

Regional Policy Document

on

Sustainable Food Systems and Livelihoods in Rural Areas of the Western Balkans

Policy Recommendations

2025

Regional Policy Document on Sustainable Food Systems and Livelihoods in Rural Areas of the Western Balkans

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¹ This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

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List of Abbreviations

AKIS	Agricultural Knowledge and Innovation System
CAP	Common Agricultural Policy
CEFTA	Central European Free Trade Agreement
EU	European Union
F2F	Farm to Fork (Strategy)
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GI	Geographical Indication
INSTAT	Institute of Statistics of Albania
IPA	Instrument for Pre-Accession Assistance (EU funding)
IPARD	Instrument for Pre-Accession Assistance in Rural Development
NGO	Non-Governmental Organization
PDO	Protected Designation of Origin
PGI	Protected Geographical Indications
SFVCD	Sustainable Food Value Chain Development
SWOT	Strengths, Weaknesses, Opportunities and Threats (analysis framework)
TSG	Traditional Specialty Guaranteed
WB	Western Balkans

Executive summary

The agriculture sector remains the main pillar of the Western Balkans countries (WB-6), shaping rural livelihoods, food security and cultural identity across Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia. Although its share in national GDP has declined in recent years, agriculture continues to contribute between 4% and 16 % of national value added, several times higher than the EU average, and thus plays a disproportionately large role in employment. However, the sector faces persistent structural and institutional challenges including small farms, limited mechanization, restricted access to finance, and weak producer organizations that leave farmers vulnerable to market volatility and external shocks. Climate change adds further pressure through droughts, floods, and soil degradation, while policy fragmentation and limited institutional capacity continue to hinder the progress toward EU alignment.

In this context, the Regional Policy Document on Sustainable Food Systems and Livelihoods in Rural Areas of the WB-6 provides detailed analyses and provides an evidence-based framework for a more sustainable, competitive and inclusive agri-food system. The study applies the FAO's *Sustainable Food Value Chain Development (SFVCD)* approach, ensuring comparability across economic, social and environmental dimensions and alignment with the EU Green Deal, the Farm to Fork Strategy, and the Common Agricultural Policy (CAP). The analysis builds on a rich participatory process that involved 6 national consultation processes held between 2023 and 2024 across the WB-6, with farmers which provided first-hand evidence on constraints and opportunities in selected value chains in each of the countries. In addition, processors, cooperatives, and local authorities have contributed with their opinions. These value chains were chosen based on the following criteria: importance of the value chain, competitive landscape, production and processing capacity, cost structure, profit potential, sustainability and government support.

Across all WB-6 economies, the challenges are very similar including farm structures remain dominated by micro-holdings, access to finance constrained by high interest rates and collateral requirements, while the processing and logistics infrastructure needed to add value or reach export markets is insufficient. Also, producer organizations and cooperatives are still weak, leaving farmers with little bargaining power. Related to social aspect, widespread informality, gender inequality and youth out-migration risk the erosion of human capital. On the other hand, the agriculture sector remains very vulnerable to climate change, encountering challenges such as soil erosion, pasture degradation and inefficient manure management that increase greenhouse-gas emissions and threaten biodiversity.

Despite these shared challenges, the WB-6 countries also demonstrate significant strengths that create the right foundations for sustainable development including favorable agro-climatic conditions, long farming traditions and a rich diversity of niche, high-value products. Also, opportunities such as donor engagement and EU pre-accession instruments, including IPARD, already support investment in infrastructure, training and quality. These resources, combined with growing domestic demand and a shared aspiration for EU membership, provide a unique opportunity to accelerate transformation toward sustainable food systems. This transition is both a necessity and an opportunity for WB-6 countries. Sustainability is not an external conditionality, but a pathway to resilience and dignity for rural communities. The convergence with the EU Green Deal offers the region access to new markets, technologies and investment, if countries act collectively and strategically. By modernizing their institutions, strengthening cooperation among

farmers and embracing environmental and social sustainability, the WB-6 can transform agriculture from a sector of subsistence into a sustainable one.

1. Introduction

1.1. Background: Agriculture in the Western Balkans

Agriculture remains a strategic pillar across the WB-6 countries: Albania, Bosnia & Herzegovina, Kosovo¹, Montenegro, North Macedonia and Serbia, providing rural employment, food security and cultural identity. While the sector's GDP share varies by country (ranging from 3.1% for Serbia and 15.5% for Albania in 2024)², it is consistently higher than the EU average (1.6%, in 2024)³ and therefore more exposed to productivity, social and environmental risks. Farm structures are dominated by small and fragmented holdings, profits and sales in some cases depend on informality, and processing capacity and quality infrastructure are underdeveloped. Climate shocks (droughts, floods, heatwaves) and natural-resource pressures (soil degradation, water stress, pasture decline) compound economic vulnerabilities, with direct implications for competitiveness and rural livelihoods⁴.

1.2. Why sustainability and why now?

In the time of global crises, sustainability is not optional, but it is the main guide for changes in securing sustainable food systems and rural livelihood. The EU Green Deal and its Farm to Fork (F2F) strategy, together with CAP, set a clear path forward: safer food, lower emissions, stronger biodiversity safeguards, circular resource use and fairer distribution of value along chains. For WB-6 countries on the EU path, aligning with F2F Strategy and CAP is both a market entry requirement and an opportunity to modernize agriculture sector, strengthen institutions capacities and mobilize investment from both public and private sectors. Measuring and improving sustainability across economic, social and environmental pillars is therefore essential to reduce risk, increase productivity and unlock access to EU markets and financing.

1.3. Objectives of the regional overview

The main objectives of this regional policy document are as follows:

1. Assess sustainability performance of selected value chains (Albania, dairy; BiH, dairy; Kosovo, vegetables & dairy; Montenegro, dairy; North Macedonia, honey; Serbia, red pepper/ajvar) across economic, social and environmental dimensions.
2. Understand the systemic challenges that constrain performance by identifying key organizational, institutional, environmental and market-related weaknesses.
3. Provide practical evidence-based recommendations, prioritized measures for governments, development agencies and the EU to accelerate EU-aligned reforms, strengthen resilience, and raise value addition and fairness along chains.

² World Bank, 2025. *Agriculture, forestry, and fishing, value added (% of GDP)*. World Development Indicators. Retrieved from <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>

³ Trading Economics.. European Union - Agriculture, value added (% of GDP). Retrieved from <https://tradingeconomics.com/european-union/agriculture-value-added-percent-of-gdp-wb-data.html>

⁴ World Bank. (2024). Western Balkans 6 Country Climate and Development Report (CCDR). Washington, DC: World Bank. Available at: <https://www.worldbank.org/en/region/eca/publication/western-balkans-6-ccdr>

1.4. Policy document structure

The document begins with concise country snapshots covering demographics, land use, farm structure, mechanization, economic contribution of agriculture, trade positions in selected value chains, and key gaps. It then explains the methodology behind the SFVCD, detailing data sources, participatory steps, scoring and how both quantitative and narrative evidence are aligned. A unified SWOT analysis follows, breaking down strengths, weaknesses, opportunities and threats across economic, social and environmental dimensions.

Building on these findings, the report identifies a set of cross-cutting structural challenges shared across the region along with a practical recommendation of pre-accession measures to address them. It then provides tailored diagnostics for each country's respective value chain and concludes with prioritized, action-oriented recommendations for governments, development partners and donors, laying out a roadmap for more sustainable food systems and livelihoods in WB-6.

2. Overview of selected value chains at country level

Albania (dairy value chain)

According to INSTAT,⁵ in 2023 Albania counted around 2,4 million residents, however disaggregated data on urban-rural division are not available. Agricultural land covered 11,363 km² in 2021, representing about 40% of national territory⁶ and agriculture, forestry, and fishing together accounted for 16.2 % of GDP in 2023 (decreased from 18.8 % in 2020), a share still far above the EU average⁷. The dairy sector remains a central activity, accounting for around 40% of agricultural production, but faces structural challenges including dominance of small farms (96 % with fewer than five cows), informal sales, limited access to extension services and finance, and environmental pressures linked to manure management and pasture degradation. Trade remains structurally in deficit for dairy products, as domestic production shortfalls are met through imports of powdered milk, butter and cheese, while informal cross-border flows further complicate reliable trade measurement⁸.

Bosnia and Herzegovina (dairy value chain)

Bosnia and Herzegovina's population is around 3,2 million residents, while agricultural land covers 22,630 km² or about 44 % of total area of the country.⁹ Agriculture's share of GDP was 4.65 % in 2023, down from 5.91 % in 2020.¹⁰ Milk and dairy products account for roughly 40 % of livestock output, but the number of producers continues to decline, with many operating at subsistence levels. Mechanization and processing capacity remain limited, and the federal

⁵ INSTAT, (2024). Population and Housing Census 2023. Accessed in <https://www.instat.gov.al/en/census-2023/>

⁶ World Bank. (2024b). Agricultural land (% of land area), Albania. World Bank. <https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?locations=AL>

⁷ World Bank. (n.d.). Agriculture, forestry, and fishing, value added (% of GDP). World Development Indicators. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>

⁸ Albanian Network for Rural Development Network, (2025). National policy on sustainable food systems & rural livelihoods – Albania. Accessed in: <https://anrd.al/wp-content/uploads/2025/11/National-Policy-Documents-Albania-1.pdf>

⁹ World Bank. (2024e). Agricultural land (% of land area), Bosnia and Herzegovina. World Bank. <https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?locations=BA>

¹⁰ World Bank. (2024f). Agriculture, forestry and fishing, value added (% of GDP), Bosnia and Herzegovina. World Bank. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=BA>

governance structure complicates cohesive agricultural policy and extension, as competencies are divided among state, entity, cantonal, and local levels, leading to fragmented data, overlapping subsidy schemes, and inconsistent rural development measures, which undermine competitiveness and coordination. The dairy trade balance remained negative in 2023, with export-to-import coverage ratio of -56 %.¹¹

Kosovo (vegetable and dairy value chains)

Kosovo's population is around 1,5 million residents, while in 2022 it was reported around 420,482 ha of utilized agricultural area.¹² In 2023, agriculture, forestry and fishing contributed 7.22 % of GDP of the country.¹³ The sector, especially the selected value chains, is facing several challenges such as highly fragmented farm structures, dominated by smallholders with limited access to advisory services, mechanization, and finance, as well as weak producer organizations and climate vulnerabilities such as droughts and water shortages, which, together with rising input costs, constrain productivity and quality. The agri-food trade balance remains negative with both vegetables and dairy rely heavily on imports to meet domestic demand, while exports are modest due to limited processing capacity, certification systems, and market integration, despite favorable agro-climatic conditions and growing domestic demand.¹⁴

Montenegro (dairy value chain)

Montenegro's population was 623,831 residents in 2024, and agricultural land covered 2,556 km², representing approximately 18 % of the country's territory.¹⁵ Agriculture's share of GDP declined from 7.6% in 2020 to 5.5 % in 2023.¹⁶ Even though the dairy value chain remains very important for the sector, it is facing several challenges such as underdeveloped processing capacities, low prices for farmers and weak market organization. The country's rugged terrain and dispersed rural settlements further increased collection and logistics costs, limiting competitiveness and scale efficiency.¹⁷ In 2024, dairy imports totaled approximately 79.8 million Euro, while exports reached only 0.25 million Euro, highlighting the sector's strong reliance on imports.¹⁸

North Macedonia (honey value chain)

¹¹ Rural Development Network of Bosnia and Herzegovina, (2025). National policy on sustainable food systems & rural livelihoods- Bosnia and Herzegovina. Accessed in: [Policy dokument: Održivi prehrambeni sistemi i sredstva za život u ruralnim područjima - PORTAL AGROKULTURA](#)

¹² World Bank. (2024g). Population estimates, Kosovo. World Bank. Accessed in: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=XK>

¹³ World Bank. (2024h). Agriculture, forestry and fishing, value added (% of GDP), Kosovo. World Bank. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=XK>

¹⁴ Network of Organizations for Rural Development of Kosovo, (2025). *National policy on sustainable food systems & rural livelihoods - Kosovo* [Unpublished policy draft].

¹⁵ World Bank. (2024i). Population estimates, Montenegro. World Bank. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ME>

¹⁶ World Bank. (2024j). Agricultural land (% of land area), Montenegro. World Bank. <https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?locations=ME>

¹⁷ Rural Development Network of Montenegro, (2025). *National policy on sustainable food systems & rural livelihoods – Montenegro*. Access in: [National policy on sustainable food systems and livelihoods in rural | Ruralnet.mk](#)

¹⁸ MONSTAT, (2025). *External Trade of Agricultural and Food Products*. Accessed in: <https://www.monstat.org/eng/novosti.php?id=4261>

North Macedonia's population was around 1,7 million residents, while agricultural land covered approximately 12,600 km² in 2021, nearly half of the country's territory.¹⁹ In 2024, agriculture, forestry and fishing accounted for about 5.9 % of GDP and honey value chain identifies as an important contributor to rural livelihoods and ecosystem services, particularly in mountainous and depopulating areas. However, the sector is characterized by fragmented production, weak producer organizations, limited advisory and veterinary support, and exposure to unfair trade practices that disadvantage small beekeepers. Trade balance is negative with North Macedonia importing roughly 2.5 times more honey than it exports, creating a trade deficit of around 358,000 Euro.²⁰

Serbia (red pepper/ajvar value chain)

In 2021, the population of Serbia was around 6,6 million residents and agricultural land covered 34,850 km².²¹ According to statistics, the agriculture sector contributed to 3.79 % of the country's GDP.²² The red pepper is an important activity within the agriculture sector and has a strong tradition on Geographical Indication (GI) protection, particularly *Leskovački domaći ajvar*, which combines heritage value with market potential. However, despite favorable agro-climatic conditions and quality raw materials, the sector faces climate variability affecting yields, labor shortages, capacity and compliance gaps among small processors and limited collective marketing and branding. The analysis shows that most smallholders are independent producers, with minimal horizontal cooperation, while competition from cheaper industrial or imported ajvar further pressures profitability.²³

Common patterns across the region

Across all six Western Balkan countries, agriculture continues to hold outsized economic and social importance compared to the EU average. Despite structural and institutional diversity, the national policy documents show strong convergence on several recurring themes shaping agri-food systems across the region described as follows:

First, production structures remain highly fragmented, dominated by small family farms often operating at semi-subsistence levels. This fragmentation limits mechanization, collective investment, and access to finance, keeping productivity below potential and constraining participation in formal markets.

Second, producer organizations and advisory systems are underdeveloped. Across all six countries, agricultural extension coverage remains limited, while cooperative and producer group formation

¹⁹ World Bank. (2024l). Population estimates, North Macedonia. World Bank. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=MK>

²⁰ Rural Development Network of North Macedonia, (2025). National policy on sustainable food systems & rural livelihoods -North Macedonia. Accessed in: <https://ruralnet.mk/en/documents-publications-f2f/nacionalna-politika-f2f>

²¹ World Bank. (2024o). *Population estimates, Serbia*. World Bank.

<https://databank.worldbank.org/source/population-estimates-and-projections>

²² World Bank. (2024q). Agriculture, forestry and fishing, value added (% of GDP), Serbia. World Bank.

<https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>

²³ Rural Development Network of Serbia, (2025). National policy on sustainable food systems & rural livelihoods - Serbia <https://www.ruralserbia.rs/index.php/srl/vest/pripremljene-preporuke-za-unapredenje-lanca-vrednosti-paprika-ajvar>.

is slow and uneven. This weak institutional backbone reduces farmers' bargaining power, hinders knowledge transfer, and limits integration into value chains and modern markets.

Third, environmental and climate-related challenges are intensifying. Environmental management gaps, particularly in manure handling, irrigation, and erosion control persist, while investment in green infrastructure remains limited. As a result, both crop and livestock sectors face growing productivity risks.

Fourth, the agri-food trade balance is structurally negative in the value chains analyzed including dairy, vegetables, honey and ajvar. Domestic production rarely meets national demand, and exports are constrained by processing and certification bottlenecks, quality assurance issues, and limited product differentiation.

Policy fragmentation and limited coordination continue to undermine performance. Bosnia and Herzegovina's federal system illustrates the extreme case, but even unitary countries face challenges in aligning central and local institutions. EU alignment processes, particularly under the CAP and the F2F Strategy, have started advancing, yet institutional capacity, monitoring, and extension systems remain weak across the region. Together, the common patterns confirm a region in gradual, but uneven transition toward sustainable and inclusive agri-food systems.

3. Methodology

3.1. Participatory approach and data collection

The Regional Policy Document is a result of a participatory consultation process with farmers across WB-6 countries. The process was guided by a unified methodology *on the participatory consultation and dialogue methodology for strengthening the farmers' position in value chain*.²⁴ During the period of 2024-2025 a participatory process of 5 workshops with farmers was held in each of the WB-6 countries.

In total of 460 farmers participated in the consultation meetings across the region, including 167 women and 111 young people (18-40 years old). The farmers were engaged in the different value chains including medicinal and aromatic plants (MAPs), dairy, honey, vegetables and red pepper. In Table 1. is a summary of the participants per country and value chain (*detailed information on the participants can be found in Annex A*).

Table 1: Number of participants in consultation meetings for each country

Country	Value chain	Number of participants	Female	18-40 years old
Albania	MAPs, Dairy	78	16	15
Bosnia and Hercegovina	Dairy	82	54	23
Kosovo	Vegetables, Dairy	62	10	25
Montenegro	Dairy	77	24	18
North Macedonia	Honey	94	19	0
Serbia	Red pepper	67	44	30
Total in WB-6 countries		460	167	111

Source: Author based on the F2F Academy project data

At the same time, the consultation process gave farmers the opportunity to better understand their position within the value chain and to learn about the factors, both positive and negative, that influence the sustainability of the current value chains. They were also informed about the requirements and priorities needed to strengthen and improve these value chains in the future

Beside the primary data from the participatory processes, the analysis drew on a wide range of secondary data sources, including national statistical agencies, ministries of agriculture and international databases such as FAOSTAT and EUROSTAT. Additional evidence was gathered from IPARD and IPA monitoring systems, FADN farm-level records, and policy documents such as rural development strategies and sectoral reports. Donor-supported studies and project evaluations, particularly from FAO, GIZ, UNDP, Italian Cooperation, and the World Bank, further enriched the dataset, ensuring a comprehensive overview of production trends, market dynamics, and institutional frameworks across the region.

After the process of data collection, six national reports on *Participatory Consultation and Dialogue to Strengthen Farmers' Position in the Value Chain* were developed, each examining the challenges and opportunities faced by farmers in the WB-6 across the selected value chains.

²⁴ The Participatory Consultation and Dialogue Methodology for Strengthening the Position of Farmers in the Value Chain was developed by Prof. Dr. Sc. Bojan Stipešević from the Faculty of Agrobiotechnical Sciences in Osijek. This methodology served as the primary tool for conducting the consultation process in the WB-6 countries.

Also, one national policy document on *Sustainable Food Systems and Rural Livelihoods*, was prepared for each country, providing an in-depth assessment of the economic, social, and environmental performance of the respective value chains in line with the principles of the FAO methodology. To address the systemic challenges identified within the respective value chains the policy documents provided a set of coherent and actionable recommendations aimed at strengthening sustainability, competitiveness and resilience in each of the WB-6 countries.

3.2. SFVCD conceptual framework

The Regional Policy Document is based on 6 National Policy Documents developed in each of the WB-6 countries based on SFVCD conceptual framework.²⁵ This framework defines ten principles covering economic, social and environmental sustainability, dynamic/systemic processes, management and end-market orientation, strategic planning, upgrading, scalability and multi-stakeholder engagement.

In the case of the Regional Policy Document the analyses are focused only on the Phase 1 of SFVCD: Measuring Performance. This phase assesses whether specific value chains deliver economic profitability, social inclusiveness and environmental stewardship. Economic viability looks at profitability and market access for stakeholders; social sustainability assesses equity, labor conditions and inclusion of women and youth; environmental sustainability analyses impact on land, water and biodiversity. Although treated separately, these dimensions overlap and trade-offs are analyzed to align with F2F Strategy and CAP requirements. The diagram below explains the methodological framework.

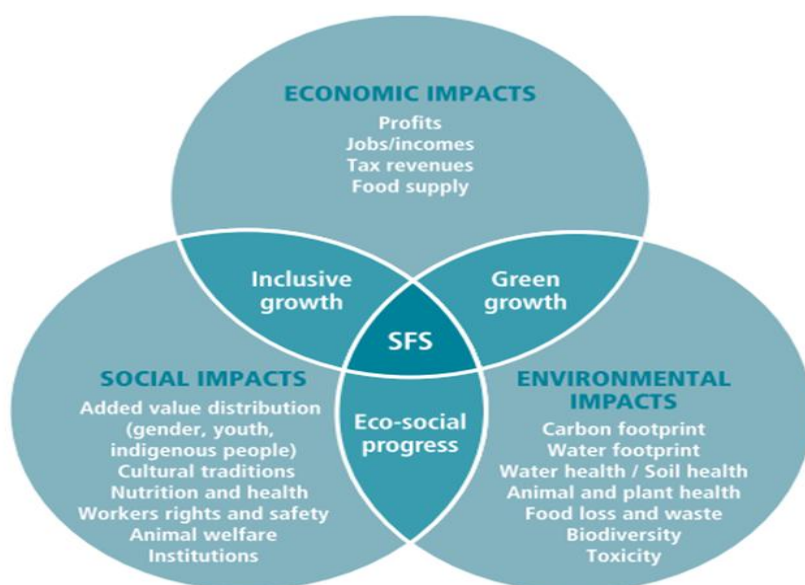


Figure 1: Sustainable Food Value according to FAO SFVCD framework.

²⁵ FAO (2014). *Sustainable Food Value Chain Development: Guiding Principles*. Rome: Food and Agriculture Organization of the United Nations. ISBN: 978-92-5-108481-6. Available at: <https://www.fao.org/3/i3953e/i3953e.pdf>

3.3. Performance evaluation and scoring

Performance across all value chains was assessed using a standardized methodology that converts qualitative evidence into quantitative scores. A common scoring system was applied, using a 1-3 scale in which: 1 indicates that a given element reduces sustainability, 2 reflects a neutral or mixed effect, and 3 signifies a positive contribution to sustainability. In some cases, a more detailed 1-5 scale is used to evaluate economic, social, and environmental indicators, including profitability, employment, market access, labor conditions, gender and youth inclusion, greenhouse gas emissions, biodiversity, and waste management. Composite scores for each sustainability pillar were then calculated and validated through expert review. Where narrative assessments were used, these were systematically translated into the same scoring framework to ensure consistency and comparability across all contexts

3.4. Analytical stages

Beyond the scoring exercise, all national policy documents applied a structured, multi-stage analytical process to diagnose systemic challenges within the value chains. This typically began with sustainability scoring, using standardized quantitative scales (primarily 1-3, where 1 indicates a negative impact on sustainability, 2 a neutral effect, and 3 a positive contribution; and in some cases, a 1-5 scale to allow finer differentiation across economic, social and environmental indicators). The scoring was followed by root-cause and systems analysis, which included value chain mapping, governance diagnostics and market and consumer assessments to identify underlying constraints such as fragmentation, informality, coordination gaps, and limited enforcement capacity. A third stage focused on triangulation and validation, drawing on national policy documents and national reports findings. Lastly, the evidence was reorganized and synthesized into policy broader sustainability objectives. This unified analytical framework, scoring, systems diagnosis, and evidence validation, provided a coherent foundation for formulating actionable and context-relevant policy measures across the region.

4. Regional level SWOT analysis

The national policy documents from Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia reveal common patterns across the agri-food systems of the Western Balkans. A regional-level SWOT analysis, based on the SFVCD framework, assesses economic, social, and environmental dimensions across the entire region. The table below summarizes the key strengths, weaknesses, opportunities, and threats, while the accompanying narrative provides a more detailed explanation of each element. The analysis draws on evidence from country-specific studies and participatory consultations, ensuring a comprehensive regional perspective.

Table 2: Regional level SWOT analysis across three sustainability dimensions

	Strengths	Weaknesses	Opportunities	Threats
Economic	- Favorable agro-climatic conditions for development of agricultural activities - Long farming traditions sustain farm production potential. - Niche, high-value products (cheeses, honey, ajvar) with GI potential create export prospects. - Rising milk yields in Albania and BiH.	- Dominance of small farms (2-6 ha average) and highly fragmented limiting economies of scale. - Low levels of profitability and productivity. - Limited access to credit due to collateral requirements and high interest rates. - Lack of labor force and increasing costs of non-farm workers. - Limited processing, certification and marketing capacities. - Poor infrastructure (roads, cold storage, logistics) and limited insurance coverage. - Informal markets and weak farmer organizations leave producers with low bargaining power. - Low awareness and adoption of digital technologies in agriculture. - Limited access to qualitative extension services.	- EU CAP alignment enables funding for consolidation, mechanization, and value chain upgrades. - Land reforms, cooperatives, and contract farming are expected to boost efficiency. - IPARD support can improve infrastructure and enhance competitiveness. - Quality schemes (GI), organic certification etc. increase access to premium markets.	- Depopulation and lack of the willingness of young people to engage in agriculture. - Market volatility, high input costs, and climate shocks threaten farm profitability. - Delayed alignment with CAP and complex governance structures hinder reform.

Social	- Strong rural traditions, family farming systems, and traditional agricultural practices preserving intergenerational knowledge. - Agriculture remains central to rural livelihoods, supporting employment and local food security. - High social cohesion and community resilience, enabling collaboration and knowledge sharing. - Active CSOs and farmer associations advocating farmers.	- Out-migration and ageing population reduce rural labor availability and participation. - Lack of willingness of young people to invest in rural communities, reducing generational renewal on farms. - Gender inequality limits inclusiveness in agricultural activities and decision-making. - Limited access to social protection, and pensions increases vulnerability. - Low quality education, healthcare services, road infrastructure and public transport.	- EU CAP alignment and other EU agricultural programs. - Strengthening of cooperatives and progress in adoption of AKIS systems. - Progress in increasing formal employment, labor rights, and improved working conditions. - Increased investments in vocational education and training, and advisory services. - Increasing awareness and gradual adoption of digital technologies. - Promotion of rural tourism, traditional products, and cultural heritage.	- High emigration and an ageing population. - Limited access to credit and financial services especially for small farmers, rural women and young people. - Weak institutions and governance, informality and limited market transparency. - Exclusion of rural women and young people from decision-making.
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Environmental	- Diverse agro-ecosystems and traditional agropastoral systems. - High share of agricultural land across the region. - Presence of pastures, forests, and wetlands. - Traditional low-input farming and agropastoral systems. - Integration of crop-livestock systems and sustainable land use.	- Low livestock yields and poor manure management. - Soil erosion, pasture degradation, and deforestation. - Limited adoption of climate-smart agricultural practices, renewable energy and waste recycling. - Weak environmental monitoring and enforcement of regulations. - Fragmented landholdings and unsustainable land-use practices. - Overgrazing and monoculture are cropping in some areas. - Limited awareness and knowledge of environmental sustainability practices among farmers.	- Strengthened environmental governance and monitoring, supported by EU alignment and regional cooperation. - Regional and national policy frameworks, such as alignment with the EU Green Deal, CAP environmental measures, and climate adaptation strategies. - Adoption of climate-smart agricultural practices and improved livestock breeding. - Expansion of renewable energy sources, including biogas, solar, and small-scale hydro. - Development of eco-tourism and agri-tourism to diversify rural incomes, while promoting conservation and cultural heritage.	- Limited progress in the implementation of the Green Agenda for Western Balkans (GAWB). Weak enforcement of environmental regulations and fragmented policy implementation limit effective natural resource management. - Increasing frequency and intensity of droughts, floods, and pests. - Rising temperatures and climate variability. - Biodiversity loss and degradation of soils, pastures, and forests.
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5. Discussions and proposed practical measures for sustainable food systems in WB-6 countries

The analysis shows that agri-food systems face similar structural problems across all six countries Albania, Bosnia & Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia. The SWOT analysis of priority value chains shows the agriculture and rural development in each country is constrained by fragmented production structures, weak producer organization, limited access to knowledge and finance, persistent social inequalities and environmental pressures. This synthesis highlights shared challenges across economic, social, and environmental dimensions and proposes key measures that should be implemented prior to EU accession to strengthen competitiveness and sustainability.

Table 3: Summary of common ground challenges of the agriculture and rural development sector in WB-6 countries

Dimension	Common ground challenges
Economic	<u>Domination of small size farms.</u> Production is dominated by small family farms, which limit economies of scale and efficiency. The average farm size is smallest in Albania (1.2 ha), followed by Kosovo (1.5 ha), Montenegro (2 ha), North Macedonia (2.6 ha) and Bosnia and Herzegovina (3 ha), while Serbia has the largest average farm size (6 ha). <u>Limited access to finance.</u> High interest rates, lack of collateral, and complex administrative procedures exclude many small farmers from formal credit systems. This in turn restricts investment in equipment, technology, and farm upgrading, maintaining low levels of productivity and profitability. Also, the supporting national schemes in most WB-6 countries are considered not sufficient to fulfil needs of farmers. <u>Inadequate quality infrastructure.</u> Insufficient storage facilities, underdeveloped processing capacities and limited cold-chain logistics contribute to product losses and lower quality, weakening the competitiveness of products in local and international markets. <u>Value chain organization.</u> Informal markets dominate, bargaining power of farmers is low and producer groups or cooperatives are not functional. This fragmentation across the value chains limits farmers' ability to negotiate better prices or access new markets. <u>Human capital and technology adoption.</u> Limited knowledge, training and innovation uptake constrain productivity. Low awareness, weak advisory support, and scarce technical skills hinder technology adoption, while gaps in training and extension services prevent smallholders from modernizing. <u>Low profitability.</u> High input costs, fragmented production, weak bargaining power, and limited access to markets compress farm margins. Many smallholders operate at or near subsistence levels, with minimal surplus for reinvestment in equipment or innovation. The structural, financial, organizational, and human-capital weaknesses described above collectively erode profitability, undermining the long-term economic sustainability and competitiveness of the region's agri-food systems.
Social	<u>Informal labour market and poor working conditions.</u> The agriculture sector relies heavily on unpaid family labor, particularly women and the elderly, with informality

extending into processing and marketing activities. The share of family labor represents 50-70 % of the total agricultural workforce across the WB-6 countries, the highest shares in Kosovo (70 %), Albania (60-65 %), and Montenegro (60 %), followed by Bosnia and Herzegovina and Serbia (55-60 %), and North Macedonia (50 %). While this provides livelihood security, it also limits productivity and leaves most workers without access to formal labor rights or social insurance.

Depopulation of rural areas and generational renewal. Rural areas across WB-6 continue to experience high levels of out-migration, driven by limited economic opportunities, social life and persistent gaps in rural infrastructure and services. This trend has shortened the labor force, reduced the availability of skilled workers, and contributed to the gradual depopulation of many communities. As younger generations move abroad or relocate to urban centers in search of better prospects, rural regions face increasing challenges in sustaining agricultural production, maintaining social cohesion and ensuring long-term development.

Rural women and youth exclusion. This important part of rural communities faces several persistent challenges including low participation in decision-making and value chains, limited access to land property rights, finance and training. Women's land ownership, the most important production asset in the agriculture sector, remains particularly low, only 8% of registered landowners in Kosovo, 11 % in Albania, less than 20 % in Bosnia and Herzegovina, 17-19 % in Montenegro and North Macedonia, and 25 % in Serbia, the regional high. This situation highlights persistent inequality in asset ownership and barriers to credit and development opportunities.

Limited cooperation and collective action. Farmer organizations and cooperatives across the region remain weak and not structured. Existing cooperatives and producer associations are few and often fragmented, which undermines farmers' bargaining power and limits their access to markets, training opportunities and essential services. Low levels of collective action and social capital also reduce farmers' ability to advocate for fair labor conditions and strengthen their position in value chains.

Weak social protection systems. The dominance of unpaid family labor offers a basic level of economic security but leaves most rural workers outside formal social protection systems. Only a small share of agricultural workers is covered by social insurance or pension schemes, while widespread informality further limits access to public services and social assistance. This reliance on family labor heightens vulnerability, particularly for women and the elderly, and undermines both productivity and generational renewal in rural areas.

Limited qualitative education. Rural areas in WB-6 countries continue to experience gaps in education and capacity building systems. Educational institutions and adult learning programs frequently operate with limited resources, while opportunities for lifelong learning are scarce. Farmers, particularly women and youth, often have insufficient financial literacy and entrepreneurial skills, restricting their capacity to manage agricultural operations efficiently or to diversify income-generating activities.

Weak knowledge transfer and advisory systems. Advisory and extension systems remain fragmented, understaffed and not connected to farmer needs. Most advisors lack participatory and inclusive training methods, resulting in limited engagement of women and young farmers. The weak linkage between research institutions, extension services, and farmer organizations constrains knowledge exchange and innovation uptake. Peer learning and mentorship networks are rare, and regional cooperation on

innovation or training is minimal, preventing the spread of successful local models across borders.

Limited digital connectivity. Broadband and mobile coverage are inadequate in many remote areas, leaving farmers disconnected from markets, training opportunities, and essential services. Low levels of digital literacy further restrict the effective use of online resources, while access to e-government and social protection services remains limited. The lack of centralized e-learning platforms and digital centralized service points exacerbates rural isolation and hinders participation in the modern economy.

Environmental Climate vulnerability and water management. Recurrent droughts and erratic rainfall in Albania, Kosovo, and Serbia have significantly reduced fodder and crop yields, while flooding in northern Bosnia and Herzegovina disrupts production cycles. Irrigation systems remain underdeveloped, covering less than 40% of cultivated land in Albania and under 10% in Montenegro, highlighting widespread water inefficiency and limited investment in climate adaptation. Low levels of mechanization in smallholder farming systems further constrain productivity and hinder effective soil management.

Greenhouse gas emissions and pollution. High greenhouse gas emissions and local pollution are driven by low-yield livestock systems, where inefficient feed utilization and open manure storage increase methane emissions and degrade soil and water quality. Reports from Albania, Bosnia and Herzegovina, and Montenegro specifically highlight manure disposal near waterways and the lack of biogas or composting facilities as urgent environmental concerns.

Land degradation and biodiversity loss. Overgrazing in Albania and Montenegro, combined with land abandonment in Bosnia and Herzegovina and parts of North Macedonia, contributes to soil erosion, shrub encroachment, and reduced biodiversity. In North Macedonia, the loss of bee pastures and floral diversity has already led to decreased honey production and impaired pollination services.

Low adoption of climate-smart and renewable technologies. Only a small number have implemented solar-powered irrigation systems or biogas digesters, and overall awareness of these solutions is limited. High costs, weak advisory support and insufficient financial support, as reported in Albania, Kosovo, and Serbia, continue to constrain wider uptake and slow progress toward smart agricultural practices.

Proposed measures

Having examined the key challenges confronting the agri-food sector in the WB6, this section of the policy document presents a set of actionable measures aimed at addressing the region's economic, social, and environmental constraints. Although numerous issues across all three sustainability dimensions continue to impede the development of rural areas, the Western Balkans also possess considerable agro-climatic advantages and *benefits* from opportunities arising through EU integration. Accordingly, the proposed measures focus on strengthening cooperation and formalization, enhancing access to knowledge and advisory services, improving social well-being, and bolstering climate resilience and resource management. Collectively, these interventions are intended to foster a more competitive, inclusive, and environmentally sustainable agri-food system across the region (for proposed measures by country refer to ANNEX B).

Proposed measures for the economic dimension challenges

The following measures present a pathway for advancing the agri-food sector, outlining short-term measures to build institutional capacity, strengthen producer cooperation, improve land governance, and support early modernization efforts, alongside longer-term reforms aimed at aligning with EU standards, expanding financing opportunities, and fostering resilient, competitive, and well-integrated value chains.

Table 4. Proposed short term and long-term measures for economic sustainability of the agriculture sector in WB-6

Area/Measure	Short-term (1-3 years)	Long-term (4-8 years)
Cooperation (Producer groups, cooperatives)	Piloting the establishment of producer groups and cooperatives through targeted training, legal advisory support, and financial assistance. Implementing projects related to strengthening collective marketing, input purchasing and management capacities at the local level, in line with CAP Pillar I objectives to improve market position and competitiveness.	Support the formal recognition and financing of producer groups and cooperatives under CAP-type instruments, including European agricultural guarantee fund operational programmes for recognized Producer Organisations and Measure 3 on cooperation support under Pillar II.
Land management	Implement preparatory cadastral inventory, voluntary land pooling and awareness campaigns on land leasing benefits. Ensuring access of rural women in land property rights by reinforcing the implementation of national legislative and policy framework in each of the WB-6 countries.	Legal and cadastral reform, establishment of land banks and implementation of structured voluntary consolidation schemes. Establishment of the land parcel identification system (LPIS) in order to comply with the EU requirements in the frame of EU integration process.
Modernization	Improving capacities of public administration in effective management of the IPA and national funds to co-finance modern equipment (irrigation, greenhouses, milking machines, feed mixers) and promote climate-smart practices. Providing supporting schemes and accessible credit for mechanization, energy-saving and storage investments. Introducing guarantee schemes and dedicated credit lines for youth and women to boost inclusive farm modernization.	Harmonization of modernisation supporting measures with the EU CAP programmes for sustainable and coherent financing. Providing complement grants with innovative tools, credit facilities, guarantees, co-investment, and blended finance, to attract private capital, reduce lending risks, and expand farmers' access to credit while promoting green and digital transformation across the agri-food sector.

Value chain integration	Piloting contract farming models linking producers and buyers under fair terms, introduce digital traceability systems to ensure product quality and transparency Promoting quality schemes and geographical indications (GIs) for niche products to enhance market recognition, value addition, and competitiveness of local agri-food production in domestic and export markets.	Developing full traceability and certification systems to ensure quality and transparency across value chains, strengthen outgrower legislation to formalize farmer-buyer relationships. Establishing regional branding frameworks that promote product origin, authenticity, and sustainability, enhancing competitiveness and market access for local agri-food products at national and international levels.
Infrastructure and logistics	Investing in farm and processing infrastructure, cold storage, collection and grading facilities to reduce post-harvest losses and stabilise supply. Improving rural roads and local connectivity to facilitate input delivery and market access, ensuring timely transport of perishable goods and stronger links between producers, processors, and local markets year-round.	Promoting public-private partnerships to develop small-scale dairy and vegetable processing units near production zones, adding value and creating job opportunities in rural areas. Expanding investment in rural logistics, utilities, and digital infrastructure to enhance supply chain efficiency, attract private investment, and integrate remote farming communities into competitive agri-food markets.
Access to finance and insurance	Establishing guarantee funds to reduce lending risks and expand farmers' access to credit. Introducing financial literacy programmes to improve management and investment decisions. Piloting agricultural insurance schemes to protect smallholders from climate and market shocks thus strengthening resilience and stability across the rural economy.	Establishing dedicated financial institutions to provide accessible financial services tailored to farmers and rural enterprises Developing comprehensive climate-risk insurance coverage to protect agricultural producers from weather-related losses, ensuring financial stability, enhanced resilience, and sustained investment in rural and agricultural development.

Proposed measures for the social dimension challenges

A phased approach to strengthening the social and economic resilience of rural communities by addressing workers' rights, inclusion, education, knowledge transfer and digital connectivity is presented in the below table. Short-term measures focus on building foundational capacities, enhancing access to basic services, and creating early opportunities for women, youth and small producers. Long-term actions aim to institutionalize these gains through systemic reforms, sustained investment and stronger governance mechanisms that enable inclusive and sustainable rural development.

Table 5. Proposed short term and long-term measures for social sustainability of the agriculture sector in WB-6

Area/Measure	Short-Term (1-3 years)	Long-Term (4-8 years)
Formalization and workers rights	Simplifying formal registration process of small farms and micro-enterprises. Improving voluntary social-security and health-insurance schemes to make them accessible for the most vulnerable groups of rural areas Raising awareness on occupational safety and gender equality. Supporting existing farmers groups and unions who advocate for workers rights.	Integrating workers into national labour and pension systems. Fully enforcing labour-law compliance with dedicated rural inspection units and social-dialogue mechanisms.
Women and youth inclusion	Launching grant schemes, mentorship and training for women and young people engaged in the agriculture and rural development sector. Piloting land-leasing and credit lines for young farmers. Including young people and rural women in the decision-making processes related to the agriculture and rural development sector governance.	Launching specific budgetary supporting schemes for young people from rural areas in order to make them invest in rural communities. Institutionalizing gender/youth quotas in producer organizations and policy councils; Ensuring equal access to land, finance and inheritance rights through legal reform.
Education	Investing in the education system in rural areas, adult learning, and community services by upgrading facilities, improving digital access, and providing basic financial-literacy and entrepreneurship training to strengthen skills and wellbeing in rural areas.	Develop lifelong-learning and rural-leadership programmes that build modern farming, environmental and digital competencies while empowering youth, women, and community leaders to drive local development. Integrate agriculture, environmental sustainability and digital skills into school and vocational curricula to prepare a skilled workforce capable of meeting future agri-food, climate and technology demands.

Knowledge Transfer & Advisory Systems (AKIS Social Pillar)	Recruit and train rural advisors in participatory, inclusive methods while promoting peer-to-peer learning that empowers farmers to jointly develop solutions.	Fully operationalize national AKIS platforms that connect research, extension services, and farmer organizations and establish cross-border innovation hubs for youth and women.
	Supporting scalability and sustainability of Centre for Agricultural and Rural Assistance (CAAR) ²⁶ pilot centres based on the Italian successful model for effective extension services.	Strengthen digital advisory services by equipping advisors with modern tools and platforms that remote knowledge sharing.
Digital Connectivity	Expanding broadband and mobile coverage across rural areas while deploying digital-extension tools that provide real-time market information, advisory support and training opportunities.	Creating permanent e-learning portals and digital one-stop-shops that streamline access to rural services, social security, and administrative procedures for citizens and farmers.
		Promoting digital upskilling programmes that help rural residents, including older farmers, use online tools, e-government services and digital farm-management applications.

Proposed measures for the environmental dimension challenges

The next set of actions focuses on supporting a greener, more climate-resilient agricultural sector through targeted investments and long-term environmental commitments. The short-term measures focus on building practical capacities, piloting climate-smart and resource-efficient technologies, and strengthening basic monitoring and advisory systems. The long-term measures aim to embed these innovations into national policies and support schemes, expand green infrastructure, and establish durable governance mechanisms that drive low-emission, climate-resilient and biodiversity-friendly rural development.

Table 6. Proposed short term and long-term measures for environmental sustainability of the agriculture sector in WB-6

Area/Measure	Short-Term (1-3 years)	Long-Term (4-8 years)
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²⁶ To learn more on Centre for Agricultural and Rural Assistance click [here](#).

Climate-Smart Agriculture (CSA)	Promoting drought-resistant crop varieties, water-saving irrigation (drip, micro-sprinklers), conservation tillage, mulching, and agroforestry pilots. Training advisors and farmers in CSA methods.	Mainstreaming CSA into national rural-development programmes. Include CSA compliance as eligibility criterion for IPARD funds and other supporting schemes. Scaling up research and monitoring networks at national and regional level.
Greenhouse-Gas Mitigation & Manure Management	Providing grants and technical assistance to improve animal feeding, housing and storage systems, enhancing productivity, animal welfare and farm efficiency. Piloting small-scale biogas units to promote renewable energy use, reduce waste, and create additional income streams for rural households and farms. Introducing and enforcing modern manure-handling standards and farm audits to improve environmental performance, reduce pollution, and support compliance with EU requirements. Supporting the adoption of climate-smart livestock technologies that reduce emissions and improve resource efficiency across production systems. Offering training and advisory services that build farmers' capacity to implement improved waste management, biosecurity, and sustainable nutrient-management practices.	Developing national methane-reduction strategies, expand biogas and compost infrastructure, and integrate emission reporting into CAP conditionality and ESG standards to promote climate-friendly livestock and waste management practices. Supporting farm-level adoption of low-emission technologies and precision nutrient management to reduce greenhouse gas outputs and enhance sustainability. Establishing monitoring and incentive mechanisms that reward farms and cooperatives for measurable progress in reducing methane and other agricultural emissions.
Pasture & Biodiversity Conservation	Mapping degraded pastures, implementing rotational grazing plans, pilot payments for ecosystem services (PES), and training farmers in biodiversity stewardship to restore ecosystems and enhance sustainable land management. Supporting the adoption of soil and pasture monitoring technologies to track restoration progress and guide adaptive grazing practices. Developing community-led conservation initiatives that combine economic incentives with biodiversity protection to engage farmers and local stakeholders.	Establishing permanent agri-environmental schemes that reward conservation practices, restore high-nature-value pastures and native breeds and integrate pollinator and forest management plans into national CAP strategies to strengthen biodiversity and ecosystem services. Promoting farmer-led habitat restoration and monitoring programmes that combine traditional knowledge with scientific guidance to enhance long-term ecological resilience.

Renewable Energy	Supporting solar-powered irrigation systems to increase energy efficiency and reduce reliance on fossil fuels in agriculture.	Developing national programmes supporting renewable-energy farms, including biogas, solar and wind, to foster sustainable energy production in the agricultural sector.
	Conducting on-farm energy audits to identify opportunities for savings and improve overall farm sustainability.	Linking agricultural energy-efficiency improvements to carbon-credit markets and sustainable finance taxonomies to incentivize low-carbon investments and attract private capital.
	Piloting micro biogas plants and energy-efficient processing units to promote renewable energy use and lower carbon emissions in rural production.	
	Offering green investment grants that incentivize farmers to adopt sustainable technologies and practices.	
Environmental Governance & Monitoring	Strengthening environmental inspection and data collection on soil, water, and biodiversity to improve monitoring, compliance and evidence-based policymaking.	Institutionalising environmental monitoring systems with interoperable databases to enable efficient data sharing, tracking and evidence-based decision-making.
	Training local officials and agricultural advisors on EU Green Deal objectives and CAP conditionality to enhance enforcement, advisory services, and alignment with EU sustainability standards.	Integrating cross-compliance rules and eco-schemes into national support frameworks to ensure alignment with sustainability standards and encourage environmentally responsible farming.

6. Country specific challenges and proposed measures for the agriculture and rural development sector in WB-6

6.1. Summary of country-specific features

The unified SWOT and common ground analysis shows that the WB-6 agri-food systems share many shared structural challenges. Nevertheless, each country exhibits distinct features based on its chosen value chain, institutional context and production profile. This section elaborates those specificities for Albania, Bosnia & Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia. Understanding these particularities is crucial for tailoring policy interventions that complement the regional recommendations.

Table 6: Summary table of country-specific challenges of the agriculture sector in WB-6 countries²⁷

Value chain/Country)	Economic	Social	Environmental
Albania (Dairy)	- Dairy contributes around 40% agricultural output, but production is highly fragmented. - About 96 % of dairy farms have fewer than 5 cows. Only a small minority operate semi-commercial herds (>10 cows). - Dualism: few modern farms/processors integrate into markets, while most smallholders remain in low-productivity informal trade. - Declining milk output (2017-2023) due to limited investment and demographic changes.	- Heavy reliance on informal labour/unpaid family members. - Poor working conditions and weak social protection system. - High rates of migration from rural areas and lack of youth motivation to engage in the agriculture sector. - Underrepresentation of women and youth in organizations and decision-making due to land barriers and cultural norms.	- High enteric methane. - Manuring mismanagement contaminates soil/water. - Pasture degradation and biodiversity loss from abandonment and grazing pressure. - Limited investment in renewables and resource-efficient technologies.
Bosnia & Herzegovina (Dairy)	- Production is dominated by family farms with 3-5 cows on average and few medium farms (20-50 cows). - Underdeveloped processing, storage and marketing infrastructure. - Imports account for an important share of domestic demand.	- Wellbeing depends on farms activities with limited incomes. - Limited producer organization; advisory services and extension support are weak.	- Intensive dairy farming causes soil, water and air pollution. - Soil organic matter is declining. - Traditional methods and manure management can improve soil structure and prevent erosion, but uptake of climate-smart practices is low.
Kosovo (Vegetables & Dairy)	- Fragmented plots limit mechanization/economies of scale. Small-scale herds averaging 3-5 cows; less than 2 % of farms have over 10 cows. - Limited technology access, weak market linkages; dairy faces quality/certification issues and unfair access to markets.	- Inadequate advisory/extension services. - Weak farmer organization, many sell directly via informal channels.	- Droughts, water shortages and animal health risks threaten production. - High input costs + fragmentation exacerbate vulnerability. - Organic/sustainable production still at early stage.

²⁷ This analysis is based on the six policy documents on National Policy on Sustainable Food Systems & Rural Livelihoods for each of the WB-6 countries, as listed above.

Montenegro (Dairy)	- Heavy import dependence; - Underdeveloped processing and poorly organized markets. - Typically 2-6 cows per household; very few farms exceed 10-15 cows. - Producers face low purchase prices, rising costs, underdeveloped market linkages, weak organizations. - Declining dairy-cow numbers, lack of standardization/certification.	- Production largely family-based, highly seasonal; widespread informal sales reduce traceability. - Weak cooperatives and low bargaining power.	- Northern pastures support grazing but poor infrastructure isolates producers. - Low digitalization/innovation uptake hinders sustainability.
North Macedonia (Honey)	- Beekeeping supports rural livelihoods but is fragmented, poorly integrated into markets; subject to unfair trade. - Farmers have weak bargaining power; branding/differentiation efforts are slow/fragmented.	- Limited advisory and training access; farmers need more communication of policies. - Producer organizations are weak; smallholders marginalized in price negotiations.	- Vulnerable to droughts, biodiversity loss. - Limited adoption of climate-smart/low-emission technologies. - Soil and biodiversity monitoring insufficient.
Serbia (Red pepper/ajvar)	- Strong tradition and GI (Leskovac ajvar), but facing climate-driven raw-material variation, labor shortages, limited capacity/market access. - Weak use of GI protection, - Small producers lack skills in product development, technologies, and marketing. - Market relies on direct/seasonal sales; faces unfair competition from cheap industrial/imported ajvar.	- Producers are mainly independent; weak cooperation within/between value chains. - Limited awareness of public funding and compliance obligations.	- Climate variability reduces pepper yields and water availability. - Processing may add waste/energy-use pressures (packaging, fuel).

6.2. Proposed measures for each country of WB-6

Based on the country-specific challenges analyzed in the previous section, this part of the policy document provides national-level recommendations to support the transition toward more sustainable food systems and livelihoods in the WB-6 countries.

Albania: Dairy value chain

Based on the challenges identified in the dairy value chain, a set of comprehensive recommendations is proposed to strengthen the sector by enhancing quality, sustainability, competitiveness, and inclusiveness. Upgrading milk collection centers, certification systems, and farmer training can improve food safety and help align practices with EU standards. Strengthening cooperatives can increase farmers' bargaining power, reduce costs, and expand market access. Implementing climate-smart innovations, such as biogas production, improved manure management, and resilient fodder systems, can lower emissions while protecting ecosystems.

Tailored financial instruments, including dairy-specific credit lines, grants, and risk-mitigation tools, can facilitate investments in modern technologies and protect producers from economic shocks. Prioritizing women and youth through targeted training, credit access, and leadership opportunities will promote generational renewal and equitable development. Encouraging diversification of activities and value-added processing can increase farmers' incomes and broaden their market reach. Finally, expanding and digitalizing extension services and data systems will support the adoption of sustainable practices and enable evidence-based decision-making across the entire value chain.

Bosnia and Herzegovina: Dairy value chain

The dairy sector in Bosnia and Herzegovina requires a rebalancing of the value chain to ensure farmers receive fairer incomes and remain competitive. Policies should focus on strengthening domestic production to reduce reliance on imports, while improving environmental sustainability and long-term sector viability. To protect soil, water, and air quality, investments are needed in modern manure-management systems, wastewater lagoons, and the proper handling and incorporation of organic fertilizers. Promoting climate-smart technologies, such as biogas production, can reduce emissions, generate renewable energy, and enhance farm efficiency, provided that digestate is returned to the soil to maintain nutrient levels. Support for traditional, pasture-based systems can improve soil fertility and reduce erosion, while training and monitoring systems should help farmers adopt balanced nutrient-management practices that prevent groundwater pollution. Strengthening financial incentives, extension services, and environmental compliance will help align the sector with sustainable farming principles, improve resilience, and ensure the dairy value chain remains economically viable and ecologically responsible.

Kosovo: Vegetables and dairy value chains

In the case of Kosovo value chain resilience can be enhanced by improving income tracking, reducing production costs, enhancing market access and expanding value-added processing. Better monitoring of income distribution, especially the share retained by farmers, alongside targeted support for branding, product diversification, and certification can increase competitiveness and ensure fairer returns. Also, the sector needs measures to foster inclusion of women and young people. Regular surveys on labor conditions, income stability, and workforce characteristics can

help identify vulnerabilities and guide interventions. Expanding cooperative membership, increasing transparency in pricing, and strengthening access to training, extension services, and digital tools can elevate the social sustainability of both chains and support more equitable participation. Lastly, in the case of Kosovo, establishing baseline environmental indicators and promoting agro-ecological practices, such as rotational grazing, organic vegetable production, efficient irrigation, and agroforestry, can reduce climate risks and improve ecosystem health. Tying sustainable production to market incentives (eco-labels, premium pricing) will further encourage adoption.

Montenegro: Dairy value chain

In Montenegro, improvement of competitiveness can be achieved through performance-based farm support, modernization of small and medium dairies, fair milk pricing, better collection systems and stronger export capacity. Also, the sector requires revitalized rural participation by supporting young farmers, empowering women, improving advisory services and strengthening cooperatives to ensure fairer value distribution and community cohesion. Environmentally, sustainable pasture management, improved waste handling, green technologies and enhanced climate resilience are crucial to reducing the sector's ecological footprint. Together, these measures aim to transform Montenegro's dairy value chain into a more competitive, inclusive and climate-resilient system that supports rural development while aligning with EU and FAO sustainability principles.

North Macedonia: Honey value chain

The sector of honey in North Macedonia would benefit from standardized income-tracking tools that allow beekeepers to monitor yields, production costs, and sales performance. Mapping value distribution along the chain, from beekeepers to aggregators, processors, and retailers, will help identify pricing imbalances and support fair-market interventions. Expanding market access through certifications, diversified honey-based products and cost-benefit assessments of branding and labeling initiatives will improve competitiveness and open new domestic and export opportunities. Also, regular surveys are needed to understand household dependence on beekeeping, seasonal labor dynamics and family involvement. Tracking key indicators, such as the share of value retained by beekeepers, income stability and the participation of women and youth, will help ensure inclusive sector development. Strengthening cooperatives and beekeeping associations can enhance transparency in price-setting and improve negotiation power. Increasing access to training, digital tools, extension services, and professional development will raise social sustainability and support the professionalization of the sector. Lastly, the honey value chain is directly linked to ecosystem health, making long-term environmental monitoring essential. Establishing baseline indicators on pollinator biodiversity, hive productivity, colony collapse incidents, pesticide residues, and floral resource conditions is crucial for informed decision-making. Promoting sustainable beekeeping practices, such as organic production, afforestation with nectar-rich species, and agroforestry, can strengthen pollinator habitats and reduce pressure on single ecosystems.

Serbia: Ajvar value chain

Strengthening the Avjar value chain in Serbia requires targeted institutional support, improved advisory services and strategic investments across all sustainability dimensions. A greater resilience can be achieved by supporting indoor and climate-smart cultivation, improving access to resistant varieties, expanding product certification and branding and enhancing marketing, cooperation and diversification of sales channels. Stronger producer associations, improved access

to training, better data on household labor and targeted technological innovations can reduce workload and improve opportunities for women, youth and small farms. Environmentally, promoting organic production, reducing chemical use, improving irrigation efficiency, conserving soil and biodiversity, and valorizing processing waste will significantly enhance sustainability and circularity.

7. Policy recommendations for sustainable food systems and livelihoods in WB-6

The following recommendations consolidate key suggestions derived from regional assessments and will serve as a strategic framework for policymakers to advance alignment with the EU F2F Strategy and CAP. Development partners and EU²⁸ institutions should use this framework to target financial instruments, technical assistance, and capacity-building interventions that support the development of sustainable, inclusive, and competitive agri-food systems across the Western Balkans.

Alignment of national policy and legislative framework in national and regional level with the EU CAP and Farm to Fork Strategy to ensure harmonization of food safety, environmental, and quality standards with EU requirements. National governments should prioritize the timely transposition and enforcement of relevant EU regulations. Development agencies can support this process by financing capacity-building initiatives for regulatory and inspection bodies. The EU can further reinforce alignment by providing targeted technical assistance, including through Twinning projects. Twinning projects remain one of the EU's key instruments for helping candidate and potential candidate countries align their legislation and institutional practices with EU standards. They facilitate direct transfer of expertise from the public administrations of EU Member States to their counterparts, strengthening administrative capacity and ensuring practical, sustainable adoption of EU norms.

Establishing formal AKIS coordination mechanisms, enhance the professional standards and accreditation of agricultural advisors, and expand the deployment of digital platforms for knowledge generation and dissemination. National governments should embed AKIS modernization within their EU integration, rural development, and innovation policy frameworks. Development partners, and the EU through programs such as Horizon Europe and Erasmus+, should provide targeted support by financing innovation hubs, advanced training for advisory service providers, and structured cross-border knowledge networks. Strengthening AKIS will improve the uptake of sustainable practices, accelerate technological innovation, and enhance the competitiveness of the agricultural sector.

Advance land consolidation and reducing land fragmentation as a key instrument for enhancing farmers competitiveness, facilitate investment and contribute to more efficient land management. National authorities should implement well-structured consolidation schemes underpinned by modern cadastral systems, transparent land registries and legal frameworks that safeguard property rights. Incentive mechanisms, such as financial support or infrastructure improvements, should be introduced to encourage neighboring landholders to voluntarily merge and reorganize fragmented parcels. EU IPA and IPARD funding, complemented by development partner assistance, can play

²⁸ Throughout this recommendations section, the EU is identified as the primary stakeholder in facilitating the integration of the WB6 into the EU framework.

a critical role by financing cadastral updates, land surveys, legal and mediation services, and essential infrastructure for consolidated holdings.

Establishing and operationalizing enabling legal frameworks for agricultural cooperatives and producer organizations, including simplified registration procedures, clear governance rules, and targeted fiscal incentives to increase farmers' bargaining power, market access and integration into higher-value segments of the value chains. Development agencies can complement these efforts by providing legal, managerial, and business-development support to emerging and existing groups, helping them build robust organizational and financial structures. EU instruments, including IPA and IPARD, should be leveraged to finance shared infrastructure for cooperatives, such as processing facilities, storage, input procurement systems and joint marketing and distribution platforms.

Strengthening financial inclusion in the agri-food sector by partnering with local financial institutions to establish agricultural guarantee funds and risk-sharing mechanisms that facilitate lending to smallholders, women and young entrepreneurs. Regulatory frameworks should also encourage the development of tailored financial products aligned with the needs of emerging and underserved agricultural producers. Development agencies can support this agenda by designing blended-finance instruments, technical assistance programs, and investment-readiness support that reduce barriers to credit and stimulate private-sector participation. EU IPA and IPARD funding should be leveraged to co-finance start-ups, innovative business models, and value-adding investments led by women and youth.

Strengthening agri-food processing capacities and quality assurance systems to enhance competitiveness and support diversification into higher-value products. Governments are encouraged to make fuller use of EU instruments, particularly those under Regulation (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs to promote geographical indications (GIs), traditional specialties and other value-added certifications. Development partners can play a complementary role by providing technical assistance for product standardization, traceability systems, and compliance with EU quality and safety requirements.

Strengthening formal market linkages, improving transparency and ensure balanced value distribution along the supply chain. Regional priorities include the development of digital marketplaces, the wider adoption of contract farming schemes, and enhanced export-promotion initiatives. National governments should establish enabling legal and regulatory frameworks for contract farming, including clear rules on obligations, dispute resolution, and quality standards. Development agencies can support the modernization of market systems by investing in e-commerce platforms, logistics solutions, and producer-buyer matchmaking services. The EU can further contribute by facilitating regional trade integration, advancing mutual recognition of standards, and supporting harmonization with EU market requirements.

Promoting the adoption of climate-smart agriculture and sustainable agricultural practices through targeted incentives, regulatory support, and advisory services to build resilient food systems and reduce environmental impacts. Priority measures include the introduction of drought-resistant crop varieties, efficient irrigation technologies, improved manure and nutrient management practices, expanded use of on-farm renewable energy, and enhanced biodiversity-conservation actions. Development agencies and the EU, particularly through funding instruments aligned with Green Deal should support these efforts by financing pilot initiatives, applied research, and technical training for farmers and advisors.

Implementing supporting measures and policies dedicated to young people from rural areas to reverse rural depopulation and ensure generational renewal in agriculture in the WB-6 countries. This includes integrating youth into national and local rural development policies, providing start-up grants, facilitating access to land and finance, and improving rural infrastructure and social services. Development agencies can support entrepreneurship programs, mentorship, and innovation hubs specifically targeting young farmers. The EU can contribute through community-led local development initiatives and funding instruments that enhance youth participation in sustainable agri-food value chains.

Removing structural barriers to women's participation in agriculture, including equitable access to land, credit, advisory services, and leadership roles in producer organizations and cooperatives to strengthen resilience of rural communities and foster an inclusive development. Targeted legal frameworks, fiscal incentives, and gender-responsive agricultural programs can facilitate women's empowerment. Development agencies can provide capacity-building, business training, and mentorship programs for rural women, while the EU can support projects that promote gender equality and inclusive participation in agri-food systems.

The above recommendations offer a strategic roadmap for national governments to implement proactive measures in support of EU accession, for development agencies to design targeted assistance programs, and for the EU to allocate financial and technical support effectively to ensure sustainable food systems and livelihoods in WB-6 countries.

ANNEXES

ANNEX A: Detailed information on consultation meetings per country

Country	Workshops	Value Chain	Municipality	Total	Female	18-40 years
Albania	First	MAPs	Malesi e madhe	20	2	5
	Second		Belsh	20	1	4
	Third	Dairy	Berat	10	3	1
	Fourth		Lushnje	15	10	2
	Fifth		Zall herr, Tirana	13	0	3
Total				78	16	15
Montenegro	First	Dairy	Župa	16	4	4
	Second		Nikšić	15	13	7
	Third		Tuzi	16	1	3
	Fourth		Danilovgrad	15	5	2
	Fifth		Bijelo Polje	15	1	2
Total				77	24	18
Serbia	First	Wine	Rekovac	14	9	5
	Second	Vegetable	Leskovac	10	7	1
	Third		Rudno	12	8	2
	Fourth	Wine	Paraćin	19	11	12
	Fifth	Wine and Vegetables	Kruševac	12	9	10
Total				67	44	30
Bosnia and Hercegovina	First	Dairy	B Petrovac	19	13	8
	Second		Banja Luka	10	4	5
	Third		Srbac	17	17	0
	Fourth		Tuzla	17	1	10
	Fifth		Bratunac	19	19	0
Total				82	54	23
Kosovo	First	Dairy	Prizren	12	2	4
	Second	Vegetables	Peja	12	0	4
	Third	Vegetables	Prizren	12	8	5
	Fourth	Vegetables	Mamusha	16	0	9
	Fifth	Vegetables	Suhareka	10	0	3
Total				62	10	25
North Macedonia	First	Wine and Beekiping	Vinica	18	1	0
	Second		P.Shapka	16	7	0

Total	Third		P.Shapka	22	10	0
	Fourth		Veles	26	0	0
	Fifth		Online	12	1	0
				94	19	0
Total				826	315	222

ANNEX B. Short and long term measures per each country of WB-

6

Table 7. Short and long term measures on the economic dimension per each country of WB-6

Country	Short-Term (1-3 years)	Long-Term (4-8 years)
Albania (dairy)	Promote cooperatives and producer groups through training and legal support; IPARD III grants for mechanization, renewable energy; digital traceability pilots.	Implement voluntary land consolidation and leasing via cadastral reform; large irrigation and renewable-energy infrastructure; regional GI promotion for cheeses and olives.
Bosnia & Herzegovina (dairy)	Strengthen cooperative governance and provide small equipment upgrades via IPARD II; pilot contract farming; cold storage grants.	Develop land-bank and leasing mechanisms; invest in renewable energy & processing hubs; GI traceability for cheeses; integrated logistics hubs.
Kosovo (vegetables & dairy)	Establish producer groups; IPA/IFAD loans for small equipment; pilot farmer–processor linkage models; small processing units.	Pilot land consolidation with cadastral updates; expand irrigation and solar systems; certification & branding systems; rural road investment.
Montenegro (dairy)	Revitalise small cooperatives; IPARD III support for milking & cooling units; small dairy processor assistance; village collection points.	Register pastureland and clarify tenure; renewable-energy dairy plants; GI for traditional cheeses; cold chains & rural road expansion.
North Macedonia (honey)	Support cooperative schemes in honey sector; renewable processing	Land pooling & voluntary consolidation; rural infrastructure

	grants; contract farming promotion; grading & storage centres.	upgrades; traceability and GI marketing; regional logistics hubs.
Serbia (red pepper/ajvar)	Improve cooperative governance; guarantee funds for equipment & youth credit; expand contract farming for vegetables and ajvar; cooling tanks and rural roads.	Land-leasing and consolidation incentives; renew irrigation and energy recovery from waste; enforce GI system for Leskovac ajvar; processing facilities and renewable-energy systems.

Table 8. Short and long term measures on the economic dimension per each country of WB-6

Country	Short-Term (1–3 years)	Long-Term (4–8 years)
Albania (dairy)	Support formalisation of family farms; launch gender/youth grants; cooperative training; strengthen rural extension on labour safety.	Institutionalise rural insurance coverage; create national cooperative federation; integrate gender equality in agricultural law and land-inheritance reform.
Bosnia & Herzegovina (dairy)	Provide legal aid for cooperative formation; expand advisory coverage; pilot rural pension & health schemes.	Harmonise social-protection systems across entities; establish permanent rural advisory academy; implement unified cooperative and gender-equality frameworks.
Kosovo (vegetables & dairy)	Youth-targeted entrepreneurship and incubation grants; mentoring for women in agri-business; strengthen local producer groups.	Integrate youth/women credit lines in national programmes; embed social-inclusion indicators in IPARD; develop cooperative unions with marketing power.
Montenegro (dairy)	Promote fair-trade and safe-work campaigns; train women/youth in dairy processing and marketing;	Introduce rural-development service centres providing training & social protection; consolidate cooperative networks linked to PDO/PGI schemes.

	pilot producer cooperatives.	
North Macedonia (honey)	Build beekeepers' associations; offer training on leadership, communication & safety; encourage youth beekeeper clubs.	Institutionalise social cooperatives; integrate beekeeping associations into CAP-aligned support; ensure equal access for women to extension & finance.
Serbia (red pepper/ajvar)	Strengthen producer associations; vocational training in agrifood entrepreneurship; promote inclusion of seasonal workers.	Establish professional cooperatives with social-enterprise status; embed rural social-policy units within ministries to sustain inclusion and labour-rights monitoring.

Table 9. Short and long term measures on the economic dimension per each country of WB-6

Country	Short-Term (1–3 years)	Long-Term (4–8 years)
Albania (dairy)	Pilot biogas and composting units for manure management; training on climate-smart feeding and irrigation; reseed degraded pastures and plant trees for erosion control.	Establish national livestock GHG inventory and biogas programme; expand pasture restoration to protected areas; fully align with EU Nitrates Directive and Green Deal targets.
Bosnia & Herzegovina (dairy)	Improve manure storage and nutrient management through entity-level grant schemes; demonstrate biogas potential on large farms; train extension staff on CSA.	Create state-level environmental monitoring system for soil and water; expand biogas and waste-management facilities; implement agri-environment payments for biodiversity and carbon storage.

Kosovo (vegetables & dairy)	Promote drip irrigation and rain-water harvesting; training on manure composting and energy efficiency; initiate small-scale renewable pilot projects.	Integrate climate-risk management into agriculture strategy; build regional solar/biogas clusters; expand irrigation infrastructure and water-storage capacity through donor finance.
Montenegro (dairy)	Launch pasture management plans and eco-tourism linkages; support solar-cooling systems for mountain dairies; awareness campaigns on waste reduction.	Establish national payment for ecosystem services scheme; scale-up renewable energy investments in mountain regions; integrate dairy sector into climate adaptation strategy.
North Macedonia (honey)	Promote biodiversity-friendly forage plants and pollinator habitats; training on organic beekeeping and climate-risk management; launch environmental monitoring of flora and soil.	Institutionalise pollinator and biodiversity protection within CAP-aligned eco-schemes; create national database on bee health and ecosystem services valuation.
Serbia (red pepper/ajvar)	Improve energy efficiency in processing and packaging; pilot waste-recycling schemes and low-carbon transport; monitor climate risks for pepper production.	Introduce green-industry standards for processing plants; support renewable energy integration and carbon footprint labelling for ajvar exports; restore degraded agricultural land through CAP eco-schemes.