

Annex 2g

Sustainability Plan

to the GCF Funding Proposal (Simplified Approval Process)

ALBAdapt – Climate Services for a Resilient Albania

14 January 2024

Version 1

Submitted by:

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

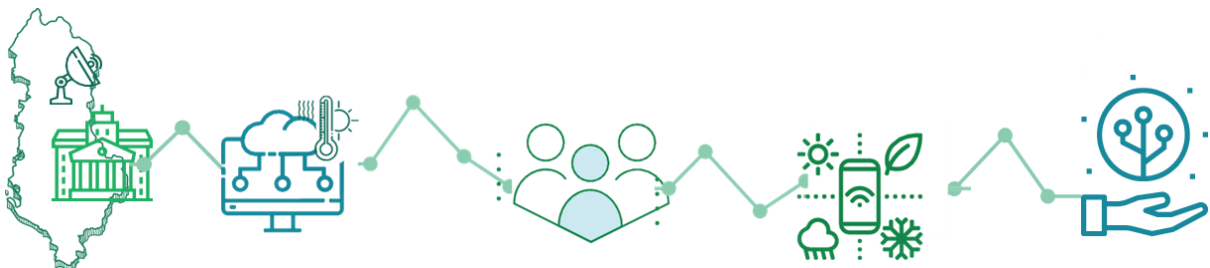


Table of Contents

Abbreviations and Acronyms	ii
1. Introduction.....	3
1.1 Objective of the Sustainability Plan.....	3
1.2 Structure of the Sustainability Plan	3
2. Institutional and Regulatory Frameworks.....	3
2.1 Institutional reform.....	3
2.2 Regulatory reform	4
3. Human Capital.....	4
3.1 NMHS.....	4
3.2 NFCS partners	4
3.3 Education system	5
3.4 MHEWS.....	5
3.5 Local actors ('Last mile')	5
4. Stakeholder Engagement and Beneficiary Ownership	6
5. Financial Sustainability.....	6
5.1 The regulatory framework	6
5.2 Reduction of costs.....	6
5.3 Domestic resources mobilisation	7
5.4 Business strategy	7
5.5 Market development.....	7
6. Operations and Maintenance of Investments	7
6.1 Personnel and Network supervision	7
6.1.1 Personnel supervision	7
6.1.2 Network supervision	7
6.2 Materials and supplies	8
6.3 Equipment and repairs	8
6.4 Communications and data storage	8
6.5 Other costs	8
6.6 O&M management plan	8

Abbreviations and Acronyms

ADF	Albanian Development Fund
ARC	Albanian Red Cross
CIEWS	Climate Information and Early Warning System
EUMETCAL	EUMETSAT Education and Training Collaborative Network
EUTMETNET	European Meteorological Network
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
GCF	Green Climate Fund
IGEO	Institute of Geosciences
LAAP	Local Adaptation Action Plan
MHEWS	Multi-hazard early warning system
NCPA	National Civil Protection Agency
NFCS	National Framework for Climate Services
NEBS	National Emergency Broadcast System
NMHS	National Meteorological and Hydrological Service
O&M	Operations and Maintenance
TSCD	Territorial Stakeholder Climate Dialogues
WMO	World Meteorological Organisation

1. Introduction

1.1 Objective of the Sustainability Plan

The objective of a sustainability plan is to ensure that the project's benefits and impacts continue to be realized after the Green Climate Fund (GCF) funding ends. This can be achieved by:

- **Building institutional capacity:** The project should support the development of the institutional capacity of the relevant national and local institutions to operate and maintain the climate information and early warning system (CIEWS) after the GCF funding ends. This includes providing training to staff, developing standard operating procedures, and establishing clear roles and responsibilities.
- **Securing financial sustainability:** The project identifies activities needed to mobilize funding for the CIEWS after the GCF funding ends. This can include, inter alia, government funding, user fees or partnerships with the private sector.
- **Stakeholder engagement:** The project engaged with stakeholders at an early stage to design institutional reforms, public policies and raise public awareness of the importance of CIEWS and promote understanding of how to use the information and warnings provided by the system. This will help to ensure that the CIEWS is used effectively, and that people are prepared to take action to protect themselves and their livelihoods from climate-related hazards.

The plan is intended to be a living document: it will be updated regularly to reflect the emerging needs of the project, its stakeholders and the CIEWS. It shall help to ensure that the ALBAdapt project is sustainable in the long term, and that it continues to provide benefits to the people of Albania for many years to come.

1.2 Structure of the Sustainability Plan

The sustainability plan of the ALBAdapt project is structured across five sub-chapters:

- **Institutional and regulatory frameworks:** this sub-chapter identifies the areas where reforms will be undertaken to ensure the sustainability of the project's results.
- **Human capital:** this sub-chapter presents key features of the project's human capital development needed to support the CIEWS in the long term.
- **Stakeholder engagement and beneficiary ownership:** this sub-chapter describes the project's approach to stakeholder engagement and beneficiary ownership.
- **Financial sustainability:** this sub-chapter describes the project's plans for securing the long-term financial sustainability of the CIEWS. It identifies potential sources of funding.
- **Operations and maintenance of investments:** this sub-chapter presents the project's plans for operating and maintaining the CIEWS after the GCF funding ends. It identifies the responsible institutions and explains how they will be resourced and equipped to carry out their tasks.

2. Institutional and Regulatory Frameworks

One of the key barriers to ensuring the sustainability of the hydro-meteorological ("hydro-met") system in Albania has been the institutional setting of the National Meteorological and Hydrological Service (NMHS) and the limited regulatory framework governing hydro-met activities. Consequently, the project will support institutional rejuvenation or restructuring, along with necessary policies and regulatory changes, that will positively impact the sustainability of the NMHS and the broader hydro-met ecosystem. This includes policies that promote the provision and use of climate services, including by the private sector, and policies that support the development of a multi-hazard early warning system (MHEWS).

2.1 Institutional reform

IGEO faces fundamental challenges in fulfilling the NMHS role. Financial instruments and regulatory frameworks to perform critical operational functions, such as station maintenance, are inadequate, and the existing legal framework does not sufficiently elaborate the NMHS's operational role or its relationships with associated structures and institutions. A detailed institutional design of a rejuvenated or restructured NMHS will be drafted and endorsed by the responsible institutions of the Albanian government. Based on the agreed mandate and set of services to be provided by the NMHS, the design

will provide a detailed set of institutional roles and responsibilities, inter-institutional coordination arrangements and a funding model to deliver this mandate. This NMHS design will be included in the draft Law on Weather, Climate and Hydrological Services (see below).

2.2 Regulatory reform

With project support, a draft law on Weather, Climate and Hydrological Services will be developed to formalise the design of the rejuvenated or restructured NMHS – including its roles and responsibilities vis-à-vis the National Civil Protection Agency (NCPA) in the context of the MHEWS. The Law will also formalise the role of the National Framework for Climate Services (NFCS) (Sub-Activity 1.1.1.1). Furthermore, a MHEWS Policy will be developed that, inter alia, defines the architecture, institutional roles, responsibilities and functions of a “joined-up” MHEWS – augmented by institutional standard operating procedures and, where necessary, amendments to the Laws on Civil Protection and Climate Change (Sub-Activities 2.1.1.1 and 2.1.1.2).

3. Human Capital

Approximately 15 people are involved in the management of the observational network. Some expertise currently resides in IGEO, but competing academic duties of staff and the limited operational budget mean that network management and maintenance have not hitherto been accorded the priority they require. The project will assist the NMHS to be able to develop the in-house expertise needed to manage the network and to implement an ongoing maintenance programme.

3.1 NMHS

The project will co-develop and implement a multi-year, multi-dimensional, gender-inclusive capacity development programme for the NMHS (Sub-Activities 1.1.1.2, 1.1.1.3), based on the new institutional duties and functions derived from the Law on Weather, Climate and Hydrological Services. The programme will work in conjunction with national stakeholders and one or more international partners. The World Meteorological Organisation (WMO), for example, operates regional training centres, including one in Italy¹ and a Global Campus for e-learning.² The European Meteorological Network (EUMETNET) operates an online e-learning programme, the Education and Training Collaborative Network (EUMETCAL).³ Additionally, the project will support specialised training workshops, on-the-job training and mentoring provided by international counterparts in other NMHSs – e.g. MeteoSwiss – as well as from technical specialists.

3.2 NFCS partners

In order to ensure that the NFCS advances beyond an attractive concept “on paper” and becomes an operational reality that serves to improve the provision of meteorological, hydrological and climate services by the public and private sectors to a range of end-users, a capacity building package, oriented around online and physical workshops and training materials, will be developed. The specificities of this capacity building programme will be tailored to the design of the NFCS adopted (e.g. initial sectoral priorities, member institutions of the NFCS Executive Committee, etc.), but its broad scope will include (inter alia):

- Supporting the professional orientation and awareness of senior management in the member institutions of the NFCS Executive Committee to ensure strong national ownership;
- Staff training on climate services in key NFCS institutions: the development of novel, more sophisticated and more targeted climate services requires not only technical expertise but also a more entrepreneurial mind-set and a far more granular understanding of user needs (and how to gather information about these needs) than currently exist in the Albanian hydro-met community;
- Training for key users / beneficiaries (including municipal governments, sectoral stakeholders and vulnerable groups) (Sub-activity 1.2.1.1).

¹ See URL: <https://www.ibe.cnr.it/> (Last accessed: 13.01.2024).

² See URL: <https://etrp.wmo.int/> (Last accessed: 13.01.2024).

³ See URL: <https://eumetcal.eu/en/ui/#/> (Last accessed: 13.01.2024).

3.3 Education system

Building the capacity of the education system to support the future supply of suitably qualified skilled staff for the hydro-met sector is vital for the ongoing sustainability of the NMHS and the climate services ecosystem. Universities and vocational colleges, notably Tirana Polytechnic University, Polis University, Epoka University and others, will be supported in the development of new elective taught modules on meteorology, hydrology and climatology that students can select (on a voluntary basis) as part of their bachelor's and master's degrees in relevant subjects (primarily physics and earth sciences) (Sub-Activity 1.1.1.1). By project-end, the expectation is that the universities will have gathered sufficient experience, and the modules will have become sufficiently established / mainstreamed, that each subject (meteorology, hydrology and climatology) will become a separate degree course in its own right, potentially at master's level first before later extending to bachelor's level.

3.4 MHEWS

There is a clear need to enhance current capacities to ensure that key institutions are able to fulfil their MHEWS-related functions. Based on a capacity assessment of the key MHEWS actors undertaken during project implementation (Sub-Activity 2.1.1.1), the project will develop a systematic capacity building programme. Likely elements of this programme will include (subject to the findings of the needs assessment):

- Training for institutions to meet their formalised MHEWS obligations (e.g. training on new software, data processing and quality control, new harmonised methodologies, hazard analysis and mapping, etc.);
- MHEWS Executive Committee training: collective workshops for all Executive Committee members to agree strategic objectives and routine functioning of the Committee and associated secretariat, and how to engage with other stakeholders (Albanian Red Cross (ARC), academia, CSOs, the private sector, municipalities, etc.);
- Integration of forest fire EWS capability within the structures and systems of the MHEWS: training on new procedures, tools and hazard management associated with wildfires;
- Hazard profiling: in multi-institution workshops (to ensure consistency of approaches), relevant personnel will be trained on characterisation of hazard-types – input data, thresholds, benchmarks, etc.;
- National Emergency Broadcast System (NEBS): training on the new institutional roles and responsibilities;
- AlbaMet Alert training: training for NCPA on management of the AlbaMet Alert platform (including two-way communication aspects), and training for relevant institutions (those that issue warnings and those that routinely receive them) on the operations of the platform;
- Mobile phone alerts system training: due to the novelty of the system in Albania and the central role in the early warning system that mobile warnings are expected to assume, a dedicated capacity building programme on the mobile alerts system, additional to the more general AlbaMet Alert training, will be provided to decision-makers (including politicians and senior civil servants), operational MHEWS personnel, MHEWS-relevant institutions (including the ARC and municipalities), mobile network operators, and retail staff in electronics and phone shops (as an information channel to the general public). The general public will also be informed about the new mobile system as part of a public awareness campaign;
- Measures to support international collaboration and engagement, including training provided by international experts and short-term (one to three months) secondments of Albanian staff to MHEWS-related institutions in the region, and vice versa (Sub-Activity 2.1.1.2).

3.5 Local actors ('Last mile')

The project will strengthen the MHEWS-related capabilities of coastal belt municipalities – for example, building their in-house capabilities to engage with local communities (including vulnerable groups) and to formulate / update local hazard management plans (pre- and post-hazard event). This work will be conducted in collaboration with ARC, which has a long track-record of working with municipalities and local communities (Sub-Activity 2.1.1.2). This work will also be closely coordinated with the Territorial

Stakeholder Climate Dialogues (TSCDs) and Local Adaptation Action Plans (LAAPs) (Sub-Activity 3.2.1.1), such that the capacity building provided to municipalities addresses:

- specific gaps in their ability to design and formulate LAAPs;
- their ability to subsequently implement or coordinate the adaptation investments included in the LAAPs.

4. Stakeholder Engagement and Beneficiary Ownership

Stakeholder engagement and beneficiary ownership are key to ensuring project sustainability because they help to build support for the project and ensure that the project meets the needs of the people it is intended to benefit. As a result, the project has been prepared and designed in the context of multiple rounds of extensive stakeholder consultations and will continuously engage with stakeholders during project implementation.

Stakeholder engagement and consultations during project preparation: Annex 2e provides a summary of the stakeholder consultations.

Comprehensive stakeholder engagement action plan: Annex 2e also presents a detailed engagement plan that will be executed during project implementation and a summary of the roles of project stakeholders.

5. Financial Sustainability

Albania currently has no financial plan for the NMHS, for climate information services or for climate action in support of long-term disaster risk reduction. Financial sustainability is a critical element of the overall sustainability plan of the project. As the CIEWS – consisting of the NMHS, the NFCS and the MHEWS – is essentially a public good, the principal source of financing will be the state budget. The private sector will provide value-added products and services to target user groups (e.g. particular sectors, such as energy generators and farmers).

5.1 The regulatory framework

The ALBAdapt project will ensure that the new legal framework, provided by the Law on Weather, Climate and Hydrological Services, covers defined elements of NMHS staffing, operations and maintenance costs as contributions from the state budget. The law will also encourage the NMHS to supplement its income and expand its range of services beyond the legally prescribed minimum service levels. Further, the law will establish the legal basis for the NFCS, which will catalyse private sector engagement with, and investment in, climate services.

5.2 Reduction of costs

There are a number of ways to achieve financial sustainability, and one is through reduced cost. This reduction of cost is embedded into the project design and implementation through several elements, including:

- Observation network design and procurement: The number of observation stations and the quality/type of station will have an impact on the network's sustainability. The project will take into consideration these aspects when designing and procuring the observation network, including economies of scale (procuring equipment at scale rather than piecemeal), equipment guarantees and quality, etc;
- Partnerships and collaboration: the project will promote: (i) the establishment of partnerships and participation in regional initiatives and networks that can provide free-of-charge data, forecasts and information, and (ii) formal arrangements with private sector actors on free dissemination of information;
- Rationalisation of operations: the current hydro-met and early warning systems are fragmented across multiple institutions and lack proper coordination and data-sharing practices. Overlapping institutional mandates and redundancy and duplication of efforts are widespread. The project will unify, rationalise and streamline CIEWS operations, thereby generating considerable operational efficiencies (as well as improved service quality and availability);
- Software: Wherever possible, the project will use established open-source software solutions.

5.3 Domestic resources mobilisation

Through knowledge products, the project will improve awareness and knowledge of the usability and usefulness of the hydro-met and early warning systems, thereby cementing their importance to policy-makers. This sensitisation will be accompanied by technical support to incorporate the allocation of budget to the CIEWS sector into the annual budget process, the medium-term budget framework and other public finance instruments (including Albanian Development Fund (ADF) operations).

5.4 Business strategy

While considerable commitment for increased domestic funding is a precondition for the successful sustained modernisation of Albania's national hydro-met observational network, the ALBAdapt project will work with the NMHS to develop a business strategy that is aligned with the opportunities and limitations imposed by the Law on Weather, Climate and Hydrological Services, that reflects in-house technical capabilities (current and future) and that serves particular market needs (e.g. in sectors such as agriculture, tourism or water management).

5.5 Market development

The ALBAdapt project will incentivise the commercial use of the improved NMHS and MHEWS data streams unlocked by Components 1 and 2. Specifically, Sub-Activity 3.1.1.1 will focus on climate business ideation: i.e. development of a set of 30 high-potential climate service / product business ideas. Three of these ideas will then receive further incubation support under Sub-Activity 3.1.1.2. Market development, and specifically the promotion of private sector climate service providers, will spur innovation, nimbleness and a customer-centric mind-set: all features that are noticeably lacking in the current environment.

6. Operations and Maintenance of Investments

The project will invest in infrastructure and assets that are essential for the delivery of climate services. The government will be responsible for the operational and maintenance costs of the NMHS. However, as part of the on-the-job training during the first three years after installation of the new equipment (stations, alert system, etc.), the operations and maintenance (O&M) cost will be covered by the project. Subsequently, the Government of Albania will assume its responsibility in this regard. The Government of Albania's confirmed co-financing to the project of EUR 2.5 million underlines its strong commitment to the project's successful implementation and its goals. Dedicated financial commitments for the long-term O&M costs are foreseen to be included in the Law on Weather, Climate and Hydrological Services that will be developed in the first years of the project (see Section 2.2).

The budget for O&M costs has been preliminarily structured into the following categories:

6.1 Personnel and Network supervision

6.1.1 Personnel supervision

Salaries of NMHS and NCPA staff involved in the operations and maintenance of the observation network (cost to be covered only by the government).

6.1.2 Network supervision

- Operations and maintenance of the observational network, not including staff salaries;
- Long-term contracts with individuals, including, inter alia, their responsibilities to ensure basic maintenance and prevent vandalism;
- Travel costs for staff to conduct site visits and maintenance;
- Training costs for staff involved in the operations and maintenance of the observational network:
 - Installation of meteorological and hydrological station infrastructure: NMHS staff will work alongside the (procured) electrical engineers to provide technical inputs and, conversely, to learn from the engineers. This will provide valuable on-the-job training that will support future in-house NMHS maintenance capabilities.

- Capacity development programme and academic curriculum development: As outlined in Section 3, O&M training needs will be addressed as part of the project's capacity building support.

6.2 Materials and supplies

- Consumables such as batteries, sensors and spare parts;
- Maintenance, fuel and lubricants for vehicles;
- Office supplies and other miscellaneous expenses.

6.3 Equipment and repairs

- Cost of repairing or replacing damaged or obsolete equipment;
- Cost of upgrading equipment to improve performance or reliability. During the procurement of the equipment, bidders will be required to submit a detailed operations and maintenance cost proposal. The yearly cost of equipment and repairs is estimated to be between 1-3% of the investment cost.

6.4 Communications and data storage

- Cost of renting or leasing communication to transmit data to the central data centre;
- The cost of renting / leasing communication is estimated to be EUR 2,500 per year for a full system with regular data transfer;
- Cost of storing and managing the data collected by the observational network;
- During the procurement of the data storage equipment, information on the ongoing costs of data storage (electrical consumption, memory swap-outs, etc.) will be requested from the vendors.

6.5 Other costs

- Insurance costs for the observational network and its equipment;
- Security costs for the observational network and its data, including cybersecurity.

6.6 O&M management plan

At the mid-term of project implementation, an O&M management plan will be defined in detail. It will provide a detailed break-down of O&M costs based on:

- The procurement / installation of equipment supported by the project up to that point;
- Up-to-date information supplied by vendors; and
- The NMHS, NFCS and MHEWS architectures decided by national stakeholders and integrated in the new regulatory framework for the sector (the details of which will be determined during project implementation).