

A full-page background image showing a male mountain biker in a white and blue jersey, black shorts, and a grey helmet, riding a gold-colored mountain bike on a dirt trail. The trail is surrounded by dry grass and shrubs, and the sky is blue with scattered white clouds.

NAP BULLETIN

December 2021

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3. UPCOMING AND FINAL ACTIVITIES THROUGH NAP PROJECT END

a. Study on economic impacts of climate change on energy and agriculture sectors in the Vrbas river basin

The general conclusion from the analysis of the impacts of climate change on the hydrology of the Vrbas basin is that, according to selected climate scenarios, a significant increase in temperatures (up to 6°C) can be expected by the year 2100. This is coupled with an increase in the number of days with precipitation greater than 20mm; in most parts of the basin, this increase is over 10%, although these high-precipitation days are unevenly distributed, with spring season increases of up to 40%. **This leads to a higher incidence of extreme flows, which according to statistical analysis increase significantly at most locations in the basin.** These extremes punctuate a general trend of reduced available water in the main course of the Vrbas and its tributaries.

The effect of climate change, for HPPs for the near period is estimated at a slight increase, up to the 3% of average annual production. **These effects are followed by a further and long-term decrease, up to the 30.1% of average annual production for a longer period in relation to the reference state.**

b. CC related Environmental Information System (EIS) is under development for the first time in BiH

A platform for collecting and monitoring climate change data change is a key component of the integrated Environmental Information System (EIS) that is being developed in BiH for the first time. The platform is designed to ensure the collection of necessary data on indicators, and will be implemented iteratively to inform the future format of the EIS platform so that it incorporates the full suite of environmentally relevant indicators. Establishing such a software platform as an integral part of the EIS will enable vertical and horizontal cooperation and data exchange between different institutions, but also monitoring of climate trends and development of reports on climate change adaptation





to meet local needs and international reporting obligations. Moreover, the System will meet transparency requirements laid out in Article 13 of the Paris Agreement by strengthening institutional and technical capacity to measure and report on: climate impacts and risks, greenhouse gas emissions, climate change adaptation, and mitigation activities.

c. Capacity-building: Climate Change Adaptation (CCA) trainings, Monitoring & Evaluation (M&E), trainings to increase knowledge on climate adaptation and awareness on necessary climate action

As part of activities to strengthen the capacity of institutions in Bosnia and Herzegovina to improve the process of adaptation planning for climate change, between March and November 2021 four training sessions were held to build and strengthen the capacity of institutions to adapt to climate change in BiH. The topics covered were:

- Adaptation planning and policy: assessment, prioritization and implementation of adaptation measures
- Mechanisms for collecting and disseminating climate change data
- Climate change adaptation indicators, development and implementation of a monitoring and evaluation (M&E) framework
- Exchange of experiences that will help relevant sectors and levels of government to report on relevant information and use it in the decision-making process on adaptation interventions.

The presentation and training was attended by a total of over 380 participants, comprised of representatives and stakeholders of institutions and sectors affected by climate change, including: water management, agriculture, forestry, spatial planning, environmental protection at the state and entity level, water management agencies in BiH, and hydrometeorological institutes. Owing to epidemiological considerations, the training was organized as a hybrid, with some participants attending the event in person, with an additional cohort attending online.

The training was led by prominent experts from Bosnia and Herzegovina and professors from thematic areas from the Republic of Slovenia. The training

leads, with their experience and practical examples, gave additional gravitas to the event, and strengthened participants' knowledge and understanding of the need to adapt to the negative effects of climate change.

d. Capacity-building: CCA / EPP trainings to support the water management sector as one of the most vulnerable to CC

As part of the GCF NAP project, between May and September 2021 four expert workshops were held on climate change adaptation with the aim of strengthening the capacity of relevant government staff and institutions in terms of climate change planning, funding opportunities, and implementation of initiatives. These trainings included:

- Training on managing river flows for ecological integrity -EPP
- Adaptation planning training on BiH and EU practice and methodological guidance

Improving knowledge on climate change adaptation opportunities for professionals is crucial to improve climate adaptation planning processes, as well as for enhancing adaptation actions and increasing adaptive capacity and resilience to climate. It also serves as an opportunity to find innovative solutions to the challenges of climate change.

The training was led by prominent experts from Bosnia and Herzegovina, as well as professors from relevant thematic areas at institutions in Croatia, Serbia, and Germany.

The trainings were attended by a total of ≈300 participants, comprised of representatives of ministries of water, agriculture and forestry, environment, water management agencies and institutions in BiH, and representatives of hydrometeorological institutes and other relevant institutions affected by climate change.





e. Development of climate finance mechanisms and strategic adaptation investment planning in 4 pilot municipalities: Trebinje, Sanski Most, Laktasi and Zenica

BIH has limited resources to finance its adaptation investments. The CCA Financing Strategy at municipal level builds its capacities to attract CCA finances and to mainstream CCA into local budgeting and development plans. Within the NAP project the CCA Financing strategies have been developed by pilot municipalities Laktasi, Zenica, Sanski Most and Trebinje and they apply specific tools for multi-year investment programming with proper prioritization of investments, corresponding mid-term financial plans aiming at building resilience and application of prioritized project concept note templates suitable for presentation to potential financing institutions and investors.

Developed CCA Financing strategies create linkages between state and local level. They take into account municipal climate resilience investment program pilots, which were focused on direct assistance to the most vulnerable and impacted population. These pilots provide replicable development solutions with special focus on municipalities which are of critical importance in addressing direct adaptation needs of the vulnerable population. The pilots in Laktasi, Zenica, Sanski Most and Trebinje were undertaken to demonstrate effective and innovative ways of leveraging available funding sources.

Actions and findings:

- Analysis of existing climate finance;
- Identified potential financial resources from both domestic and international sources for CC adaptation;
- Feasibility assessment of using complementary sources of finance, and summary of applicable financial mechanisms and available financing instruments developed;
- Methodology and analytical tools for: (1) multi-year capital investment risk-informed programming; (2) investments prioritization; (3) financial forecasting and mid-term municipal finance planning developed;
- Development and testing of computer-based financial models for multi-year forecasting of budgets for selected municipalities;

package of tested tools and manuals with data application examples completed;

- Set of workshops for representatives of selected municipalities and training materials developed and conducted; Project Concept Note (PCN) format with reference to requirements of international financial institutions presented; review of different projects to be considered for further preparation by municipalities; selected projects to be prepared in PCN;
- Investment plans for selected municipalities developed;
- Financial plan models presented to assisted municipalities;
- Municipal financing proposals prepared;
- Developed innovative financing strategy for climate change adaptation investments at the municipal level.
- Key conclusion: access to funding sources for climate finance is locked-in at the local level

f. Developed 'Climate Finance Strategy BiH' - key messages

To support a comprehensive understanding of climate finance, key messages were drafted and confirmed. Key messages were drafted for: strategic directions, finance, CCA and M&E, with sectoral/sub-sectoral recommendations for municipal infrastructure.

This NAP finance strategy has reviewed a range of relevant documents and conducted interviews with key decision-makers and implementers in BiH. The recommendations are based on this assessment and the climate finance and sectoral expertise of the authors.

The general thrust of the sectoral recommendations is aimed at strengthening the foundation for the urgently needed investments that will help BiH adapt to the (by now) inevitable consequences of climate change, while maintaining the direction of achieving a just transition towards a low-carbon future.

Over 80% of total projected investments into climate change adaptation in BiH are envisaged to be financed by entity governments and public



institutions, close to 20% by municipalities and less than 1% by the private sector and individual persons.

Some international funding providers have indicated that their interest lies in financing the necessary adaptation investments, but there appears to be less interest than in mitigation. The responsible authorities will need to engage closely with international funding providers to encourage them to scale up their finance over the course of the NAP implementation and to more fully align their operations with the directions of the NAP, something which could be achieved through the definition of specific projects under the NAP. A dedicated donor council may be an appropriate approach to delivering this closer co-ordination and could be aligned with the NDC financing agenda.

g. COP26 Participation by Representative of BiH City of Zenica

[UN Climate Change Conference \(COP26\) - \(31 October – 12 November 2021\)](#)

The UK hosted the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow on 31 October – 12 November 2021. The COP26 summit brought parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change.

Participating at the conference under the thematic area: *Cities at the crossroads – The UN System helping cities to accelerate climate*, Objective: 3. *Unlocking climate finance*, was Ms. Jakuta Imširović, Head of Department for Ecology & Utilities, City of Zenica, Bosnia Herzegovina.

A key theme of the thematic area was that limited access to climate finance amounts to a barrier to adaptation and mitigation. Together with partners, the UN seeks to alleviate bottlenecks to finance local priorities as identified in NDCs and related policies and plans (NAPs, NAMAs, etc.) to truly localize climate action.

To watch the panel: https://www.youtube.com/watch?v=Clv_i_1U72E



Key messages from the panel:

- a. Cities are very crucial units of climate action- suffering the most
- b. Strengthening public financial management and public-private partnerships is necessary to increase climate finance for local level,
- c. Cities can introduce innovative ways of financing, e.g. blended sources, crowdfunding, soft loans
- d. Everything we are doing now means how much we will be resilient in 2050

h. NAP document is finalized and provided for official adoption

United Nations Framework Convention on Climate Change (UNFCCC) recommends that countries develop national adaptation plans (NAPs) in order to facilitate and advance their climate change adaptation planning. The process of adaptation planning resulted in an assessment of vulnerabilities and risks arising from climate change and climate extremes and offered possible options for adaptation to climate scenarios. The National Adaptation Plan of aims to improve existing reporting on the development and implementation of adaptation measures and contribute to the integration of climate change adaptation into relevant social, economic and environmental policies and actions.

Recently, the BiH developed its first NAP document with prioritized actions in the most vulnerable sectors: agriculture, water resources, biodiversity, forestry, and human health. Addressing the issue of climate change adaptation will contribute to achieving long-term sustainable development, i.e. Sustainable Development Goals. Adaptation planning should be a continuous, progressive, and iterative process, the implementation of which should be based on clearly defined priorities, including those defined in the country's strategies and plans and aligned with its sustainable development goals, plans, policies and programmes.

The total value of necessary adaptation actions is over US\$4 billion through 2030, and can be implemented with strong international support.





OVERVIEW OF PHOTO ESSAYS

RECENT PROJECT HIGHLIGHTS LAUNCHED IN CONJUNCTION WITH KEY INTERNATIONAL DATES:

STORY FOR WORLD WATER DAY (22 MARCH):

[True Value: Taking action to improve water security, farmers in Bosnia and Herzegovina manage water as a precious resource](#)

(Flickr album: <https://flic.kr/s/aHsmV1Rsh4> and <https://flic.kr/s/aHsmUVH2eD>)

With the first signs of spring, the Košpić family has their hands full packing tonnes of potatoes they harvested last autumn on their farm in the village of Mrčevci, situated in the northwest of Bosnia and Herzegovina (BiH). Their potato harvest is just a part of the value their land and hard work generates.

The household and farm are led by 50-year-old farmer Miloš Košpić, who in the past two decades has been developing the family farm around the house and land that he inherited from his father.

For Miloš and his wife Slađana, their two sons and a daughter, as well as his aged mother, everyone has a key role on the farm, including animal husbandry in addition to vegetable and fruit crops.

“This household has run here for about a hundred years”, he says, explaining that his father was not interested in large-scale farming, so it fell to him to spearhead the infrastructure investments needed to boost productivity. First among these infrastructure priorities was securing enough water.

Things are changing

Farmers in BiH are already facing the negative consequences of climate change, manifested via floods, droughts, erosion, landslides, storms, and hail. While there is awareness of the urgency of the water sector challenges, farmers know intimately that we must accelerate action to transform water security.

Photo: Farmland in Sutjeska, Tjentište, Bosnia and Herzegovina. Photo: Lili Popper/Unsplash.

A Bright Future

Despite these challenges, Miloš sees a bright future. For 17-year-old Dejan, Miloš's youngest son who recently embarked on a course of study at a Banja Luka technical high school, following in his father's footsteps via agriculture is increasingly appealing.

In a country blessed with water like BiH, Miloš Košpić sees a bright future. Part of realising this dream depends on water.

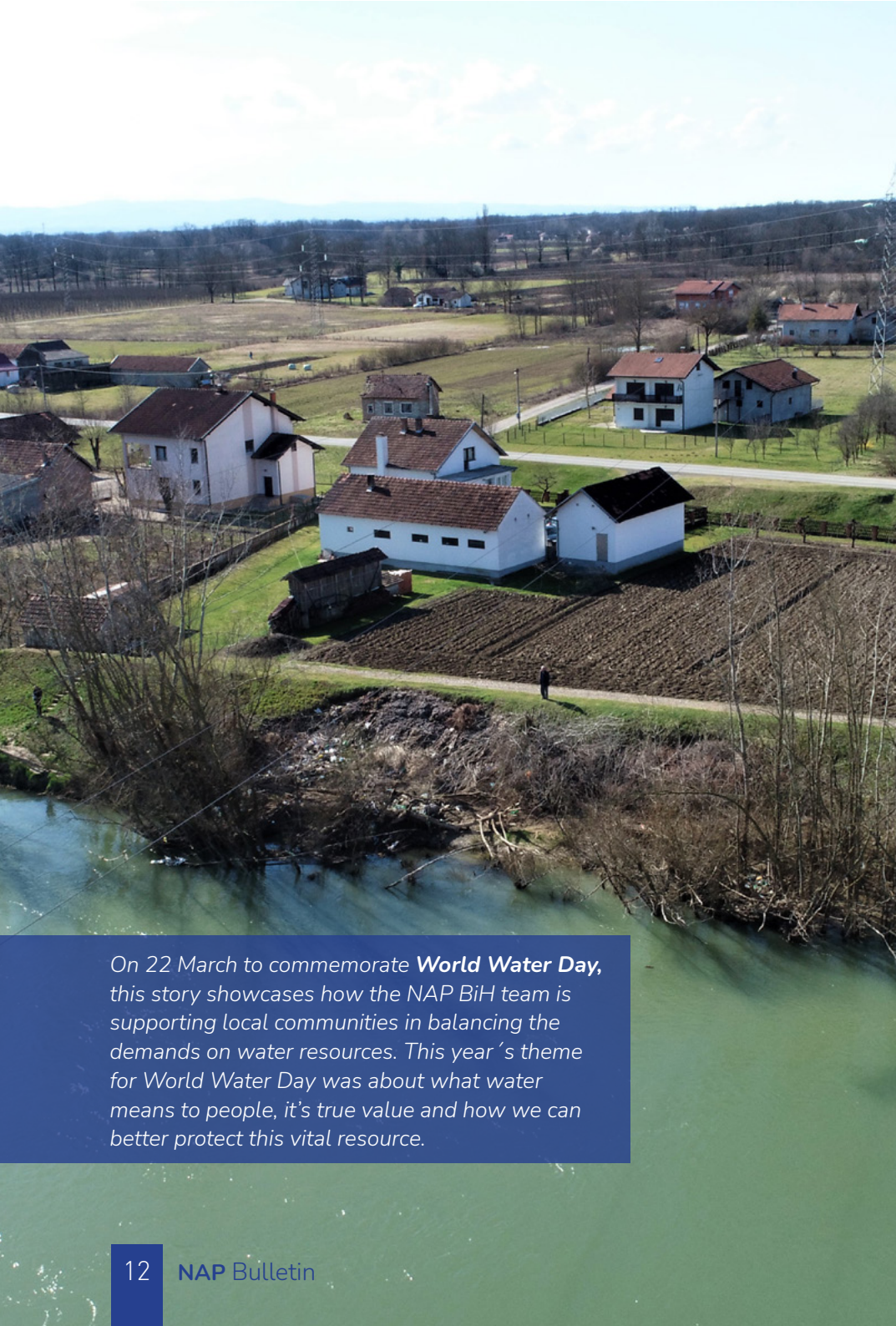
Photo: Dejan's mother remembers fondly how Dejan was put behind the steering wheel of a tractor when he was only five, and how this early experience helped the young man blossom into a skilled manager of production machines throughout the farm.

Valuing Water, Enabling Change

For BiH, a UNDP-implemented, Green Climate Fund-financed project, **Advancing the National Adaptation Plan (NAP) process for medium-term investment planning in climate sensitive sectors**, recognises the importance of water. Knowing that the management of water resources impacts all aspects of society, the project is advancing adaptation planning with a focus on the most vulnerable sectors.

Only with proper climate change adaptation planning and budgeting can these sectors expect systematic, suitable, and long-term support from both local institutions and donors.





On 22 March to commemorate **World Water Day**, this story showcases how the NAP BiH team is supporting local communities in balancing the demands on water resources. This year's theme for World Water Day was about what water means to people, its true value and how we can better protect this vital resource.

When the well runs dry

For Miloš and his family, the old well that provided the household with water was replaced in the 1970s by a system of tanks and cisterns. Beginning in 2000 – when the development of the farm intensified – this system became insufficient. “This is when I decided to dig deeper and make wells.”

Miloš's farm, in the village of Mrčevci, is located near the city of Banja Luka, through which the Vrbas River runs. But being connected to an urban utility system can be cost-prohibitive for farmers like Miloš, whose lands lie a mere 5-7 metres above rich aquifers.

“Wherever you drill around here, there is water... So, there are plenty of wells around here,” he explains, adding that he has five such well systems developed for watering the plants on his farm.

What lies beneath

To grow potatoes, onions, cabbage and watermelon, the Košpićs need a robust irrigation system, and the only way to do so effectively entailed transitioning to groundwater, which is a plentiful resource in this region encircled with rivers.

Achieving climate resilience requires building up vulnerable farmers by developing their skills and expertise in water management. A resilient farm can cope effectively with climate shocks, while also increasing production in smart, economically efficient ways.

#1 Water

Being a farmer is hard work and “an expensive sport”. Miloš explains that his farm is one of only two commercially registered farms from his village of about 200 households, and he knows that to sustain this production his farm depends on water.

“In agriculture – water is number one. You can pick any vegetable to grow, you can put any amount of fertiliser, but if you don't have water – if you can't water the crop so it grows – then it is all in vain.”

Water is a linchpin

Building resilience depends not solely on farmers' management of resources, but also on how well local, national, and global institutions support farmers.

In the face of a changing climate, National Adaptation Plans (NAPs) are central to proactively adapting, and managing water is an urgent priority. Water is a critical for the climate, environment, and resilience agenda. Promoting ambitious climate action across the world, NAPs also ensure that countries are able to support their citizens.

Precious resource, prescient guidance

Within BiH's NAP, institutions have defined priority adaptation actions that include work to improve water management to increase resilience to floods and droughts. Activities also include planting new drought and flood tolerant species, cultivars, and hybrids; introducing improved cultivation technology; and the development of more efficient irrigation systems. Additional efforts to promote afforestation with indigenous and fast-growing species are already underway.

The NAP includes specific provisions to enhance the capacity of public health institutes and emergency services, and to establish effective statistical monitoring of climate change-related events. For additional protection against extreme weather events, the NAP also includes work to develop a co-ordinated early warning system, including an anti-hail protection system. These efforts will protect farmers, as will the adoption of new technical solutions - including Environment Based Solutions – to ensure flood, erosion, and torrent protection for settlements and cities.

The NAP also includes plans to reduce water losses in water supply systems, and work to construct reservoirs for multipurpose uses, including redistribution of water flow, flood protection, irrigation, and hydropower.





An ambitious plan, ambitious partnerships

To make this work possible, key governmental institutions are involved in the NAP process. In particular, the Ministry of Spatial Planning, Civil Engineering, and Ecology of Republika Srpska as the country's UNFCCC and GCF focal point, the Ministry of Foreign Trade and Economic Relations of BiH as a state-level ministry in charge of coordination of climate change adaptation activities throughout the country, and the Federal Ministry of Environment and Tourism.

The investment necessary for implementation of this ambitious plan will reach ≈USD\$5bn from 2021 to 2025. BiH is already investing in numerous climate change adaptation measures using domestic resources, but implementation of this plan requires and benefits from strong international assistance.

Harnessing the wild waters

Vaso Lepir spent his life by the river of Vrbas in northwest BiH. For the past 76 years he has seen all of its moods and seasons, enjoying it at its best, and suffering when it was at its worst. He has experienced first-hand how imperative it is to have strong leadership in managing water.

In 2014 when a large part of the country was hit by devastating floods, the Bosna, Vrbas, and Sava rivers broke free of their banks and left thousands homeless.

Remembering waist-deep water in his house, and the destruction it wrought with its 20 cm of residual mud that took months to clear out, Vaso notes that he would not be able to fight that battle a second time. Instead, he put all his strength into building protections against future river incursions.

It took Vaso and his wife Marija three years to put things back to normal and build a strong embankment. Their efforts were bolstered by assistance from local authorities. His household facilities and yard are now surrounded by a berm over a metre-high.

“We are protected now. It is good by the river, but like this, when you are protected there aren’t any problems. However, there is a danger it all gets carried away if it is not protected.”

Water from our mother

From his parents’ old house with one well, Miloš developed the family farm into a viable livelihood, made possible because of their key infrastructure investments in irrigation.

“I am grateful to nature and I treat it well. It is sad to see how other people are treating nature... not watering the crops. We have one mother who gave us birth and our other mother is the nature.”

To change the future of water, we must rethink how to understand, value, and manage water as a precious resource. Miloš and Vaso are good examples of how each of us can appreciate the true value of water and take action to protect it.





STORY FOR INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY (22 MAY):

Choosing peaches over apples: As more intense, more frequent droughts occur in Bosnia and Herzegovina's inland regions, one fruit grower is adjusting by turning to a Mediterranean crop

(Flickr album: <https://flic.kr/s/aHsmVKDSVb>)

Looking at the heights of both Manjača and Vlašić mountains, Vaso Savić's family orchard is one of the rare ones that grows peaches on the valleys around the northern Bosnian town of Laktaši. Largely cultivated in Italy and Spain and often seen in the Adriatic coastal areas of Bosnia and Herzegovina and Croatia, peaches in Savić's home village of Miloševci are an uncommon fruit to grow in inland regions.

'Peach is not common here in this micro climate around Laktaši. When I first planted peach in my village [back in 1987], everyone was in wonder as it is a Mediterranean crop – though a very nice fruit', Vasić recalled.

What seemed unusual for the continental climate of northern Bosnia decades ago, now looks like a harbinger of climate change as this fruit tree, as Savić explains, is more resistant to the droughts that have become more frequent and intense. Characterised by four distinct seasons, Savić notices the continental climate in the region changing - and with it, the fruit.

A change of climate

This 62-year-old fruit grower got into this branch of agriculture 40 years ago, and began his career working in the then-state-run fruit plantation company, as well as for private owners. Savić spent years closely collaborating with students, researchers, and professors working on harvesting and testing different fruit varieties. This diverse but specialised experience provided him with the knowledge that he now uses to grow

his own 200 peach trees, 150 cherry trees, and dozens of apple, pear and plum trees, as well as to maintain the orchards of other owners.

‘There was a change of climate; we can feel it, and not in a positive sense’, Savić explains, adding that it there are now temperatures typical of summer arising in January, but wintery weather in the spring when the fruit trees blossom.

To fight against the undesirable consequences of these temperature fluctuations, one needs large investments into protection systems, something Savić says fruit growers in Bosnia and Herzegovina are unlikely do, as there are few state subsidies and low incomes in the area.

‘The state was always poor and could not subsidise our needs’, he noted, ‘and these are multi-year undertakings that require large investments. Back in the day, when the climate was favourable, it was possible that everyone could be a fruit grower, even without large irrigation systems’.

Part of the solution

The UNDP BiH NAP team recognises that achieving farm resilience requires building up vulnerable farmers by developing their skills and expertise to use sustainable farming practices. A resilient farm can cope effectively with climate shocks while also increasing production in smart, economically efficient ways.

Savić understands that adaptive farming and celebrating biodiversity remains the answer to several sustainable development challenges. From nature-based solutions to climate, health issues, food and water security, and sustainable livelihoods, picking what to plant and when to plant in a changing climate is the foundation upon which we can build back better.

Building resilience depends not just on how farmers manage resources, but on how well local, national, and global institutions support farmers. Only with proper climate change adaptation planning and budgeting can the most vulnerable sectors - such as agriculture - expect systematic, suitable, and sustainable support from both local institutions and donors.



*In conjunction with International **Day for Biological Diversity** on 22 May, this highlight shows how “We’re part of the solution”. The UNDP BiH NAP team appreciates that climate action must dramatically accelerate if we are to protect farmers from a changing climate. Planting peaches might be one drought-resistant solution.*



More intensive droughts

Savić's parents raised him and his two brothers in the family house that he still often uses when he visits to maintain the orchard and host his sons and their families. Growing up in a family that derived its sustenance from agriculture, he was naturally interested in fruit production, but as neither his brothers nor his two sons chose the same profession, he chose to work as a consultant and horticulturist for numerous orchards in the region rather than expanding his own.

The majority of large orchard owners he works with derive a greater share of their income from other industries, he noted, explaining that making a living from fruit production is fraught given both the economic insecurities of the Bosnian-Herzegovinian market, as well as the uncertainties brought about by climate change. In the last 10-15 years, recurring droughts are now compounded by unseasonal frosts.

'Droughts happen all the time, but it is getting more intense. Winters are turning mild and summers are getting hotter. It is not deployed as it should be', he said. 'We cannot say we are satisfied, but if we have a harvest every third year – we can say "it is good"'.

What happens due to drought, he explains showing some of the troubled branches, is that the tree reabsorbs moisture from the fruits, which then become deformed and undeveloped, and fail to reach maturity.

'It can happen that at fruiting, there is drought and the tree dehydrates the fruit if there isn't enough water in the soil... The fruit remains deformed. It can still be used for something but it has no juice and this can't be reversed. Then it has no market value...'

Testing resilience to droughts

Over his four decades as a professional fruit grower, Vaso Savić learned how some crops are more resilient to a lack of water than the others, with peaches being his leading candidate.

'Peach is more resilient to drought', he explained, adding that there are ways to shovel around the trees so that the soil preserves more moisture from the autumn to spring, in preparation for the dry season.

His experience taught him that aside from peach, cherries can withstand droughts as their harvesting season falls before the hot summer months (although it still must be nourished and treated with special care throughout the year). Vineyards are also more drought-tolerant than apple and pear trees, Savić elaborated.

Stunted fruits are not the only trouble that comes from droughts. Bark beetles, first attacking the weakest trees, are appearing more often and this requires additional efforts to nourish the trees and bolster their resistance to pests.

With most of the earlier generations of pesticides banned in accordance with EU standards, fruit growers are encouraged to put more effort into the nourishment and care of trees in the first instance. And this, Savić noted, is expensive for many growers.

Restructuring and turning to more climate-resilient crops requires a lot of careful work and years of testing and investment, but also a fair measure of luck.

‘Before, we used to know from what side the rain would come’, Savić explained spreading his arms to the sky. ‘Now it is completely unpredictable when the cold winds will come’.

Introducing predictability

To carve out a measure of predictability for farmers, the BiH NAP project is advancing adaptation planning with a focus on the most vulnerable sectors - including water management, agriculture, and forestry - by upgrading the knowledge base for adaptation, prioritising adaptation interventions for the medium term, building institutional capacities for integrating climate change adaptation, and demonstrating innovative means of financing adaptation at the sub-national and local government levels.





STORY FOR INTERNATIONAL YOUTH DAY (12 AUGUST):

[Changing what we eat to help the planet: Young people from Bosnia and Herzegovina are showing how it is possible to effect change to help the environment](#)

Flickr album:

For 25-year-old Emina Kuhinja, choosing a plant-based diet came about after learning of the negative effects on nature engendered by meat production and other segments of the food industry that she sees as a burden to the environment.

“A plant-based diet in my head still seems abstract, but I consider it to be a beautiful future, because the people I am seeing on the internet, they all seem very positive, healthy, fit, and this seems like the future of food.”

For Emina, a researcher and activist in Sarajevo, just starting out on her career in the field of political science, she found a beautiful symbiosis for what works for her body as well as the environment.

Transforming Food Systems

Emina recently participated in the Climate Change Academy organized in Bosnia and Herzegovina by the UNDP-implemented, Green Climate Fund-financed project, ‘Advancing the National Adaptation Plan (NAP) process for medium-term investment planning in climate sensitive sectors’.

Mingling with young politicians, activists, and journalists, Emina learned about the impacts of climate change on agriculture, water management, human health, and the economy. She found the experience a meaningful opportunity that got her thinking even more about what we do to nature and how our daily habits affect the environment and worsen the consequences of climate change.

“I believe there should be more awareness, because a lot of people don’t understand the processes that are happening,” Emina says. “Firstly, we need education and then change of habits.”

Informed decisions = healthy choices

During this year’s Economic and Social Council (ECOSOC) Youth Forum, held in April, the young participants emphasized the need to work towards more equitable food systems and highlighted the need for young people to make informed decisions on food choices through increasing global education on the healthiest and most sustainable options for both individuals and the environment.

Counting the youth vote

According to UNDP’s ‘Peoples’ Climate Vote’, the largest survey of public opinion on climate change ever conducted, 72% of under-18s in Bosnia and Herzegovina said that climate change is an emergency. It is evident that young people’s needs and aspirations should be heard, and their role as positive agents of change should be supported. To stimulate debate on climate change among youth in BiH and ensure their voices are heard at the 26th UN Framework Convention on Climate Change Conference of the Parties (COP26), the NAP project, in partnership with the Association Internationale des Étudiants en Sciences Économiques et Commerciales (AIESEC)- a youth led organization - organized debates on climate change in 2021.

No room for debate: we must change our habits

Whether it is about food systems, the environment, or the effects of climate change, 19-year-old Anastasija Đorđa Bosančić from Banja Luka is ready to discuss it. Highlighting the importance of changing our habits to be more considerate to the environment, and underscoring what Bosnia and Herzegovina’s institutions need to do in accordance with the [Paris Agreement](#) were central themes in AIESEC’s youth climate change debates.



The UNDP BiH NAP team knows that youth are integral in transforming food systems & taking climate action. On **International Youth Day** (12 August), with the theme: “Transforming Food Systems: Youth Innovation for Human and Planetary Health”, this highlight takes a look at how youth are For International Youth Day 2021, the theme is, ‘Transforming Food Systems: Youth Innovation for Human and Planetary Health’. The UNDP BiH NAP team knows that the success of such a global effort will not be achieved without the meaningful participation of young people. They know that when it comes to transforming food systems, youth are often ahead of the curve.



As a debate winner, Anastasija Đorđa is set to represent Bosnia and Herzegovina at [COP26](#) in Glasgow.

“Even though we, the youth, are not directly responsible for climate change we are the ones to feel them on our skin,” says the 19-year-old international relations student. “In 10-20 years when the time comes for us to be successful businesspeople, have our families and careers, climate change will peak and whatever we do now will have an impact.”

Emphasizing how she was raised by her parents to be careful with discarding waste, and with an awareness of how nature is suffering from human impacts, Anastasija Đorđa carries this cognisance with her and tries to convey it onwards to young people around her. Through everyday conversations and through her own example via participation in the projects and events of international organizations dedicated to the field, she tries to make a change.

“I think that the responsibility is ultimately on the companies and governments – which is true – but I believe each one of us could contribute,” she noted. “Talking about climate change, people consider it to be the melting of ice in Antarctica or a polluted ocean far away from us, while our own rivers are polluted and full of garbage and no one seems to notice.”

Just like Emina, Anastasija Đorđa sees part of the solution in changing personal habits, with awareness of food systems among the top priorities.

“We are focused on the consumption, but no one wonders about everything that needed to be sacrificed so that food could come to us,” she says. “We should reduce the consumption of meat and dairy of animal origin. There are always healthy alternatives to one part of nutrition we can adjust, no matter the household budget.”

For Anastasija Đorđa, checking the ingredients and nutrition labels to see whether her food is natural produced or unsustainably processed is a trivial matter that does not take too much time.

“I would definitely say that I noticed how more and more people paying attention to what they eat. We should not scare each other, but we should become aware of the problem and start working on solving it.”

Youth are central to BiH's National Adaptation Plan

Within the National Adaptation Plan BiH, institutions plan to raise awareness and enhance education about the need to adapt to climate change and support the development of a sustainable, climate resilient and more responsible agriculture sector.

In the face of a changing climate, NAPs provide a foundation for proactively adapting. Promoting ambitious climate action across the world, NAPs also ensure that countries are able to support their citizens.

Supporting the government to advance the NAP process and reaching the goals outlined in the Paris Agreement and 2030 Agenda for Sustainable Development, Green Climate Fund (GCF) resources are being used to raise awareness of parliamentarians, young politicians, and youth about the importance of integrating climate change-related risks, coping strategies - and opportunities - into ongoing development planning and budgeting processes. Youth are central to this process. The NAP BiH team will continue to integrate the country's youth, and applaud and amplify their efforts collectively and individually to restore the planet and protect life.





STORY FOR WORLD TOURISM DAY (27 SEP):

The Peak of Resilience: With dual blows from climate change and the pandemic, mountain resorts in Bosnia and Herzegovina are turning to summer visitors for climate-resilient sustainable growth

Flickr album:

Though its weather may be unpredictable, the beautiful Mt Jahorina – a 1984 Winter Olympic venue – has attracted thousands of skiers for decades.

But in recent years, nature admirers have begun flocking to the area in spring, summer, and autumn as well.

A mountain of possibilities

“Our mountains are certainly an enormous wealth, and we must not in any way see them only as a potential for winter tourism; we have to see them as destinations where year-round tourism is developed,” said Dragan Sokolovic, a dedicated tourism professional who has worked for over 35 years in the area.

Starting during the lead-up to Sarajevo’s 1984 Winter Olympic Game Mr Sokolovic recalls how he was one of the first employees of the celebrated Hotel Bistrica. He later moved to work as a hotel receptionist and head of reception in what he describes as one of the most renowned hotels in Yugoslavia.

With the expansion in the numbers of accommodation facilities, there is much to be done in terms of the design, development, and construction of ancillary infrastructure, especially that which would boost off-season tourism.

The apex of potential

Over the course of his career, Mr Sokolovic saw tourism expand in Bosnia and Herzegovina and the Jahorina mountain complex. Catalysed by the Olympics, he remembers when 5,000 skiers could be transported by the cable car each hour, keeping seven lines running all day long. He recalled how prior to and shortly after the Olympics, many hotels opened on the mountains surrounding Sarajevo – including on Mt Jahorina, Mt Bjelasnica, and Mt Igman, attracting tourists from around the world.

Initially, tourism was facilitated by Yugoslav agencies and state companies. Beyond the investments into accommodation, there were investments in the accompanying infrastructure. The whole of Sarajevo, and nearby small town of Pale, worked together to help tourism flourish.

Nowadays, mostly through the efforts of private owners, there have been investments into accommodation facilities, but not the supporting infrastructure necessary for year-round visits, Sokolovic noted.

Activating action

Knowing how to respond is key to building resilience.

That is why the UNDP-implemented, Green Climate Fund-financed project, 'Advancing the National Adaptation Plan (NAP) process for medium-term investment planning in climate sensitive sectors' is working to improve climate adaptation planning, and action, raise awareness of - and enhance education about - the need to adapt to climate change and support the development of a sustainable, climate resilient, and more responsible tourism sector. A sector that understands explicitly its vulnerabilities to climate change. Co-ordinated with the Ministry of Foreign Trade and Economic Relations of BiH as a state-level ministry in charge of co-ordinating climate change adaptation activities throughout the country, and the Ministry of Spatial Planning, Civil Engineering, and Ecology of Republika Srpska as the country's UNFCCC and GCF focal point and the Federal Ministry of Environment and Tourism, the NAP for BiH provides a foundation for proactively adapting.



For **World Tourism Day** (27 September), with a focus on “Tourism for Inclusive Growth”, this highlight examines how mountain resorts in Bosnia and Herzegovina are turning to summer visitors for climate-resilient sustainable growth.



Bosnia and Herzegovina has already been affected by many climate extremes: intense precipitation, heat waves, extremely high temperatures, droughts, floods, stormy winds, and more. An increase in the intensity and frequency of these extremes can be expected in the decades to come. As in other sectors, climate change is becoming one of the key issues affecting the development and management of the tourism sector in BiH. In this regard, winter mountain tourism is directly exposed to the consequences of climate change, given the relatively low altitudes at which domestic ski centres are located, and the dominance of the winter tourist season.

In addition to the negative implications for the winter tourist season in mountain resorts, due to higher daily temperatures on the Mediterranean coast, mountain resorts can be affirmed as new destinations during the summer tourist season. Accordingly, it is important to plan in detail the adaptation measures and its financing and implementation methods

For mountain resorts, the NAP report for BiH refers to expert estimates that “winter tourist destinations, located below 1,500m altitude will not be able to rely on snow precipitation and that the borderline, by the end of this century, could rise to 1,800m altitude.”

Mt Jahorina ski trails traverse that knife edge, arrayed in elevation between 1,300 and 1,800m.

Prior to the pandemic, predictions were that the tourism sector would employ about 114,000 people and make up about 3.5 per cent of GDP by 2028.

Though climate change increases the difficulties inherent to developing and managing tourism, there are potentially some upsides that the mountain communities of BiH can avail themselves of, the country’s NAP report noted.

Adjusting to the new normal

Even three decades ago - including during the 1984 Olympic Games, when rain washed away snow in the week before the Olympics, and wild weather was raging on Mt Bjelasnica just before the men’s alpine events - virtually any weather is possible. This did not stop tourism from developing, but resulted in a fundamental need for adaptability and resourcefulness.

Confidence rising

The COVID-19 pandemic made tourism drop significantly around the world. According to the United Nations World Tourism Organization, the number of international tourist arrivals declined by [83 per cent](#) between March and December 2020 compared with the previous year.

But confidence is slowly rising. As the tourist sector seeks to address pent-up demand, the need for inclusive, sustainable growth has never been clearer.

Year-round resilience

As mountain resorts build back better, economic opportunities for communities around Mt Jahorina may no longer be centred around winter sports, the potential for year-round resilience is in sight.

For Dragan Sokolovic who is nearing retirement age, the new climatic conditions have given rise to a burst of creativity. He noted that there is still much unused potential on Mt Jahorina, which he sees as a store of wealth that needs to be more strategically conceptualised and prepared with suitable infrastructure.

“All the sudden weather changes have to be reacted to with activities that will keep visitors coming”, he said. “Jahorina offers so many possibilities, but they need to be planned.”





4. UPCOMING AND FINAL ACTIVITIES THROUGH NAP PROJECT END

- Official adoption of BiH NAP document and submission to UNFCCC
- Development of Study for mapping torrential flood risks of pilot urban areas in Bosnia and Herzegovina with preliminary assessments of the application of protective measures on the basis of nature-based solutions
- NAP promotion campaign to contribute to awareness raising of decision makers/ government representatives, citizens, and the media in Bosnia and Herzegovina about the negative effects of climate change on society and economy and what can be done to address the problem.



Ministarstvo vanjske trgovine i
ekonomskih odnosa
Bosne i Hercegovine



Ministarstvo za prostorno
uređenje, građevinarstvo i
ekologiju Republike Srpske



Ministarstvo poljoprivrede,
šumarstva i vodoprivrede
Republike Srpske



Federalno ministarstvo
poljoprivrede, vodoprivrede i
šumarstva



Federalno ministarstvo
okoliša i turizma

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