Global Water Partnership

How water resources management can support climate-resilient development in North Macedonia

ABOUT THIS BRIEF

Water is a 'climate connector' – impacts of climate change on water will flow through all sectors of the economy and across national borders. This brief explains why integrated approaches to water management are essential for climate-resilient development, how North Macedonia has laid a solid foundation in that sense, and what needs to change if North Macedonia is to meet its commitments under the Paris Agreement and achieve the Sustainable Development Goals (SDGs).

SDG target 6.5, on integrated water resources management (IWRM), can make that climate connection. This brief looks at all four dimensions of IWRM, namely the enabling environment, institutions and participation, management instruments, and financing.

RECOMMENDATIONS

Key stakeholder(s)	Recommendation
Ministry of Environment and Physical Planning (MoEPP) Ministry of Agriculture, Forestry and Water Management (MAFWM)	Agriculture is an important sector in North Macedonia, but only 10% of agricultural land is under irrigation. **1** It would be helpful for MoEPP and MAFWM to coordinate to develop a climate-resilient irrigation strategy, with appropriate investment in information and institutional mechanisms needed for the sustainable management of surface and ground water for irrigated agriculture in a changing climate.
Ministry of Economy and other agencies responsible for Energy MoEPP National Hydrometeorological Service (HMS)	North Macedonia has set ambitious decarbonisation goals that will require phasing out of fossil fuel-based energy generation and dramatic increase in tapping into renewable energy sources, including hydropower. **2** Ensure that implementation of the recently passed 2040 Energy Strategy is climate change-responsive. For example, design and operational decisions related to new and existing hydropower should consider climate change impacts such as increasing precipitation variability and extreme events.

RECOMMENDATIONS

CONTINUED...

Key stakeholder(s)	Recommendation
Ministry of Environment and Physical Planning (MoEPP)	The boundaries of the river basin management districts have been delineated throughout North Macedonia and management plans are in various stages of development and implementation. 3 Complete all River Basin Management Plans (RBMPs) and invest in implementation of existing transboundary plans (such as the Lake Ohrid Transboundary Management Plan).
Ministry of Environment and Physical Planning (MoEPP)	An Information Management System (IMS) has been developed for the Drin Basin that acts as a platform for joint data collection, storage, and sharing between North Macedonia and its neighbours. 4 Use the Drin Basin IMS to inform the development of IMSs in North Macedonia's other transboundary basins (chiefly the Strumica River Basin and the Vardar River Basin).
Ministry of Environment and Physical Planning (MoEPP)	The launch of the Green Agenda for the Western Balkans provides further access to the EU Green Deal package. 5 Use the EU Green Deal mechanisms to improve North Macedonia's climate change response as well as to achieve the relevant SDGs, including via accessing climate financing through the EU's Instrument for Pre-accession Assistance (IPA) III window.

THE CHALLENGE

Water-related impacts of climate change threaten food and energy security in North Macedonia as well as broad-scale development and decarbonisation efforts.

In 2016, flash floods left 22 dead and inflicted an estimated US$100 million in economic losses. With climate change, floods are projected to become more frequent and intense, with precipitation increasing in variability.

A continuous increase in temperature is projected from 2025 to 2100. Overall average precipitation is projected to decrease in the same period, with greater and faster decreases in summerg.

Together this is expected to lead to an overall decrease in water availability by 18% in 2100 with increased risk of drought as well as increased negative effects on water quality, which is already hampered by low levels of wastewater treatment (c.20% of total volume is treated).

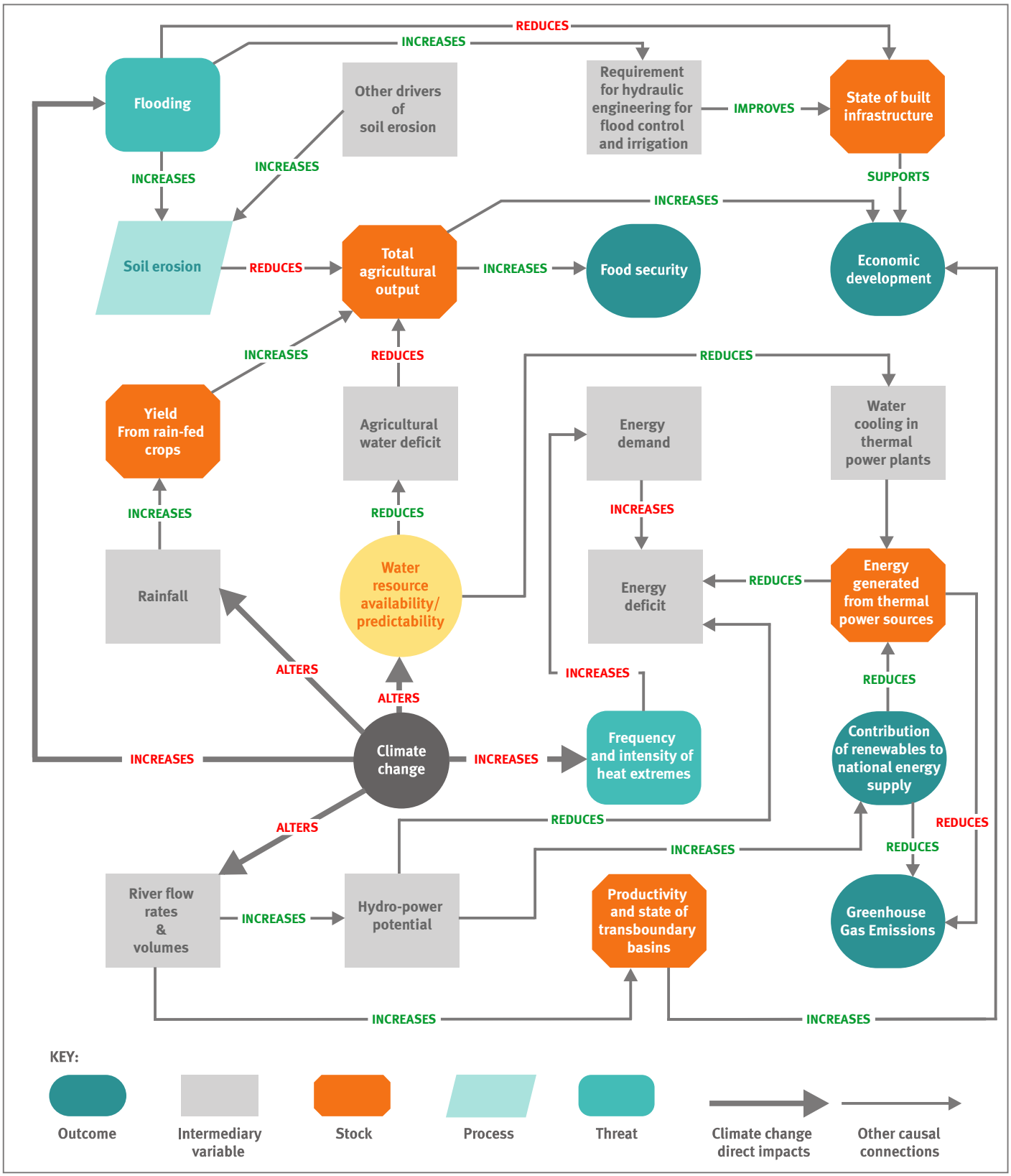
The variability of North Macedonia's climate, as well as increasing risk of extremes, poses multiple risks to agriculture including an increased risk of soil erosion and reduced yields of wheat and maize (particularly in the Southeast region).

The agriculture sector contributes 10% of GDP, constitutes over 17% of the workforce in a context of high national unemployment, and uses almost 50% of the total land for cropland and pastures. It is a priority area of investment for sustainable growth in the Programme of Government, 2017-2020.

In the energy sector, SDG target 7.2 aims to increase substantially the share of renewable energy in the global energy mix. North Macedonia's climate action to date focuses on mitigation, and most measures are in the energy sector, with renewable energy costs dominated by the development of small and large hydropower plants.

Hydropower plants already account for a third of the country's generation capacity, but are vulnerable to climate change impacts, such as reduced precipitation and increasing erosion (driven by extreme weather events). All of North Macedonia's four major river basins are transboundary, making hydropower a key 'climate connector' with its neighbours.

THE INTERCONNECTED NATURE OF WATER-RELATED CLIMATE CHALLENGES IN NORTH MACEDONIA



The interconnected nature of these challenges

As with the water–energy–food nexus, climate resilience and sustainable development are interconnected. The diagram below maps the relationships between some of the key climate challenges that North Macedonia faces, showing why coordinated, integrated and cross-sectoral responses are required to adapt to the impacts of climate change.

At the centre of the diagram is water resource availability/predictability, which is impacted by climate change (as shown by the words written on the arrows between the variables). The complex relationship between climate change and water availability/predictability is not shown here for reasons of space. The word 'alters' is used to describe the fact that climate change can affect water resources via multiple vectors, including via changes in temperature and precipitation, and impact on availability in multiple ways, including via seasonality, changing frequency and intensity of rainfall events, and fluctuating water quality, as well as in the increase or decrease average water availability.

To illustrate the accurate reading of this diagram, two causal chains are described:

- **Causal chain 1:** Climate change impacts food security via multiple vectors. In North Macedonia, climate change is expected to increase the frequency and severity of flooding, which increases soil erosion; the resulting unfavourable cropping conditions contribute to reducing total agricultural output, and correspondingly, threaten food security. Also, climate change is expected to decrease the total amount of rainfall in North Macedonia, with greater and faster decreases expected in the summer during the growing season. Reduced rain means reduced agricultural output for rainfed crops, and also reduced availability for irrigated agriculture where natural and man-made water storage capacity is limited, resulting in reduced food security.
- **Causal chain 2:** Climate change alters the flow rates and overall volume of water in rivers. Predictable flow rates and availability of a minimal level of flow is necessary for productive activities in a river basin, which in turn contribute to their economic development. In North Macedonia, where the four biggest basins are transboundary, the linkage between river flow rates and volumes and productive activities becomes an issue of transboundary cooperation, where riparian countries' existing mechanisms for sharing water for different purposes (irrigation, hydropower, water supply, for example) at different times of the year may need to be adjusted depending upon shifts and uncertainties introduced by climate change on flow rates and volumes. Given that climate change is expected to decrease precipitation and therefore decrease flow rates in North Macedonia, with particular drops being observed in the summer, the competition among different users across different countries will increase across its different riparian countries, affecting their state of cooperation and ultimately limiting some riparians' economic development potential.

ENABLING ENVIRONMENT

What do key policy statements say about integration of water, climate, and other Sustainable Development Goal agendas?

Water-related climate change impacts and response measures are recognised at a high level in national strategy and increasingly in the water sector and in agriculture, though less so in energy. Within climate strategy, water-related issues are considered in detail to date only in the 2014 Third National Communication (3rd NC).

Climate change

The National Development Plan (2017-2020) recognises increasing susceptibility to natural disasters due to climate change, and integrated approaches to water resources management feature among the response measures. The 2021-2024 National Development Strategy is in the last stages of development. Among climate strategies, North Macedonia's Nationally Determined Contribution (NDC), submitted in 2015, does not mention water-related impacts or measures, besides hydropower featuring as part of the renewable energy mix. Their Enhanced Nationally Determined Contribution (2021) is similar with water mentioned briefly in terms of adaptation and a focus on hydropower with regards to the mitigation portfolio.[1] The 3rd (and most recent) National Communication includes sectoral vulnerability and adaptation analyses for water resources and agriculture. Adaptation measures in water resources 'include placing greater emphasis on integrated, cross-sectoral water resources management using river basins as management units.'[2] A Strategy on Environment and Climate Change for the period 2014–2020 was adopted in 2018, but is reportedly not well known in sector ministries. A dedicated National Strategy and Law on Climate Change are in development, as is a National Spatial Plan which will consider climate change adaptation.

Legislation in the area of climate change is limited to several articles in the Law on Environment, but water-based climate action is not covered. The 2020 Voluntary National Review (VNR) of North Macedonia's progress towards the Sustainable Development Goals (SDGs) noted this legislative gap in addition to the lack of an overall strategic document setting climate change adaptation priorities. Both of the Biennial Update Reports on Climate Change (2015, 2017) recognised the lack of a comprehensive strategy that sets climate change adaptation priorities.

POLICY STATEMENTS

SECTOR	KEY POLICY STATEMENTS (INCLUDING LAWS, STRATEGIES, AND PLANS)
Cross-sectoral	■ National Development Plan (2017-2020) ■ Strategy on Environment and Climate Change (2014-2020) ■ 2020 SDG Voluntary National Review ■ Green Agenda for the Western Balkans ■ Programme of Government (2017-2020
Climate change	■ Nationally Determined Contribution (2015), Enhanced Nationally Determined Contribution (2021) ■ 1st National Communication (NC) on Climate Change (2003); 2nd NC (2009); 3rd NC (2014) ■ 1st (2015) and 2nd (2017) Biennial Update Report on Climate Change ■ Law on Environment
Water	■ 2012 Water Strategy
Trans-boundary	■ MoU for the Management of the Extended Trans-boundary Drin Basin ■ Lake Ohrid Watershed Management Plan ■ Draft Vardar River Basin Management Plan (RBMP) and Draft Strumica River Watershed RBMP
Energy	■ Strategy for Energy Development of the Republic of North Macedonia 2040

1 Republic of North Macedonia (2021). "Enhanced Nationally Determined Contribution". Available at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/The%20Republic%20of%20North%20Macedonia%20First/Macedonian%20enhanced%20NDC%20(002).pdf

2 Republic of Macedonia (2014). 3rd National Communication on Climate Change. Ministry of Environment and Physical Planning. Available at: https://unfccc.int/sites/default/files/resource/mkdnc3.pdf

Water

Turning to water, the 2010 Water Strategy mentions climate change only briefly. The boundaries of river basin districts have been defined throughout the country and River Basin Management Plans (RBMPs) are in various stages of development and implementation:

- RBMPs have been prepared for the Vardar River Watershed and the Strumica River Watershed,
- The RBMP for Black Drin Watershed is under development,
- All RBMPs have been prepared with the support of international partners,
- Climate change is considered in greater detail in the draft RBMP for the Vardar basin but the plan does not include specific objectives or measures for climate change adaptation or mitigation and
- Completion of all river basin management plans (RBMPs) is listed as a priority from 2020 onwards (see **Recommendation 3**).[3]

Based on SDG Indicator 6.5.2, only 13% of the transboundary area in North Macedonia has an operational agreement for water cooperation.[4] The 3rd National Communication (2014) is the only document reviewed that recognises the importance of water as an international 'climate connector', noting the requirement for transboundary water cooperation. The country has pockets of transboundary water cooperation, especially around transboundary lakes, but the effectiveness of the existing set of transboundary agreements is debatable[5]. There are no regular meetings of the Greek-Macedonian Permanent Commission on Transboundary Freshwater Issues, for example, and whilst bilateral agreements exist with Bulgaria on the Strumica River Basin and with Greece with regards to the Vardar River Basin, cooperation should be re-established and formalised.

Lake Ohrid, which borders Albania and North Macedonia (see text box), is one of the country's transboundary lakes with an established Transboundary Management Plan, developed as part of the GEF-funded UNDP-implemented Drin Project. Several other projects are also underway that could increase the proportion of the transboundary area with operational agreements (see 'projects' listed in Finances section below).

North Macedonia is considered a biodiversity hotspot, with over 16,000 species recorded in the country, more than 850 of which are endemic.[6] Water-related climate action can support water resource management in ecologically sensitive areas, like the Lake Ohrid region. This can support, and be supported by, the National Strategy for Nature Protection (2017-2027) and the National Biodiversity Strategy and Action Plan (2018-2028). The launch of the Green Agenda for the Western Balkans in late 2020 and the EU's Green Deal package provides opportunities for North Macedonia to improve its climate change responses,[7] with water-based climate actions linking to multiple themes, including the protection and restoration of ecosystems (see **Recommendation 5**).

LAKE OHRID is

- one of the oldest and deepest lakes in Europe
- a hotspot of freshwater biodiversity, home to over 200 endemic species
- a World Heritage Site

3 Republic of North Macedonia (2020). SDGs Voluntary National Review (VNR). https://sustainabledevelopment.un.org/content/documents/26387VNR_2020_Macedonia_Report.pdf
4 UN Water. 2021. "North Macedonia (Sdg6data.Org)." Retrieved March 30, 2021 (www.sdg6data.org).
5 Republic of North Macedonia (2020). SDGs Voluntary National Review (VNR). https://sustainabledevelopment.un.org/content/documents/26387VNR_2020_Macedonia_Report.pdf
6 Global Water Partnership (GWP). 2020. Lake Ohrid Transboundary Management Plan Presented at North Macedonia National Consultation Meeting. Published 29/09/2020 (accessed 30/03/2021). Available from: https://www.gwp.org/en/GWP-Mediterranean/WE-ACT/News-List-Page/LOWMP_MK_consultation/ and IUCN. 2020. Towards Improved Management of Natural Resources in North Macedonia. Published 08/07/2020. Accessed 30/03/2021. Available from: https://www.iucn.org/news/eastern-europe-and-central-asia/202007/towards-improved-management-natural-resources-north-macedonia
7 European Commission. (2020). Guidelines for the Implementation of the Green Agenda for the Western Balkans.

Agriculture

In relation to agriculture (SDG2), the 3rd National Communication identifies priority adaptation measures including increasing the use of irrigation (currently only 10% of agricultural land). The National Adaptation Plan (NAP), which will elaborate such measures, is in development with support of the UNDP. The agricultural sector is a key sector in North Macedonia (see text box) and is a priority area of investment for sustainable growth in the Programme of Government, 2017-2020.

AGRICULTURE SECTOR

- 10% Contribution to GDP
- 17% Total workforce employed in sector
- 50% Land that are cropland and pastures
- 10% Agricultural land irrigated

Energy

In relation to energy (SDG 7), North Macedonia's electricity is primarily generated by fossil fuels (64%) and hydroelectric plants (33%). With a decarbonization goal of reducing greenhouse gas (GHG) emissions by 62% by 2040 in comparison with 2005 levels, fossil fuels will be phased out and the intention is to continue building up the country's renewable energy sources. Increasing the country's hydropower capacity is a priority action, but hydropower is vulnerable to climate impacts, including the expected countrywide reduction in precipitation and the impacts of higher erosion rates on generation capacity. The Utilisation of Renewable Energy Sources (2010-2020) strategy does not appear to consider water-related climate change impacts. The 3rd National Communication briefly mentions a need for adaptation measures relating to hydropower. A recently approved energy strategy, the Strategy for Energy Development of the Republic of North Macedonia 2040, aligns with the country's Energy Law and the EU's Energy Union Strategy, but the degree to which water-related climate change impacts and required adaptations are incorporated remains to be seen (see **Recommendation 2**).[8]

Disaster Risk Management

While a National Disaster Risk Reduction Platform does exist, there is no disaster risk management strategy for North Macedonia in line with the Sendai Framework for Disaster Risk Reduction (2015-2030) as of early 2021. The 2020 VNR listed the development of such a strategy as a priority next step.

[8] 2020 VNR

INSTITUTIONS

Are North Macedonia's institutions ready to manage the impacts of climate change on water resources and on other water-related sectors in an integrated way?

Cross-sectoral coordination platforms exist, but institutional integration on climate change, including on water-related issues, has been hampered by limited human resource capacity, gaps in the overarching legislative framework, and inadequate training. There are acknowledged, systemic weaknesses in key areas, including in institutions for disaster risk management and for transboundary water resource management.

Inter-sectoral platforms exist, including the National Climate Change Committee (NCCC), National Sustainable Development Council, and National Water Council. The NCCC includes stakeholders from across government, academia, civil society, and the private sector. The Ministry of Environment and Physical Planning (MoEPP) is designated to take a lead on both climate change and water policy and is the National Designated Authority (NDA) for global climate agreements and the National Focal Point to the UNFCCC. There is a dedicated Ministry of Agriculture, Forestry and Water Management (MAFWM), which manages water for agricultural purposes as well as key water infrastructure (including dams, reservoirs, and irrigation canals and systems). The National Hydrometeorological Service (HMS) is also within MAFWM and plays a number of crucial climate-related roles (see textbox).

The Department of Energy, within the Ministry of Economy, oversees all forms of energy generation, including hydropower. Coordination of North Macedonia's SDG-related progress is overseen by the Sustainable Development unit, which is under the Cabinet of the Deputy President in charge of Economic Affairs (see institutional diagram below).

There are, however, numerous barriers to inter-agency and inter-department coordination and collaboration on climate change issues. Across MoEPP and other involved ministries there is limited staff available to work on climate change, which also limits representation on the NCCC.

While there is a Department for Water in MoEPP, climate change is led by a single State Councillor. The local (municipal) level has a large number of delegated environmental responsibilities (over 130) and there is a lack of guidance and training on how to integrate climate change issues into local planning. An assessment of capacity building needs is underway, supported by UNDP. In water meanwhile, river basin management councils in theory allow for basin-level coordination, but capacity for leading integrated water resources management is assessed as low at both the national and subnational levels. Systemic weaknesses in institutions for disaster risk management have also been raised as a major inhibitor of effective climate change adaptation. The launch of The National Disaster Risk Reduction Platform in 2019 provides necessary information for implementing the early warning system and mitigation measures, but will require time and investment to build its own capacity.[9]

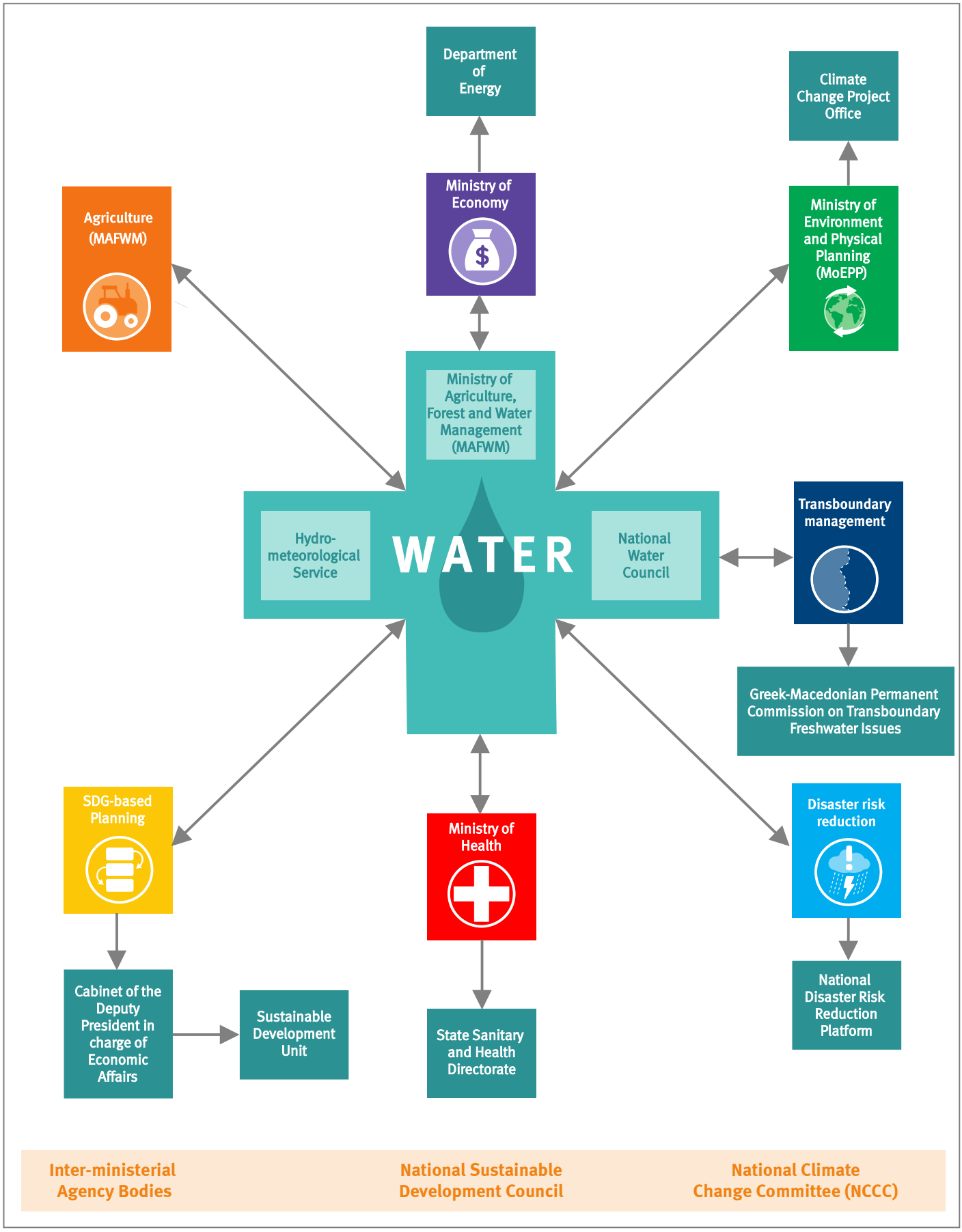
On the positive side, North Macedonia's candidacy for European Union (EU) membership, and need to align policy with EU directives, provide a politically salient driver for both river basin planning processes and integration of climate change issues within these. Development of a law and strategy on climate change has been programmed under the EU Instrument for Pre-Accession Assistance (IPA II), to align with the EU 2030 Climate and Energy Framework and is expected to set out the framework for inter-ministerial communication, coordination, and cooperation. However, it is not clear how far efforts to match the prescribed form of EU directives and frameworks will drive integration in practice. The Draft Vardar River Basin Management Plan (RBMP) (2018-2019), for example, notes that climate change is not explicitly part of the EU Water Framework Directive, and its treatment of the issue is minimal.

Roles played by the Hydrometeorological Service (HMS)

- monitoring and research related to climate-meteorological and hydrological activities;
- monitoring quantity and quality of surface and ground water;
- forecasting meteorological and hydrological events; and
- designing climate change risk scenarios.

9 2020 VNR

REPUBLIC OF NORTH MACEDONIA'S INSTITUTIONS



Beyond agriculture or energy, the health sector offers a successful example of integrating climate change adaptation in practice. Most activities under the World Health Organisations' country-level 'Climate Change: Health Adaptation Strategy and Action Plan' (2011) have been at least partially implemented, including vector-borne disease surveillance and a heat early warning system. The Ministry of Health also plays a key role in managing water-borne disease prevention and management via the State Sanitary and Health Directorate.

At the transboundary level, climate change is treated as a cross-cutting issue in North Macedonia's cooperation with riparian neighbours in the Drin Basin, to be taken into account alongside other challenges such as deterioration of water quality and biodiversity. While there are many institutional gaps at the transboundary level, a Greek-Macedonian Permanent Commission on Transboundary Freshwater Issues exists for the Vardar River Basin, but with limited cooperation in practice.[10]

MANAGEMENT INSTRUMENTS

Are management decisions on water and other Sustainable Development Goal issues being guided by evidence of climate change?

Only an estimated 60% of the country's river gauging stations are operational, which impacts data collection and processing. The 3rd National Communication identified other deficiencies in the monitoring network of the National Hydrometeorological Service (HMS) (see text box). While these challenges reportedly persist, there are plans to engage additional staff and to build further technical monitoring capacity. The lack of an overarching monitoring, reporting, and verification system that can track adaptation measures has been noted as a key gap in North Macedonia's communications to the UNFCCC,[11] and the establishment of a comprehensive water monitoring system is stated to be a national priority for the coming years in the 2020 SDG Voluntary National Review (VNR).[12]

Despite the deficiencies, hydrometeorological data are still used for a range of decision-making purposes – including in the vulnerability assessments and adaptation planning for the 3rd National Communication. In relation to SDG 2 (Zero Hunger), agrometeorological forecasts are provided by HMS weekly via television broadcasts, with alerts to farmers in the event of extremes. Investors and insurance firms also request data on an ad-hoc basis. There are concerns, however, that data inadequacies will undermine management instruments for climate change adaptation.

Major deficiencies in the hydrometeorological network are well recognised. There are examples of evidence-informed decision-making ranging from forecasting for farmers to formulating climate strategy. However, there is no overarching monitoring, verification, and reporting system for adaptation measures in general or a comprehensive water monitoring system, in particular. The risk that inadequate data could undermine water-related management instruments for climate change adaptation, i.e., irrigation permitting, is high.

Deficiencies in the monitoring network:

- outdated and missing equipment;
- no overarching system exists; and
- lack of IT and expert capacity for data collection, processing, analysis and modelling.

10 USAID (2018).
11 Re. UNFCC bit.
12 2020 VNR, p.44.

Two examples are:

1 The lack of data on water flows and consumption undermines the effective regulation of surface and ground water, which in turn hampers effective permitting and pricing of irrigation water – an essential counterpart to the intended expansion of irrigation as an adaptation measure in the agriculture sector.

2 Detailed information on post-disaster damages, losses, and needs are often lacking and/or inadequate (such information should ideally be disaggregated by sex, age, and other social determinants).[13]

North Macedonia participates in projects focused on strengthening evidence-informed decision-making in the context of climate change at the transboundary level, with a focus on early warning and integrated flood risk management in the transboundary Drin Basin, supported by the German Government and the Adaptation Fund (see below Finances section). An Information Management System (IMS) has been developed for the Drin Basin that acts as a platform for joint data collection, storage and sharing between North Macedonia and its neighbours. This IMS could serve as a basis for the other transboundary basins (chiefly the Strumica River Basin and the Vardar River Basin – see **Recommendation 4**).

FINANCES

How ready is North Macedonia to finance water-related climate action?

There are important ongoing initiatives to improve climate finance readiness, including support from the first Green Climate Fund (GCF) readiness programme to undertake analysis of climate financing and streamlining, while the second readiness programme is expected to develop an investment pipeline for the GCF. The forthcoming long-term climate change strategy is also expected to set out activities and sources of finance in detail. It is not yet clear how water-related investments will feature in this strategy. The Climate Change Project Office, under MoEPP, will become a more important coordinating entity in both the management of existing projects and the planning and proposing of future projects, including transboundary projects such as the ones listed below. As a climate connector across sectors, between countries, and across mitigation and adaptation planning, water-based climate action offers multiple opportunities for integration.

North Macedonia has accessed very limited dedicated international climate finance to date, though water features strongly in a recently approved transboundary project. The EU is a major donor to climate-related sectors and projects. Hydropower dominates the EU-funded projects (completed, current, and planned) as well as the domestic budget allocations for climate change that are water-related. Besides wastewater and water supply, the wider range of water-related investment needs and opportunities for adaptation, including in agriculture and energy, are not yet well detailed.

13 2020 VNR, p.26

North Macedonia's climate financing landscape in numbers

US$9.4 million

- Climate finance from the multilateral climate funds to North Macedonia has been focused on mitigation and the energy sector and totalled only US$9.4 million (as of March 2021).[14]

US$9.9 million

- Adaptation in general, and water more specifically, have until recently not been a focus for regional, global, or multi-country projects in which North Macedonia participates, but the transboundary flood-risk project in the Drin Basin (see table below), which also covers Albania and Montenegro, was approved for US$9.9 million in funding from the Adaptation Fund in 2019.

  The EU's IPA has the potential to be a more significant source of climate-related financing than multilateral climate funds. A pipeline of IPA-funded proposals is required (**Recommendation 5**).

€9.2 billion

- Funds deemed relevant to climate change totalled €9.2 billion (US$10.0 billion; 62% planned, 14% completed and 14% ongoing). The relationship to climate change is unclear in some cases, but most appear to be mitigation focused.

€3.0 billion

- A third of the total, i.e., €3.0 bA thirillion (US$3.3 billion) is for hydropower, of which 63% of activities are planned, 5% are ongoing and 26% are completed.

3%

- A further small share of the IPA funded pipeline (‹3%) is for wastewater treatment.

- The majority (64%) of public finance for climate change action (mitigation and climate 'co-benefits') has been from international donors, principally the EU and the World Bank.

- The domestic budget accounts for little more than a third (36%) of public finance for climate change action. National budget allocations designated as related to climate change, at US $78 million, made up less than 2% of the 2017 total budget, and of this, only 10% was water-related (9% was in water supply and wastewater and 1% in hydrology and forecasting).

Transboundary climate change projects with a strategic focus on water-based climate change adaptation

Project	Funder	Value	Year
Adaptation to Climate Change through Transboundary Flood Risk Management in the Western Balkans	GIZ		2012-2021
Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin	GEF (UNDP implemented)	US$8.8 million	2015-2019
Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans	Adaptation Fund	US$9.9 million	2019-2024

14 Latest available figures from Climate Funds Update (2021).

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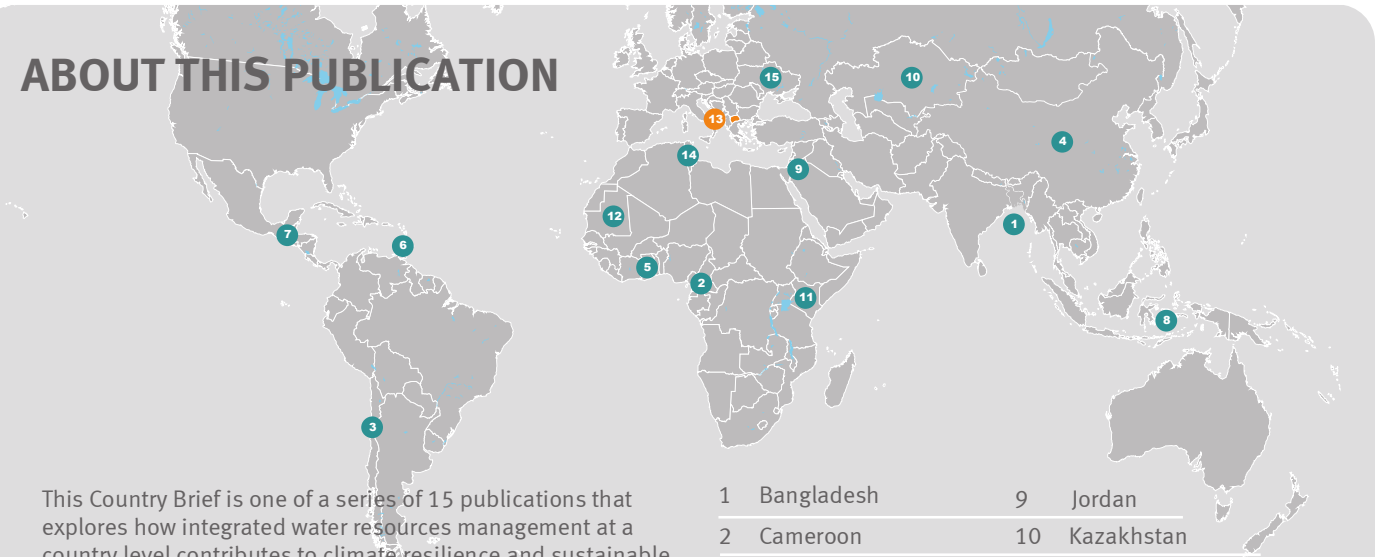
ABOUT THIS PUBLICATION



This Country Brief is one of a series of 15 publications that explores how integrated water resources management at a country level contributes to climate resilience and sustainable development, as well as meeting the commitments under the Paris Agreement and achieving the Sustainable Development Goals (SDGs).

The full synthesis report, The Untold Story of Water in Climate Adaptation. Part II. 15 Countries Speak, of the work undertaken in all 15 countries is available at www.gwp.org.

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Published in December 2022 by Global Water Partnership

Global Water Partnership