upon delivery agri-environmental externalities/services in agriculture and forestry. Besides to this, the requirements for direct payment scheme complying with EU standards (GAEC - Good Agricultural and Environmental Condition and SMR - Statutory Management Requirements) are not defined.

Measures on the preservation and utilization of local varieties and breeds, as well as for organic production, have been put in place. However, the complex safety standards and operational requirements which all require new investments, prevent many farmers from capitalizing on products with added value based on local natural resources, varieties, breeds and local knowledge.

Additional efforts are also needed to further align with EU policies in areas such as water quality, waste management, air quality, nature protection, energy efficiency and renewable energy sources.

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