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INTRODUCTION

The year 2023 was marked by the tests of war, conflicts and natural disasters.

It began with a natural disaster that caused far-reaching damage. The 6 February earthquake in Türkiye and the Syrian Arab Republic – the most severe to occur in Türkiye in a century – directly affected an estimated 9.1 million people in the 11 hardest-hit provinces. About 50 000 people died, tens of thousands were injured and millions were displaced. Livestock, infrastructure and equipment saw massive damages throughout the most fertile regions of Türkiye.

Additionally, the war in Ukraine continued to disrupt domestic, regional and world food markets and displace great numbers of people. The war has prolonged the global market volatility that marked the COVID-19 pandemic and has led to sharp increases in both interest rates and consumer food and energy prices. The historic levels of inflation that arose in 2022 stabilized somewhat in 2023 as the region got used to what has become a protracted crisis.

In the realm of sustainability, FAO worked in 2023 to introduce and accelerate the digital and green transition towards sustainable resilience through support for agricultural cooperatives, non-governmental organizations, producer associations and unions representing vulnerable groups. FAO is also helping to ensure that diverse and healthy diets are available and affordable to all in a way that balances economic, social and environmental sustainability and considers demographic shifts, poverty, inequalities and an improved way of life.

The Europe and Central Asia region is making progress in reducing malnutrition overall, but it is off track on childhood overweight, adult obesity, micronutrient (mainly iron) deficiencies and exclusive breastfeeding (FAO et al., 2020). FAO is working to fundamentally reshape food and agriculture policies in the region to address the “triple challenge” of affordability, livelihoods for farmers and environmental sustainability.

If we are to protect natural resources, prevent and restore biodiversity loss, adapt to climate change, and reduce greenhouse gas emissions, we must eschew unsustainable models of resource extraction and waste generation. The 2021 United Nations Food Systems Summit elevated the discourse on food systems, and the July 2023 follow-up in Rome reaffirmed the role of food systems in achieving the Sustainable Development Goals and the Paris Agreement goals on climate change.

This report summarizes FAO’s achievements and accomplishments in Europe and Central Asia in 2023, including work to increase social protection, ensure climate action, improve conditions for youth and women, and implement solutions based on science, innovation and digitalization. The first section of this report interprets FAO’s work in countries and regionally through the lens of the four betters, while the second summarizes the work completed in each country in 2023 and outlines ongoing efforts.
HIGHLIGHTS OF FAO’S WORK IN THE REGION

FAO’s work globally and in the Europe and Central Asia region is guided by the FAO Strategic Framework 2022–2031, which articulates the Organization’s vision of a sustainable and food-secure world for all. The Strategic Framework seeks to support the 2030 Agenda for Sustainable Development through the transformation to more efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment and a better life, leaving no one behind.
Regional Initiative 1: Empowering Smallholders, Family Farms and Youth through Inclusive Rural Transformation, Digitalization and Innovation

Land consolidation and land banking

Traditionally applied primarily for agricultural development and farm restructuring purposes, land consolidation is a highly efficient multidisciplinary land management instrument that requires close cooperation among specialists with varying educational backgrounds and experiences. Educating those professionals, therefore, must be a precondition for operational and sustainable land consolidation programmes in all countries. When applied in a multipurpose approach, land consolidation also can facilitate the implementation of public interventions on privately owned agricultural land related to the adaptation to and mitigation of climate change, the restoration of nature and the protection of the environment.

To this end, FAO collaborated with 14 universities from 11 European countries and with public agencies in charge of land consolidation from six countries to develop a master’s degree course curriculum on land consolidation and banking. A publication was created to analyse current educational programmes, examine the demand for knowledge and skills of young professionals, and propose a structure for a course curriculum on land consolidation and land banking. The course aims to teach students, land tenure professionals and others how land consolidation and banking can fulfill infrastructural, environmental, rural development and related non-agricultural objectives. The plan is for the curriculum to be used as a basis for the preparation of e-learning materials for universities.

Also in 2023, FAO published a document sharing the lessons learned over the previous decade from the introduction of land consolidation in North Macedonia. This document can be useful for other programme countries planning to introduce land consolidation instruments, including Albania, Azerbaijan, Georgia and Montenegro.
HIGHLIGHTS OF FAO’S WORK IN THE REGION

Digital Villages Initiative

Eight countries in Europe and Central Asia (Albania, Azerbaijan, Bosnia and Herzegovina, Georgia, Kyrgyzstan, Tajikistan, Türkiye and Uzbekistan) piloted FAO’s Digital Villages Initiative in 2023, and ten more countries and territories are close to joining.

FAO has developed a readiness assessment tool to analyse the maturity level of potential digital villages using 17 criteria across three dimensions: digital ecosystem, leadership and governance, and strategic context. The tool was used to assess more than 60 villages in nine countries and territories in Europe and Central Asia.

The highly participatory approach of injecting digital solutions into rural areas throughout the region aims to empower rural people, especially youth, to identify and develop solutions to the challenges faced by these rural communities. Several interventions were implemented in 2023 to drive the transformation process, including a Digital Villages Initiative camp and a Hack4DigitalVillages innovation challenge targeting students and young people in Uzbekistan. Additional recent efforts include the Living Lab programmes, which provide digital literacy and entrepreneurship training for selected Uzbek communities, and a Digital Villages Initiative hub, which serves as a digital platform for community knowledge sharing. Additionally, a twinning collaboration helped rural communities in Albania and Tajikistan leverage digital technologies.

Precision agriculture

In collaboration with the Czech University of Life Sciences and the Czechia Ministry of Agriculture, FAO conducted a regional workshop on precision agriculture in November 2023 in Prague. Representatives of 16 countries from Europe and Central Asia and from international organizations showed up to the event, which was part of an FAO project to create a platform for agricultural experts and others to exchange knowledge on precision agriculture.

The workshop emphasized the intricacies of precision agriculture and facilitated the dissemination of valuable insights within the community through examples of agriculture industry development on farms in European Union countries. Participants expressed a desire to advocate for initiatives that prioritize precision agriculture, build partnerships in the agriculture sector, support the education of farmers, and implement monitoring and evaluation systems for assessing the impacts of initiatives.
Farmer field schools in the livestock sector

The Farmer Field School approach was introduced for the first time in the livestock sector of the Western Balkans in 2023. Through its emphasis on agricultural development, resource management and climate-resilient practices, the approach set the stage for the transformation of dairy cattle breeding, particularly in the northern region of Montenegro.

Farmer field school activities were preceded by a comprehensive assessment of smallholder farms to gather details on the existing conditions and challenges in dairy production. To ensure the effective delivery of the curriculum, master trainers were selected and trained in participatory methods.

The project also placed a strong emphasis on developing accessible training materials and guidelines, translated into the Serbian language to cater to the local farming community. These resources also can serve as a model for replicating the schools in similar agricultural settings across the region.

In addition, farmer field schools focused on sheep farming were organized in Türkiye and Azerbaijan in collaboration with local farmers’ associations. Local master trainers and facilitators were taught to empower farmers not only to achieve better production on their farms but also to introduce new technologies. The farmers’ engagement and interest in farmer field school activities were remarkably high, building a culture of innovation and experimentation and providing evidence of the sustainability of the Farmer Field School concept, since farmers initiated their own experiments. These projects in Türkiye and Azerbaijan provide great examples for growing this approach in the Caucasus.

FAO also held a regional workshop in 2023 in Türkiye to provide hands-on training to smallholders and extension agents on pond aquaculture for improved food security and human nutrition. An additional regional workshop on the diversification of aquaculture targeted smallholders and extension agents.

REGIONAL INITIATIVE 2:
TRANSFORMING FOOD SYSTEMS AND FACILITATING MARKET ACCESS AND INTEGRATION

One Health

From 2020 to 2022, FAO carried out a series of national surveys in 12 countries and territories on antimicrobial use and the awareness of antimicrobial resistance in the livestock sector. In 2023, the results were analysed and turned into detailed country reports that were shared with veterinary and food safety authorities. Antimicrobials are still being misused, the reports determined, and there is a lack of understanding...
of key concepts that should be addressed through training. The reports are expected to be published on the FAO website and in peer-reviewed academic journals. Survey findings also were used in the planning of antimicrobial resistance surveillance programmes and targeted activities in Armenia and Tajikistan.

An overview of the methodology and key findings of the surveys was presented at the Fifth International Conference of The European College of Veterinary Microbiology in 2023. Representatives of veterinary and food safety authorities in the Western Balkans met to discuss the survey results and identify follow-up activities (including further technical support from FAO) to address gaps and needs in tackling antimicrobial use and resistance in the livestock sector.

Fish health management

In the face of increasing fish diseases, FAO Members – particularly those from Central Asia – have requested technical assistance from FAO to tackle emerging fish diseases and improve fish health management. FAO held a training 27–28 September 2023 in Trabzon, Türkiye, for representatives from Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan and supported the participation of a veterinarian specialist from Kyrgyzstan in a regional workshop on aquatic animals put on by the World Organisation for Animal Health.

Two fish health management projects were begun in 2023 to support the trout production sector by improving on-farm fish health management and phytosanitary standards and strengthen capacities in the aquafeed value chain and aquatic animal health management.

One Country One Priority Product initiative

FAO held a regional launch of its global One Country One Priority Product initiative 2–3 May 2023 in Tashkent, Uzbekistan. The initiative became operational in 2023 in Uzbekistan (sweet cherries), Tajikistan (apricots), Albania (chestnuts) and Türkiye (figs). Georgia (specialty wines), Republic of Moldova (table grapes) and Kyrgyzstan (walnuts) are expected to join the programme in 2024. The main goal of the initiative is to support the transition to more efficient, inclusive, resilient and sustainable agrifood systems through diversifying production, unlocking the untapped potential of agricultural products, and identifying and addressing gaps in the value chain.

REGIONAL INITIATIVE 3:
MANAGING NATURAL RESOURCES SUSTAINABLY AND PRESERVING BIODIVERSITY IN A CHANGING CLIMATE

Regional seed programme

In Europe and Central Asia, a regional programme fostered collaboration and coordinated actions on issues related to seeds, supporting countries during emergencies and reducing dependence on seed imports. The programme facilitated the mobilization of resources and initiated seed emergency projects in Armenia, Republic of Moldova and Ukraine, with the potential for expansion to additional countries.

Through various activities, including technical trainings, a study tour to Hungary, events and webinars, the programme enhanced the capacities of research institutes and beneficiaries to recover and propagate climate-resilient and local seed varieties. The programme, which also included demonstration trials promoting tolerant seed varieties and sustainable agricultural practices, engaged a network of experts and involved some 300 farmers in seed production trainings.

Regional meeting of the Global Agenda for Sustainable Livestock

The third meeting of the Global Agenda for Sustainable Livestock for Europe and Central Asia was held 10–12 October in Kemer, Türkiye. Organized by FAO, the event enhanced and expanded the multistakeholder collaboration initiated at the first regional meeting in 2018. During several virtual consultations, participants decided to establish the Regional Chapter of the Global Agenda for Sustainable Livestock in Central Asia and Eastern Europe.

The 2023 meeting welcomed participants from a wide array of countries – from Bosnia and Herzegovina east to Mongolia – to help identify livestock production challenges and solutions and to engage countries in dialogues aimed at strengthening sustainability and resilience. Country representatives discussed good practices from the region and potential responses to topics essential for the livestock sector’s contributions to the Sustainable Development Goals. The outcomes of the regional meeting were presented to the global sustainable livestock community at the Thirteenth Global Agenda for Sustainable Livestock Multi-Stakeholder Partnership meeting in late 2023 in Chiang Mai, Thailand.
REGIONAL INITIATIVE 2:
TRANSFORMING FOOD SYSTEMS AND FACILITATING MARKET ACCESS AND INTEGRATION

Reduction and prevention of food loss and waste

Although food supply chain actors (farmers, aggregators, processors and retailers) in Europe and Central Asia are aware of – and in principle have access to – technologies and good practices to minimize food loss and waste, many of them (especially smallholders) do not apply them due to deeply rooted traditions, cultures and social structures and a perceived lack of incentives.

To help alleviate this issue, FAO worked in 2023 to promote behaviour change to reduce food loss and waste. Even if it is not always economically profitable in the short term, incorporating behavioural science into programmes and policies has benefits over the classical approach in food businesses.

In the potato food supply chains of Georgia and the onion supply chains of Azerbaijan, FAO assessed the socioeconomic functionality of food supply chain activities and their impacts on the climate. Solutions for the reduction of food loss and waste were assessed for their social and behavioural acceptability and their environmental and economic cost-effectiveness. In both countries, a multidisciplinary team conducted field research and crafted a set of recommendations for reducing food loss and waste and created an updated methodology for food supply chain research and analysis.

Overview of the fruit and vegetable sector in the Eurasian Economic Union

FAO developed a study to provide an overview of the development of the fruit and vegetable sector in Eurasian Economic Union countries. The study describes sector trends, focusing on the need for investment and development assistance, and provides recommendations for further improvement.

Despite the limited acreage given to fruits and vegetables compared to other crops, they are an important part of the agricultural sector in all five Eurasian Economic Union countries, according to the study. However, most fruit producers are smallholders with limited access to key agricultural inputs, and their efficiency is
further limited by inadequate post-harvest and processing infrastructure.

The report found that favourable conditions and significant opportunities exist for the expansion and further development of a competitive and sustainable fruit and vegetable sector in each of the five countries. The review also underlined the need for increased capacity development support and investments by governments and development partners in the fruit and vegetable sector.

**Strengthening agrifood trade policy and market development**

With participation from the Western Balkan 6, a subcommittee meeting of the Central European Free Trade Agreement (CEFTA) took place on 24 October 2023 in Pristina, Kosovo, on agriculture, including sanitary and phytosanitary issues. Discussions included improving the trade of agricultural products in the CEFTA region and making agricultural support policies more transparent.

It was requested that FAO provide technical assistance to CEFTA parties in developing a common Excel-based solution on subsidy reporting. In early December, FAO presented the outcomes of pilot reporting through a single template and summary of regional budget support. Building on the success of their joint initiatives, FAO and CEFTA are planning on continuing their collaboration in 2024.

**Regional Overview of Food Security and Nutrition in Europe and Central Asia**

Although progress has been made in reducing various forms of malnutrition in most countries of the region, Europe and Central Asia is in a worse position overall regarding the prevalence of childhood overweight, exclusive breastfeeding and adult obesity. Addressing these issues demands a repurposing of food and agriculture policies to addressing the “triple challenge” of current agrifood systems – increasing the affordability of healthy diets, ensuring better livelihoods for farmers and improving environmental sustainability.

With less than seven years left until the deadline, the region is making progress towards achieving Sustainable Development Goal 2 (Zero Hunger), despite the serious challenges experienced in the past few years. Even though the average cost of a healthy diet has increased in the region, the number of people who cannot afford a healthy diet declined in 2022. These data and more were revealed by the 2023 edition of the Regional Overview of Food Security and Nutrition in Europe and Central Asia, produced by FAO.

The report notes that in recent years, several crises – the COVID-19 pandemic, conflicts, weather extremes and natural disasters – have made it more difficult to improve food security and nutrition. Still, since 2000, the prevalence of undernourishment in the Europe and Central Asia region has been below 2.5 percent, and the estimated number of moderately or severely food-insecure people declined by 4.1 percent (4.7 million) from 2021 to 2022 to 111.1 million people.

The 2023 report cites the conclusion of the 2022 edition, calling for an agrifood systems transformation and the rethinking of food and agriculture policies to adequately address challenges related to food security, nutrition, health, environmental sustainability and the livelihoods of farmers (especially rural farmers) and other actors across the agrifood sector.

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1 All references to Kosovo should be understood to be in the context of United Nations Security Council resolution 1244 (1999).
Partnership with the Economic Cooperation Organization

The Regional Coordination Centre for Food Security, a subsidiary body of the Economic Cooperation Organization (ECO), benefited this past year from an FAO project under the FAO–Türkiye Partnership Programme. With technical input from FAO, the centre conducted an analysis of food security in Economic Cooperation Organization countries – including Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Türkiye, Turkmenistan and Uzbekistan – and published an overview report in English and Russian that includes an in-depth analysis of the potential impacts of the war in Ukraine on food security in the concerned countries.

Food system-based dietary guidelines

Food system-based dietary guidelines provide crucial evidence-based recommendations for interventions to promote overall health and prevent chronic diseases. The guidelines also inform changes throughout the food system to ensure that diverse and nutritious foods are available and affordable. In the Europe and Central Asia region, just 34 of the 53 FAO Member Nations have developed such guidelines. Since 2021, FAO has been assisting Kyrgyzstan, Montenegro and Serbia in developing food-system based dietary guidelines in line with the new FAO methodology and up-to-date scientific evidence. Multisectoral teams have been formulated in each country to analyse dietary patterns and related policies and programmes and review the relationship between diets and health. Targeted food system analysis on key health and nutrition issues also was developed. These analyses helped apply the food systems perspective in practice and provided recommendations for evidence-based interventions.

Sustainability is increasingly being considered in dietary guidelines to raise awareness of diets’ remarkable environmental footprints and to explore opportunities for reducing these footprints.

Agricultural Market Information System

The Europe and Central Asia region plays an essential role in global food security and nutrition. However, given the vital role of agriculture in the
region, additional steps are required to strengthen food system monitoring throughout the region and in all countries. The provision of timely market information and knowledge can help farmers, decision-makers and other food chain actors make more rational short- and long-term decisions. Information systems also can help obviate uncertainty and unexpected situations and advance progress towards the Sustainable Development Goals.

In 2023, FAO published a regional baseline review assessing national market information systems in the region. The report provides recommendations for improving the broader perspective of marketing and building market information systems for agrifood chains. Using a case study approach, it describes the conceptual framework and its implementation in selected countries to generate ideas and insights that may help develop and strengthen market information systems.

Food control system assessments

Government-led food safety control systems play an essential role in assuring safe food, protecting consumers’ health and promoting fair practices in food trade. FAO and the World Health Organization (WHO) developed a food control system assessment tool to help countries assess in a structured and transparent way their performance throughout the entire food chain, identifying priority areas for development and measuring and evaluating progress over time.

Detailed assessments ongoing in Azerbaijan, Belarus and Georgia are due for completion in 2024. The country-driven assessments, completed by ministries and agencies with food safety responsibilities, compare data and evidence with required competencies. The results are used to generate tailored reports and investment plans that inform the future development of the food safety control system.

Countries can use these investment plans to target state funds or donor support.

Strengthening holistic agrifood systems transformation

Agrifood systems transformation, recognized as a priority across the Europe and Central Asia region, is a key contributor to the achievement of the 2030 Agenda for Sustainable Development. In this regard, the United Nations Food Systems Summit + 2 Stocktaking Moment in 2023 served as a significant milestone, with countries engaged in discussions about food systems transformation.

FAO supported countries in building upon the outcomes of the conference, in collaboration with other United Nations agencies and actors through the regional Issue-based Coalition for Sustainable Food Systems.

Specifically, FAO facilitated a holistic food systems approach and multistakeholder collaboration for the transformation of food systems through the release of a joint report with The Royal Institute of International Affairs, Chatham House, looking at outcomes of the 2021 United Nations Food Systems Summit in Europe and Central Asia ahead of the Stocktaking Moment.

Additionally, as co-chair of the Issue-based Coalition, FAO provided support for the March 2023 Regional Forum on Sustainable Development, held in Geneva and online. FAO also continued its virtual Food Systems Talks series, elaborating on such issues as the circular economy (produced jointly with United Nations Economic Commission for Europe), the impacts of climate change on food systems (in collaboration with the World Meteorological Organization), and the key outcomes and way forward after the Stocktaking Moment with the National Convenor of Finland.

To further support evidence-based programme development for food systems transformation, FAO assessed the food systems of 13 countries in collaboration with the Regional Cooperation Centre for Sustainable Food Systems of the Organization of the Black Sea Economic Cooperation.
BETTER ENVIRONMENT

REGIONAL INITIATIVE 2:
TRANSFORMING FOOD SYSTEMS AND FACILITATING MARKET ACCESS AND INTEGRATION

Geographical indications

On 11 December, FAO and oriGIn, the Organization for an International Geographical Indication Network, co-hosted the virtual Fourth Regional Consultation on Geographical Indications in Europe and Central Asia to discuss FAO’s geographical indications initiative. Activities followed up on the recommendations from the first three consultations and addressed the challenges being faced by authorities and producer groups willing to adopt and promote geographical indications. The consultation also presented studies, guidance and tools related to geographical indications controls, certification, marketing strategies and sustainability. During country-specific panels, participants shared their experiences and helped identify areas of potential technical assistance for the development of geographical indications systems.

REGIONAL INITIATIVE 3:
MANAGING NATURAL RESOURCES SUSTAINABLY AND PRESERVING BIODIVERSITY IN A CHANGING CLIMATE

Enhancing policies to combat climate change

On 7–8 September 2023, Uzbekistan, with technical support from FAO, hosted the International Conference on Food Security to address challenges hindering progress towards SDG 2 and global food security, particularly in Central Asia and in landlocked developing states. The conference included an FAO-led technical session that covered the impacts of climate change on food security.

Building on a successful event in 2022, a regional climate workshop on enhancing climate action in Europe and Central Asia was held in Istanbul, Türkiye, in a hybrid format on 27–28 September 2023. The workshop emphasized the significance of the agriculture sector in addressing climate change, implementing climate actions and fostering the sharing of knowledge and efforts among countries. Forty-six participants were present from 14 countries in the region, and representatives of United Nations agencies also were in attendance.

Climate action and finance

In 2023, FAO mobilized resources from various donors, including the Global Environment Facility (GEF) and the Green Climate Fund, to support countries in fulfilling their commitments under the Paris Agreement, including the Enhanced Transparency Framework guiding countries on reporting greenhouse gas emissions, climate change impacts and adaptation. To help monitor the progress of nationally determined contributions, FAO facilitated Capacity-Building Initiative for Transparency projects in Uzbekistan and Tajikistan, with additional countries expected to follow.

Several Green Climate Fund readiness initiatives were approved or initiated in the region, including in Bosnia and Herzegovina, Georgia, North Macedonia and Turkmenistan, concentrating on nationally determined contributions, other climate commitments, climate finance tools and private-sector engagement. A Green Climate Fund project in Kyrgyzstan on carbon sequestration through climate investment in forests and rangelands commenced in 2023. In its support for national institutions and the implementation of participatory and ecosystem-based management practices, the project is designed to foster green growth investments and address land degradation. These initiatives testify to FAO’s commitment to advancing sustainable practices and combating climate change in the region.

In addition to its active engagement in project implementation, FAO played a crucial role in supporting countries in the region before and during the 2023 United Nations Climate Change Conference. Through various side events, FAO addressed key topics related to the Enhanced Transparency Framework, regional cooperation, and opportunities available through the Global Environment Facility and the Green Climate Fund.

Mainstreaming biodiversity

FAO advocates for nature-positive production in agriculture to reduce the sector’s negative impacts on natural resources and biodiversity.
HIGHLIGHTS OF FAO’S WORK IN THE REGION

Under this priority in 2023, FAO released several publications, including a guide to nature-positive production, the third issue of Biodiversity in Action, and a document on nature-based solutions and their application to agrifood systems.

A second regional dialogue was held in Europe and Central Asia on 22–23 May 2023, within the framework of the United Nations International Day for Biological Diversity, to raise awareness of global biodiversity framework targets and national commitments concerning biodiversity for food and agriculture.

Collaborating with the Livestock Environmental Assessment and Performance Partnership, FAO held a series of impactful training sessions in 2023 in six countries in the region on assessing livestock’s impacts on biodiversity. Conducted through a combination of online sessions and face-to-face workshops, the training used the current Livestock Environmental Assessment and Performance guidelines for the assessment of biodiversity in the livestock sector to enhance the capacities of local organizations and experts. The programme aimed to address risks and opportunities within and beyond the livestock sector, setting the stage for a more sustainable and prosperous future across Central Asia.

A regional workshop on inland fisheries management and aquatic biodiversity conservation, held 9–13 October 2023 in Vodnany, Czechia, brought together representatives of ten countries in the Balkans, the Caucasus and Central Asia. The workshop included thematic lectures, practical demonstrations and excursions to fish farming workplaces.

FAO continued to support the Forest Invasive Species Network for Europe and Central Asia, launched in 2017, and its activities, particularly in the organization of topical trainings on emerging invasive species. The network’s annual meeting, held 26–28 June 2023 in Sopron, Hungary, focused on digital solutions for better forest health monitoring. A pocket guide for monitoring important bark- and wood-boring forest insects in the region is planned for publication in 2024.

Sustainable management of agrichemicals

An FAO project related to the life cycle management of pesticides and disposal of persistent organic pollutants pesticides in Central Asia and Türkiye, funded by the Global Environment Facility and begun in 2019, continued its activities in 2023. Field activities took place in Azerbaijan and Tajikistan regarding the storage and hosting of obsolete pesticides and persistent organic pollutants. Lab and field trials on phytoremediation and bioremediation of soils contaminated by pesticides (both persistent organic pollutants and heavy metals) are being conducted in Kazakhstan and Kyrgyzstan to contribute to combating land degradation and reviving terrestrial ecosystems.

A consolidated report on empty pesticide containers and agricultural plastic waste was developed for all five project countries, and working groups on container management systems were established in several countries. FAO experts assessed the legal frameworks on pesticide life cycle management in Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan and assessed pesticide exposure in Kazakhstan, Kyrgyzstan and Tajikistan. Two reports were developed and a training held on personal protective equipment use and proper pesticide spraying in 2023 in Kazakhstan.
Representatives from the five participating countries gathered in September 2023 in Baku, Azerbaijan, to discuss current practices in pesticide life cycle management in the region and identify gaps and challenges in national systems for drafting national road maps to improve pesticide life cycle management. Additionally, the pesticide registration lists in these countries were analysed using joint FAO–WHO criteria to identify active ingredients classified as highly hazardous pesticides.

Integrated pest management field trials and trainings in Kazakhstan (for cabbage, tomatoes and apples), Tajikistan (tomatoes, potatoes and apricots) and Türkiye (apples) have been demonstrating that integrated pest management can help reduce pesticide use significantly in various crops. Representatives of Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan visited the trial apple orchards in Türkiye in 2023 to study the potential of the approach in their own countries.

Environmental sustainability – promoting bioeconomy

In 2023, the FAO/UNECE Forestry and Timber Section in Geneva released several publications, including ones focused on sustainable and circular bioeconomy in forest-based industries, circularity concepts in the pulp and paper industry and the wood construction sector, and sustainable and circular bioeconomy through agriculture practice in Eastern Europe and Central Asia.

The FAO/UNECE Forestry and Timber Section also collaborated with FAO and the Ministry of Agriculture and Forestry of Türkiye to organize an event in September in Türkiye on the future of the country’s forestry and wood-based industries sector in the transition to a sustainable bioeconomy.

FORESTA 2023 (the joint session of the Economic Commission for Europe’s Committee on Forests and the Forest Industry and the FAO European Forestry Commission) took place 20–23 November in San Marino. Among other important matters, the session focused on biodiversity and international and regional forest-related developments.

FAO continued to support work related to non-wood forest products (medicinal and aromatic plants, fruits and berries, and mushrooms), which are often neglected and considered secondary products. These products are often collected and consumed by rural people, thus not entering the market, and their importance in rural livelihoods remains unknown. FAO is preparing a publication based on the analysis of non-wood forest products in the Western Balkans that includes household surveys conducted in previous years in Albania, North Macedonia and Serbia.

In 2023, as in previous years, FAO facilitated virtual meetings of the ministers of Central Asian countries responsible for agriculture for discussions on pertinent issues. In February, supported by the Ministry of Agriculture of Uzbekistan, the ministers of agriculture reviewed how agricultural finances can serve a sustainable increase in production. Participants shared proven approaches and promising ideas on how to allocate public funds in a targeted way (such as for infrastructure, natural resource management, research and education) to ensure maximum impact in spurring agricultural growth. Changes in tax schemes, direct and indirect subsidies, tariffs and import quotas also can influence the development of the agriculture sector.

In March, the ministers of agriculture – whose countries are strongly affected by drought, desertification, salinization and other issues – focused on cooperation on food security in the context of climate change. Hosted by Turkmenistan, this seventh meeting of the ministers allowed participants to take stock of the progress made since the conclusion of the 2021 United Nations Food Systems Summit and to identify challenges for the coming years.
Gender equality and women’s empowerment

The development of FAO’s Regional Gender Equality Action Plan 2023–2026 for Europe and Central Asia was completed in 2023. Implementation already has begun, with several events being held to mainstream gender policies and gender transformative approaches to a wider and more diverse array of policymakers and other relevant actors. These include a workshop on gender-transformative approaches and agrifood systems, held 29 November to 1 December, that focused on translating the goals of the regional action plan into practice.

A regional round table on the empowerment of rural women and the implementation of SDC Indicator 5.a.1, held 5–6 October and organized in partnership with the German Alliance for International Cooperation, focused on gender equality and land rights in the Western Balkans. A workshop on gender, agriculture and rural development for achieving the SDGs, held 13–14 December, united representatives of Tajikistan, Türkiye and Uzbekistan.

Additionally, several other events in the past year underscored the importance of addressing gender-specific challenges within the context of agrifood systems and food security: the UNECE Sustainable Development Regional Forum, organized jointly with UN Tourism in March; the high-level international conference on food security and agrifood systems in September in Samarkand, Uzbekistan; and the Forty-third session of the European Commission on Agriculture in September in Budapest, Hungary.

Youth empowerment

Youth in rural areas can be a significant driving force for sustainable rural development. To this end, FAO gathered representatives of 20 countries, farmers’ associations and youth groups in Budapest and online 29–30 November to share ideas and build bridges for advancing the well-being, livelihoods and prosperity of rural youth at the first Rural Youth Forum for Europe and Central Asia.

The forum called for increasing young people’s involvement in decision-making processes and enhancing their access to natural resources, finance, training, knowledge and public services. It was agreed that improving digital literacy among rural youth, creating opportunities for intergenerational knowledge transfer, and creating an enabling environment through policies can further improve their opportunities. As participants noted, the specific needs of rural young women should be considered when designing inclusive policies and public services. FAO continues to work to ensure that more and more young people see a future for themselves in agriculture or rural areas.

Hand-in-Hand Initiative

Tajikistan is the only country in the region that is part of FAO’s global Hand-in-Hand Initiative supporting the implementation of ambitious national programmes to accelerate agrifood systems transformations. FAO piloted “twinning” approaches for knowledge exchange and technology transfer between the Republic of Korea and Tajikistan. These approaches also were implemented locally between smart villages in France and future digital villages in Albania and Kosovo. The Korea Agency of Education, Promotion and Information Service in Food, Agriculture, Forestry and Fisheries – a public sector agency of the Republic Korea – preselected Tajikistan for knowledge and technology transfer through an official development assistance model.
COUNTRIES:
2023 PROJECT OVERVIEW

In each of the FAO programme countries in Europe and Central Asia, the Organization and its many partners achieved great success in 2023 in advancing towards the four betters – better production, better nutrition, a better environment and a better life. Below is a snapshot of these developments.
ALBANIA

In 2023, Albania celebrated 50 years of working with FAO to foster sustainable agriculture and rural development. FAO Director-General Qu Dongyu visited Albania and met with President Bajram Begaj and Prime Minister Edi Rama in January 2023. FAO continues to strengthen its support to Albania to further the country’s efforts to achieve the Sustainable Development Goals (SDGs) and European Union accession.

In preparation for European Union membership, Albania adopted the Farm Accountancy Data Network (FADN) implementation plan. With FAO support, the Ministry of Agriculture and Rural Development successfully established FADN units, with training sessions for working groups. Information from interviews with 60 farmers was used to compile European Union standard variables for 40 Albanian farms.

Committed to addressing gender and youth disparities, FAO held several round tables, workshops and training activities to engage women’s groups, agricultural extension services and community members in Kuqan village (Elbasan) and Leskovik. These events helped improve management skill gaps and build the knowledge needed to run agribusiness incubators. The Young Agriculture Entrepreneur training course, the result of collaboration between FAO and the University of Tirana, began its first intake of 20 students in March 2023.

A standout accomplishment was the United Nations Joint Programme, focused on business partnerships and solutions for achieving the SDGs. A report provided an assessment of SDG principles and positive practices adopted by the agricultural processing sector in Albania.

Digital Villages Initiative-like approaches were piloted across several villages. In Malešia e Madhe, Korçë and Belsh, precision agriculture technologies were integrated into vocational training programmes. Several assessments are underway in Tropoja, the first scale digital village in Albania, to accelerate chestnut value chain development and agri-tourism through digitalization.

The chestnut has been designated a special agricultural product in the country, in line with the FAO One Country One Priority Product programme, which promotes the value chain of chosen products. Ninety percent of chestnuts, which are grown for both income and home consumption across Albania, come from the Tropoja region. In recent years, chestnut production has declined due to production and market competition challenges. Initiated in June 2023 and anticipated to run through 2025, an FAO project aims to support Albania in developing sustainable chestnut value chains in the mountain areas of the Tropoja region and promote the product on the regional market.

ARMENIA

In March 2023, FAO published a short brochure on a project to deliver emergency humanitarian assistance to conflict-affected vulnerable groups in Armenia. More than 90 000 people have been displaced from Nagorno-Karabakh into Armenia, with FAO supporting host households and displaced families in need of food security support.

Continuing its support under the NDC Partnership, FAO engaged the agriculture, forestry and land use sectors in nationally determined contribution processes.

In April, FAO led a training course, as part of a project on forest resilience in Armenia, to introduce the concept, methodologies and practices of forest and landscape restoration and to complement the theoretical thinking with successful examples and best practices. A project to assist in establishing a national forest monitoring and assessment system concluded in December 2023, and the forest resilience in Armenia project is ongoing.
In September 2023, FAO led a groundbreaking workshop that introduced pioneering findings from an extensive survey on antimicrobial use within the pivotal food and veterinary sector in Armenia. This laid the groundwork for a national baseline for antimicrobial resistance in Armenia and a benchmark for future progress.

Azerbaijan aims to assist small and medium-scale farmers and producers in the Balakan, Gakh and Zagatala rayons. In 2023, the project introduced the Globally Important Agricultural Heritage Systems (GIAHS) and geographical indications concepts and strengthened farmers’ capacities to enter into and optimize market chains for selected products (honey and other beekeeping products, dried meat, food products made of or containing hazelnuts, dried persimmon, persimmon molasses and jams, including walnut jam).

Under a regional project, a road map for the management of pesticide life cycles was prepared alongside an assessment of disposal options for persistent organic pollutants. As a result of project activities implemented in 2023, 210.3 million tonnes of liquid persistent organic pollutants and other obsolete pesticides were safeguarded at central Jangi storage facility.

A project to support the implementation of the smart village concept in integrated community development increased awareness and enhanced capacities of the Ministry of Agriculture, the rural population, farmers and stakeholders in community development planning, sustainable production practices and business activities. In Aghali village, FAO is focusing on integrated community development accelerated by digitalization through digital demo plots and digital skills development.

FAO assisted 765 beneficiary farmers with high-quality winter wheat seeds, fortifying household resilience. These efforts were complemented by comprehensive training sessions, enhancing farmers’ skills for sustainable agricultural success.

FAO meticulously assessed the needs of the Vineyard Register System and initiated vital agricultural support for Nagorno-Karabakh refugees, nurturing their agricultural skills and livelihoods.

AZERBAIJAN

The sustainable management of chestnut and pine forests was enhanced through field demonstrations of disease assessment, sampling, hypovirulence application, estimation of treatment effectiveness, sanitation, and silvicultural measures applicable for newly emerging forest diseases and pests, including chestnut blight, chestnut gall wasp and pine dieback.

Work has been ongoing to develop wheat varieties resistant to wheat rust diseases occurring in the Aghdam and Tartar regions, as part of a project to strengthen regional collaboration and national capacities for disease management.

A project regarding the development of sustainable and inclusive agrifood systems in
On 24 March, on the margins of the United Nations World Water Conference, FAO and the Ministry of Ecology and Natural Resources, Agriculture, Economy of Azerbaijan and other development partners held a successful side event on accelerating the achievement of the SDGs through transformative actions in the water sector in Azerbaijan.

In December, FAO published a book-length report on the hazelnut sector in Azerbaijan, sharing options for green energy interventions along the value chain. This report evaluates the potential for the production of sustainable bioenergy from residues generated along the hazelnut value chain.

**BELARUS**

In Belarus, the agriculture sector significantly contributes to economic growth, poverty reduction and food security while boosting nutrition, health and quality of life. In 2023, agriculture production in Belarus continued to meet the food needs of the population, ensuring the country’s self-sufficiency in meat and dairy products and making significant steps in the development of the fruit, vegetable and industrial crop sectors. Collective and state farms dominate the sector, covering almost 80 percent of the production share, while household plots are cultivated mainly for the family subsistence.

The agriculture sector in Belarus is experiencing an ageing work force and labour drain, as increasing numbers of youth do not want to inherit the family farm and are migrating to cities for paid employment and better lifestyle prospects. Farmers, who require equipment for small-scale operations, are having problems with financing and access to information, technology and market and value chains. Climate change, plant pests and biodiversity conservation also are concerns, and FAO has been conducting projects to strengthen food production and national food security outcomes.

In 2023, a project to promote women’s entrepreneurship in rural areas continued to enhance the capacities of the Ministry of Agriculture and Forestry to formulate and implement gender-responsive and socially inclusive policies, contributing to the SDGs and the National Strategy for Sustainable Development. The project partnered with the Institute of Sociology of the Academy of Science to develop a methodology and conduct a field survey that included focus group discussions and interviews with 456 female respondents in the Brest, Vitebsk and Minsk regions. The results point to a low level of awareness among rural women regarding entrepreneurship opportunities and underline the importance of modernizing rural infrastructure and adapting rural extension and advisory services to serve the needs of smallholders. The data are being used as background for the forthcoming FAO country gender assessment in Belarus.

The market chains in Belarus have recently opened to a larger share of imported foods, so a project was conducted from January 2022 through December 2023 to help ensure the viability and sustainability of local food market chains.

Farmers need accurate and timely information on weather, pests, diseases, financing, crop predictions and more. FAO conducted a project from January 2022 through December 2023 to increase the competitiveness of agricultural products in a sustainable manner by providing information, innovations and consulting services to farmers.

As part of a project to reduce the advance of antimicrobial resistance in food and agriculture, FAO trained staff of the National Veterinary Laboratories in 2023 on the FAO Assessment Tool for Laboratories and Antimicrobial Resistance Surveillance Systems (ATLASS). In addition, Central and Regional Veterinary Administration and laboratories were trained on how to analyse critical points of livestock farm production flow where antimicrobials are mostly used and on how to minimize the use of antimicrobials in
livestock. Additional subnational trainings, including on-farm trainings, were held to target veterinarians, zootechnicians and farm managers in various districts.

FAO implemented a project from 2020 through July 2023 on strengthening the resilience of pine forests to bark beetle outbreaks and associated dieback. The project developed guidelines for the design of emergency contingency plans for pest outbreaks and for enhancing the resilience of forest stands against pests, diseases and drought.

**BOSNIA AND HERZEGOVINA**

As part of a project related to the field-level testing and agronomic evaluation of new sweet cherry varieties, FAO trained farmers on new growing methodologies. Three experimental fields for the research of new cherry varieties have been established in Bosnia and Herzegovina. The project aims to boost cherry production and management in the country.

A geographical indication is a sign used on a product to show it comes from a specific origin and possesses qualities or a reputation due to that origin. Beginning in January 2023, a project worked with producer groups in developing registration applications for seven traditional food products with geographical indication potential: Sember cabbage, Fojnica potatoes, Herzegovinian Škripavac (cheese), Kukuruz Stodanac (corn), Majevica smoked cheese Zarac, Herzegovian Cupter and Gacko cream.

FAO trained 46 ministry staff and veterinary border inspectors to bring them up to speed on European Union legislation and to raise their abilities to conform to European Union standard operating procedures and manuals.

The ongoing Digital Villages Initiative continued with the implementation of the participatory methodology for the development of a Digital Villages Initiative road map in the villages of Pale and Kakanj. Three additional villages are being targeted as part of the initiative, and road maps for those villages are under development.

FAO supported nine municipalities and one canton by building their capacities to prepare and adopt agriculture and rural development strategies. A call for small-scale investments to improve the competitiveness of value chains in the agricultural and rural development sectors received eight applications that were supported.

FAO delivered three capacity-building training courses for the domestication of standardized tools for data collection and quality assurance guidelines for the 2021–2022 United Nations Convention to Combat Desertification reporting cycle in the first quarter of 2023. Thanks to continuous advisory support from FAO consultants, the 2022 United Nations Convention to Combat Desertification report for Bosnia and Herzegovina was compiled and validated with the participation of key stakeholders and submitted within the deadline.

The project “Potentials of fast-growing plantation forests” concluded in August 2023.

**GEORGIA**

In 2023, FAO Georgia marked the inauguration of a new project on strategic readiness to support the updated nationally determined contributions and its climate action for Georgia, funded by the Green Climate Fund to support the low-emission and climate-resilient development of the country’s agriculture sector.

FAO held intensive consultations with the Ministry of Environmental Protection and Agriculture of Georgia on food loss and waste during the third phase of the European Union-funded European Neighbourhood Programme for Agriculture and Rural Development project. The outcome was the Law on Food Loss and Waste Reduction and Food Donation, adopted
on 4 October 2023 by the Parliament of Georgia. The law creates a legal basis for the regulation of food loss and waste management and food donation issues at any stage of the supply chain.

In June, FAO, in collaboration with the National Food Agency of the Ministry of Environmental Protection and Agriculture of Georgia, conducted a four-day demonstration trial on the use of biopesticides against locusts in Kakheti, Georgia.

Science and Innovations Day was marked in Georgia on 3 October 2023. FAO organized the National Agricultural Olympiad for 870 participants from September to November 2023 under a project to support youth inclusion and empowerment in agrifood systems for rural development. FAO supported the development of the National Seedling Certification System and gave technical support for nurseries. Within the EU4Business initiative, video tutorials about pruning in vineyards became available online – in Georgian – for Georgia’s viticulturists. FAO’s educational programme teaches modern agricultural techniques that increase the yield and quality of vine grapes and wine. After a successful implementation of the national animal identification, registration and traceability systems in Georgia by FAO and the handover of the system to the National Food Agency in 2022, FAO made the system internationally available to other countries, including Antigua and Barbuda, Barbados, Guyana, Saint Lucia, and Saint Vincent and the Grenadines.

A EUR 5.1 million initiative to boost private-sector competitiveness in Georgia – implemented by FAO, the United Nations Development Programme Georgia, the United Nations Industrial Development Organization and the International Organization for Migration and with financial support from the European Union – was completed in 2023. This landmark five-year initiative supported significant strides in advancing the circular economy, fostering robust business clusters, enhancing legislative frameworks and boosting Georgian producers’ presence in European markets.

**KAZAKHSTAN**

Farmers’ limited access to capital for financing operational activities and low financial literacy impede the sustainable and effective development of agriculture in Kazakhstan. With the launch of the FAO–Kazakhstan Partnership Programme in 2023, the Country Office was actively engaged in the implementation of projects on land degradation and drought, desertification, land tenure security, environmental protection, climate change, the One Health approach, food safety and pesticide management.

According to the Ministry of Agriculture of Kazakhstan, approximately 70 percent of the country is classified as degraded. The Kazakhstan Resilient Agroforestry and Rangeland Project to restore rangeland through the wider use of sustainable management practices was approved in 2023.
In collaboration with the Ministry of Agriculture of Kazakhstan, FAO in May assessed the national antimicrobial resistance surveillance system and laboratories in the country’s food and agriculture sectors. The mission aimed to identify and recommend the next steps to improve national surveillance capacities for the detection of antimicrobial resistance in the food and agriculture sectors using ATLASS.

Remote sensing-based agricultural monitoring can provide valuable insights into crop conditions and production prospects. FAO and the University of Maryland/NASA Harvest have been working together on a pilot project to test and refine this methodology. At the end of April 2023, FAO presented the preliminary results in Astana and highlighted a new map of the spring crop of wheat, the main cereal grown in Kazakhstan.

In May, FAO organized its fifth meeting within the framework of an FAO project on investment support for smallholders in the development of food value chains in Kazakhstan. In June, FAO organized a study tour as part of its project to support investments in agrifood value chain development for smallholders. FAO organized a series of events in Astana supporting rural development and the development of small family farms.

Kazakhstan, which has over 21 million ha of arable land, faces serious risks to human and environmental health from the residues of Soviet-era obsolete pesticides and soil contamination from persistent organic pollutants. However, data on the location, type and number of obsolete pesticides at the country’s 727 pesticide stores is lacking. In June, FAO held a series of three-day training programmes in Shymkent, Atyrau and Almaty to train 90 participants on how to establish a national inventory of obsolete pesticides and develop effective management and disposal strategies based on inventory data.

In late July, FAO Director-General Qu Dongyu and H.E. Yerbol Karashukeev, Minister for Agriculture of Kazakhstan, met on the margins of the United Nations Food Systems Summit + 2 Stocktaking Moment at FAO headquarters in Rome.

KYRGYZSTAN

FAO worked in Kyrgyzstan in 2023 to promote the dairy and livestock sectors, boost food safety and combat climate change. In June, FAO conducted a two-day simulation exercise of an outbreak of nodular cattle dermatitis in the village of Bokonbayevo in the Ton district of the Issyk-Kul region to increase the capacities of veterinary services and strengthen their competence in epidemiology, risk assessment and emergency preparedness should there be an outbreak of the disease.

From July to September, FAO conducted trainings on food safety in the fruit and vegetable sector for entrepreneurs from more than 35 companies in the Osh, Batken, Jalal-Abad, Chu and Issyk-Kul regions of Kyrgyzstan.

Forests and grasslands absorb greenhouse gases, and sustainable forestry can help Kyrgyzstan prevent further increases in air temperature. In December, FAO took part in the work of the Council in the Jogorku Kenesh (Parliament) of Kyrgyzstan on sustainable development in the face of climate change. The ongoing project, which focuses on carbon sequestration through climate investment in forests and rangelands, will continue until 2030, working on the restoration and creation of new forest ecosystems in an area of more than 6 000 ha. In December 2023, the working group held meetings with residents of four pilot districts in the Jalal-Abad, Naryn and Osh regions.

Internet of things water sensors were installed in Kochkor to better manage water resources, together with other interventions such as artificial glaciers.
REPUBLIC OF MOLDOVA

FAO’s digitalization work in the Republic of Moldova in 2023 focused on policy, digital literacy and market access. Digital Villages Initiative assessments were run in the villages of Andrusul de Jos, Râdoaia, Bahmut, Bascalia, Ciutesti, Balasesti and Darcauti. The analysis provided data on the importance of agricultural jobs for each of the villages, their specialization in the agrifood sector, their agritourism potential, the availability of basic public services, past or current projects implemented in the chosen locations, and stakeholders potentially interested in participating.

FAO has directly improved the lives of the most vulnerable people in rural areas. More than 4,054 smallholder households received agriculture inputs for maintaining their domestic food production and technical advice for developing resilient and sustainable agriculture production. FAO collaborated with development partners, including the European Union and Switzerland, in creating a favourable investment climate in the agrifood sector. The Agrifood Partnership Platform, launched in October 2023, is expected to become an important tool for the development of the country’s agrifood system. An FAO project on emergency support for agricultural producers in the context of socioeconomic and energy crises delivered agriculture inputs to 5,000 beneficiaries.

World Soil Day was observed on 5 December through interactive lessons on soil importance and protection for 70 primary school students at the Prometeu-Protalent Lyceum in Chisinau.

Work was delivered through December on the formulation of a Green Climate Fund project proposal on climate change adaptation and mitigation in forestry.

MONTENEGRO

FAO launched several flagship initiatives in Montenegro in 2023 and provided technical assistance in the areas of land consolidation and sustainable forest management.

FAO became one of the United Nations agency signatories in 2023 of the memorandum of understanding for the Montenegro SDG Acceleration Fund, a pooled funding mechanism governed by Montenegro and the United Nations, with funding provided by various bilateral donors.

FAO conducted an extensive assessment in 2023 to prepare for the initiation of farmer field schools, administering questionnaires to 200 farmers to better understand the state of dairy cattle breeding in the northern region of Montenegro. A training programme for trainers and facilitators was implemented, and 14 master trainers were selected to then train seven facilitators. Farmer field schools were subsequently conducted by these seven facilitators in the municipalities of Pljevlja, Berane and Bijelo Polje for dairy production. The schools addressed the core needs of smallholder dairy farmers, including in feeding, milk hygiene
and farming practices. The training materials, translated into Serbian, can serve as a template for replicating the schools in similar production environments across the region.

In cooperation with the European Bank for Reconstruction and Development, FAO’s Centre for Investment supported three projects in 2023. A project to support the emergence of short food value chains, completed in September 2023, included several marketing, e-commerce, knowledge-sharing and capacity-building activities in the country, supporting family farmers and producers’ associations from the mountain areas to the coastal region. A second project aims to strengthen food quality standards and enhance the competitiveness of the agrifood sector in the Western Balkans (Serbia and Montenegro). A third project aims to achieve greater diversification of exports in terms of destination markets and a higher share of value-added agrifood products.

The end of the year was marked by the signing of a Country Programming Framework with the Government of Montenegro that outlines plans through 2027. The objectives of the agreement are agricultural development, improved state and management of natural resources, innovative and competitive economic development, gender-responsive initiatives, and inclusive economic development that is climate-resilient and has a low carbon footprint.

**NORTH MACEDONIA**

Land consolidation has been a driver throughout 2023 in transforming the agrifood sector in North Macedonia to one that is more sustainable. Significant climate action in 2023 included efforts regarding forest restoration and climate-resistant seed stock.

In April 2023, following the success of the **MAINLAND project** (2017–2022), FAO and the European Union collaborated with the Ministry of Agriculture, Forestry and Water Economy of North Macedonia to launch a national strategy on land consolidation for the period 2022–2030 and a project to enhance land consolidation in the country. The project plans to re-allot 156 ha of agricultural land in Chiflik and foresees the construction of agricultural infrastructure in Dabjani.

Also in 2023, FAO assisted North Macedonia in accessing climate finance from the Green Climate Fund to strengthen national capacities and strategic frameworks for a low-carbon and climate-resilient society.

Within an FAO project focused on enhancing the capacity of the forest service, a meeting was held to exchange best practices and experiences in forest restoration, emphasizing the importance of regional cooperation in effective forest management. The project launched in July 2023 and will continue through 2024.
To address the growing demand for high-quality, climate-resilient seed material, FAO supported the Ministry of Agriculture in improving domestic production and strengthening national capacities to ensure adequate seed production and supply to farmers. A May event delivered the results of work on climate change resilience through seed system management.

In July, FAO Director-General Qu Dongyu and the Minister for Agriculture, Forestry and Water Economy of North Macedonia, H.E. Ljupcho Nikolovski, met to discuss cooperation between FAO and North Macedonia.

**SERBIA**

In 2023, FAO signed a **Country Programming Framework** with the Government of Serbia that articulates how the partners will work towards a more sustainable, innovative and inclusive food and agriculture sector and better management of the country’s natural resources.

Several sustainable forest management projects concluded in or continued through 2023. An FAO and Global Environment Facility project aiming at low-emission, resilient development in Serbia was completed in June 2023. The project delivered a national forest inventory and integrated forest information system. A project to boost the resilience of forests to climate change and biodiversity loss via mitigation and adaptation investments was concluded in May. Ongoing through 2024 are projects related to an enabling environment at policy, field and market levels for forest landscape restoration to achieve land degradation neutrality in Serbia and to enhance the resilience of Serbian forests and their carbon storage potential.

Recognizing the importance of educating future agricultural professionals about the impacts of climate change on agriculture, FAO led the development of a new elective subject “Climate Change in Agriculture,” which was approved by the Ministry of Education and piloted in five agricultural schools in the 2023–2024 school year. As a result of recommendations and trainings provided by FAO, 12 municipalities introduced new disaster risk resilience and climate-smart agriculture measures in local agriculture support programmes, and an additional seven plan to introduce those measures in future programmes.

To support agricultural communities and help families recover from the floods that hit Serbia in May and June 2023, FAO called for applications from farmers in seven selected municipalities. Assistance is planned for delivery beginning in early 2024.

To further pursue the implementation of national pathways for food system transformation, three national dialogues were organized in 2023: on the International Day of Biological Diversity in Novi Sad, on healthy diets and food production, and on the observance of World Food Day in October.

The FAO Investment Centre provided technical advice in 2023 at the request of the Serbian Ministry of Agriculture to reinforce the Serbian Quality Label development on fresh pork meat, consolidate the guidelines on raw material, and emphasize the secondary benefits of the label for the honey and poultry sectors, particularly as a tool for upgrading standards.

**TAJIKISTAN**

FAO and the Ministry of Agriculture of Tajikistan officially launched the national working group of the **Globally Important Agricultural Heritage System** in January. The launch event was held within the scope of a project related to agrobiodiversity conservation in Tajikistan for food security and livelihood improvement.

With about 10 percent of the rural population working abroad, income-driven migration is creating labour deficits in agriculture in
Tajikistan, creating some hardships for rural livelihoods. To fill the gaps left in family farm work, FAO established about 50 junior farmer field schools to educate up to 1,000 children. The first activities, held in February, covered drip irrigation, greenhouse vegetable cultivation, organic farming methods, and technology for growing mushrooms in artificially controlled conditions. Twenty women groups were trained through farmer field schools and received seed packages and processing equipment. FAO supported small-scale investments in agriculture and post-pandemic recovery through the delivery of 40 demountable solar fruit and vegetable dyers and 20 greenhouses to eight farmer groups in four districts of Khatlon. Eight farmer field schools were established to promote drought-resistant and salt-tolerant crops, and 340 kg of high-quality legume seeds were distributed.

FAO is committed to reducing food loss and waste in Tajikistan. In April, FAO held a national stakeholder validation workshop in Dushanbe on the formulation of a strategic road map for food loss and waste reduction. The workshop proposed measures to improve national strategies and action plans to reduce food loss and waste across all subsectors of the food system, from farmers to consumers.

Every year, locusts put crops and rangelands at risk while threatening the food security and livelihoods of rural populations in Tajikistan. In March, FAO delivered essential equipment for field locust survey and control operations to the State Entity Locust Control Expedition of the Ministry of Agriculture. In the first week of April, FAO organized a cross-border survey among the locust control agencies of Tajikistan and Uzbekistan as part of an FAO programme to improve locust management. As a result of the initiative, the two locust control agencies signed a protocol on common findings and further steps.

Tajikistan has been greatly affected by climate change and is prone to climate disasters. In May, an introductory seminar was held in Dushanbe on an FAO project to strengthen the country’s capacity to comply with the Enhanced Transparency Framework under the Paris Agreement. To improve reporting, FAO worked with the government to develop an electronic tool to monitor gas emissions throughout the country. A new Green Climate Fund country programme was developed with FAO support and adopted by the Green Climate Fund in November 2023.

In December, a memorandum of understanding was signed by the Fisheries and Aquaculture Research Centre of the Hungarian University of Agriculture and Life Sciences and the State Unitary Enterprise Mohii Tojikiston of the Ministry of Agriculture of Tajikistan. Thirty-five fish farmers attended the project workshop, and FAO prepared a functional assessment report.
The FISHCap project to develop capacities for sustainable fisheries and aquaculture management in Central Asia held a steering committee meeting in May, and the final report was prepared at the end of the year. A delegation from Tajikistan participated in a regional workshop on practical training in pond aquaculture for key species held in Antalya, Türkiye, on 21–22 November.

The community of Lolazor village in the Hisor Mountains faces weak infrastructure, unpredictable weather patterns and land erosion. To address these issues, various Digital Villages Initiative interventions were implemented to leverage digital technologies and collaborations with neighbouring regions. These initiatives included upgrading internet connectivity to 3G, promoting agritourism through digital marketing, empowering the community with digital skills, twinning with digital villages in Uzbekistan, establishing a digital demo farm, and nurturing agricultural entrepreneurship through living labs.

FAO conducted a series of consultations to reduce antimicrobial resistance in agrifood systems through the One Health approach for national stakeholders from the veterinary sector in Dushanbe. The meetings focused on using ATLASS.

TÜRKIYE

A project to reduce food loss and waste in Türkiye and Central Asian countries supported countries in developing national strategies and action plans to prevent and reduce food loss and waste. The project raised public awareness and boosted the country’s capacity on food loss and waste, including through good practices to prevent and reduce waste.

The joint e-commerce platform HepYerinden is a digital hub for ten member cooperatives, providing a space for market collaboration and a unified identity. The platform’s significance – including stories of resilience from cooperatives during the devastating February earthquakes – was highlighted during an August launch ceremony in Bursa.

The two earthquakes on 6 February significantly impacted 11 provinces of Türkiye that are centres of horticulture, forestry, fisheries, livestock and dairy production. To rehabilitate national food security efforts, FAO and the Ministry of Agriculture and Forestry developed an Earthquake Response and Recovery Plan (2023–2026), valued at USD 112 million, to support around 700 000 people in the affected areas. Emergency technical cooperation projects have supplied dairy equipment and greenhouse inputs to 455 beneficiaries and cash assistance to 430 fishery households.

Given the importance of family farming to agrifood systems, FAO, in collaboration with the Ankara University Development Studies Application and Research Centre and with support from the Ministry of Agriculture and Forestry, began the study “A Perspective on the Future of Family Farming in Türkiye” in April 2023. In partnership with Pınar Süt, a private-sector dairy entity in
Türkiye, FAO formalized an implementation agreement signed in October 2023 that will tackle the challenges of youth migration, the ageing of farming communities, and problems related to youth and supply chains through a sustainable rural development approach.

Considered prone to drought risks, Türkiye is exploring millets and other drought-tolerant crops. Within the scope of the International Year of Millets (2023), FAO Türkiye organized three workshops and efforts to enhance biodiversity.

A high point of 2023 was the United Nations 16 Days of Activism in November 2023, dedicated to empowering women. Viorel Gutu, Sub-Regional Coordinator for Central Asia and FAO Representative in Türkiye, shared quotes on social media explaining that migration and displacement related to climate change often disproportionately affect rural women and children. As part of the project “Leaving no one behind: Greater involvement and empowerment of rural women in Türkiye and Central Asia,” a two-day regional workshop was held in Ordu on 13–14 December 2023.

Türkiye launched the One Country One Priority Product initiative in cooperation with FAO in December, designating figs as a special agricultural product.

A detailed analysis of the Turkish wheat sector was conducted as part of the project “Supply Chain Analysis for the Turkish Wheat Sector: Establishing a Resilient Food System.”

TURKMENISTAN

An ongoing FAO-GEF project on integrated natural resources management in drought-prone and salt-affected agricultural production landscapes in Central Asia and Türkiye established nurseries with drip irrigation systems in Dashoguz, developed a sustainable pasture management plan in Ahal and delivered equipment to combat drought and salinity in Nohur.

The creation of a modern land cadastre is important for the effective accounting of land resources and the development of small family farms and enhanced tenure security. A project to support the establishment of a digital land cadastre began in January 2023. FAO held several training events in Turkmenistan on the basics of global satellite navigation system technologies and their applications. A lecture at the Turkmen Agricultural University covered the registration of land rights and the land cadastre and the preparation of relevant by-laws.

Under the auspices of the FISHCap project, participants from Turkmenistan participated
in several regional events and exchange visits on production systems, fish feed and feeding, and fish health management. The project supported the procurement of aquaculture training equipment for the Turkmen Agricultural University of the Ministry of Agriculture. Under the awareness-raising component, the colouring book “I am learning and painting fish” was translated into the Turkmen language and distributed to primary schools in the capital city of Ashgabat.

**UKRAINE**

FAO scaled up its 2023 Response Programme for Ukraine to reach more rural households and populations with emergency livelihood support and enlarged its activities to include livestock production, the rehabilitation of agricultural land affected by the war, and the revitalization of small-scale farming enterprises. The programme focused on three pillars: restoring food security and self-sufficiency in front-line communities; restoring critical agricultural production and value chains; and enhancing coordination and technical support to the functioning of critical food system services. In summary, in 2023 FAO supported more than 150,000 rural families and more than 6,000 small farmers, focusing on the most affected oblasts of Ukraine.

The termination of the Initiative on the Safe Transportation of Grain and Foodstuffs from Ukrainian Ports has increased the instability of export routes and reduced the planting and selling of crops. It caused an increase of approximately 11 percent in exports of commercial enterprises compared to pre-war levels, while oblasts in the west of Ukraine recorded a 25 percent increase. Ukraine has opened a temporary humanitarian corridor on the Black Sea, but the 19 million tonnes of agricultural production exported in 2023 is 20 percent less than in the same period in 2022.

The Kakhovka Dam disaster in June 2023 disrupted energy production, access to drinking water, irrigation, infrastructure and river transport. The dam eruption destroyed a critical fisheries source and likely destroyed spawning grounds, impacting potential recovery. The disaster affected over 500,000 ha of agricultural land connected to irrigation canals in southern Ukraine. FAO co-led the agriculture sector analysis of the post-disaster needs assessment, which calculated damages and losses.

From November 2022 to April 2023, FAO conducted a series of assessments to understand the impacts of the war on the livelihoods of rural households and small agriculture enterprises. More than one in four rural families have reduced or ceased agricultural production, with one in three having done so in the front-line oblasts, according to a nationwide household survey. Small agricultural enterprises reported a 9 percent decrease from 2022 in the cultivated area of cereal crops, while enterprises along
the front line experienced a 20 percent drop. In response, a 2023 project to safeguard livestock production and repair livestock shelters to protect food security and livelihoods in conflict-affected rural areas helped ensure farmers in Donetsk, Dnipropetrovska, Kharkivska and Zaporizka oblasts have improved livestock shelter. Similarly, a project to safeguard the livestock production of rural households during the winter season of 2023–2024 in areas affected by war escalation aims to give 3 600 households increased access to animal feed, health care and materials for shelter repairs and rehabilitation. In October 2023, FAO reported that over 25 percent of formerly arable land is uncultivated due to unexploded ordnance and damage from bombing in the Oskilska, Vlkivska Iziumska, Chkalovska and Starosaltivska communities. FAO and the World Food Programme launched a joint project to restore livelihoods and revitalize rural communities affected by mines and explosive remnants of war to clear explosive remnants from about 300 ha of agricultural land. At the same time, FAO is providing cash, vouchers, seeds, animal feed and other agricultural inputs to enable small-scale farmers to resume agricultural production. A project to provide emergency seed support to conflict-affected smallholder farmers in Ukraine was active from March through August 2023. FAO provided spring seed support to approximately 3 600 smallholder farmers in conflict-affected areas to sustain their livelihoods and protect and recover agricultural value chains disrupted by the war. In May, 4 400 bags of corn seeds and 3 600 bags of sunflower seeds were distributed in Chernihiv, Sumy and Kharkivska oblasts. FAO assisted the National Academy of Agrarian Sciences in the relocation of genetic materials from Kharkiv to a depository in the west of the country. FAO completed a project in July 2023 to strengthen the resilience of pine forests to bark beetle outbreaks and associated dieback. The project helped revise national surveillance and monitoring systems and formulate recommendations for follow-up, aiming at the development of functional early warning systems. FAO supported the State Service of Ukraine on Food Safety and Consumer Protection with the reconstruction of the existing premises and the delivery of new equipment for two laboratories conducting testing and certification of food commodities for export at border facilities.

Despite the war, FAO is uniquely positioned in Ukraine to implement a multidimensional and innovative strategy to continue addressing the needs of war-affected rural populations and sustaining and restoring agrifood systems at scale. FAO and the Government of Ukraine, particularly the Ministry of Agrarian Policy and Food of Ukraine, will continue to collaborate on joint programmes in 2024.

**UZBEKISTAN**

The Digital Villages Initiative was launched in Uzbekistan in 2023 to shepherd the communities of Novkent and Yuksalish into a digitally driven future. The highly participatory approach aims to empower rural people, especially youth, to identify and develop solutions to the challenges faced by rural communities. A youth innovation programme linked young students and entrepreneurs in Fergana with smallholder farmers, and students made progress through the DVI Camp, the Hack4DigitalVillages innovation challenge and weekly DVI Living Labs. The project established the DVI Hub, a digital platform for community knowledge sharing. In December, the final workshop of an FAO project to prepare for the digital transformation of agriculture was held in Tashkent.

In the first week of April, FAO surveyed Tajikistan and Uzbekistan locust control agencies within the scope of an FAO programme to improve national and regional locust management in the Caucasus and Central Asia. On 6–8 April, locust experts visited bordering districts of the Surkhandarya region of Uzbekistan, where about 40 000 ha were surveyed.

The key event of 2023 in Uzbekistan was the International Conference on Food Security, hosted by the Government of Uzbekistan in Samarkand, Uzbekistan, on 7–8 September, with technical support from FAO. The conference considered key agrifood system challenges and identified solutions in Central Asia and beyond. Another important event was the third meeting of the Central Asian Animal Health Network, held 8–9 June in Samarkand, to delve into the future of animal health and the One Health approach. FAO facilitated the virtual sixth meeting of the ministers of Central Asian countries, who gathered on 15 February to share their experiences on agricultural issues. FAO also organized three major international events on salt-affected soils in Tashkent: the second
meeting of the International Network on Salt-affected Soils, the sixth plenary meeting of the Subregional Eurasian Soil Partnership, and specialized trainings on salt-affected soil analysis conducted by the Global Soil Laboratory Network.

Significant work was done in 2023 to advance gender equality and rural women’s empowerment in agriculture and rural livelihoods. The FAO–GEF project “Sustainable Forest Management in Mountain and Valley Areas of Uzbekistan” conducted four trainings in all project sites on the implementation of the gender strategy, with more than 120 people – including 45 women – taking part. Under the scope of the United Nations Joint Programme “Empowering Youth Towards a Brighter Future through Green and Innovative Development of the Aral Sea Region,” significant work is being done in Karakalpakstan on empowering rural youth and women by equipping them with digital entrepreneurship and social innovation skills. In December, 523 beneficiaries – 46 percent of them women – of the “Shared Prosperity through Cooperation in Border Regions of Kyrgyzstan and Uzbekistan” project received agricultural equipment, seeds and seedlings.

Agriculture accounts for 27 percent of the country’s gross domestic product. To ensure good yields, Uzbekistan is actively engaged in the moderate use of chemicals and pesticides and the cultivation of agricultural products. A statement of cooperation was signed by FAO, the Uzbekistan Ministry of Ecology, Environmental Protection and Climate Change, and the European Union concerning a project to provide technical assistance for the sound management of hazardous chemicals.

On 7 September 2023, FAO Director-General Qu Dongyu and Uzbekistan President H.E. Shavkat Mirziyoyev met at the Kuksaroy Presidential Palace in Tashkent and agreed to strengthen the collaboration between FAO and Uzbekistan.
RESOURCES MOBILIZATION

The FAO Regional Office for Europe and Central Asia concluded a successful year in terms of resource mobilization, with USD 51.6 million mobilized in the region. Although the total amount has dropped from 2022 (an exceptional year in terms of resource mobilization due to the emergency response in Ukraine), it remains above the annual average of the resources mobilized in the region in previous years. In 2023, 67.6 percent of the mobilized amount was allocated for emergency activities, with the rest slated for development projects.

The top resource partners in the region in 2023 were Japan, with USD 11.6 million, followed by the United Nations Office for the Coordination of Humanitarian Affairs (USD 8.9 million), the European Union (USD 4.9 million), Norway (4.5 million) and the Global Environment Facility (USD 3.9 million).

Ukraine mobilized around USD 29.5 million for emergency response projects to sustain food security, restore livelihoods and revitalize rural communities in conflict-affected areas. The Republic of Moldova mobilized around USD 2.2 million for emergency support to agricultural producers in the context of socio-economic, climate and energy crises and to sustain the agricultural production and food and nutrition security of farming households impacted by the conflict in Ukraine and the drought. Türkiye supported the livelihoods of rural households in areas affected by earthquakes and refugees through new resource partnerships (USD 1.4 million).

On the development side, Ukraine started a new project for inclusive, competitive and sustainable value chain functioning and development in the agriculture, fisheries and forestry sectors, with a budget of approximately USD 6 million. Georgia continued to expand its portfolio in enhancing food safety and livestock-sector competitiveness with additional funds and strategic readiness to support updated nationally determined contributions and climate actions, with about USD 2.6 million. Azerbaijan (USD 2.2 million) and Bosnia and Herzegovina (USD 2 million) also mobilized resources to support climate actions, particularly on land degradation neutrality. Tajikistan mobilized USD 1.3 million to strengthen capacities to comply with the Enhanced Transparency Framework under the Paris Agreement.