Funding Proposal

SAP048: Strengthening the resilience of vulnerable communities within high climatic and disaster risk areas in Togo

Togo | Banque Ouest Africaine de Développement | Decision B.41/04

12 March 2025

GREEN CLIMATE FUND

Contents

Notes to accredited entities on the use of the SAP funding proposal template

- The Simplified Approval Process Pilot Scheme (SAP) supports projects and programs with a GCF contribution of up to USD 25 million with minimal to no environmental and social risks. Projects and programs are eligible for SAP if they are ready for scaling up and have the potential for transformation, promoting a paradigm shift to low-emission and climate-resilient development.
- This template is for the SAP funding proposals and is different from the funding proposal template under the standard project and program cycle. Distinctive features of the SAP funding proposal template are:
  - *Simpler documents*: key documents have been simplified, and presented in a single, up-front list;
  - *Fewer pages*: A shorter form with significantly fewer pages. The total length of funding proposals should **not exceed 20 pages,** annexes can be used to provide details as necessary;
  - *Easier form-filling*: fewer questions and clearer guidance allows more concise and succinct responses for each sub-section, avoiding duplication of information.
- Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other funding proposal documents such as project appraisal document, pre-feasibility studies, term sheet, legal due diligence report, etc.
- Submitted SAP Pilot Scheme funding proposals will be disclosed simultaneously with submission to the Board, subject to the redaction of any information which may not be disclosed pursuant to the GCF Information Disclosure Policy.
- For more information on how to develop Funding Proposals under the SAP please refer to the Simplified Approval Process (SAP) Funding proposal guidelines.

Please submit the completed form through the GCF Digital Proposal Submission Platform (DPS)[1]

[1] See the DPS user guide for further information on how to access and submit proposals.

A. PROJECT/PROGRAMME SUMMARY

A.1. Has this FP been submitted as a SAP CN before?			Yes ☐ No ☒		
A.2. Is the Environmental and Social Safeguards Category C or I-3?			Yes ☒ No ☐		
A.3. Project or programme	*Indicate whether this FP refers to a combination of several projects (programme) or one project.* ☒ Project ☐ Programme	**A.4. Public or private sector**	☒ Public sector ☐ Private sector	**A.5. RfP**	Not applicable

A.6. Result area(s)	*Check the applicable GCF result area(s) that the overall proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of GCF and Co-financers' budget devoted to it. The total of the percentages when summed should be 100% for GCF and Co-financers' contribution respectively.*		
		GCF Contribution	**Co-financers' contribution[2]**
	Mitigation total	Enter number %	Enter number %
	☐ Energy generation and access	Enter number %	Enter number %
	☐ Low emission transport	Enter number %	Enter number %
	☐ Buildings, cities and industries and appliances	Enter number %	Enter number %
	☐ Forestry and land use	Enter number %	Enter number %
	Adaptation total	Enter number %	Enter number %
	☒ Most vulnerable people and communities	80 %	Enter number %
	☒ Health and well-being, and food and water security	10 %	Enter number %
	☒ Infrastructure and built environment	5 %	Enter number %
	☒ Ecosystem and ecosystem services	5 %	Enter number %

A.7.1. Expected mitigation outcome *(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)*	*Indicate GHG emission reductions or removals in tCO2eq over total lifespan of the project/programme[3]*	**A.7.2 Expected adaptation outcome** *(Core indicator 2: direct and indirect beneficiaries reached)*	9,260,864 total beneficiaries	
			7 924 792 indirect beneficiaries	1,336,072 direct beneficiaries
			85,57% of indirect beneficiaries vis-à-vis total population	*14,43% of direct beneficiaries vis-à-vis total population*
A.8.1. Total investment (GCF + co-finance[4])	Amount: $ **27,025 747** USD	**A.8.2 Total GCF funding requested** (max USD 25M)	Amount: $ **24,987,000**USD	
A.9. Type of financial instrument requested for the GCF funding	*Mark all that apply.* ☒ Grant ☐ Loan[5] ☐ Equity ☐ Guarantees ☐ Others:			
A.10. Implementation period (months)	Disbursement period: 5 years	**A.11. Total project/ programme lifespan (years)**	*10 years*	

A.12. Expected date of internal approval	*The date that the Accredited Entity obtained/will obtain its own approval to implement the project/ programme, if available* *Click or tap to enter a date.*	**A.13. Has Readiness or PPF support been used to prepare this FP?**	Yes ☐ No ☒
A.14. Is this FP included in the entity work programme?	Yes ☒ No ☐	**A.15. Is this FP included in the country programme?**	Yes ☒ No ☐
A.16. Executing Entity information	The Executing Entity is the Togolese Government represented by the Ministry of National Security and Civil Protection, to which the National Civil Protection Agency ("*Agence Nationale de Protection civile - ANPC*" in French) is affiliated, and which also assumes the project management role. ANPC was established by decree No. 2017-011 dated 31 January 2017, with the purpose of protecting the population from recurrent disasters resulting from human and natural factors, and for effective and efficient management of emergency situations due to climate change in Togo. Among others, the agency was established to coordinate all interventions related disaster risk reduction and emergency management at the national level, supervises rescue operations, and protecting the displaced persons and refugees. Over the past eight years, the National Civil Protection Agency (ANPC) has demonstrated robust project management capabilities, implementing a range of disaster risk reduction and climate resilience initiatives. ANPC has managed significant projects such as the Project to Strengthen the Resilience of Vulnerable Communities to Climate Change and Disasters, funded by UNDP with a budget of $2.16 million, covering the entire national territory. Another example includes the Strengthening Disaster Risk Governance and Recovery Capacity project, financed by the EU through UNDP with $800,000, also implemented nationwide. Region-specific initiatives include the Strengthening the Resilience of Communities in the Savanes Region, funded by UNDP with $256,000, and the Strengthening the Emergency Response System in Northern Togo, supported by UNHCR with $250,000. - In addition to fully implemented projects, ANPC has also contributed to significant components of larger programs, such as the West Africa Food System Resilience Program (FSRP), with $10 million financed by the World Bank, and CREWS' disaster risk reduction initiatives with $1.15 million also funded by the World Bank. These examples underscore ANPC's capacity to execute and collaborate on large-scale, multi-stakeholder projects, showcasing its ability to leverage international funding to build resilience and improve disaster management systems across Togo. Since ANPC is an Agency of the Ministry of Security and Civil Protection (MSCP), the latter will act on legal contracts as Executing Entity but ANPC which has the required capacities will be delegated for the project implementation.		

A.17. Scalability and potential for transformation (max. 100 words)
The project "Strengthening the Resilience of Vulnerable Communities within High Climatic and Disaster Risk Areas in Togo" will scale up previous initiatives by enhancing and expanding the existing climate information services and multi-hazard early warning systems.

[2] Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.
[3] The total lifespan of the project/programme is defined as the maximum number of years over which the outcomes of the investment are expected to be effective. This is different from the project/programme implementation period .
[4] Refer to the Policy on Co-financing of the GCF.
[5] Senior loans and subordinated loans.

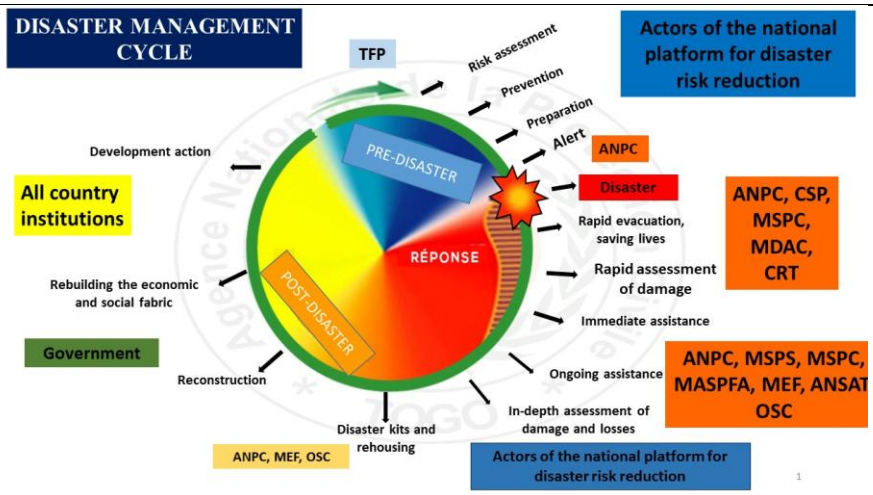


Figure 2: National disaster management cycle by the National Civil Protection Agency

By developing a robust National Framework for Climate Services and bolstering the capacity of the Togolese Hydrometer- services (e.g., Togolese Meteorological Agency), the project will ensure the provision of reliable climate data for informed decision-making. It will also enhance the National Civil Protection Agency's ability to disseminate critical climate risk information swiftly. This comprehensive approach promotes a paradigm shift towards, climate-resilient development by integrating advanced climate services with community-based adaptation and risk reduction measures.

A.18. Project/ Program rationale, objectives and approach (max. 300 words)

Climate Rationale

The analysis of rainfall patterns in Togo between 1961 and 2012 (Third National Communication on Climate Change (TCNCC), 2015) shows an alteration of the geographical and seasonal distribution of rainfall. This is reflected in decreased number of rainy days with a rise in rainfall, characterized by increased intensity and quantity of rainfall, particularly in certain stations. This explains the recurrent floods recorded in recent years in the country with damaging consequences, such as those of 2010, where damages and losses are estimated at over seventeen billion in local currency (XOF17,191,629,713), or approximately US$38,203,621, (~1% of the 2021 annual budget) which is very important in developed country context. The scenarios developed as part of the Third National Communication on Climate Change (TCNCC, 2015) show a growing trend in rainfall concomitantly with global warming by 2025, 2050 and 2100.

The project seeks to improve preparedness capacities of national institutions and build resilience of local communities to climate change and disaster risks by strengthening the existing early warning system and training vulnerable populations in Togo to be better prepared against the impacts of disasters.

The project aims to strengthen the resilience of Togolese communities to climate variability and disasters through three main components:

1. **Strengthening Climate Information Services**: Enhance the institutional and technical capacity of the Togolese Meteorological Agency (ANAMET) and hydrological service (DRE) to provide reliable climate information. Activities include strengthening the National Framework for Climate Services (NFCS), technical capacity building, improving institutional coordination as well as communication networks, and fostering international collaboration.
2. **Enhancing Multi-Hazard Early Warning Systems (MHEWS)**: Improve disaster risk knowledge and forecasting capabilities, establish automated warning systems, and strengthen national preparedness and response through the Civil Protection National Agency. This involves using digital tools for data collection and analysis, integrating local knowledge, and enhancing community awareness and training.
3. **Leveraging Climate Information and Early Warning System (CIEWS) for investment and financial decisions on adaptation**: Improve investment and financial decisions to enhance the effectiveness of adaptation actions among vulnerable communities. This includes developing forecast-based action protocols and local risk reduction plans, establishing early warning triggers with clear thresholds, capacity building on

forecast-based action, and creating an emergency funding mechanism to provide the seed capital to attract additional investments into the sector

Climate Results

The project will result in:

- Increased accuracy and reliability of climate information.
- Improved early warning systems that effectively disseminate alerts.
- Enhanced community preparedness and resilience to climate hazards.
- Strengthened institutional capacity for disaster risk management.

Rationale for GCF Funding

GCF funding is critical due to Togo's limited financial resources to address climate challenges comprehensively. The investment will enable scaling up existing initiatives, integrating advanced technologies, and fostering sustainable development practices.

The project's approach leverages a combination of capacity-building, technology investment, and community engagement, ensuring sustainable and scalable impacts. The instrument chosen aligns with GCF's focus on transformative climate action, promoting low-emission and climate-resilient development pathways.

By securing GCF funding, Togo can build on previous initiatives, implement robust climate information systems, and significantly enhance its resilience to climate change, setting a model for other vulnerable regions.

B. PROJECT/PROGRAMME DETAILS

B.1. Context and baseline (max. 500 words)

B.1.1. Context and justification

Climatology and present-day trend

1. Togo is a West African country located between the 6° and 11° northern latitude and the 0° and 1°40 meridians of eastern longitude. It covers an area of 56,600 km² and is a corridor stretching 650 km in length with a coastline of nearly 50 km. Its maximum width is 150 km. This configuration explains the spatial, climatic, economic, human and biological diversity. It is bordered to the West by Ghana, to the East by Benin, to the South by the Gulf of Guinea and to the North by Burkina Faso.

2. During the last population census in 2022 (RGPH5), the population of Togo was 8.095.498 inhabitants[6]. According to estimates by the National Institute of Statistics and Economic and Demographic Studies, current Togo's population would be 9,260,864 inhabitants with a growth rate of 2,3%[7].

3. The Togolese economy is predominantly based on agriculture, which employs over 70% of the population. Overall, the macroeconomic framework remains stable with an inflation rate below the Union's threshold of 3.0%. Driven by productivity gains in the agricultural sector and public investment in transport infrastructure, Togo's economic growth has remained high above population growth. In 2018, it stood at 4.7%, 5% in 2019 and raised to 5.3% in 2020. However, the budget deficit, which stood at 9.6% of GDP in 2016, improved to 0.3% in 2017. Public debt rose from 48.6% of GDP in 2011 to 79.4% in 2016 (NDP, 2018), a debt ratio above the Union's ceiling of 70% of GDP. The education and health sectors accounted for a significant share of public spending (14% and 7% respectively on average between 2009 and 2014).

4. Togo's climate is tropical to sub-equatorial from north to south, under the influence of two trade winds, the harmattan and the monsoon. From the coast to 8° North, there is a sub-equatorial climate capitalized by two dry seasons and two rainy seasons with annual totals varying between 800- and 1400-mm. Relative humidity is high and temperatures moderate at around 27°C throughout the year. Beyond 10° north latitude, a dry tropical Sudanese climate prevails, capitalized7 by a five-month rainy season with a rainfall of 900 to 1100 mm. Temperatures are more contrasted with peaks above 41°C. In the center of the country there is a Guinean-Sudanese type of climate corresponding to a transition zone, with rainfall between 1400 and 1500 mm, exacerbated by the relief. Dry winds from the Harmattan desert blow southwards between November and March, bringing cooler, drier weather and periodic droughts to the north of the country. However, current climate trends show a change in the rainy season, which can start up to 30 days later than usual.

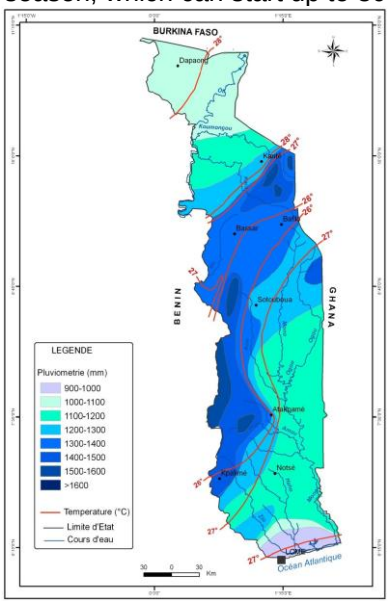
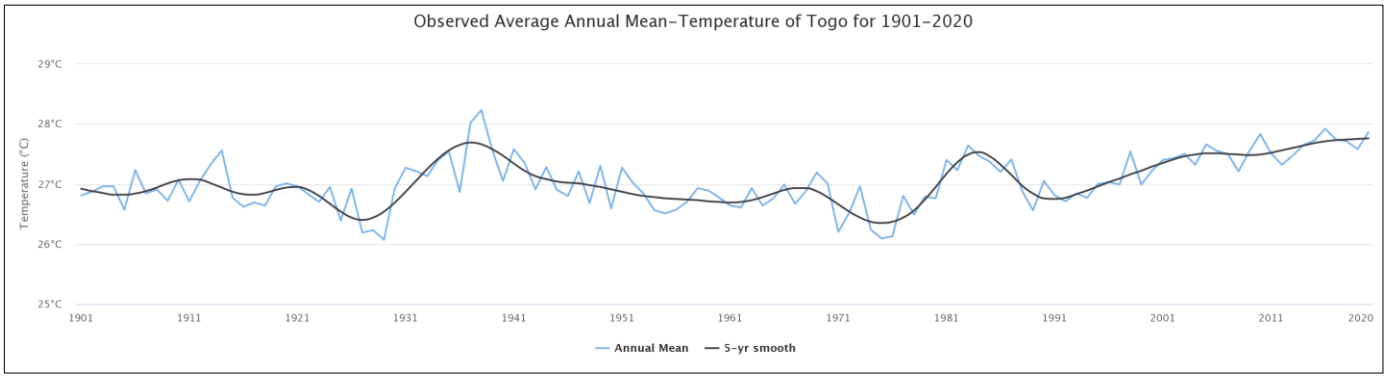
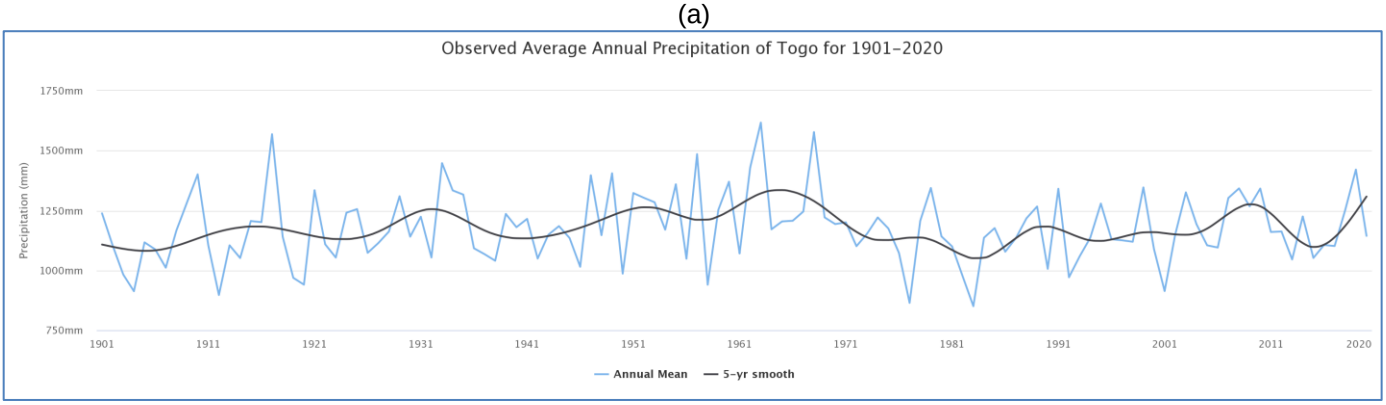


Figure 3: Rainfall and temperature map of Togo (1989-2021)

[6] Fifth General Census of Population and Housing, 2022
[7] https://inseed.tg



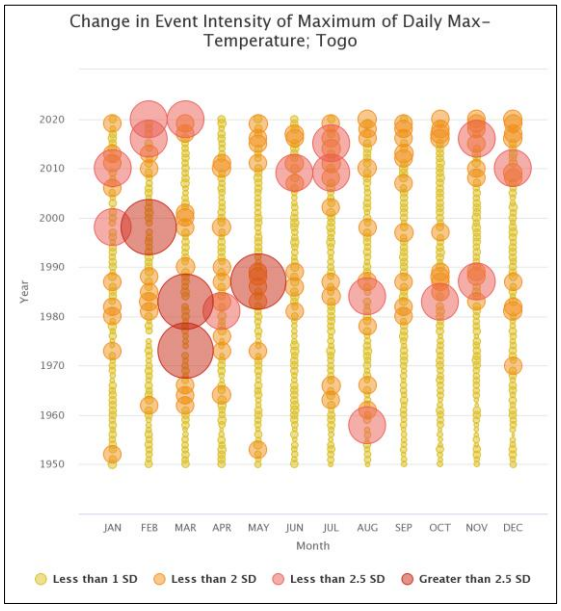
(a)



(b)

Source: https://climateknowledgeportal.worldbank.org/country/togo/climate-data-historical

Figure 4: Average (a) temperature and (b) precipitation on the country from 1901 to 2020



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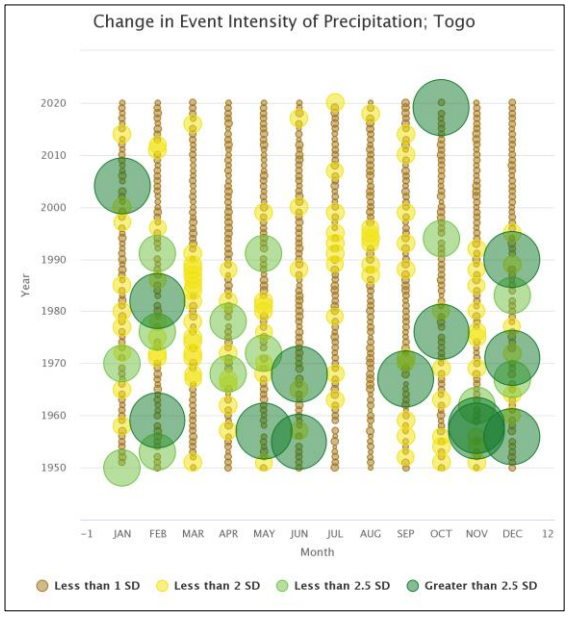


(b)

Source : https ://climateknowledgeportal.worldbank.org/country/togo/climate-data-historical

Figure 3: Change in event intensity (a) Daily max temperature, (b) Intensity of precipitation

5. A bubble graph is suited to illustrate the much more variable occurrence of short-term weather events (daily scale). According to the charts, substantial changing occurred from 2000 both in temperature and rainy data recorded. In one hand, temperature data recorder is increasing and on the other hand, precipitations decrease. This displayed very well the current climate situation of the country. Figures present the multi-model (CMIP5-Coupled Inter-comparison Project No.5) ensemble of 32 Global Circulation Models (GCMs) showing the projected changes in annual precipitation and temperature for the periods 2040–2059 and 2080–2099.[8]

Climate projections

6. Climate change trends in Togo are expected to increase the risk and vulnerability of local communities to the intensity of extreme events, coastal storms, and natural hazards such as heat waves, droughts and floods. Projections indicate that flood hazards such as river flooding may remain like current conditions under future change. However, changes in the environment such as land use changes will affect local flood hazards in the future. While model projections are largely uncertain about the change in drought hazard, the present hazard level in Togo may increase in the future because of climate change, particularly rising temperatures

7. Indeed, analysis of the trends in rainfall patterns in Togo between 1961 and 2012 (TCNCC, 2015) reveals an alteration in the geographical and seasonal distribution of rainfall. This is reflected in a decrease in the number of rainy days with a rise in rainfall, characterized by the intensity and quantity of rainfall, particularly in certain stations.

8. Scenarios developed as part of the Third National Communication on Climate Change (TCNCC, 2015), using the SimCLIM2013 simulation tool with climate projections to 2025, 2050, 2075 and 2100, show a growing trend in rainfall concomitant with global warming. The simulations carried out for the 2025- and 2100-time frames reveal a temperature increase of 0.63 to 4.5°C. Rainfall will increase from 3.26 to 39.2 mm of rain by 2025 and 2100. Rainfall variation ranges from 3.26 to 7.6 mm of rain, representing an increase of 0.36 to 0.47%.

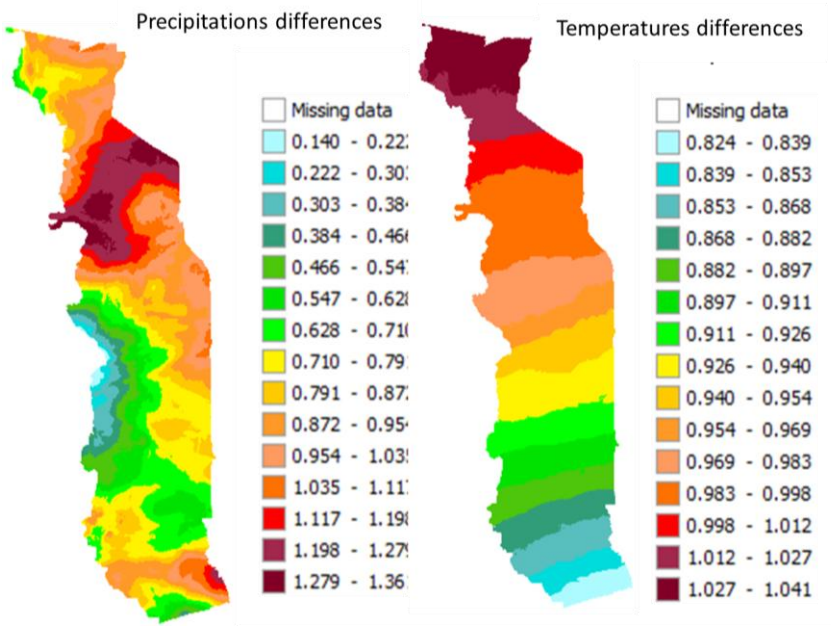


Figure 5: variation in precipitation and temperature by 2050 according to the RCP 2.6 scenario

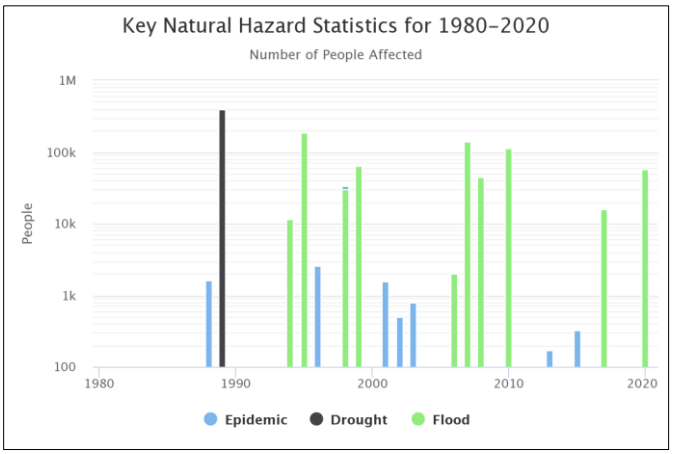
9. According to IPCC, 2014, overall risks from climate-related impacts are evaluated based on the interaction of climate-related hazards (including hazardous events and trends) with the vulnerability of communities (susceptibility to harm and lack of capacity to adapt), and exposure of human and natural systems. Changes in both climate system and socioeconomic processes -including adaptation and mitigation actions- are drivers of hazards, exposure, and vulnerability.
10. Many floods have been recorded over the past few years in the country, including those of 2010, which were the focus of a national report with the support of Technical and Financial Partners including the World Bank

[8] Togo climate risk county profile, 2021 (https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15859-WB_Togo%20Country%20Profile-WEB.pdf)

and the United Nations Development Program (UNDP). The damage and losses resulting from these floods in 2010 are estimated at seventeen billion one hundred and ninety-one million six hundred and twenty-nine thousand seven hundred and thirteen (XOF17,191,629,713), or approximately US$ 38,203,621. The property damage assessed involve the number of flooded (3947), collapsed (7320), dislodged (194) and deserted (921) houses; the surface area of devastated crop fields is 7744.24 hectares[9].

11. Between the timeframe of 2010 to 2020, among related hydrometeorological disasters were caused by floods, affecting nearly 185,000 people and nearly 38,000 people were affected by hazardous weather events in 2021 – 59% by floods and 38% by strong winds.

12. The following chart, provides overview of the most frequent natural disaster in Togo



Source : https ://climateknowledgeportal.worldbank.org/country/togo/climate-data-historical

Figure 7: Major hazard events between 1980 – 2020 in Togo

13. Among the severe natural hazards occurred in Togo, data showed that from 1980 to nowadays, flood events are the most recurrent with 50%. Since the beginning of the 2000s, the frequency of flood-related disasters has been regular, and severely impact people and economic activities.

14. According to the National Civil Protection Agency (ANPC) report on the assessment of emergency situations in the northern part of Togo in 2020, 5198 producers, including 1940 men and 444 women, were affected by flood-related disasters. The total flooded area is 6902 ha (539 ha in the Kara and 6902 in the Savannas region). The financial estimate of total agricultural losses is one billion three forty-four million four hundred sixty-eight thousand eight hundred fifty-four (1,344,468,854) CFA francs for an expected production of 1,409,368 tons. Between January and December 2021, the agency assessed field losses related to flooding at 1911.5 ha.

Natural Hazard 1900–2020	Subtype	Events Count	Total Deaths	Total Affected	Total Damage ('000 USD)
Drought	Drought	3	0	550,0000	500
	Bacterial Disease	10	1,032	11,610	0
	Viral Disease	2	84	560	0
Flood	Riverine Flood	8	72	547,695	0
Storm	Convective Storm	1	0	15	200

Table 1. Natural disasters in Togo, 1900–2020 - (World Bank Togo Climate risk Profile)

[9] Assessment of damage, losses and post-disaster reconstruction needs of the 2010 floods in Togo

The following pictures illustrate the various damages caused by the rains and floods.

(a)

(b)

(c)

(d)

Figure 8. a, b, c, d: Flood damage to residential areas, in 2023 and 2024

Figure 8: Bridge break on the national road N°1 at AMAKPAPE following the August 2008 floods in Togo (photograph by Togolese National Television, TVT)

Climate Vulnerabilities and Impacts

15. Climate change impacts the Togolese forestry sub-sector severely depending on the region. The level of exposure to climate change is assessed "medium" in the Plateau region. It is "high" in the Maritime, Central and Kara regions. The Savannas region has a "very high" level of exposure to climate change. The sensitivity

of the agricultural sub-sector to climatic stresses is very high in the two northern regions of the country, with the maximum sensitivity in the Kara region.

16. Togo is a predominately agriculturally based economy, where more than 60% of the population is rural and in one form or another employed in agriculture. Poverty is in Togo a predominately rural issue with more than 90% of the population in, for example the Savannas region, living below the poverty line. With more than 60% of the population earning its livelihoods in agriculture. Therefore, climate change is expected to have the main impact on agriculture, in Togo. Flooding is expected to affect an average of more than 80,000 people (about 60 percent of all people affected by disasters) and result in damages and losses of about $40 million. The northern region is highly vulnerable to flooding and is likely to suffer from water shortages and extreme heat. A 1% increase in temperature is estimated to decrease Togo's economy by 1.9%, global wheat yields by 6.0%, rice yields by 3.2%, maize yields by 7.4%, and soybeans by 3.1%.

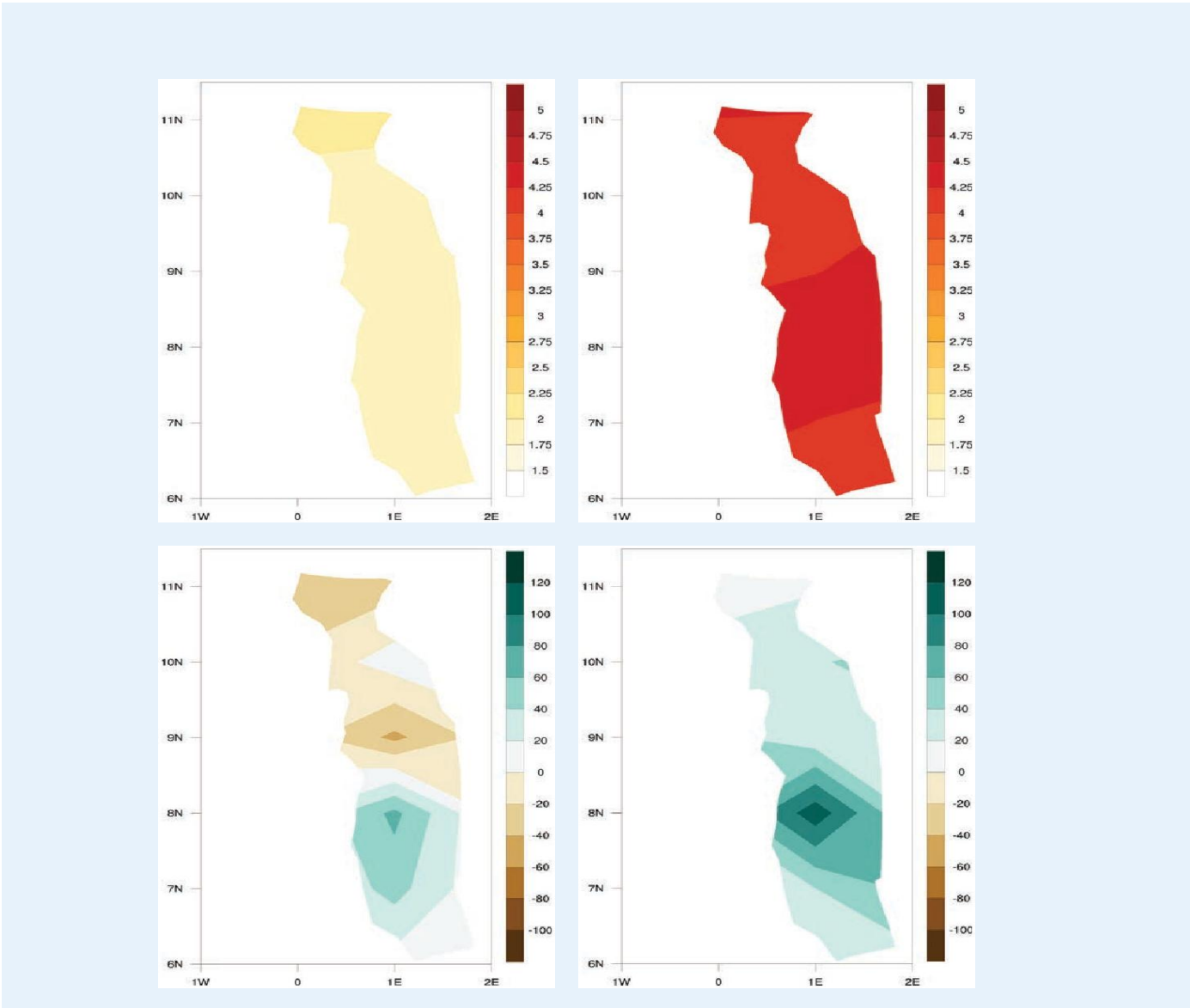


Figure 9. CMIP5 ensemble projected change (32 GCMs) in annual temperature (upper) and precipitation (down) by 2040–2059, relative to 1986–2005 baseline under RCP 8.518 (World Bank Togo Climate Risk Profile)

17. Climate change is increasing the population's vulnerability to weather-related risks. The extreme weather climatic conditions in the poorest, northern part of the country (particularly the Savannas region) are increasingly making difficult for its residents to generate a livelihood from agricultural activities on which they

disproportionately depend. In addition, periodic flooding is costing a significant amount to the economy. In 2010, according to World Bank and government statistics, flooding was estimated to have cost 1.2 percent of GDP, and this risk will likely grow with the effects of climate change.

18. As Togo is sensitive to climate change-related environmental shocks such as floods and drought, it is ranked the 47th most vulnerable country to climate change in the world according to the ND-GAIN Vulnerability Index (2018). Droughts, floods and erratic rainy seasons affect agricultural and food production. In sum, local communities' deep-rooted agricultural practices, traditional knowledge systems, and resource management strategies offer valuable resilience against climate-related challenges. While there is a need to strengthen sustainable resource management, these traditional practices provide a foundation that, when combined with innovative methods, can enhance environmental sustainability and disaster resilience. The project will integrate traditional approaches with new nature-based practices to create hybrid solutions that respect and build upon local cultural practices, empowering communities to sustainably manage resources and adapt to climate change impacts.

19. The sensitivity of the agricultural sub-sector to climate stress is also very high in the two northern regions of the country, with the highest sensitivity in the Kara region, which translates into a "very high" potential impact for these two regions, unlike the Central, Plateau and Maritime regions, where the impact is lower (level "high"). Only the Maritime and Plateau regions has a "medium" capacity to adapt to climate change, the other three regions being less equipped to deal with climate change[10].

20. Indeed, the damage caused by floods that is frequently recorded is the total or partial destruction of habitats, road, health and education infrastructures and drinking water supply networks. Above all, the destruction of crops and stocks of agricultural products has been noted. This resulted in:
    - accommodation of disaster victims in centers (buildings, tents) or host families;
    - the isolation of certain localities;
    - increased transport costs;
    - interruption or disruption of health services (care, vaccinations, prenatal consultations, etc.);
    - suspension of classes;
    - temporary closure of schools;
    - increase in school failure rates;
    - school drop-out;
    - proliferation of water-borne diseases;
    - conflicts over the use of natural water supplies;
    - food and nutrition insecurity;
    - increased cost of food;
    - decline in producers' incomes.

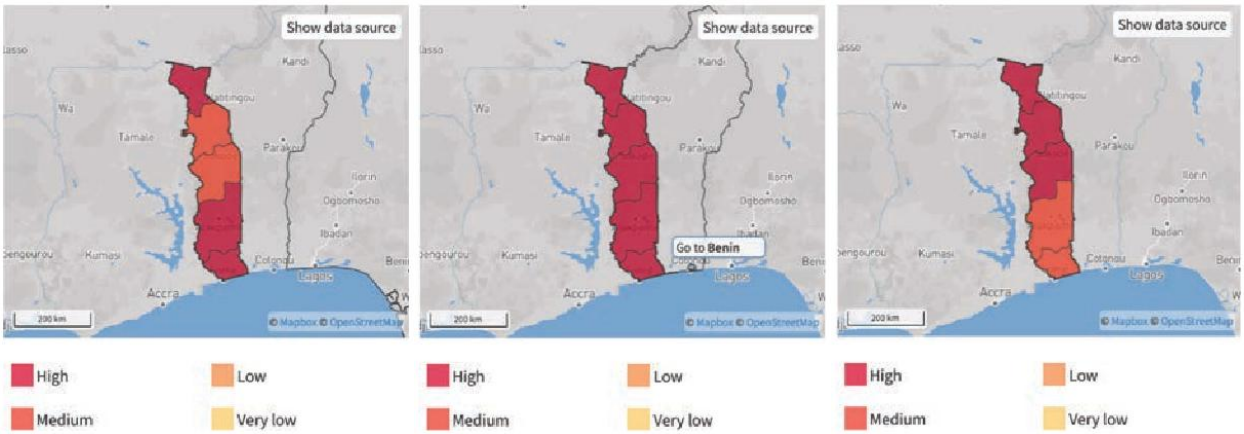


Figure 10. Risk of river flood (left); risk of wildfires (center); risk of extreme heat (right) - (World Bank Togo Climate Risk Profile)

[10] Vulnerability assessment of the agriculture, forestry and other land use sector to the adverse effects and impacts of climate change, 2020

21. Experiences and lessons learned from the management of disasters caused by these hydro-meteorological disasters show the following in terms of vulnerability:
    - Communities living in flood-prone areas (depressions, riverbanks and riverbeds) are the most exposed to the effects of flooding during heavy rains;
    - In urban areas, neighborhoods without drainage infrastructure are the most vulnerable to the impacts of flooding;
    - Communities living in flimsy housing are more vulnerable to the impacts of flooding;
    - Informed and risk-educated communities are better prepared to address emergencies;
    - The existence of forest cover on mountainsides in areas with rugged terrain helped to reduce landslides;
    - The establishment of vulnerability maps for certain regions of the country enables the observation and monitoring of these areas in rainy periods;
    - Preparedness of stakeholders contributes tremendously to the success of assistance operations and to the reduction of the impacts of disasters on communities.

22. These experiences highlighted Togo's weak capacity to address disasters and stressed the need for collective, concerted and coordinated action by all stakeholders. Since the exceptional floods of 2007, the Togolese government had established a national consultation platform for disaster risk reduction, by order No. 012/MERF dated 17 April 2007. Many institutions from the public (line ministries involved in DRR), private and civil society sectors, NGOs (Red Cross and Red Crescent Societies) as well as technical and financial partners (United Nations agencies) are involved.

    For effective disaster prevention and management in the short, medium and long term, and increased resilience of affected communities, the government, with the support of development partners, has reinforced the existing platform through the establishment of an early warning mechanism focusing on flood risks, which will be extended to other disasters. This mechanism is based on the four pillars (risk knowledge, monitoring and warning service, dissemination and communication, response capacity) of an early warning system (EWS) adopted by the national platform for disaster risk reduction.

    Indeed, the early warning system is intended to prevent the occurrence of a disaster, particularly flood, and to minimize the damage that could result thereof. Specifically, it seeks to: (i) be a tool for the implementation and monitoring of the platform that ensures consultation and information dissemination between the partners involved in the system: (periodic meetings, news groups, mailing list, messaging, WEB, etc.); (ii) promote a means of exchange for all partners of the platform such as planners and decision-makers from the various ministries, technical services and local authorities, researchers and engineers from scientific and technical institutions, members of civil society (NGOs, associations, etc.); and (iii) improve the flow of information by setting up metadata, documentary databases (the most complete inventory: maps, DBMS, GIS, studies, projects) accessible from the early warning system website.

    However, the flood early warning system in Togo faces several challenges and impediments to its effectiveness, including the following

- **At technical level**: there is a poor national coverage in terms of data collection tools (meteorological and hydrological stations). The existing data collection equipment/tools are outdated in some cases and non-operational in others (the installation of new automatic hydrometric and meteorological stations and the rehabilitation of existing tools are crucial for improving the accuracy and therefore the quality of the data collected. It should also be noted that rating curves of the main rivers currently used are outdated and need to be updated. Furthermore, the failure to consider the inflows from the Kompienga dam in the FEWS model, and from the communities upstream of the Nangbéto hydroelectric dam in the FUNES model, results in damage to the riverside communities, as upstream activities change the characteristics of the inflows into the basins. In addition, there is a lack of topographic data for the entire Mono basin to improve the accuracy of data and thereby refine the FUNES model forecasts, and a low technical capacity of meter readers (both weather and water meters).
- **At the regulatory and institutional level**: it is worth mentioning the absence of texts implementing the decree establishing the National Civil Protection Agency (ANPC), the lack of communal contingency plans, the inadequate integration of disaster risk reduction (DRR) into local development policy documents, plans and programs. In addition, there is a lack of a management frameworks that defines clearly the roles and

responsibilities of different stakeholders involved in disaster risk management from national to local levels in emergency situations.

At the financial and operational level: the 'WS's operationalization requires the deployment of funds and resources for updating information systems, holding periodic meetings of institutional stakeholders, carrying out mock exercises, intensifying outreach activities, information, education and communication at the community level and with stakeholders, with a view to its ownership, as well as awareness-raising among local stakeholders for the maintenance of riverbanks in risk area.

23. To this end, this project will take steps to:
    - Strengthen the governance, notably the legal and institutional framework, of the EWS (revitalizing the regional platforms and setting up prefectural platforms, interconnecting the hydrological and meteorological services to the National Civil Protection Agency (ANPC)'s watch room);
    - Improve the collection and feedback of information by strengthening the technical and human capacities of EWS actors;
    - Carry out awareness-raising and information activities for local populations on preventive and active flood control methods as well as post-disaster recovery and invest in the acquisition of life-saving equipment to build the resilience of communities.

24. The World Bank jointly with WMO are supporting Togo in the framework of the CREWS (Climate risk and early warning systems) initiative. This initiative aims to contribute to the improvement of the Togolese government's early warning services for drought, floods and other extreme weather and climate events, by strengthening the capacities of the national services responsible for: i) meteorology and climatology; ii) hydrology; and iii) civil protection. It facilitates the provision of scientific and technical experts, and the development of the capacities of the actors and populations concerned by early warnings (national services, populations of areas exposed to floods and agricultural drought, etc.) via:
    - Improved seasonal and sub-seasonal forecasts and decision support for agriculture and livestock at the national level;
    - Design of a capacity building plan in the following areas: climate prediction, hazard detection, monitoring, forecasting and warning, multi-hazard early warning systems, flood forecasting, climate data management, geographic information systems (GIS) and remote sensing, operational meteorology and hydrology;
    - Testing of early warning system products for drought, floods and food security in selected areas;
    - Development of hydrological modelling for risk assessment and for use in early warning systems in selected urban areas;
    - Creation of national operational procedures for multi-hazard warnings;
    - Mapping of vulnerable and flood risk sites in selected urban areas.

    To date, a lot of achievements have been made through CREWS-Togo project especially onf the development of forecast bulletins, the elaboration of the NFCS, the improvement of institutional framework, the development of strategic plans, the overall diagnostic of the national multi-hazards early warning systems and the recommendation for its improvement as well as the technical support to the institutions. The current proposal will build upon these achievements and contribute to the development and improvement of sub-seasonal forecasts, the strengthening of the institutional framework, the capacity building, the reinforcement of data management systems as well as the operationalization NFCS and different strategic plans developed within CREWS-Tog

25. Another ongoing project with the World Bank is the Food system resilience program (FSRP). It is a multi-phase programmatic approach to improve the resilience of food systems, promote intra-regional value chains and strengthen regional capacities for agricultural risk management. The project aims to increase the fight against food insecurity by improving the resilience of food system actors, priority landscapes and value chains in the program areas in Togo. Within the framework of the EWS, the following goals are expected:
    - build decision support systems to prevent, manage and respond more effectively to agricultural and food crises and manage hydro-meteorological and climate risks by integrating data and leveraging cutting-edge innovations and technologies;
    - strengthen national capacities and institutional sustainability, as well as collaboration with the private sector to provide demand-driven digital advisory services and impact-based forecasting and warning services.
    -

    Currently, FSRP has built on CREWS results to enable financial support to NMHS and civil protection services. FSRP continues to finance weather forecasts activities as well as issuing weather bulletin and capacity building

for ANAMET and DRE staffs. To strengthen CREWS results, FSRP acquired more than 160 weather and hydrologic stations to better cover the Togolese territory and collect more climates relate data. The current GCF proposal will scale up all these activities in order to improve the data collection and management, the knowledge of disaster risks, the forecasts, the national MHEWS as well as the adaptation in different sectors.

26. Furthermore, the country through the Ministry in charge of environment is implementing the West Africa Coastal Areas Program (WACA), a World Bank financing project. The sub-component 3.1 of the project is related to social investments to promote income-generating activities and preservation of ecosystems. In addition, income-generating activities focused on women empowerment, will be financed to reduce the various pressures on the resources of the ecosystems. The project also aims to support the development and protection of protected areas and wetlands as well as the restoration of community forests and mangroves. This sub-component is implemented thanks to funding from the GEF-6.

27. Since 2019, UNDP is financing the Community and Ecosystem Resilience Project, whose development objective is to promote low-carbon local development, resilient to the effects of climate change and beneficial to the global environment through Ecovillages. UNDP also finance technical support in the development of the fourth national communication on Climate change and 2nd Biennial Report on Climate Change.

28. ECOWAS has in its portfolio the implementation of the ECOWAS Hydrometer Initiative. The objective of the ECOWAS Hydrometer Initiative is to strengthen national and regional hydrometeorological services in West Africa to reduce disasters and climate risks for countries, communities and businesses. The implementation of the project is essentially based on 5 axes, including: (i) Strengthening of institutions to provide effective hydrometeorological services, (ii) Observation, analysis and effective management of hydrometeorological information, (iii) access of communities and businesses to appropriate hydrometeorological services, (iv) integration and coordination of research in the sub-region and (v) close monitoring of the state of hydrometeorological service

29. The AfDB is one of the implementing agencies of the Climate Investment Funds (CIF). Created in 2008 and endowed with an envelope of US$8.3 billion, the CIFs are, to date, the largest fast-track instruments for financing the fight against climate change in the world. They are intended to provide the support countries urgently need to hasten the event of low-carbon and climate-resilient development

30. Four programs are implemented under the Climate Investment Funds (CIF):
    - Clean Technology Fund (CTF);
    - Forest Investment Program (FIP);
    - Pilot Program for Climate Resilience (PPCR);
    - Scaling Up Renewable Energy Program in Low Income Countries (SREP).

31. To date, Togo does not receive funding from the CIF. This can be considered as an incentive factor for state entities working in the field of climate finance to mobilize additional resources to carry out the government's strategy in its fight against the impacts of climate change. These parallel financing opportunities are leverage factors for strengthening co-financing on Disaster Risk Management projects.

32. The BOAD Togo CIEWS project is designed to build upon and create synergies with the existing projects led by the World Bank and other initiatives currently active in Togo, as elaborated above, thereby enhancing the coherence and reach of climate resilience efforts in the country. For instance, by establishing a Multi-Hazard Early Warning System (MHEWS) and strengthening climate information services, this BOAD project will address critical gaps identified in these parallel initiatives, such as the need for streamlined, accessible, and actionable climate data for at-risk communities and decision-makers. Furthermore, the project will complement the World Bank's efforts by reinforcing institutional capacities and fostering coordination among various entities, including the Togolese Meteorological Agency and the National Civil Protection Agency, ensuring that climate and disaster risk data is not only generated but also effectively disseminated and utilized at all levels.

33. The BOAD Togo CIEWS will complement the other existing initiatives and other climate projects in Togo by extending climate information services specifically to support disaster risk management across national and community levels. Through activities like Activity 3.1.1, which focuses on establishing a forecast-based action mechanism, and Activity 3.2.1, which establishes an Emergency Funding Mechanism (EFM), the BOAD project will ensure that climate data informs proactive disaster responses and is readily available for decision-makers across sectors. This focus aligns with and builds upon the data collection and infrastructure upgrades initiated

by other projects, ensuring that these investments yield immediate and actionable insights for disaster risk management and community resilience.

34. In particular, the BOAD project will add value to the existing initiatives by focusing on community-level resilience and the practical application of climate data in decision-making processes. While the World Bank and other organizations have laid a foundation through initial assessments and pilot activities, the BOAD project aims to scale these efforts by deploying comprehensive capacity-building programs and establishing standard operating procedures that integrate new climate data tools and early warning mechanisms. This approach ensures that the lessons and data generated by previous and ongoing projects can be fully leveraged, avoiding duplication and enhancing the country's ability to respond swiftly to climate-related risks. These collaborations and synergies will strengthen the resilience-building ecosystem in Togo by encouraging a multi-faceted approach that not only improves early warning capabilities but also builds a sustainable framework for long-term adaptation strategies.

B.1.2. Scaling Up GCF-CREWS intervention (Togo)

Background of the framework

35. The GCF-CREWS partnership was formalized following discussions between the Green Climate Fund (GCF) and the Climate Risk and Early Warning Systems (CREWS) Secretariats. The 15th CREWS Steering Committee and the GCF Board endorsed a collaborative framework aimed at scaling up early warning system (EWS) financing for countries at high risk of climate impacts. Through GCF's Simplified Approval Process (SAP), countries that have demonstrated successful CREWS-funded interventions can now access up to US$25 million to reinforce and expand their early warning capabilities. This collaboration ensures sustainability, impact amplification, and easier access to future funding for larger-scale climate resilience efforts.

36. The core objective of the GCF-CREWS scaling-up framework is to fortify and expand early warning system investments that have proven effective in vulnerable countries. The initiative seeks to scale up institutional, operational, and functional capacities in weather forecasting, hydrological services, and multi-hazard early warning systems. By doing so, countries can enhance their resilience to climate-induced hazards and support decision-making processes in response to extreme weather events.

37. The framework aims to empower countries with CREWS-funded successes by facilitating continued financing to expand early warning systems. The primary targets include improving national ownership of these systems, strengthening institutional capacities, and fostering multi-stakeholder consultations to co-design projects. In particular, the framework emphasizes:
    - **Quantitative Scaling:** Expanding the scope and reach of early warning systems to cover more geographical areas and vulnerable communities.
    - **Functional Scaling:** Enhancing the technical capacity of institutions responsible for disaster risk reduction and response.
    - **Institutional Scaling:** Strengthening governance and stakeholder collaboration at the national and regional levels.

Summary of the previous CREWS-funded intervention

38. **Scope:** The main objective of the CREWS Togo project was to support the strengthening of national capacity to deliver climate, hydrometeorological and early warning services in selected sectors and communities. CREWS resources contributed to the improvement of the Government of Togo's early warning services for drought, flooding and other severe climate and weather events by enhancing the capacities of national services in charge of (i) meteorology; (ii) hydrology and (iii) civil protection. The project supported the provision of scientific and technical expertise as well as capacity development among stakeholders and communities involved in early warning (national services, population in areas prone to floods and agricultural drought, etc.) The activities implemented helped ensure that early warnings reach those who are most vulnerable in selected pilot areas, with a focus on community engagement and gender inclusion. It also acted as a vehicle for capital mobilization in the sector, creating favorable baseline conditions, knowledge and pilot activities, which could be transferred and scaled up by large investments, such as GCF.

39. **Key Deliverables:** CREWS Togo's work to strengthen national capacity to deliver improved drought, flood and other weather and climate warning services saw landmark moments as of date. Togo's national meteorological service transformed into a national agency in 2022 with an evolved legal status by decree. Togo also

implemented best practice on disseminating early warnings to reach its people more widely and effectively. Although technical capacity has significantly improved in national hydro-met and civil protection services, much more for multi-hazard early warning in Togo. A key challenge for progress and sustainability: sufficient resources to maintain and develop services.

40. **Progress so far:**
    a. Bill making the Met Service an agency issued as Decree in November 2022. The strategic plan for ANAMET was validated and aimed at strengthening the agency's institutional capacities with an action plan to develop its services.
    b. Monitoring tool with methodology developed for Togo's National Framework for Climate Services (NFCS) and validated making Togo the first country in Africa to develop a monitoring system for its NFCS action plan.
    c. At least 14 national hydro-met staff and technicians trained on monitoring and forecasting severe weather and floods.
    d. 46 maps of flood risk zones developed for 12 prefectures and 34 municipalities, 4 similar risk maps for Agbanakin, Agome-Glozu and Koulfiekou communities and Anie market.
    e. The adoption of Community Alerting Protocol (CAP) was a key recommendation of the diagnostic for Togo. Its first use was at the end of 2022.
    f. 2 national preparedness plans updated in 2023 on flood preparedness and response and disaster risk reduction. 3 risk assessment and rapid evacuation plans developed for a regional hospital centre, a market, and a school.
    g. Togo's hydrological service is working on its seasonal forecasting through a new system and training.
    h. Integration of community vulnerabilities mapping and local level planning and response into the development of a Municipalities Master Plan, was cited as evidence of stronger civil protection services.
    i. At least 318 women benefitted from capacity development offered by CREWS.
    j. More than 650 people from communities and civil protection empowered to use seasonal flood forecasts and disaster risk information to prepare against and respond to floods, storms and other hazards.
    k. A monthly climate forecast for Togo factoring in rainfall fluctuation during the monsoon was the latest product outcome of ongoing CREWS support on sub-seasonal and severe weather forecasting. The intra-seasonal forecast is disseminated via TV, radio, social media, and the national Met-Service's new website.
    l. About 6.3 million people – 78% of the population – receive risk awareness information through a campaign carried out in communities in all five regions of the country and other outreach efforts.

Overview of the Logical Framework of previous intervention (Phase 1) with mapping to the logical framework of the GCF proposal (Phase 2 scaled up)

41. Links between the previous intervention (Phase 1) and the current proposal (Phase 2)

Table : Mapping of Old and New Logical Framework

Logical Framework Component	Phase 1 (Old Framework)	Phase 2 (New Framework)	Notes/Comparison
Objective/Goal	To support the strengthening of national capacity to deliver climate, hydrometeorological and early warning services in selected sectors and communities	To improve preparedness capacities of national institutions and build resilience of local communities to climate change and disaster risks by strengthening the existing early warning system and training vulnerable populations in Togo to be better prepared	

		against climate impacts of disasters.		
Outcomes and Outputs	A. Strengthening hydrological and meteorological services	1. Strengthening Climate Information Services	A number of technical assistances to build capacities of the national hydrological and meteorological services were provided through CREWS Togo project. These include, among many, provision of scientific and technical advice, support to enhanced seasonal and sub-seasonal forecasting, the development of a capacity building plan and designing and carrying out piloting of EWS products mainly for flood and drought to support directly the communities. The scale up proposal will help further enhance these capacities built through CREWS by enhancing climate information services, communication networks and international collaboration to sustain the capabilities by promoting a more enabling environment and continuous capacity development of Togolese agencies. The CREWS project focuses on hydrological and meteorological services provided for short-term data and operational support for preparedness and resource management. While the focus of the scaled-up proposal on climate services emphasizes the long-term support for climate adaptation and resilience that can guide	

			long-term planning and policy.
	B. Civil protection, emergency management, disaster risk reduction, community support and last-mile service delivery	2. Enhancing Multi-Hazard Early Warning Systems (MHEWS) 3. Leveraging Climate Information and Early Warning System (CIEWS) for investment and financial decisions on adaptation	The CREWS project piloted a number of EWS products for flood and drought in selected areas, developed national operational procedures for MHEWS and provided institutional support through simulation exercises. The scale up proposal builds on the piloting outcomes of the CREWS project and aims to improve further disaster risk management and forecasting capacities and strengthen national preparedness and response in collaboration with the Civil Protection Agency. It is also an opportunity to further support community-level adaptation actions and infrastructure improvements.

42. References to closing reports, independent evaluations, etc. that demonstrate successful implementation of the results and areas in need of additional support targeted by the Phase 2 proposal scope
Excerpts from the Mid Term Evaluation Report submitted indicate that:
    a. The objectives of the CREWS Togo project are consistent with national policies and strategies, with donor policies, and they are also consistent and synergistic with the initiatives of other major donors supporting the country's development. The approach adopted by the project, in particular for the development of the skills of ANAMET, DRE and ANPC, seems adapted to the context.
    b. At the mid project, the achieved results are mainly at the institutional level in terms of inter-institutional collaboration, diagnostics of national warning capacities and the legal status of ANAMET. In terms of services to be developed, the main result is the improvement of weather and climate forecasting processes. According to ANAMET, the project has already led to a clear improvement in the quality of short-term forecasts. Concerning seasonal and sub-seasonal forecasting, the results are still qualitative, as the process is ongoing, but according to the actors, the MISVA briefings and trainings have operationally strengthened ANAMET's seasonal forecasting capabilities. What is particularly interesting is the participatory approach and south-south collaboration between the Meteorological Services of the different countries and the regional centers (ACMAD, AGRHYMET, ANACIM).
    c. The hydrological component, at present, has obtained less results, but there is a significant commitment of scientific and technical partners which should allow the DRE to capitalize on the experience if its human resources are reinforced.
    d. Positive impacts have been observed on the quality of weather and seasonal forecasts, which have improved significantly as a result of the training received.
    e. Notwithstanding the mitigated results and the impacts that cannot be measured at the present time, the project presents elements of viability that will be able to support the sustainability of the started

processes according to the strategic choices that the national partners and the Government of Togo will make over the next two years.

f. The most critical point is the availability of human and financial resources provided by the Government to ANAMET and the DRE in particular. The transition from DGMN to ANAMET and the development of a National Strategic Plan could increase advocacy towards the government and donors to strengthen the institutional budget. The other positive aspect supporting sustainability is the networking of national structures with international technical partners capable of supporting and providing them with information, skills, and tools developed specifically to make multi-hazard early warning operational in Togo. The collaboration framework established is well articulated and can allow ANAMET to access forecasts, indices, tools but also collaborations with other ongoing and future initiatives. For the DRE, great opportunities in accessing and valorizing hydrological forecasting tools at different time frames and geographical coverage are already being realized and the strengthening in the number and skills of its staff is in pipeline.

Summary of the expected scaling up main results with phase 2 (framed under the three pillars of the Scaling Up Framework -Horizontal, Vertical and Institutional)

Scaling Up Framework Pillars	**Scalable elements in proposed GCF-SAP-CREWS Scale in Togo**
Horizontal	The scale up project will aim to cover more than 9 million beneficiaries with 85% of these as indirect beneficiaries and 4.5% as direct beneficiaries. 80% of which are from the most vulnerable communities.
Vertical	The scale up project will ensure that investment from CREWS on capacity building and tools development and piloting will feed into a systems approach that would be more effective over the long-term and are resilient, accessible and responsive to hazards, including floods and drought and vulnerabilities.
Institutional	Capacity development and coordination between national, regional and local governments in hazard monitoring – “all-of-government” approach and response leads to more comprehensive and sustainable early warning systems.

B.2.1. Project/Programme description (max. 1,000 words)

43. The overall objective of this project is to improve preparedness capacities of national institutions and build resilience of local communities to climate change and disaster risks. Specifically, it seeks to: (i) to have a better understanding of disaster risk; (ii) to strengthen governance, preparedness and recovery to better manage disaster risk; and (iii) to make investments in disaster risk reduction for resilience.

Component 1: Climate Information Services Delivery

Outcome 1: Climate and hydrological data and information collection processes are strengthened, enabling better decision-making in Togo.

44. Component 1 focuses on strengthening the capacities of Togo's climate information services, particularly the Togolese Meteorological Agency (ANAMET), the Water Resources Directorate (DRE) and the National Civil Protection Agency (ANPC). It aims to enhance data collection, analysis, and dissemination processes and improve institutional coordination to enable better decision-making in the face of climate-related challenges. The outcome is crucial because it addresses several key barriers identified in the problem statement. Togo faces significant climate risks, and its ability to provide effective climate information and early warnings is hindered by outdated infrastructure, lack of comprehensive coverage, and institutional challenges. By strengthening climate data and information collection processes, this outcome will directly improve the country's capacity to produce timely and reliable forecasts and early warnings. The outcome aligns with the overall project’s goal by forming the foundation to enable Togo’s key institutions to generate accurate and reliable

climate information, which will serve as the basis for other interventions and lead to enhanced community adaptive capacity and reduced vulnerability to climate-related hazards.

45. **Output 1.1: Policy and legislative frameworks for climate information services strengthened**: This output is crucial for creating an enabling environment for improved climate information services in Togo. By establishing and strengthening policy and legislative frameworks, it will provide the necessary institutional support and guidance for the effective operation of climate information services. This directly contributes to the outcome of strengthened hydrometeorological and climate data and information collection processes. The output will involve multiple key institutions and stakeholders such as ANAMET, DRE, ANPC, relevant government ministries, parliamentarians, and international organizations such as the World Meteorological Organization (WMO) and the United Nations Office for Disaster Risk Reduction (UNDRR).

46. *Activity 1.1.1: Operationalizing the National Framework for Climate Services (NFCS) through developing tailored climate products for priority sectors:* The National Framework for Climate Services (NFCS) has been initiated and developed within CREWS-Togo project based on the five priority sectors of the Global Framework for Climate Services (GFCS) that supports the production and delivery of climate information at global, regional and national levels, spanning all climate time scales to aid policy and decision-making. These priority sectors are agriculture and food security, disaster risk reduction, energy, health, and water. The NFCS focuses on improving climate science and services and has created a coordinated national approach to climate services, enhancing collaboration between providers and users of climate information by integrating climate information into decision-making across sectors. However, the different thematic groups gathered only once so far and have defined their roadmaps, but the implementation is still pending due to limited financial capacities. This activity will supplement the implementation of priority activities for co-development of climate information for the different sectors. This involves capacity building activities, such as training workshops and knowledge sharing events for the development and dissemination of climate products adapted to different sectors, the support of research activities, the improvement of climate products validation process as well as the forecast bulletins (to consider the integrated information) and their access and the development of products and services for other hazards in Togo. Moreover, this activity will support the adoption and implementation of the WMO Climate Services Toolkit (CST) which is one of the key enabling pieces for the implementation of the Climate Services Information System (CSIS), the operational core of the GFCS

47. *Activity 1.1.2: Establishing and operationalizing a National Disaster Risk Management Framework aligned with the Sendai Framework, NDC, NFCS, national adaptation process (NAP) and EW4ALL initiative.* The activity's purpose is to align Togo's disaster risk management with the national priorities and international best practices and commitments. This will enhance the country's ability to prevent, prepare for, and respond to climate-related disasters. The activity will focus on establishing a comprehensive and cohesive framework that integrates disaster risk reduction into national development planning and sectoral policies. It will involve extensive stakeholder consultations to ensure an inclusive approach, incorporating inputs from various sectors, including government agencies, civil society organizations, the private sector, and community representatives. While none of the communities and population self-identify as Indigenous Peoples the stakeholder consultations will involve communities representing various social and economic groups from regions prone to climate-related risks. The consultations will expand to include targeted workshops, focus group discussions, and bilateral meetings to ensure broad and inclusive participation. Additionally, community representatives will be selected in collaboration with local governments and civil society organizations to ensure fair representation of vulnerable populations, including women, youth, and persons with disabilities. It will follow a clear timeline aligned with the development of the NDRMF starting at the inception, through the development and incorporate validation sessions to ensure feedbacks are incorporated into the policy development.

48. The framework will outline clear roles and responsibilities for all stakeholders, promote risk-informed decision-making, and encourage adopting best practices in disaster risk management aligned with international best practices and standards, such as the Sendai Framework for Disaster Risk Reduction. This activity builds upon the NFCS established in Activity 1.1.1, focusing specifically on disaster risk management.

49. *Activity 1.1.3: Building capacity for legislative and policy support for climate information services.* This activity focuses on improving the legal framework and policies for climate services and early warning in Togo including the development of warning codes. Key aspects include conducting a comprehensive legal review, engaging stakeholders, providing capacity building for legislators and policymakers, drafting new legislation or amendments, aligning policies, establishing enforcement mechanisms, and including provisions for sustainable funding. These efforts aim to create a robust legal environment that supports and sustains the frameworks

established in Activities 1.1.1 and 1.1.2. The legislative support will have significant impacts on both the National Framework for Climate Services (NFCS) and the National Disaster Risk Management Framework. For the NFCS, it will provide a legal mandate, clarify roles and responsibilities, and facilitate data sharing and cross-sectoral collaboration. For the Disaster Risk Management Framework, it will mandate the integration of climate information into risk reduction strategies, establish requirements for risk assessments and early warning systems, and provide a legal basis for emergency response measures and "Build Back Better" principles in reconstruction efforts. This legal foundation will enhance the effectiveness and sustainability of both frameworks, creating an enabling environment for improved climate information services in Togo.

50. **Output 1.2: Capacity of the Togolese Meteorological Agency (ANAMET) and hydrological service (DRE) enhanced through training and international collaboration**. This output is crucial for strengthening Togo's climate information services by directly addressing the technical and institutional barriers identified, while also aligning with international standards set by the World Meteorological Organization (WMO). It aims to enhance ANAMET and DRE capacities to collect, process, and disseminate accurate and timely climate data, which is fundamental to achieving Outcome 1 and meeting GBON requirements. Recall that DRE is responsible of managing the hydrometric network as well as water resources in general in Togo while ANAMET is in charge of meteorological and climate observations and applications. The enhanced capacity will enable ANAMET and DRE to contribute more effectively to the global hydrometeorological community, improving both national and international meteorological and hydrological forecasting as well as hydroclimate monitoring capabilities. Key stakeholders involved in delivering this output would include ANAMET and DRE staff, WMO representatives, international meteorological ad hydrological organizations, technology providers, and potentially academic institutions for training support. The activities under this output are designed to systematically upgrade the skills of ANAMET and DRE human resources and foster international partnerships to achieve GBON compliance, thereby significantly enhancing Togo's meteorological and hydrological capabilities and its contribution to global weather and climate data networks.

51. *Activity 1.2.1: Conducting capacity building for ANAMET and DRE human resources.* This activity focuses on enhancing the skills and knowledge of ANAMET and DRE staff through targeted training programs. The purpose is to build a cadre of skilled professionals capable of operating and maintaining advanced hydrological and climate monitoring systems, analyzing data, and producing reliable forecasts. This forms the foundation for all subsequent activities, as a well-trained workforce is essential for effectively utilizing upgraded equipment and software. The activity will begin with a comprehensive skills gap analysis to identify specific training needs within ANAMET and DRE. Based on these findings, tailored training modules will be developed covering advanced hydrological and meteorological techniques, modelling, and data analysis. For instance, CREWS-Togo supported the set up and calibration of the GEOGLOWS model on Togo. Further capacity DRE staff building will be needed on the analysis and validation of forecast and this activity will address it. Overall, the training will be delivered through a series of workshops and sessions led by expert trainers. The activity will also support ANAMET and DRE to develop standard operating procedures for generating climate, weather and hydrological information to support warning decisions. To ensure long-term skill development, a mentorship program will be implemented, pairing junior staff with experienced meteorologists. Staff will also be encouraged to participate in international meteorological and hydrological conferences and seminars, while an ongoing professional development program will be established to facilitate continuous learning and skill enhancement.

52. *Activity 1.2.2: Establishing international collaboration and partnerships with organizations including, ARC, UNOCHA, WFP, IFRC and International Telecommunication Union (ITU) to improve the use of climate services and DRR practices.* This activity aims to establish a strengthened international partnership to support ANAMET, DRE and ANPC in climate risk integration and management. The purpose is to facilitate knowledge exchange, access to international best practices, and potential resource sharing. This activity complements the previous three by providing ongoing support and opportunities for further capacity enhancement, ensuring the sustainability of the improvements made. Directorate of National Meteorology (DMN) of Morocco has been identified as a key partner however, partnerships with other partner organizations including African Risk Capacity (ARC), World Food program (WFP), International Federation of Red Cross and Red Crescent Societies (IFRC) and International Telecommunication Union (ITU) will be explored. Memoranda of Understanding (MOUs) will be developed and signed with partner organizations to formalize collaborations, paving the way for the creation of joint working groups or committees to oversee collaborative efforts. The partnerships will facilitate exchange programs for ANAMET staff to visit and learn from partner organizations, as well as participation in regional and international meteorological initiatives. Concretely, career development activities will be planned and implemented for 12 forecasters, 6 climatologists, 60 master-level observers,

engineers and technicians. Finally, regular reviews and evaluations of these partnerships will be carried out to ensure their ongoing effectiveness and mutual benefit.

53. **Output 1.3: Capacity of the National Agency of Civil Protection (ANPC) to support disaster risk management strengthened.** The output focuses on building the capacity of the National Agency of Civil Protection (ANPC)- a key institution in Togo's disaster risk management framework- enabling it to manage disaster risks more effectively. The output aims to enhance ANPC's capabilities in risk modeling, risk transfer, and contingency planning, while also improving coordination with other relevant agencies, particularly ANAMET. The output is closely interlinked with the development of the National Disaster Risk Management Framework and the National Framework for Climate Services (NFCS) under Output 1.1. By enhancing ANPC's capabilities, this output ensures that the agency can effectively implement and operationalize these national frameworks, creating a more cohesive and responsive climate and disaster risk management system. Key stakeholders involved in delivering this output will include ANPC staff, African Risk Capacity (ARC), ANAMET and DRE representatives, international disaster management experts, and potentially academic institutions for specialized training support.

54. *Activity 1.3.1: Conducting capacity building for ANPC including risk modelling, risk transfer and contingency planning.* This activity aims to enhance the technical skills and knowledge of ANPC staff, enabling them to better assess, manage, and respond to climate-related risks. It will involve organizing targeted training workshops, bringing in international experts, ARC experts, and providing hands-on experience with risk modeling software and tools. The activity will have two key modules: Risk modelling capacity building and Contingency Planning including M&E and gender strategy integration. The risk modelling capacity building will ensure that officials from the National Agency of Civil Protection (ANPC), including various divisions and directorates involved in Disaster Risk Management (DRM), possess the necessary skills to model risks such as floods and droughts, thereby permitting them to better inform local communities about disasters, their frequency of occurrence, and their impacts. The following goals will be achieved; i) Develop and deliver comprehensive training programs on risk modelling and profiling for ANPC staff. ii) Equip ANPC personnel with advanced tools and software for accurate risk modelling; iii) Facilitate train-the-trainer programs to enable ANPC staff to educate local community officials on risk modelling techniques. iv) Establish a nationwide system for consistent risk profiling and updating risk models; v) Create Disasters risk bulletin; and vi) Foster collaboration with international experts and institutions to enhance the capacity and knowledge base of ANPC.

55. The contingency planning module will ensure that the ANPC is well-trained in identifying and selecting activities. It will also capacitate them to analyze and determine proper response costs for activities, including 'flash resilience activities', in the event of a disaster. The module will be complemented by establishing a monitoring and evaluation (M&E) system within the ANPC to oversee the implementation of response activities and ensure systematic M&E of disaster responses. Finally, gender strategy will be incorporated into the contingency plan to help remove gender biases during the implementation of response activities. Specifically, the module will result in; i) Providing specialized training for ANPC staff on activity identification, selection, and response cost analysis; ii) Developing and implementing a response M&E frameworks to track and evaluate the effectiveness of response activities; iii) Integrating gender-responsive approaches into contingency planning and response activities; and iv) Establishing a dedicated M&E unit within ANPC to ensure continuous monitoring and evaluation of disaster response efforts. The activity is expected to result in improved disaster preparedness and more effective risk management strategies. This activity lays the foundation for improved disaster risk management and is closely linked to Activity 1.3.2, as enhanced ANPC capabilities will facilitate better coordination with other agencies.

56. *Activity 1.3.2: Improving coordination between ANAMET, DRE and ANPC, and private stakeholder entities through MOUs focused on improving Early Warning for all in Togo.* The purpose of this activity is to establish formal mechanisms for collaboration and information sharing between the key institutions involved in climate information services and disaster risk management. The expected impact is a more cohesive and efficient national response to climate-related threats. The activity will include drafting and signing Memorandums of Understanding (MOUs) between ANAMET, DRE, ANPC, and relevant private stakeholders, defining roles and responsibilities, and establishing protocols for data sharing and joint decision-making. It will establish a national dialogue forum to bring together the key institutions and develop sector-specific plans to improve the understanding and utilization of climate information. The MOUs will be the deliverable of the activity, with its core sub-activity comprising workshops and stakeholder engagement to bring on board all the relevant entities to partake in an open forum and structured dialogue to define their roles and coordination mechanism. A consultant will be engaged to facilitate the process. The expected impact is a more integrated and efficient

approach to disaster risk management and climate services, leading to better-informed decision-making across key sectors. This activity builds upon the capacity development in Activity 1.3.1, ensuring that the enhanced skills and knowledge can be effectively applied in a coordinated manner across institutions.

57. **Output 1.4: Developing a business delivery model and financial strategy for sustainable climate services.** The output aims to develop a comprehensive financial strategy to sustain and enhance the ongoing operations of its National Meteorological and Hydrological Services (NMHS). The strategy will focus on creating a sustainable business model, exploring public-private partnerships, and identifying innovative financing mechanisms. This output directly contributes to Outcome 1 by providing the sustainable financial foundation necessary for strengthening climate data and information collection processes. It will focus on transitioning the country's key climate institutions' service delivery to a user-centered service model and enhance the skills of staff to highlight and advocate for the benefits of climate information and early warning systems (CIEWS). This is crucial for boosting user demand and their willingness to invest. Additionally, this sub-activity will help establish a supportive environment in Togo for utilizing CIEWS in investment and financial decision-making to mitigate long-term disaster risks.

58. *Activity 1.4.1: Design a strategy for the recognition of ANAMET meteorological services, DRE hydrological services and ANPC disaster risk management strategies, integrating an improvement of the institutional budget, and contribute to advocacy with the relevant ministries.* This activity aims to secure sustainable institutional funding for key climate services and related risk management by demonstrating the value of ANAMET, DRE and ANPC work to national decision-makers. The expected impact is increased financial resources for ANAMET, DRE, and ANPC, enabling them to improve their services and operations. The project will work closely with government partners to advocate for increased and ring-fenced national budget allocations for CIEWS. It will build on the advocacy achievements of Activity 1.1.3 and expand to exploring opportunities for cost recovery through tailored services for specific sectors such as agriculture, energy, and health. It will empower ANAMET into developing a compelling case for increased funding, organizing meetings with relevant government officials, and presenting cost-benefit analyses of improved climate services.

59. *Activity 1.4.2: Explore public-private partnerships leveraging innovative financing mechanisms for sustainable climate services.* This activity aims to foster public-private collaboration to drive innovation, resource mobilization, and service quality improvements in Togo's climate services sector. The primary objective is to create a resource mobilization strategy for ANAMET and DRE, incorporating private capital to support sustainable climate services. To achieve this, the activity will conduct a stakeholder mapping exercise to identify key private sector entities, including agribusinesses, insurance providers, and telecommunications companies, as well as relevant academic institutions.

60. Multi-stakeholder workshops will facilitate discussions on specific partnership opportunities, with a focus on developing tailored financial instruments such as climate service subscription models, weather-based insurance products, and climate data licensing for commercial use. These instruments provide private capital with opportunities for return on investment, particularly through value-added climate products like crop-specific weather forecasts for agribusinesses and risk assessment tools for insurers. Additionally, the project team will support the creation of partnership models that align public service delivery with private sector innovation, efficiency, and scalability, while ensuring compliance with national regulations.

61. Incentives for private capital participation include access to reliable climate data for product development, opportunities to expand service offerings, and improved risk management capabilities in sectors affected by climate variability. This approach could potentially attract substantial private sector contributions, with the exact amount of attainable private capital to be refined during the development of the resource mobilization strategy based on market assessments and stakeholder engagement.

Component 2: Impact-based MHEWS and Early Action.

Outcome 2: A multi-hazard early warning system is established in Togo to build communities' resilience to natural hazards is enhanced, through increased awareness, timely and accurate warnings, and strengthened emergency preparedness and response capabilities.

This component focuses on developing and implementing an impact-based Multi-Hazard Early Warning System (MHEWS) and promoting early action in Togo. It aims to enhance the country's ability to detect, monitor, analyze, and forecast natural hazards, as well as to disseminate timely and accurate warnings to communities at risk. The

interventions under the component are designed to significantly improve Togo's ability to prepare for and respond to climate-related hazards, ultimately reducing the loss of life and economic damages caused by these events. This outcome is crucial because it addresses the country's vulnerability to climate change impacts, particularly the increasing frequency and intensity of natural hazards such as floods, droughts, and storms. The outcome addresses the barriers identified, including limited access to advanced technology, insufficient institutional capacity, financial constraints, and lack of community engagement. The outcome will be achieved by following WMO best-practice guidance. According to the guidance, a MHEWS should build on four main pillars: (i) disaster risk knowledge based on systematic collection of data and disaster risk assessments; (ii) detection, monitoring, analysis and forecasting of hazards and possible consequences; (iii) dissemination and communication, by an official source, of authoritative, timely, accurate and actionable warnings, and associated information on likelihood and impact; and (iv) preparedness at all levels to respond to the warnings received (WMO, 2018b). These actions will work together to create a more resilient society that can better anticipate, prepare for, and respond to climate-related threats.

62. **Output 2.1: Improved disaster risk knowledge based on systematic collection of disaster risk data and vulnerability assessments**. This output directly contributes to the overall outcome by providing essential information on hazards, vulnerabilities, and risks, which is necessary for effective early warning and community preparedness. To derive the output, a comprehensive hazard and risk assessment will be conducted across the country, which will combine scientific data with local knowledge through participatory mapping. A centralized disaster risk information system and hazard database will be established to consolidate and make accessible all relevant risk data. Additionally, MHEWS governance and institutional arrangements will be well defined and formalized to identify all the relevant stakeholders and their respective roles and responsibilities. The institutional arrangements will emphasis collaboration between national meteorological and hydrological services (ANAMET and DRE), disaster management agencies (ANPC), academic institutions, local communities, local institutions and international partners to deepen understanding of climate impacts and vulnerabilities. The output will be reinforced by targeted capacity building program to train stakeholders on risk assessment methodologies and the use of risk information tools.

63. *Activity 2.1.1: Elaborate an Atlas on climate risks by conducting comprehensive multi-hazard risk assessments and vulnerability assessments.* This activity aims to identify and analyze the main natural hazards climate risks affecting Togo, assess the vulnerability of different sectors and communities and document all in an Atlas. It will involve collecting and analyzing historical data on hazards, conducting field surveys, and using advanced modeling techniques to assess risks. The assessments will provide crucial information for prioritizing areas for intervention and designing targeted early warning strategies. Building on the risk assessments, visual representations of hazard-prone areas in Togo will be created. The maps will be dynamic, allowing for regular updates as new data becomes available. This will involve using Geographic Information Systems (GIS) and other mapping technologies to create layered, interactive maps showing different hazards, their intensity, and potential impacts.

64. These maps will be crucial for early warning dissemination, urban planning, and community awareness, directly supporting the overall goal of enhancing community resilience. Local knowledge and perspectives will be incorporated into the risk assessment process. It will involve organizing community workshops, participatory mapping exercises, and focus group discussions to gather local insights on hazards and vulnerabilities. While none of the communities engaged self-identify as Indigenous People, the project will adopt participatory approaches to ensure that community leaders, representatives of vulnerable populations, and other stakeholders are meaningfully engaged. The participatory methods will prioritize inclusivity, transparency, and respect for local knowledge and practices.

65. The risk assessment will be conducted collaboratively through consultations and workshops where all participants have the opportunity to provide input and express consent freely. The project will ensure that all stakeholders are fully informed about the objectives, processes, and expected outcomes of the activities before implementation. Priority will be placed on ensuring that decisions are made in a manner that reflects community needs while safeguarding their consent, rights and knowledge.

66. This bottom-up approach will complement the technical assessments, ensuring a comprehensive understanding of risks. By engaging communities, this activity also serves to raise awareness and build local capacity for risk management, directly contributing to the outcome of enhanced community resilience. This Activity 2.1.1 will lay the groundwork for subsequent activities by providing the necessary data for hazard mapping and database development.

67. *Activity 2.1.2: Developing a consolidated hazard and risk data center to support the early warning system.* The activity will involve establishing a centralized disaster risk information system to improve disaster risk knowledge and its application, and corresponding training of staff on the utilization and maintenance of the system. The hazard data system would serve as a comprehensive repository for all disaster risk-related data and information in the county and it will be accessible to various stakeholders. It will catalog extreme weather conditions, climatic conditions and their impacts, including validations. The Activity will result in the establishment of a Data Center which will also house the consolidated risk and hazard system. The Data Center would be equipped with state-of-the-art IT equipment and software including servers, storage systems, and networking infrastructure to ensure high performance and reliability. It would also incorporate redundancy and backup systems to safeguard critical data against loss. The hazard information system itself would be developed as a web-based platform, allowing for remote access and easy updates. It will leverage on the outputs of other activities especially Activity 2.1.1 to integrate various types of data, including hazard maps, vulnerability assessments, exposure data, historical disaster records, climate projections, and socio-economic indicators. The system would also incorporate GIS capabilities for spatial analysis and visualization of risk information. To ensure interoperability and data sharing, the system would be designed using open standards and APIs. This would allow for integration with other relevant national and international databases and systems. The platform would include tools for data input, validation, and quality control to maintain the integrity and accuracy of the information. The system will lead to improvement in the generation of products for specific hazards (heatwaves, extreme events, etc.), and droughts. User interfaces would be developed for different stakeholder groups, such as government agencies, researchers, and the general public, with varying levels of access and functionality.

68. These interfaces would include features for data visualization, report generation, and basic risk analysis tools. The Activity would also establish protocols and procedures for data collection, update, and management. This would include defining roles and responsibilities for different agencies in contributing to and maintaining the system, as well as guidelines for data sharing and use. The system will be fully compliant with WMO and ICAO standards. To ensure sustainability, the activity will be complemented by technical training programs including training on hydrological data management and quality assurance for system administrators and users, as well as the development of user manuals and technical documentation. Additionally, a long-term maintenance and upgrade plan would be created to keep the system current and functional beyond the project's lifespan.

69. To ensure accessibility, the Data Center will be developed as a web-based platform with user-friendly interfaces that allow relevant stakeholders, including government agencies, researchers, and local authorities, to access and utilize the data effectively. The platform will offer role-based access, enabling different levels of data interaction for specific user groups while safeguarding data security and integrity. In addition to system setup, the project will implement a comprehensive training program designed to maximize the Data Center's use across stakeholder groups. This training will cover data entry, retrieval, and analysis, focusing on the platform's GIS and data visualization capabilities, as well as interpretation of hazard and risk information. Targeted training sessions will be held for different stakeholder groups to ensure they understand how to leverage the system for early warning, disaster planning, and response. User manuals and technical documentation will further support ongoing use and capacity building, allowing stakeholders to effectively integrate the system into their workflows and make data-driven decisions.

70. *Activity 2.1.3: Establishing MHEWS governance and institutional arrangements and to strengthen partnership among national institutions:* This activity aims to create a coherent and efficient framework for managing and utilizing disaster risk information across various governmental and non-governmental entities. The activity will include a comprehensive review of existing institutional structures, policies, and legal frameworks related to disaster risk management and climate services in Togo. This assessment would identify gaps, overlaps, and potential areas for improvement in the current system. Based on the review, a new governance structure for the MHEWS would be proposed. The structure would likely include a high-level inter-ministerial steering committee to provide overall strategic direction and ensure political support. Below this, a technical working group comprising representatives from key agencies such as the national meteorological service, hydrological department, disaster management agency, and relevant ministries would be established to oversee day-to-day operations and coordination. Clear roles and responsibilities would be defined for each participating institution (including ANAMET, DRE, ANPC, Ministry of Security and Civil Protection, Ministry of Agriculture, Livestock and Rural Development, and National Agency for Environmental Management - ANGE). This would include specifying which agencies are responsible for data collection, analysis, forecasting, warning dissemination, and response coordination.

71. The governance structure would also establish mechanisms for collaboration and information sharing between these institutions. The institutional roles will be formalized through SOPs. A key aspect of the activity will involve the development of a legal framework to support the MHEWS, potentially including new legislation or amendments to existing laws. This framework, together with the SOPs would formalize the roles and mandates of different institutions, establish data sharing protocols, and ensure the sustainability of the system. The governance framework would incorporate provisions for regular review and evaluation of the effectiveness of the MHEWS in improving disaster risk knowledge. This would include setting up monitoring and evaluation systems, conducting periodic assessments, and establishing feedback loops for continuous improvement.

72. Capacity building is integral to this activity, including training staff in relevant institutions on their roles in the new governance structure and best practices in disaster risk knowledge management. Additionally, leadership development programs may also be implemented to enhance coordination and decision-making at higher levels. By investing in both technical and leadership skills, this activity aims to create a robust framework for disaster risk management and ensure the sustainability of the governance structure.

73. **Output 2.2: Strengthened detection, monitoring, analysis and forecasting capabilities:** This output involved upgrading and modernizing Togo's hydromet infrastructure to comply with GBON's standards. The GBON standards mandate specific resolutions for surface and upper-air observations, including hourly surface observations and twice-daily upper-air observations, as such, the output is critical for enhancing Togo's ability to accurately predict and monitor natural hazards, forming the technical backbone of the MHEWS. It directly contributes to the outcome by improving the timeliness and accuracy of warnings, which is essential for effective early action. Key actions include installing advanced monitoring systems, implementing cutting-edge forecasting tools, and building institutional capacity. This output will involve close collaboration between the ANAMET, DRE, ANPC, international technical partners, academic institutions, and relevant government agencies to ensure the sustainability and effectiveness of the enhanced capabilities.

74. *Activity 2.2.1: Modernizing and maintaining weather and hydrometric observations' infrastructures and monitoring systems:* This activity involves upgrading ANAMET's technical infrastructure with modern weather and hydrological monitoring equipment. The purpose is to improve the accuracy and coverage of hydroclimate data collection, addressing the identified barrier of outdated infrastructure. This will be achieved through the installation of new and upgraded infrastructure and equipment to strengthen the country's climate, weather and hydrometric observations networks and extend the geographical coverage in compliance with WMO Global Basic Observing Network (GBON) standards. The modernization process will start with a comprehensive inventory and assessment of existing equipment to identify critical areas for upgrades. A study will be carried out to structure the optimal climate-meteorological and hydrolometric networks for the development of services. Based on this assessment and identified coverage gaps, modern weather monitoring equipment such as automated weather stations, weather radars, mobile phones for real time data sharing and satellite receivers as well as hydrometric equipment such as automatic flowmeters, water level recorders and data loggers will be procured. These new systems will be strategically installed and calibrated across Togo to enhance data collection coverage. To ensure the longevity and effectiveness of the new equipment, master plans for maintenance and operation of the climate-meteorological and hydrological networks, including allocating funds for O&M will be developed and implemented. Technical staff and observers will receive thorough training on equipment operation and maintenance procedures to support the sustainable use of these new resources, and robust Quality Management Systems (QMSs) will be established.

75. *Activity 2.2.2: Strengthening Software Infrastructure and Data Management according to international data standards:* Following the hardware upgrades, this activity focuses on enhancing ANAMET and DRE software capabilities and data management practices. The purpose is to improve data processing, analysis, and storage capabilities, enabling more sophisticated climate modelling and forecasting. It will also include digitization of historical climate and weather data and efficient storage and retrieval. An assessment of current software systems will be conducted to identify areas for improvement. Based on the assessment, a Data Center will be established and furnished with advanced meteorological software for data processing, analysis, and forecasting. A core unit of the Data Center will be a centralized data management system with functionalities to facilitate the acquisition and sharing of data (e.g. SYNOP/METAT) with production systems and users. The weather information collected and stored in the database will serve as the basis for co-developing climate products for priority sectors (such as health and agriculture) and facilitate the integration of information into user and community practices. For instance, automatic system for generating dynamic crop calendars for various crops including sub-seasonal trends will be developed for the agriculture sector. The database will be complemented with a robust data quality control and assurance protocols to maintain data integrity. CREWS-

Togo project supported the purchase of Clidata server and supports the implementation of WIS2 which is very relevant to improve data management and sharing standards.

76. This activity will ensure the durability of these actions by providing support on data rescue, adoption of a data quality control system and especially improvement of the use of real-time weather data for weather and hydrological forecast analyses and the interoperability of data exchanges. Finally, data-sharing protocols will be established with relevant national and international agencies to facilitate collaborative climate monitoring and research efforts. The ANAMET staff who will manage the Data Center will undergo comprehensive training on the new software systems and data management procedures. Moreover, CREWS-Togo is supporting the improvement of hydrological data management via the acquisition of a server. This activity will support this with the acquisition of a Hydroserver, a software cyberinfrastructure platform created to support collection, management, and sharing of time series of observations from hydrologic and environmental monitoring sites. The support will also be provided to set up a convenient room that will house the server for its optimistic functioning.

77. *Activity 2.2.3: Implementing the state-of-the-art impact-based weather and hydrological forecasting tools.* Building on the enhanced monitoring networks, this activity focuses on improving Togo's capacity to analyze data and generate accurate forecasts based on impacts with a focus on short-term, sub-seasonal and seasonal scales. It will involve acquiring and implementing advanced forecasting software, especially the numerical weather prediction models, developing tailored prediction models for different hazards and for generating sub-seasonal and seasonal climate forecasts, and training personnel in their use. There will be specific sub-activities aimed at strengthening ANAMET's multi-hazard impact-based forecasting capacities which is essential to prevent disaster loss and damage. Equally, the activity will support DRE on the use of hydrological and hydrodynamic modelling tools such as HEC-RAS for impact-based hydrological forecasting to improve flood monitoring and forecasting at national and catchments levels. The activity will also be supporting the establishment of a Laboratory of Applied Remote Sensing and Geoinformatics (LTAG) at the University of Lomé to position the University as a key technical partner to support the country's forecasting capacities.

78. The expected impact is more accurate and timely forecasts of potential hazards, enabling earlier and more targeted warnings. It will form the foundation for the development and implementation of innovative weather forecast products (based on Raincell) and a standardized weather forecast verification process based on the products available in Togo. Raincells, being localized and intense precipitation events, provide critical data that enhance the precision of weather models. This targeted approach allows meteorologists to predict and monitor severe weather conditions with greater detail and accuracy. This activity is closely linked to the previous one, utilizing the improved data inputs to generate better forecasts.

79. *Activity 2.2.4: Conducting regular early warning system testing and capacity building for the main hazards:* This activity aims to ensure the long-term effectiveness and sustainability of the enhanced monitoring and forecasting systems. It will involve developing and implementing a comprehensive training program for technical staff, conducting regular drills and simulations to test system performance, and establishing protocols for continuous improvement. The expected impact is a well-trained workforce capable of operating and maintaining the advanced systems, ensuring their reliability over time. This activity is crucial for the success of the previous activities, as it ensures the proper utilization and maintenance of the new technologies.

80. **Output 2.3: Deployed improved and diversified systems for disseminating and communicating warnings, ensuring broader coverage and reach.** This output aims to establish effective mechanisms for communicating early warnings to all at-risk populations in Togo. It directly contributes to achieving Outcome 2 by ensuring that timely and actionable warnings reach communities, enabling them to take appropriate preparatory actions. In achieving the output, emphasis will be placed on a people-centered approach. At its core, it aims to engage local communities deeply in the warning dissemination process and enhance public understanding of early warnings. The activities to be carried out to achieve this output are designed to be inclusive from the outset, ensuring that diverse voices, including those of vulnerable groups such as women, elderly, children, people with disabilities, and marginalized communities, are integrated into every stage of development and implementation. It will involve developing multi-channel communication strategies, building community-based warning networks, and leveraging partnerships with the private sector. The output will involve collaboration between national disaster management agencies, local authorities, community leaders, telecommunication companies, and media outlets to create a comprehensive and inclusive warning dissemination system. It will provide the crucial "last-mile" component ensuring warnings reach the community level, and are effectively communicated and acted upon within the communities.

81. *Activity 2.3.1: Developing and implementing a people-cantered, multi-channel early warning communication and dissemination strategies.* This activity aims to create a comprehensive approach for delivering warnings through various channels to ensure maximum reach and accessibility. It will involve mapping existing communication channels, identifying gaps in coverage, and developing tailored strategies for different regions and demographic groups. A Common Alert Protocol (CAP) and alert messages for priority hazards will also be developed under this activity. Activity 2.3.1 will prioritize an inclusive and participatory approach to develop a comprehensive, people-centered early warning communication strategy. According to WMO, a common issue with early warnings is that the creators of these warnings often lack familiarity with the end users. When recipients receive these messages, they frequently do not grasp their full meaning, especially if technical language is used. This can lead to misunderstandings and a lack of trust in the issuing authorities (WMO, 2022b). To address this gap, the activity will begin with a series of community consultations across diverse regions of Togo, ensuring representation from all demographic groups, particularly those often marginalized in decision-making processes. These consultations will include focus groups, town hall meetings, and one-on-one interviews with representatives from vulnerable populations such as women, elderly, children, people with disabilities, ethnic minorities, and economically disadvantaged groups.

82. In developing tailored strategies, the activity will establish working groups that include representatives from various vulnerable populations. These groups will co-design warning messages and dissemination protocols, ensuring that the language, format, and delivery methods are accessible and culturally appropriate for all community members. The communication strategy will consider several methods of message transmission with a strong focus on inclusivity. For instance, while SMS alerts and mobile apps will be developed, equal emphasis will be placed on low-tech solutions that can reach those without access to smartphones or cellular networks. By establishing partnerships with Togo's telecom companies, the project will ensure the efficient dissemination of warnings to a targeted 10% of mobile network subscribers, and lay the groundwork for scaling SMS alerts and mobile apps in the future. These partnerships will foster a long-term collaboration with telecom companies to enhance early warning systems and ensure sustainable and reliable communication solutions across Togo. The activity's expected impact is a significant improvement in the speed and reach of warning dissemination, contributing to achieving output 2.3. This might include community radio networks, traditional town criers, or color-coded flag systems in remote areas. The strategy will also incorporate innovative solutions like providing solar-powered radios to households in areas with limited electricity access. The activity's expected impact is a significant improvement in the speed and reach of warning dissemination. By providing the overall framework for warning communication, it will contribute to achieving output 2.3.

83. *Activity 2.3.2: Building community-based warning networks and conducting public awareness campaigns.* This activity will implement a comprehensive, multi-faceted approach to strengthen last-mile communication, develop localized warning systems, improve warning messaging, and raise public awareness. The activity will involve will focus on developing clear, actionable, and easily understood warning messages. This will involve creating standardized but flexible warning templates, developing universal warning symbols, crafting messages in local languages and dialects, and incorporating specific action guidance in warnings. To ensure comprehension, all messages will be tested and refined with diverse community groups. Emphasis will also be placed on consistency and coherence in messaging and a consolidation of warning outlets to ensure that all warning messages emanate from a single authorized source. Simultaneously, the activity will establish a network of community-based communication hubs equipped with reliable devices such as satellite phones, two-way radios, or robust mobile networks with backup power sources. Each community will be assisted in developing its own localized warning system that integrates traditional knowledge with modern technologies.

84. These systems will be designed collaboratively with community members to ensure they are culturally appropriate and easily understood by all. A key component of this activity will be the selection and training of local volunteers as warning ambassadors. The training program will cover understanding and interpreting warning information, operating local warning systems, effective communication techniques, basic first aid, and leadership skills during crises. Special effort will be made to include women, youth, and members of marginalized groups as warning ambassadors to ensure diverse representation. Ongoing public education and awareness campaigns will be crucial for the success of the early warning system. The campaign will include regular community meetings, school-based education programs, development and distribution of informational materials in local languages, use of popular media, and annual community preparedness events. Where appropriate, technology will be leveraged to enhance engagement, including the development of simple mobile apps, interactive online hazard maps, and use of social and traditional media platforms for rapid information dissemination.

85. *Activity 2.3.3: Establishing feedback and verification mechanisms.* Activity 2.3.3 aims to ensure the continuous improvement and relevance of the early warning system. The first step will involve developing a digital platform that integrates various data sources to track warning dissemination and receipt across different channels. This platform will utilize APIs from telecommunication companies to monitor SMS delivery rates, integrate with community radio stations to track broadcast times, and use GPS-enabled mobile apps to verify warning receipt in specific geographic areas. To complement this technological approach, a network of community monitors will be established, with representatives from diverse demographic groups trained to observe and report on local warning dissemination effectiveness using standardized protocols. Regular surveys will form a crucial component of the feedback mechanism. These will include annual comprehensive surveys conducted through face-to-face interviews, focusing on public perception of the warning system, understanding of warning messages, and typical response behaviors. Additionally, rapid post-event surveys will be conducted immediately after each warning issuance to gather fresh insights on system performance. To ensure inclusivity, these surveys will be designed in multiple languages and formats, including pictorial versions for low-literacy populations and will be conducted through various means including mobile phone surveys, community meetings, and door-to-door visits in remote areas.

86. A community-based hazard reporting system will be established to leverage local knowledge and observations. This will include a user-friendly mobile app for smartphone users, an SMS-based reporting system for basic phone users, and a network of strategically located "hazard report kiosks" in community centers for those without phone access. Local volunteers will be trained to assist community members in using these reporting tools. The reported data will be verified and integrated into the early warning system, enhancing its accuracy and local relevance. To ensure that feedback leads to tangible improvements, a dedicated analysis team will be established. This team will regularly review the collected data, identify trends and issues, and develop recommendations for system enhancements. They will work closely with the teams responsible for warning dissemination strategy and community-based networks to implement these improvements. Quarterly review meetings will be held with representatives from various stakeholder groups, including vulnerable populations, to discuss the feedback results and proposed changes.

87. *Activity 2.3.4: Establishing and strengthening coordination with private sector telecommunication networks and media.* This activity focuses on leveraging private sector resources and expertise to enhance warning dissemination. It will involve negotiating agreements with telecom companies for priority warning message delivery, collaborating with media outlets for standardized warning broadcasts, and exploring innovative public-private partnerships for warning services. Technical working groups will also be formed to develop detailed protocols for warning dissemination, including message formats, triggering mechanisms, and delivery prioritization. To reinforce Activity 1.4.2, innovative public-private partnership models with the telecommunication networks will be explored to ensure sustainability and mutual benefit, potentially including cost-sharing arrangements for infrastructure upgrades or joint research initiatives.

88. The implementation will also focus on developing and regularly testing integrated warning dissemination drills, involving all partner organizations to simulate various emergency scenarios. Special partnerships will be sought to address the challenge of reaching remote or technologically underserved areas, such as collaborating with satellite communication providers or local radio stations. Crucially, a joint monitoring and evaluation framework will be established to track the effectiveness of these public-private collaborations, with regular review meetings to assess performance and explore new opportunities.

89. **Output 2.4: Enhanced community and institutional readiness for effective disaster response.** The output aims to enhance community and institutional readiness for effective disaster response, directly contributing to Outcome 2 by strengthening emergency preparedness and response capabilities. This output focuses on equipping key institutions, developing action plans, conducting training exercises, raising public awareness, and implementing continuous improvement processes. Essential tools and equipment necessary for disaster response will be provided to key institutions such as the National Civil Protection Agency and local government authorities. Additionally, it will lead to the development of community-specific protocols to ensure that responses are tailored to the unique needs and vulnerabilities of different communities. To reinforce the effectiveness of the protocols, regular drills and simulation exercises will be organized to test them, ensuring that both institutions and communities are well-practiced in their disaster response procedures. Education programs will be implemented to raise public awareness about disaster risks and preparedness measures. These programs will be conducted in collaboration with educational institutions and civil society organizations, aiming to build a culture of preparedness within communities.

90. Additionally, continuous improvement processes will be put in place, involving regular evaluations and updates to action plans based on lessons learned from training exercises and actual disaster events. The delivery of this output will involve collaboration between various stakeholders, including the National Civil Protection Agency, local government authorities, community leaders, educational institutions, and civil society organizations. By working together, these stakeholders can ensure a comprehensive and coordinated approach to disaster preparedness and response.

91. *Activity 2.4.1: Equipping the National Civil Protection Agency with the tools and equipment for disaster preparedness and response.* Activity 2.4.1 focuses on equipping the National Civil Protection Agency (ANPC) with tools and equipment for disaster preparedness and response, which is crucial for enhancing communities' capacity to manage emergencies effectively. A comprehensive needs assessment will be conducted to identify the gaps in the agency's current equipment inventory and prioritize acquisitions based on Togo's specific hazard profile and resource constraints. Key actions include conducting a detailed inventory, prioritizing equipment needs, procuring from reliable suppliers (preferably regional), developing maintenance schedules, providing staff training, and establishing deployment protocols for deployment of equipment during emergencies. Given Togo's context, which includes risks such as floods, droughts, and potential urban disasters, a range of equipment could be purchased. This may include water rescue equipment like inflatable boats and water pumps; search and rescue tools such as thermal imaging cameras and cutting tools; personal protective equipment; communication devices including portable radios and mobile command centers; first aid supplies; all-terrain vehicles; portable power equipment; basic firefighting tools; rope rescue equipment; and portable shelters. This equipment will significantly enhance the agency's capacity to respond to various emergency scenarios.

92. The activity will also involve establishing partnerships with local technical schools or vocational centers for regular maintenance and repair, ensuring sustainability and building local capacity. By improving the agency's operational readiness, this activity lays a strong foundation for subsequent activities in Output 2.4, particularly the implementation of community action plans and the conduct of training exercises, which will rely on the availability and proper use of this equipment.

93. *Activity 2.4.2: Developing community action plans and emergency protocols that are regularly reviewed and updated.* The activity aims to develop community action plans and emergency protocols that are regularly reviewed and updated, ensuring that each community has tailored, up-to-date guidelines for disaster response. It will involve facilitating community workshops where local leaders, residents, and stakeholders collaborate to create detailed action plans addressing specific vulnerabilities and resources within their communities. There will be deliberate efforts to include vulnerable groups in the consultations. The community plans will be consistent with and integrated into the broader National Disaster Risk Management Framework developed under Activity 1.1.2. This will ensure coherence and coordination between local and national efforts, enhancing overall disaster response efficiency. A crucial part of this activity is establishing periodic review mechanisms to ensure that these plans are not static but are continuously improved based on new information, changing conditions, and lessons learned from previous incidents and drills. This activity builds on the institutional capacity developed in 2.4.1 and Component 1, providing a solid foundation for these community-level preparedness efforts. Ultimately through activity 2.4.2 communities will be empowered to take ownership of their disaster preparedness, fostering resilience and enabling swift, effective responses to natural hazards. The clear, well-practiced protocols, will enable vulnerable communities to minimize confusion and chaos during emergencies, ultimately reducing the potential impact of disasters and saving lives.

94. The community-specific action plans developed under this Activity 2.4.2 will be integrated into the National Disaster Risk Management Framework established in Activity 1.1.2 through a participatory and bottom-up approach. Local leaders and residents, especially those representing vulnerable groups, will collaborate in community workshops to design action plans tailored to their specific hazards, vulnerabilities, and resources. These workshops will ensure that each community's unique needs and practices directly feed into the national framework, fostering an inclusive and responsive disaster risk management system. This process will be enhanced by structured feedback loops, allowing local input to shape the national framework's priorities and implementation strategies and vice versa.

95. *Activity 2.4.3: Conducting regular community-based training and simulation exercises.* Under this activity, regular community-based training and simulation exercises to familiarize community members with emergency procedures and test the effectiveness of their action plans will be carried out. Its implementation will involve designing realistic, scenario-based exercises that reflect the specific hazards and vulnerabilities of each

community. These scenarios might include natural disasters such as floods, earthquakes, or storms, tailored to the local context. The drills will be scheduled periodically to maintain a high level of preparedness and adaptability. After each exercise, detailed feedback sessions will be held to identify strengths and areas for improvement, ensuring that action plans are continually refined and updated. This iterative process not only tests the plans developed in Activity 2.4.2 but also enhances community readiness through hands-on, practical experience. The importance of this activity lies in its ability to transform theoretical plans into actionable steps, building confidence and competence among community members. By regularly engaging in these training exercises, communities will be better prepared to respond effectively to real emergencies, thereby reducing potential impacts and enhancing overall resilience.

96. *Activity 2.4.4: Establishing and strengthening public awareness and education programs.* The activity aims to establish and strengthen public awareness and education to ensure widespread understanding of climate-related hazards, disaster risks and appropriate responses, with a particular focus on targeting women and other marginalized groups. It will lead to increased community participation in disaster risk management and decision making for climate resilience. Implementation will begin with the development of comprehensive educational materials tailored to various audiences, including brochures, posters, videos, and interactive online resources. These materials will specifically address the unique needs and vulnerabilities of women and marginalized groups, ensuring inclusivity. Concurrently, school-based programs will integrate disaster preparedness into the curriculum, educating children and adolescents, who can then bring this knowledge home to their families. DRR will also be integrated into university curricula and training centers for professional education to increase dissemination among stakeholders and populations. At the communal level, community outreach campaigns will be organized, leveraging local media, social platforms, and community events to disseminate information widely, leveraging on the achievement of Activity 2.1.4.

97. Special emphasis will be placed on reaching out to women and marginalized groups through workshops, seminars, and public demonstrations, providing them with hands-on learning experiences and ensuring their active participation. This activity complements the previous ones by fostering a culture of preparedness and ensuring that all community members, regardless of age, gender, or social status, are informed and ready to participate effectively in disaster response efforts. To identify and engage these groups, the project will conduct a participatory selection process during the implementation phase, collaborating with local governments and community leaders to pinpoint vulnerable populations. This process will consider factors like geographical vulnerability, socio-economic status, and previous exposure to climate-related risks to ensure inclusivity and representation. The selection criteria will be refined based on community consultations and needs assessments to ensure the most relevant communities and groups are reached. Local authorities, NGOs, and community-based organizations (CBOs) will assist in identifying and validating participants, leveraging their local knowledge to ensure a thorough and inclusive selection.

98. The importance of this activity lies in its ability to create a well-informed public that can act swiftly and appropriately in the face of a disaster, ultimately reducing vulnerabilities, minimizing potential impacts, and saving lives. By embedding disaster awareness and education into the fabric of everyday life, and by empowering women and marginalized groups, communities will be more resilient and better equipped.

99. *Activity 2.4.5: Conducting regular evaluation and lesson-learning exercises.* The activity involves conducting regular evaluation and lesson-learning exercises. Its purpose is to continuously improve disaster preparedness and response capabilities based on real-world experiences and changing conditions. Key actions will include post-disaster assessments, stakeholder feedback sessions, and the integration of lessons learned into existing plans and protocols. This activity creates a feedback loop that enhances the effectiveness of all previous activities, ensuring the ongoing relevance and improvement of disaster preparedness efforts.

Component 3: Leveraging CIEWS for investment and financial decisions.

Outcome 3: Adaptation actions are strengthened through increased integration of accurate climate information

100. This component focuses on leveraging the Climate Information and Early Warning System (CIEWS) to improve investment and financial decisions related to climate change adaptation among vulnerable communities in Togo. The aim of this outcome is to enhance the effectiveness of adaptation actions in Togo by integrating more accurate and timelier climate information into decision-making processes. This outcome is crucial because it addresses the gap between available climate data and its practical application in adaptation strategies. By strengthening the link between climate information and concrete actions, it will contribute

significantly to solving the problem of inadequate preparedness for climate-related hazards and help overcome barriers such as limited institutional capacity and insufficient use of climate data in planning.

101. To achieve this outcome, key actions will include laying the foundations to transition towards forecast-based early action in Togo including developing forecast-based action protocols, establishing early warning triggers with clear thresholds, and creating an emergency funding mechanism to provide the seed capital to attract additional investments into the sector. These actions will enable a more proactive and efficient response to climate-related risks, allowing for timely implementation of adaptation measures. The outcome is specific in its focus on strengthening adaptation actions through improved use of climate information, and it will contribute to Togo's national adaptation priorities and support the country's efforts to meet international commitments related to climate change adaptation and disaster risk reduction.

102. **Output 3.1: Foundations for Forecast-based Actions established** This output is crucial for Togo's transition to a proactive, anticipatory approach to climate-related risks. By establishing forecast-based actions, the output directly contributes to Outcome 3 aim of strengthening adaptation actions through increased integration of accurate climate information. The output will focus on introducing forecast-based action in Togo and support the country's transition to forecast-based financing, laying the foundational work for creating an enabling environment for early action. Due to forecast-based actions requiring substantial resource investment, coupled with the limited resources raised for this project, the project will take a prudent approach of laying the foundational work to introduce forecast-based financing in the country. It will strengthen institutional capacities to understand the concept, provide the foundational tools, data and systems to enable an evolutionary transition to FbA. The key actions to be implemented under the output include developing detailed action protocols, setting up early warning triggers with clear thresholds, and conducting comprehensive training for stakeholders. These activities will involve collaboration among various entities, including the National Meteorological and Hydrological Services, the National Civil Protection Agency, local authorities, and community representatives. International partners with expertise in forecast-based action, such as the African Risk Capacity, IFRC and WFP may also provide technical support.

103. *Activity 3.1.1: Developing the institutional framework and protocols for forecast-based action.* Developing a robust institutional framework is paramount for the successful implementation of forecast-based actions. This framework serves as the backbone for coordinating efforts, ensuring accountability, and fostering long-term sustainability of the system. A dedicated oversight committee or task force comprising representatives from key stakeholders including meteorological and hydrological services (ANAMET and DRE), disaster management agencies (ANPC), humanitarian organizations, and local authorities. The body will be responsible for developing policies, guidelines, and legal framework to formalize forecast-based actions within existing disaster management (National Disaster Risk Management Framework developed under Activity 1.1.2) and climate adaptation structures. The mandates, roles, and responsibilities of each participating institution will be clearly defined the to avoid confusion and ensure efficient operations, while their relationship will be formalized through memoranda of understanding to establish clear lines of communication and coordination. Measures will also be instituted to integrate forecast-based actions into national and local disaster risk reduction strategies and development plans.

104. This integration will help secure political buy-in, allocate necessary resources, and align forecast-based actions with broader resilience goals. To support this, a financial mechanism will be created within the institutional framework involving a dedicated emergency fund (See Output 3.2 for details of the fund). Simultaneously, the activity will also create detailed early action protocols (EAPs) which will outline specific actions to be taken when certain climate forecasts are made. These protocols will provide clear guidance on what steps should be taken, by whom, and when, based on different levels of forecasted risk. They will also address forecast-based actions to be undertaken in the post-warning, pre-hazard event time-period, relating to the hazard-type and the affected sub-populations.

105. *Activity 3.1.2: Set-up early warning triggers including clear measurable thresholds to trigger pre-defined early actions.* This activity is crucial for operationalizing the forecast-based action system in Togo. It directly contributes to the outcome of strengthening adaptation actions by providing a concrete mechanism to translate climate information into timely, pre-defined actions. The activity will involve a collaborative process to identify and establish specific, measurable thresholds for various climate hazards, such as rainfall levels for flood warnings or temperature thresholds for heatwaves that, when reached, will automatically trigger pre-defined early actions. Key actions to achieve this output include leveraging on the assessment of climate risks and historical data (Activity 2.1.1 under Output 2.1) to define appropriate thresholds, developing and integrating

these thresholds into the existing early warning systems (leveraging Output 2.2 and 2.3), and ensuring that all relevant stakeholders are trained in the use of these systems. Key stakeholders and partners involved in delivering this output to ensure that the thresholds are practical and actionable include ANAMET, which will work closely with the National Civil Protection Agency, relevant ministries (e.g., Agriculture, Health), and local authorities. African Risk Capacity will also be a key technical partner in this activity. Additionally, continuous monitoring and evaluation will be conducted to refine and improve the thresholds and response actions based on real-world experiences and feedback.

106. *Activity 3.1.3: Training stakeholders including relevant agencies, communities, and volunteers on implementing forecast-based actions.* Activity 3.1.3 is a vital element of ensuring the effectiveness and sustainability of the early warning system. This activity involves designing and conducting comprehensive training programs tailored to the needs of different stakeholders. The primary focus is on enhancing their capacity to interpret early warning triggers, understand forecast-based action protocols, and effectively execute the required actions when these triggers are activated. This activity is paramount, as it directly influences the preparedness and responsiveness of the entire system. The stakeholder will be trained to ensure that early warnings translate into timely and appropriate actions, thereby minimizing the adverse impacts of climate-related hazards. The African Risk Capacity will be the technical partner to carry out the capacity building program, while ANAMET, ANPC, local government officials, community leaders, and volunteers will be the direct beneficiaries. Collaboration with educational institutions, non-governmental organizations, and international experts will also be sought to enhance the training content and delivery. A detailed training curriculum that covers the various aspects of the early warning system, such as interpreting climate data (leveraging Activity 2.2.2), understanding the established thresholds and triggers (leveraging Activity 3.1.2), and implementing specific forecast-based actions (Activity 3.1.1).

107. The training will utilize a mix of theoretical sessions, practical exercises, simulations, and drills to ensure participants gain hands-on experience and confidence in their roles. Additionally, the training programs will be adapted to the specific contexts and needs of different groups, ensuring relevance and effectiveness. To ensure the training programs are impactful, a train-the-trainer approach will be adopted, where selected participants are trained as trainers who can then cascade the training to wider audiences. Regular refresher courses and updates will be provided to keep stakeholders abreast of any changes or improvements in the early warning system and forecast-based action protocols. Monitoring and evaluation mechanisms will be established to assess the effectiveness of the training programs and make necessary adjustments based on feedback and evolving needs.

108. **Output 3.2: Emergency Funding Mechanism (EFM) created and operational.** This output focuses on establishing a financial mechanism that ensures the availability and rapid disbursement of funds in response to climate triggers and early warnings. The importance of this mechanism lies in its ability to provide immediate financial resources, facilitating swift and efficient emergency actions that can significantly reduce the impact of climate hazards on vulnerable communities. The mechanism will ensure that pre-defined actions triggered by climate forecasts can be swiftly executed without delays due to funding constraints. By having an operational emergency funding mechanism, the project can support timely interventions such as evacuations, provision of emergency supplies, and implementation of protective measures.

109. *Activity 3.2.1: Establishing the legal and institutional and operating framework for the Emergency Fund.* The activity will involve a comprehensive process of designing and implementing the legal, institutional, and operational structures necessary for the Fund's successful operation. To execute the activity, several sub-activities will be carried out, including drafting legislation to establish the Fund, defining its governance structure, defining the roles and responsibilities of various stakeholders. The operational framework design will include operational guidelines and procedures for the Emergency Fund, covering aspects such as fund allocation criteria, disbursement processes, guidelines and protocols for fund disbursements linked to early warning triggers, monitoring and evaluation mechanisms, and oversight and accountability measures. This will also include setting up the financial management systems and tools required for efficient fund administration and to track contributions, manage disbursements, and ensure transparency and accountability. Examples of specific guidelines to ensure the safekeeping of the EMF may include establishing a Steering Committee to oversee the fund's governance, requiring the ANPC Board of Directors to review and authorize any disbursements, and implementing a two-tier approval process for fund deployment (authorisation by the steering committee approval by the ANPC Board). Likewise, regular monitoring and audits will be carried out to ensure the transparency and accountability of the funding mechanism to maintain donor confidence and

demonstrate the effective use of funds. Periodic evaluation with continuous improvement measures will also be implemented based on feedback and evolving needs.

110. ANPC will be the lead executing agency hosting the fund, and will collaborate with ANAMET, local government, and communities to develop the EFM framework. Legal experts and financial consultants may be engaged to provide specialized input, while international partners such as the African Risk Capacity, African Development Bank (AfDB), IFRC and WFP will be consulted to offer technical assistance based on best practices from similar funds globally. These international agencies will be engaged through Memoranda of Understanding (MOUs), established in alignment with the stakeholder mapping and partnership outcomes of Activity 1.2.2.

111. *Activity 3.2.2: Mobilizing and securing financial resources to operationalize and replenish the fund.* This activity aims to identify and secure diverse and sustainable sources of funding to ensure the Emergency Fund remains well-capitalized and capable of responding to climate-related emergencies promptly. Initially, the fund will be capitalized with a seed capital of USD 2 million from GCF. This initial investment will provide a strong foundation for the fund's operations, enabling immediate response capabilities. The importance of this activity lies in its role in ensuring the Emergency Fund's long-term viability. Therefore, the activity's core focus is ensuring replenishment of the fund and that financial resources are always available for rapid response, thereby enhancing the overall climate resilience of the targeted communities. This will be achieved by developing a comprehensive Resource Mobilization Strategy (RMS) to ensure the fund's continuous replenishment and growth. The RMS will incorporate the following:

i. Strong stakeholder engagement and partnership building by engaging with a broad range of stakeholders, including government agencies, international donors, and private sector partners, to secure commitments and contributions to the EMF. This involves conducting meetings, meeting, negotiations, and campaigns to highlight the project's achievements and its positive impacts on vulnerable communities.
ii. Exploring and implementing innovative funding mechanisms to replenish the fund. This may include establishing public-private partnerships, risk transfer mechanisms through leveraging insurance reinsurance schemes, and creating crowdfunding initiatives. Additionally, the project will explore the potential of green bonds and climate resilience bonds as sustainable financial instruments to attract investment.
iii. Preparing and submitting grant applications to international donors, development agencies, and philanthropic organizations. This includes identifying suitable funding opportunities, crafting compelling proposals, and demonstrating the impact and importance of the EFM. For instance, the upcoming Loss and Damage Fund has been identified as a potential key partner and the preliminary works will be carried out to ensure the country is strategically placed to access funding from the Loss and Damage Fund, once operational, to provide additional capitalization and replenishment of the Emergency Fund.

112. The Ministry of Finance working closely with ANPC will play a crucial role in developing the resource mobilization strategy. As the government entity responsible for overseeing resource mobilization in the country, the Ministry of Finance will play a central role in the establishment and operationalization of the Emergency Fund. Their involvement is crucial to ensuring the fund's alignment with national resource mobilization strategies and financial regulations. Specifically, the Ministry will provide technical oversight and review the fund's implementation, including fiduciary and governance arrangements, to maintain compliance with anti-money laundering and counter-terrorism financing (AML/CFT) regulations. Additionally, the Ministry will be consulted about securing co-financing and exploring long-term financing mechanisms to support the sustainability of the fund.

113. To formalize these roles, Activity 1.3.2 will establish a structured engagement framework, which will include a Memorandum of Understanding (MoU) signed between the Ministry of National Security and Civil Protection and the Ministry of Finance (MoF) to outline the Ministry of Finance's responsibilities and collaborative commitments in the project. This arrangement ensures that the MoF's contributions, from technical guidance to regulatory compliance, are effectively integrated, supporting a transparent and sustainable Emergency Fund framework.

114. Activity 3.2.1 is dedicated to the establishment and operationalization of the Emergency Fund. This includes both the development of the fund structure and its deployment to provide direct financial assistance to communities in times of crisis, with specific support for evacuation, resettlement, and rescue efforts as

needed. This initial GCF investment will ensure that the Emergency Fund is fully functional and capable of responding to urgent needs during disaster events.

115. In contrast, Activity 3.2.2 focuses on creating measures to replenish the fund, ensuring its sustainability over the long term. This includes strategies to attract additional resources from government allocations, donor contributions, and potential public-private partnerships. Together, these activities are designed to both establish and sustain the Emergency Fund, ensuring it remains a reliable financial mechanism for disaster response in the future.

116. The indicative target size of the Emergency Fund, once fully funded, is projected to be approximately between USD 2 and 4 million. This amount is determined by preliminary high-level analysis of historical data on climate-related emergencies, the expected frequency and severity of future events, and projected costs for response efforts, including evacuation, resettlement, and rescue operations. This financial threshold ensures the fund is adequately prepared to address immediate disaster response needs, enhancing community resilience and reducing reliance on government budgetary sources as the sole funding source for emergency response and disaster risk reduction in the country. The adequacy and level of the funding base will be assessed in detail and refined during the project implementation as part of the resource mobilization strategy development.

117. The Emergency Fund will primarily be used to support emergency relief efforts in response to climate-related disasters, ensuring rapid and effective assistance to affected communities. The funds will facilitate critical interventions such as providing food, clean water, and temporary shelter to disaster victims. Additionally, the fund will support evacuation and resettlement operations, medical assistance for the injured, and psychosocial support for trauma-affected individuals. It will also cover essential logistics, including transportation for relief supplies, deployment of emergency response teams, and restoration of basic services disrupted by the disaster.

118. The Emergency Fund will be managed by ANPC functioning under the directions and control of the Ministry of National Security and Civil Protection, the EE, following strict governance protocols to maintain transparency and accountability to be developed as part of Activity 3.2.1. The acceptable investment outlets for the fund will focus on low-risk instruments to preserve capital, ensuring liquidity to meet emergency demands swiftly. The Fund is designed to operate on a revolving basis well beyond the project implementation period. Therefore, any unused portion of the fund remaining after the project life will not be returned to grant providers; instead, it will continue to support emergency response in alignment with GCF-approved purposes. A fund management and operational framework to be developed under Activity 3.1.2 will ensure that retained funds are used exclusively for disaster risk reduction and response, with oversight and accountability mechanisms put in place to uphold compliance with these objectives.

B.2.2. Outcome mapping to GCF results areas and co-benefits categorization

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1 Energy generation and access	**MRA 2** Low-emission transport	**MRA 3** Building, cities, industries, appliances	**MRA 4** Forestry and land use	**ARA 1** Most vulnerable people and communities	**ARA 2** Health, well-being, food and water security	**ARA 3** Infrastructure and built environment	**ARA 4** Ecosystems and ecosystem services
Outcome 1: Climate data and information collection processes are strengthened enabling better decision-making in Togo.	☐	☐	☐	☒	☒	☒	☒	☐
Outcome 2: A multi-hazard early warning system is established in	☐	☐	☐	☐	☒	☒	☒	☐

Togo to build communities' resilience to natural hazards is enhanced, through increased awareness, timely and accurate warnings, and strengthened emergency preparedness and response capabilities.								
Outcome 3: Adaptation actions are strengthened through increased integration of accurate climate information	☐	☐	☐	☐	☒	☒	☒	☐

If any co-benefits have been identified in section D.3, fill in the co-benefit table below to map each co-benefit to the corresponding category as defined in the FP guidance note.

Co-benefit number	Co-benefit					
	Environmental	**Social**	**Economic**	**Gender**	**Adaptation**	**Mitigation**
Co-benefit 1: Improved livelihood resilience to climate impacts among project beneficiaries.	☒	☐	☐	☐	☒	☐
Co-benefit 2: Enhanced gender equality and social inclusion in project activities and benefits.	☐	☒	☐	☐	☒	☐

B.3. Implementation / institutional arrangements (max. 750 words)

119. The West African Development Bank (BOAD) will be the project's Accredited Entity. BOAD will be responsible the projects oversight and will perform supervisory roles on the project. Reporting to BOAD will be the Executing Entity: The Ministry of National Security and Civil Protection, to which the National Civil Protection Agency (ANPC) is affiliated. ANPC under the direction of the Ministry of National Security and Civil Protection will be responsible for the day-to-day management and project execution. A PMU will be constituted and hosted by the ANPC. A Project Steering Committee will also be set up to oversee the PMU and serve as the project's decision-making and governance function. The project will also be supported by an array of implementing entities, technical partners, service providers and consultants. The specific roles and functions of each of the key institutional players are detailed as follows:

Accredited Entity:

120. BOAD will be the project's Accredited Entity (AE). As AE, BOAD will be responsible for oversight and supervising the implementation, financial management, quality assurance, evaluation, reporting and closure of the project's activities. In compliance with the Accreditation Master Agreement (AMA) and Funded Activity Agreement (FAA), BOAD ensure the proper management and application of GCF Grant Proceeds by the

Executing Entity by ensuring that the GCF proceeds are utilized in accordance with the terms of the Funded Activity Agreement and the Accreditation Master Agreement. BOAD will be responsible for requesting and administering the GCF proceeds and will disburse the proceeds to the Executing Entity according to the project's annual work plan and budget.

121. BOAD will enter into a Funded Activity Agreement with GCF and will in turn enter into a subsidiary agreement with the Executing Entity, the Ministry of National Security and Civil Protection . The subsidiary agreement will form the legal basis for the transfer to GCF proceeds to the Ministry.

Executing Entity:

122. The Ministry of National Security and Civil Protection, to which the National Civil Protection Agency (ANPC) is affiliated will act as the project Executing Entity. ANPC is a pivotal institution mandated to coordinate disaster preparedness, response, and recovery efforts nationwide. Established in 2007, ANPC operates under the Ministry of Security and Civil Protection and is tasked with ensuring the safety and resilience of communities facing natural and man-made disasters. With a skilled workforce comprising emergency response professionals and administrative staff, ANPC manages a robust framework for disaster risk management, encompassing early warning systems, evacuation procedures, and post-disaster recovery initiatives.

123. ANPC has spearheaded various projects aimed at enhancing disaster resilience, including Project to strengthening the resilience of communities in the Savanes region to disaster risks, Project to strengthening disaster risk governance and recovery capacity, project to support post-flood recovery 2022 in ECOWAS member states, project to strengthening the emergency response system in northern Togo, in the Savanes region, showcasing their ability to mobilize resources effectively and collaborate with national and international stakeholders. Their extensive field experience and operational expertise make them a preferred entity for hosting the project management unit and overseeing project activities especially relating to disaster risk reduction and emergency response initiatives. An updated Financial Management Capacity Assessment will be conducted on ANPC prior to project initiation.

124. Ministry of National Security and Civil Protection will enter into a subsidiary agreement with BOAD for the management of the GCF proceeds and their general execution functions under the project. ANPC will host the Project Management Unit and conduct recruitment of the required Staff, and the Project Steering Committee. While ANPC under the guidance of Ministry of National Security and Civil Protection, will have the overall implementation responsibility, some of the project's outputs and activities will be implemented by implementing entities. The implementing entities, technical partners, and service providers will report to ANPC, and ANPC will in turn report to BOAD through the Ministry of National Security and Civil Protection, after the review and endorsement of all reports by the Project Steering Committee. The final say for decisions pertaining to the activities will always lie with the EE, the Ministry of Security and Civil Protection.

125. The Emergency Fund Mechanism established under Activity 3.2.2, will be hosted by the ANPC. The legal framework, operating procedures and policies of the EFM will be established during the project implementation as part of Activity 3.2.1, however the PSC will play a key role in terms of oversight and accountability of the Fund.

Project Steering Committee:

126. The PSC will be composed of representatives of the projects key stakeholders including Ministry of Environment and Forest Resources (MERF), Ministry of National Security and Civil Protection, ANPC board members, BOAD, the NDA (Directorate of Environment), ANGE, members from the National Supervisory Board (NSB) and other government representatives.

127. The steering committee will sit semi-annually to review the project's progress, take and endorse decisions affecting the implementation. The PCS will provide the strategic policy direction, give guidance to ensure the project remains with the overall objective and national interest, and oversee overall project execution activities including, reviewing and approving annual work plans, budgets and progress reports. They will also facilitate coordination and collaboration between the various institutions and will provide the political backing for the mobilization of the project's financial and technical resources to support project implementation. Having

members from Ministry of National Security and Civil Protection, ANPC Board of Directors as well as the NSB in the steering committee will ensure ANPC will follow the correct and proper steps and will manage the funds accordingly at each stage for the smooth achievement of the expected results.

128. The PSC will play an advisory and oversight role, while the Executing Entity will retain ultimate decision-making authority regarding project implementation, which will ensure that all project activities are executed smoothly and efficiently. The Executing Entity will be responsible for final decisions on the operational aspects of the project, while the PSC provides high-level guidance and endorses strategic initiatives to support project success.

Project Management Unit:

129. The PMU will be hosted by ANPC and will report to the Project Steering Committee. It will comprise technical experts specialized in disaster risk management, early warning, environment, development, etc. They will be responsible for the day-to-day management of the project, examining the technical aspects of the project, proposing solutions to technical challenges, developing the detailed action plans for each project component, and ensuring the quality and relevance of project interventions and deliverables of the service providers and technical partners. At its core will be a Project Coordinator, a Project Assistant, a Finance Officer a Procurement Officer, Office Assistant, a Gender and ESS Specialist, Monitoring, Evaluation and Learning (MEL) Specialist and Officer, and Technical Advisors (Urban geographer etc.). PMU will be recruited by EE under AE supervision.

130. The PMU will be responsible for preparing the project's financial, technical and progress reports, audited financial statements audited by an independent external auditor, and submitting these reports to the PCS for endorsement/approval before submission to the Accredited Entity. It will source the relevant technical partners and service providers and seek areas of collaboration by establishing contact with key stakeholders and development partners.

Implementing Entities:

131. The Executing Entity will sign a Memorandum of Understanding (MOU) with the Togolese Meteorological Agency (ANAMET) who will be acting as the project's implementing entity. ANAMET will be the beneficiary of some of the project's activities aimed at strengthening climate resilience, such as developing climate information systems, enhancing early warning systems, and implementing community adaptation initiatives. ANAMET will not be a direct recipient of the GCF resources, but they will be responsible for coordinating the activities of the service providers and technical partners regarding the aspects of the project on climate information and early warning. They will provide quarterly reports to the EE on progress and the EE will review and approve their quarterly work plans. While the Implementing Entities implements the specific activities, the Executing Entity will retain ultimate decision-making authority regarding project implementation. The EE, Ministry of National Security and Civil Protection will have the final say on decision pertaining to the activities implemented by the Implementing Entity.

132. ANAMET, the National Meteorological Service of Togo, plays a crucial role in monitoring and forecasting weather and climate conditions across the country. Initially created as "Service de la Météorologie" (Service of Meteorology) by the decree Nº 434 of 31 August 1932, and subsequently erected as "Direction de la Météorologie Nationale" (Directorate of National Meteorology) and "Direction de la Météorologie Nationale" (General Directorate of National Meteorology) by the decrees Nº 71/027 of 08 November 1971 and 28 October 2005 respectively, it is in 2022 that it has been transformed to an Agency, "Agence Nationale de la Météorologie du Togo (ANAMET)" (National Agency of Meteorology of Togo) by the decree Nº 2022-110/PR of 11 November 2022. ANAMET operates currently under the Prime Minister's Office and is mandated to provide accurate and timely meteorological information to support various sectors including agriculture, disaster management, and water resource management. With a dedicated team of meteorologists, agrometeorologists, and technicians, ANAMET leverages its expertise to enhance national resilience to climate-related risks and support sustainable development initiatives.

133. Over the years, ANAMET has undertaken significant projects such as the Intra-ACP Climate Services and Related Applications Programme (ClimSA), the Volta Flood and Drought Management (VFDM) project and the West Africa Food System Resilience Program (FSRP-Togo) among others, demonstrating their capability in integrating modern technologies and methodologies to improve weather monitoring, early warning systems, and climate data management. Their experience in these areas, coupled with their extensive network of regional and international collaborations, underscores their position as a trusted Implementing Entity (EIE) for climate resilience and disaster risk reduction initiatives. ANAMET's selection as an EIE reflects their institutional capacity, technical proficiency, and commitment to advancing Togo's climate agenda through innovative and effective solutions.

134. The “Direction des Ressources en Eau, DRE” (Directorate of Water Resources) which is under the Ministry of Water and Sanitation, is responsible for operational hydrology in Togo. DRE’s mission is to understand, monitor the quantity and quality of water resources and their uses, as well as their integrated and balanced management throughout the territory. To this end, DRE has the objectives (i) to develop national policy, directives, standards related to water and their implementation, (ii) to set up and manage national hydrometric and piezometric networks, (iii) to perform the hydrological and hydrogeological analysis necessary for the sustainable water resources management, (iv) to review the applications and operations of water resource, (v) to collect basic data on water resources and set up a database, (vi) to promote the integrated water resources management (IWRM) and the organization and coordination of its implementation, (vii) to develop the regional and international cooperation and (viii) to ensure the administration and management of the integrated water resources information system (Système intégré d'information sur les ressources en eau, SIIEAU).

Technical Partners and Service Providers:

135. A group of technical partners have been identified to support the project implementation by playing the role of Technical Partners. MOUs will be signed between the Executing Entity and the Technical Partners to formalize the arrangement and affirm the partners’ commitment to meeting the project’s objectives. Preliminarily, the African Risk Capacity (ARC), WMO, and IFRC have been identified as technical partners. The PMU will be responsible for scouting for additional partners who are highly qualified, internationally recognized with expertise in climate information and early warning systems to provide strategic technical guidance.

136. The Technical Partners will be responsible for supporting in-country capacity development and implementation. They will provide strategic orientation for project implementation, evaluate and respond to requests for support from entities seeking assistance to outline and implement a project-specific activities, and facilitate the collaboration with between other stakeholders.

137. The roles of both the Technical Partners and Implementing Entities will be formalized through MOUs, and neither will administer or manage GCF proceeds directly. The primary distinction in their roles lies in the Technical Partners' advisory capacity versus the Implementing Entities' operational responsibilities.

138. Technical Partners will serve in a high-level advisory role, providing strategic technical guidance to the Project Steering Committee (PSC), Executing Entity (EE), Project Management Unit (PMU), and Implementing Entities. Their contributions will include offering specialized technical insights, fostering alignment with global standards, and facilitating capacity-building initiatives to strengthen local expertise in line with best practices in climate information services, early warning systems and disaster risk reduction.

139. In contrast, Implementing Entities will focus on implementing designated project activities. They will play an active role in the engagement, selection and oversight of service providers. They will coordinate on-the-ground implementation efforts, ensuring alignment with project objectives and technical standards. The Implementing Entities will report quarterly to the Executing Entity, providing updates on progress, challenges, and outcomes to support informed project management and oversight.

140. The Implementing Entities, ANAMET and DRE, have been selected as they are the leading national institutions in Togo for hydrometeorological and water resource management services, respectively. These entities will support the implementation of key project activities related to climate information services, including

data collection, analysis, and dissemination. They will report directly to the Executing Entity (EE) on their progress, ensuring alignment with project objectives. Technical Partners—ARC, WMO, IFRC, and UNDRR—will provide advisory and technical support, leveraging their international expertise to ensure project standards meet global best practices in climate services and disaster risk management.

141. To establish clear roles and responsibilities, the EE will enter into Memoranda of Understanding (MOUs) with both the Implementing Entities and Technical Partners. Service providers needed for project-specific tasks will be competitively procured following the AE's procurement guidelines and will be engaged through service agreements or contracts with the EE.

Participating Institutions and their responsibilities

Institutional Role	Name of Institution	Contracting Arrangement
Accredited Entity: The AE will provide oversight and supervision, ensuring effective implementation, financial management, quality assurance, and reporting throughout the project. It will monitor the proper use of GCF funds by the Executing Entity, ensuring alignment with project goals and compliance with GCF standards.	BOAD	Accreditation Master Agreement (AMA) and Funded Activity Agreement (FAA) with GCF.
Executing Entity: The EE will be responsible for coordinating and implementing all project activities, drawing on its expertise in disaster preparedness, response, and recovery across Togo. The EE will host the Project Management Unit and Project Steering Committee, ensuring efficient coordination with implementing and technical partners. The PMU will be responsible for the day-to-day management of the project with oversight from the PSC. The EE will report to the Accredited Entity, and uphold accountability and transparency standards, enabling effective project execution and compliance.	Ministry of Security and Civil Protection (through ANPC).	Subsidiary Agreement between the BOAD and Ministry of Security and Civil Protection as Executing Entity
Implementing Entities: The Implementing Entities have been selected for their expertise in climate information services within Togo. They will play a crucial role in implementing the key project activities relating to climate information services. They will be responsible for facilitating activity implementation including organising workshops and bringing together stakeholder. They will provide quarterly progress reports to the Executing Entity but will not directly receive and manage GCF proceeds.	ANAMET, DRE	MOU between Ministry of Security and Civil Protection (Executing Entity) and ANAMET/DRE as Implementing Entities
Technical Partners: These partners will provide strategic technical guidance and advice to support the project implementation. The Technical Partners will play a critical role in building in-country capacity and aiding implementation including offering strategic direction, providing technical inputs and review of service providers deliverable as well as advising the PSC. They are mainly international organisation with extensive experience in climate information services and disaster risk reduction.	WMO, IFRC, UNDRR, ARC	MOUs between the EE and Technical Partners.
Service Providers: Service providers will be engaged on short term basis to provide specific project deliverables under the various activities. Service providers will be selected during project implementation on competitive basis in line with the AE's procurement rules. The service providers may be contracted by the AE or EE as necessary.	The service providers will include consultants, consulting firms, and equipment suppliers	Contracts and Service Agreements between the EE with the Service Provider.

Responsibilities of Executing Entities and Implementing Entities in the implementation of the Activities

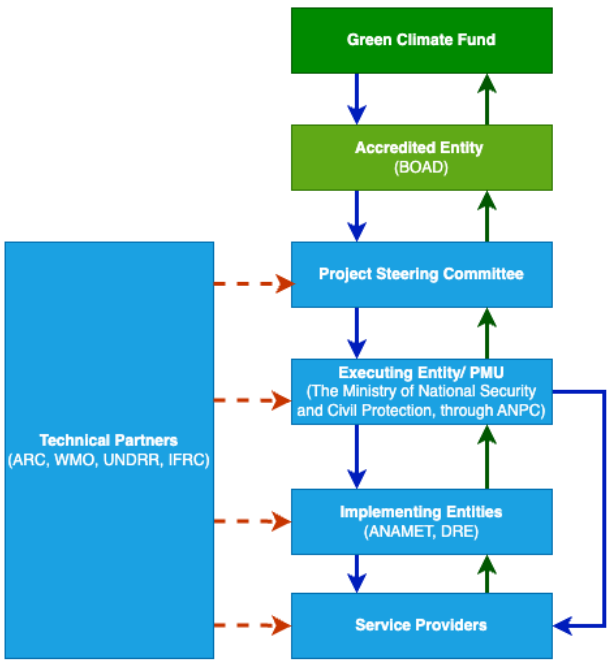
Activity	Lead Executing Entity	Implementing Entity	Technical Partner
Activity 1.1.1: Operationalizing the National Framework for Climate Services (NFCS) through developing tailored climate products for priority sectors	Ministry of Security and Civil Protection (through ANPC).	ANAMET	WMO

Activity 1.1.2: Establishing and operationalizing a National Disaster Risk Management Framework aligned with the Sendai Framework, NDC, NFCS, national adaptation process (NAP) and EW4ALL initiative .	Ministry of Security and Civil Protection (through ANPC).	-	UNDRR
Activity 1.1.3: Building capacity for legislative and policy support for climate information services	Ministry of Security and Civil Protection (through ANPC).	ANAMET	WMO/ARC
Activity 1.2.1: Conducting capacity building for ANAMET and DRE human resources.	Ministry of Security and Civil Protection (through ANPC).	ANAMET	WMO/ARC
Activity 1.2.2: Establishing international collaboration and partnerships with organizations including, ARC, UNOCHA, WFP, IFRC and International Telecommunication Union (ITU) to improve the use of climate services and DRR practices	Ministry of Security and Civil Protection (through ANPC).	ANAMET	ARC
Activity 1.3.1: Conducting capacity building for ANPC including risk modelling, risk transfer and contingency planning	Ministry of Security and Civil Protection (through ANPC).	-	ARC
Activity 1.3.2: Improving coordination between ANAMET, DRE and ANPC, and private stakeholder entities through MOUs focused on improving Early Warning for all in Togo.	Ministry of Security and Civil Protection (through ANPC).	ANAMET, DRE and key media network entities	WMO
Activity 1.4.1: Design a strategy for the recognition of ANAMET meteorological services, DRE hydrological services and ANPC disaster risk management strategies, integrating an improvement of the institutional budget, and contribute to advocacy with the relevant ministries	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	ARC
Activity 1.4.2: Explore public-private partnerships leveraging innovative financing mechanisms for sustainable climate services .	Ministry of Security and Civil Protection (through ANPC).	ANAMET	ARC
Activity 2.1.1: Elaborate an Atlas on climate risks by conducting comprehensive multi-hazard risk assessments and vulnerability assessments	Ministry of Security and Civil Protection (through ANPC).	ANAMET	ARC/WMO
Activity 2.1.2: Developing a consolidated hazard and risk data center to support the early warning system	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	WMO/ARC
Activity 2.1.3: Establishing MHEWS governance and institutional arrangements and to strengthen	Ministry of Security and Civil Protection	ANAMET/DRE	WMO/ARC

partnership among national institutions.	(through ANPC).		
Activity 2.2.1: Modernizing and maintaining weather and hydrometric observations' infrastructures and monitoring systems.	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	WMO
Activity 2.2.2: Strengthening Software Infrastructure and Data Management according to international standards.	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	WMO
Activity 2.2.3: Implementing the state-of-the-art impact-based weather and hydrological forecasting tools.	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	WMO
Activity 2.2.4: Conducting regular early warning system testing and capacity building for the main hazards	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	ARC/WMO
Activity 2.3.1: Developing and implementing a people-cantered, multi-channel early warning communication and dissemination strategies.	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	ARC/WMO
Activity 2.3.2: Building community-based warning networks and conducting public awareness campaigns	Ministry of Security and Civil Protection (through ANPC).	ANAMET/DRE	ARC/WMO
Activity 2.3.3: Establishing feedback and verification mechanisms.	Ministry of Security and Civil Protection (through ANPC).	ANAMET	ARC/WMO
Activity 2.3.4: Establishing and strengthening coordination with private sector telecommunication networks and media.	Ministry of Security and Civil Protection (through ANPC).	ANAMET	ARC
Activity 2.4.1: Equipping the National Civil Protection Agency with the tools and equipment for disaster preparedness and response	Ministry of Security and Civil Protection (through ANPC).	-	UNDRR
Activity 2.4.2: Developing community action plans and emergency protocols that are regularly reviewed and updated	Ministry of Security and Civil Protection (through ANPC).	-	UNDRR
Activity 2.4.3: Conducting regular community-based training and simulation exercises.	Ministry of Security and Civil Protection (through ANPC).	-	UNDRR
Activity 2.4.4: Establishing and strengthening public awareness and education programs.	Ministry of Security and Civil Protection	-	UNDRR

	(through ANPC).		
Activity 2.4.5: Conducting regular evaluation and lesson-learning exercises	Ministry of Security and Civil Protection (through ANPC).	-	UNDRR
Activity 3.1.1: Developing the institutional framework and protocols for forecast-based action.	Ministry of Security and Civil Protection (through ANPC).	-	IFRC/ UNDRR
Activity 3.1.2: Set-up early warning triggers including clear measurable thresholds to trigger pre-defined early actions	Ministry of Security and Civil Protection (through ANPC).	-	IFRC/ UNDRR
Activity 3.1.3: Training stakeholders including relevant agencies, communities, and volunteers on implementing forecast-based actions.	Ministry of Security and Civil Protection (through ANPC).	-	IFRC/ UNDRR
Activity 3.2.1: Establishing the legal and institutional and operating framework for the Emergency Fund.	Ministry of Security and Civil Protection (through ANPC).	-	IFRC/ UNDRR
Activity 3.2.2: Mobilizing and securing financial resources to operationalize and replenish the fund.	Ministry of Security and Civil Protection (through ANPC).	-	IFRC/ UNDRR

Organisational Diagram:

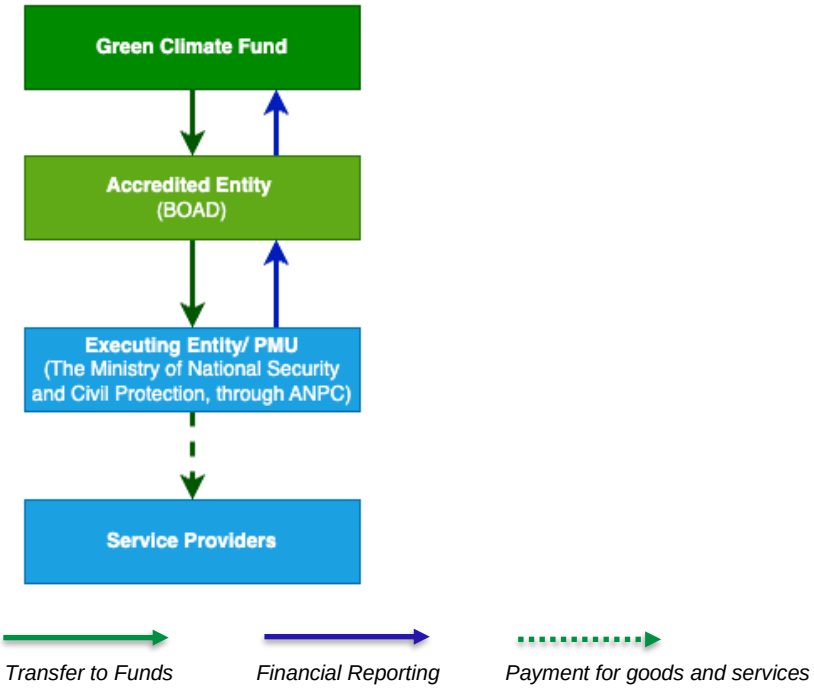


Flow of Funds:

142. The financial flows within the project are structured to ensure transparency, accountability, and efficiency in resource allocation and utilization. BOAD will request and receive GCF proceeds according to the project implementation progress and disbursement schedule detailed in the Funded Activity Agreement. BOAD will channel the GCF proceeds to the Executing Entity, ANPC based on the subsidiary agreement and the project's annual work plan. Disbursement will be made to the EE in advance, and the EE will be required to submit the necessary financial and progress reports to account for the previously disbursed funds before subsequent disbursements are made to the EE.

143. The EE will responsible for administering the GCF proceeds under the supervision of the PSC who will endorse the quarterly workplans and budgets. The EE will be responsible for all the project's procurements and make direct payments to the service providers/suppliers upon confirmation of the quality and standards of the deliverables. Dedicated financial management and reporting mechanisms will be established within the ANPC to track expenditures, monitor budget utilization, and ensure financial accountability.

Funds flow diagram:



Transfer to Durable Assets:

144. Equipment and durable assets purchased using GCF proceeds to support the project's objectives, particularly in strengthening climate information services and early warning systems will be treated following the requirements of Clause 23.04 of the Accreditation Master Agreement (AMA). An asset management and disposal plan will be developed prior to project completion and communicated to the GCF via the Project Completion Report (PCR). The plan will ensure that all equipment are recorded, retained and maintained by relevant national institutions, such as the ANPC or ANAMET, to continue supporting climate resilience and disaster risk management efforts post-project. The assets' ownership and maintenance responsibilities will be formally transferred to these institutions, ensuring the equipment remains operational and beneficial for Togo's ongoing climate adaptation and resilience initiatives. A copy of the Asset Transfer Certificate and handing over documentation will be submitted to the GCF as part of the Project Completion Report.

C. FINANCING INFORMATION

C.1. Total financing

(a) Requested GCF funding (i + ii + iii + iv + v + vi)		Total Amount: 24 987 000		Currency: million USD ($)	
GCF Financial Instrument		**Amount**	**Currency**	**Tenor & grace**	**Pricing**
(i)	Senior loans	Enter amount	Options	Enter years	Enter %
(ii)	Subordinated loans	Enter amount	Options	Enter years	Enter %
(iii)	Equity	Enter amount	Options		Enter % equity return
(iv)	Guarantees	Enter amount	Options	Enter years	
(v)	Reimbursable grants	Enter amount	Options		
(vi)	Grants	24,987,000	million USD ($)		

(b) Co-financing information[11]		**Total amount**		**Currency**		
		2 038 747		million USD ($)		
Name of institution	**Financial instrument**	**Amount**	**Currency**	**Tenor & Grace**	**Pricing**	**Seniority**
UNDP	Grant	2 038 747	USD ($)	Enter years Enter years	Enter %	Options

(c) Total investment (c) = (a)+(b)	**Amount**	**Currency**
	2 038 747	million USD ($)
(d) Co-financing ratio (d) = (b)/(a)	2 038 747 / 24 987 000= 8,16%	
(e) Other financing arrangements for the project/programme (max ½ page)	Activities in this project stem from the different key structures of the early warning system consulted during project preparation. They perfectly express the expectations of these different stakeholders and are indicative of the project's maturity. Their implementation will be carried out in an inclusive manner with a view to ensuring synergy between all stakeholders. In addition to the United Nations Development Program (UNDP), which is providing support to Togo in the management of disaster risks, the National Civil Protection Agency (ANPC), the project manager, in collaboration with the key actors of the Early Warning System (EWS), has engaged discussions with the accredited entity, the West African Development Bank (BOAD), and the National Designated Authority (NDA) to mobilize additional resources from the Green Climate Fund (GCF) for the effective implementation of project activities. In addition, the National Environmental Management Agency (ANGE) was also consulted about the environmental categorization of the project.	

[11] If the co-financing is provided in different currency other than the GCF requested, please provide detailed financing information and a converted figure in the GCF requested currency in the comment box. Please refer to the date when the currency conversion was performed and the reference source.

	The agreement between UNDP and Togo government signed march 2020 details the terms under which UNDP will support the project "Reinforcement of Resilience for Vulnerable Communities to Climate Change and Disasters in High-Risk Areas." This collaboration specifies UNDP's role in providing technical assistance, such as recruiting personnel, facilitating training, and acquiring necessary equipment and services. These support services, outlined in compliance with UNDP's policies, aim to enhance ANPC's capacity to independently execute project activities. Costs for these services are recovered as per administrative agreements and reported periodically, ensuring transparency and alignment with the overarching goals. . The agreement between the UNDP and Togo is already in force and the co-financing is already being used by the Ministry of Security and Civil Protection through the ANPC. All this has led to: ▪ co-financing commitment letter. ▪ issuance of the letter of no objection from the designated national authority. ▪ the letter declaring the project not subject to an Environmental and Social Impact Assessment (ESIA) by the National Environmental Management Agency.

C.2. Financing by component

Component	Output	Indicative cost USD	GCF financing		Co-financing		
			Amount USD	Financial Instrument	Amount USD	Financial Instrument	Name of Institutions
Component 1: Climate Information Services Delivery	Output 1.1 to Output 1.4	4 094 000	2 948 500	Grants	1 145 500	Grants	UNDP
Component 2: Impact-based MHEWS and Early Action	Output 2.1 to 2.4	17,203,500	16 447 500	Grants	756,000	Grants	UJNDP
Component 3: Leveraging CIEWS for investment and financial decisions	Output 3.1 & 3.2	3,189,247	3 152 000	Grants	37,247	Grants	UNDP
Monitoring Evaluation and Learning:	Monitoring Evaluation and Learning:	1,230,000	1,230,000	Grants			
Project Management Costs	Project Management Costs	1,309,000	1,209 000	Grants	100 000	Grants	UNDP
Indicative total cost (USD)		27,025 747	24,987,000		2,038,747		

C.3 Capacity Building and Technology development/transfer

145. The project in Togo is dedicated to enhancing the country's climate resilience and disaster risk management capabilities through a comprehensive suite of technology transfer and capacity building activities. The project aims to modernize weather monitoring systems, strengthen data management infrastructure, and establish robust frameworks for climate services and disaster risk management by reinforcing key institutional structures and policies and targeted capacity-building of the nation's organizations within the CIEWS framework. These efforts are designed to empower local communities, governmental agencies, and other stakeholders with the knowledge, tools, and practices necessary to effectively manage climate risks and adapt to changing environmental conditions.

Capacity building

146. *Activity 1.1.1: Operationalizing the National Framework for Climate Services (NFCS) through developing tailored climate products for priority sectors.:* This activity aims to establish a comprehensive National Framework for Climate Services (NFCS) targeting Togolese Meteorological Agency (ANAMET), and other relevant governmental bodies. The NFCS will facilitate the integration of climate information into national planning and decision-making processes. Training workshops, seminars, and collaborative sessions will be conducted to ensure these organizations can effectively use climate data to inform policies and strategies, enhancing their ability to address climate variability and change.

147. *Activity 1.1.2: Establishing and operationalizing a National Disaster Risk Management Framework aligned with the Sendai Framework, NDC, national adaptation process (NAP), NFCS and EW4ALL initiative..*: This activity focuses on developing and implementing a National Disaster Risk Management (DRM) Framework, targeting the National Agency for Civil Protection (ANPC), local government authorities, and the Ministry of Security and Civil Protection. The framework will be aligned with international standards such as the Sendai Framework, Nationally Determined Contributions (NDC), and the Early Warnings for All (EW4ALL) initiative. Capacity building will include training in disaster risk reduction, emergency response, and coordination mechanisms to improve resilience and reduce the impact of disasters.

148. *Activity 1.1.3: Building capacity for legislative and policy support for climate information services:* This activity targets legislative bodies, policymakers, and relevant governmental departments. It aims to build their capacity to develop and enforce policies supporting climate information services. Workshops and training sessions will be held to educate legislators and policymakers on the importance of integrating climate data into legal frameworks, ensuring that laws and regulations support the effective use of climate information for national planning and risk management.

149. *Activity 1.2.1: Conducting capacity building for ANAMET and DRE human resources:* This activity focuses on enhancing the skills and knowledge of human resources at the Togolese Meteorological Agency (ANAMET). Training programs will cover advanced meteorological techniques, data analysis, and the use of modern weather monitoring equipment. This will ensure that ANAMET staff are equipped to provide accurate and timely weather information, improving forecasting capabilities and contributing to national disaster preparedness and climate resilience.

150. *Activity 1.3.1: Conducting capacity building for ANPC including risk modeling, risk transfer, and contingency planning:* Targeting the National Agency for Civil Protection (ANPC), this activity aims to build capacity in areas such as risk modeling, risk transfer mechanisms, and contingency planning. Through specialized training and workshops, ANPC personnel will gain the skills needed to effectively assess and manage disaster risks, develop contingency plans, and implement risk transfer strategies, enhancing the agency's overall preparedness and response capabilities.

151. *Activity 2.3.2: Building community-based warning networks and conducting public awareness campaigns.* This activity builds capacity by creating community-based warning networks and running public awareness campaigns. It develops clear, actionable warning messages in local languages, equips communication hubs with reliable devices, and trains local volunteers as "warning ambassadors" in interpreting warnings, using local systems, and leading during crises. The selection of these ambassadors, including women, youth, and marginalized groups, will help ensure broad representation. Additionally, the activity will leverage public education campaigns, such as community meetings, school programs, and media outreach to reinforce community preparedness and enhance engagement using tools like mobile apps and interactive hazard maps.

152. *Activity 2.4.3: Conducting regular community-based training and simulation exercises.* This activity builds capacity by conducting regular, community-based training and simulation exercises that prepare community members for emergencies. It uses realistic, scenario-based drills tailored to local hazards, such as floods or storms, and includes post-exercise feedback sessions to refine action plans. These hands-on exercises reinforce emergency procedures, building confidence and adaptability in community members to respond effectively to actual emergencies, ultimately strengthening resilience.

153. *Activity 2.4.4: Establishing and strengthening public awareness and education programs.* This activity builds capacity by establishing public awareness and education programs that deepen understanding of climate-related hazards and disaster responses, with a focus on women and marginalized groups. It develops tailored educational materials—brochures, videos, and online resources—and integrates disaster preparedness into school and university curricula to reach all age groups. It leverages community outreach campaigns, local media, social platforms, and events to ensure broad dissemination, while using workshops and seminars to provide hands-on learning for marginalized groups. The activity aims to foster a culture of preparedness, enabling all members to participate actively and effectively in disaster response, ultimately reducing vulnerabilities and enhancing resilience.

154. *Activity 3.1.3: Training stakeholders including relevant agencies, communities, and volunteers on implementing forecast-based actions.* This activity strengthens capacity by delivering tailored training programs that equip stakeholders with the skills to interpret early warning triggers, understand forecast-based action protocols, and execute necessary actions. African Risk Capacity will lead this initiative, with ANAMET, ANPC, local government officials, community leaders, and volunteers being the primary beneficiaries. Training will cover interpreting climate data, understanding action triggers, and implementing forecast-based actions, using a mix of practical exercises, simulations, and drills. It will adopt a train-the-trainer approach to improve the program's reach, while refresher courses and monitoring mechanisms will be instituted to maintain its effectiveness and adaptability over time.

Technology transfer

155. *Activity 2.2.1: Modernizing and maintaining weather and hydrometric observations' infrastructures and monitoring systems***:** This activity focuses on upgrading existing weather monitoring infrastructure across Togo and targets the Togolese Meteorological Agency and local weather stations. By modernizing these systems, the project aims to improve the accuracy and reliability of weather forecasts, crucial for effective disaster preparedness and agricultural planning.

156. *Activity 2.2.2: Strengthening Software Infrastructure and Data Management:* This activity aims to strengthen ANAMET and DRE's software infrastructure and data management capabilities, enabling effective technology transfer to Togo by equipping the agencies with advanced meteorological and hydrological software as well as a centralized data management system. The activity will support sophisticated climate, hydrological and hydrodynamic modeling and forecasting through upgrades in data processing, analysis, storage, and the digitization of historical climate records. This improved infrastructure will facilitate real-time data use, enhance interoperability for data exchanges, and enable co-developed climate products for sectors like agriculture and health.

157. *Activity 2.2.3: Implementing the state-of-the-art impact-based weather and hydrological forecasting tools.* This activity will enhance Togo's capacity for accurate and timely hazard forecasting by implementing advanced Numerical Weather Prediction (NWP) models and impact-based forecasting tools. It aims at supporting ANAMET and DRE to improve their ability to generate sub-seasonal and seasonal climate forecasts by proving them with cutting-edge forecasting software and developing tailored prediction models for various hazards. Additionally, the activity includes training staff in multi-hazard forecasting and supporting hydrodynamic modeling at DRE, as well as establishing a Laboratory of Applied Remote Sensing and Geoinformatics at the University of Lomé to bolster technical support for forecasting. This comprehensive approach will enable precise, early warnings for severe weather events, ultimately reducing disaster risks and enhancing community resilience.

C.3.1 Does GCF funding finance Capacity building activities?	Amount: 22,541,000 USD
C.3.2. Does GCF funding finance Technology development/transfer?	Amount: 88,990,000 USD

C.4. Justification for GCF funding request (max. 500 words)

158. Reducing global warming vulnerability and improving the resilience of local communities, particularly women and youth, is a priority in Togo. This project supports the enhancement of resilience for national institutions and local communities to climate change and disaster risks. Several activities under the project positively impact the preparedness and recovery capacity of these communities. The request for funding from the Green Climate Fund (GCF) is aligned with the need for climate change adaptation in Togo, particularly addressing the increased exposure of human settlements and infrastructure to climatic events.

159. The project aligns with Togo's National Development Plan (2018-2022), specifically in strategic area 3, impact 3.12, and the government's new roadmap in strategic area 3, ambition 10. Additionally, it aligns with the priorities of the Sendai Framework for Action and Sustainable Development Goal (SDG) 13. However, amidst the global COVID-19 pandemic and the urgent need to revive the economy, Togo, as a Least Developed Country (LDC), faces severe budgetary constraints. These constraints hinder adequate investment in disaster preparedness and recovery activities, which are increasingly crucial due to climate change. The pandemic exacerbates the impacts of climatic extremes, doubling the pressure on communities and heightening their vulnerability. This situation jeopardizes ongoing efforts to build resilience. Without GCF financing, Togo would need to resort to high-interest loans, further straining its limited resources. Hence, external support is essential to enhance community resilience.

160. The GCF's involvement is crucial to strengthen national institutions and build local communities' resilience to climate change and disaster risks. The project design enables a systematic understanding of climate change hazards and associated risks, directly addressing GCF financing criteria. Without GCF support, the project cannot adequately enhance data acquisition and provide better climate information to end-users. Several adaptation benefits are expected from the proposed activities:

161. Reasons for GCF intervention

a) **Climate vulnerability:** Togo faces significant climate risks, including an increased frequency and intensity of extreme weather events such as floods, droughts, and storms, which threaten livelihoods and infrastructure. For example, the 2020 floods affected over 120,000 people, damaging homes, crops, and infrastructure. This project aims to reduce these vulnerabilities by implementing advanced early warning systems and promoting climate-resilient agricultural practices.

b) **Capacity gaps:** National institutions such as ANAMET (Agence Nationale de la Météorologie du Togo) and ANPC (Agence Nationale de la Protection Civile) face critical capacity gaps in providing effective climate information and disaster risk management. This project will address these gaps through extensive training programs and technical support, enabling these institutions to deliver timely and accurate climate services. For instance, training ANAMET staff in advanced meteorological techniques will enhance weather forecasting capabilities.

c) **Outdated infrastructure:** The existing infrastructure for climate data collection and dissemination in Togo is outdated and inadequate, hindering effective early warning systems. Many weather stations are old and fail to provide accurate data. Upgrading these stations and implementing new data management systems will improve the accuracy of climate information. This project includes the installation of modern weather monitoring equipment in key regions, enhancing data collection and dissemination capabilities.

d) **Policy and legislative support:** Strengthening policy and legislative frameworks is essential for creating an enabling environment for improved climate services and disaster risk management. The project will support the development of policies that integrate climate risk assessments and adaptation strategies into national planning. By working with the Ministry of Environment and Forest Resources, the project will ensure that climate resilience is embedded in legislative processes.

e) **Technology and equipment needs:** Upgrading weather monitoring equipment and enhancing software infrastructure are crucial for improving the accuracy and coverage of climate data collection. This project will

provide ANAMET with state-of-the-art weather monitoring stations and data management software, allowing for more precise and comprehensive climate data collection. This technological upgrade will support better decision-making and timely warnings for extreme weather events.

f) **Community resilience:** Enhancing community resilience through adaptation and mitigation initiatives is vital for reducing vulnerability to climate-related risks. The project will target local communities, particularly focusing on women and youth, with training programs on sustainable agricultural practices and disaster preparedness. For example, implementing community-based adaptation projects such as water conservation techniques and drought-resistant crops will help communities cope with climate impacts.

g) **Institutional coordination:** Improved coordination among key institutions is necessary for a cohesive national response to climate threats. The project will establish platforms for information sharing and collaboration among government agencies, NGOs, and local communities. For example, regular coordination meetings and joint training sessions will ensure that all stakeholders are aligned and working towards common climate resilience goals.

h) **Sustainability:** Developing sustainable business models and financial strategies is key to ensuring the long-term viability of climate services. The project will explore innovative financing mechanisms, such as public-private partnerships and community-based savings schemes, to support ongoing climate resilience efforts. By involving financial institutions and local businesses, the project aims to create sustainable funding streams for climate adaptation initiatives.

i) **International collaboration:** Partnerships with international organizations will facilitate knowledge exchange and access to best practices. Collaborating with entities such as the World Bank, UNDP, and regional climate centers will provide Togo with valuable insights and resources. For instance, participation in international climate conferences and workshops will help Togo adopt successful strategies from other countries facing similar climate challenges.

j) **Alignment with global frameworks:** The project aligns with international frameworks such as the Sendai Framework for Disaster Risk Reduction and the Global Framework for Climate Services (GFCS). By adhering to these frameworks, the project ensures that Togo's climate resilience efforts are in line with global standards and best practices. This alignment will also facilitate access to international funding and technical support, further strengthening the project's impact.

162. This project represents a comprehensive effort to address the multifaceted challenges posed by climate change in Togo by modernizing weather monitoring systems, strengthening data management infrastructure, and promoting enhanced localized disaster risk management at the community level with specific focus on vulnerable groups. These efforts are crucial for building a more resilient and sustainable Togo, capable of withstanding and adapting to climate risks. Besides, strengthening policy and legislative frameworks, fostering international collaboration, and ensuring alignment with global standards will support the long-term success of these initiatives, while improving coordination among institutions and developing sustainable financial strategies will ensure that climate services continue to benefit Togo's population beyond the project implementation period.

C.5. Exit strategy (max. 300 words)

163. The exit strategy for the project is crucial to ensuring the long-term sustainability of the activities and the continued enhancement of Togo's climate resilience after the project concludes. With funding from the GCF, the project will implement structuring actions aligned with the Sendai Framework for Disaster Risk Reduction. This comprehensive strategy encompasses institutional strengthening, financial sustainability, community engagement, technology maintenance, monitoring and evaluation, and international collaboration to create a lasting impact that will benefit Togo's institutions, communities, and overall climate resilience.

164. Institutional strengthening

- **Capacity building:** Continuously enhance the skills and knowledge of staff within ANAMET, ANPC, and other relevant institutions through ongoing training programs, mentorship, and participation in international meteorological and disaster management conferences. For instance, training sessions on advanced meteorological techniques and disaster response strategies will enable ANAMET to provide accurate weather forecasts and ANPC to manage disaster risks effectively. This approach aligns with the Sendai Framework's priority of enhancing disaster preparedness for effective response.
- **Policy and legislative frameworks:** Ensure robust policy and legislative support that mandates the integration of climate information into decision-making processes and disaster risk management. This includes regular

updates to policies to reflect new knowledge and best practices. By working with the Ministry of Environment and Forest Resources, the project will embed climate resilience into legislative processes, ensuring long-term institutional support. This will institutionalize the tools for the sustainability of this and future projects.

165. Financial sustainability

- **National budget allocation:** Advocate for the establishment of dedicated budget lines within the national budget to support the ongoing operations of ANAMET and ANPC. This will ensure these institutions have the financial resources necessary to maintain and upgrade their infrastructure and capabilities. Engaging with the Ministry of Finance to secure these budget allocations is essential for the financial sustainability of climate services.
- **Public-Private Partnerships:** Develop and maintain partnerships with private sector entities to leverage additional financial resources and technical expertise for sustaining climate services. For example, partnerships with telecommunications companies can support the dissemination of early warning messages. Other innovations may include creating revenue-generating partnerships through service subscriptions, data licensing, and potential co-funding models for climate initiatives. Additionally, private sector investment in climate resilience initiatives can provide much-needed funding and innovation, as seen in successful models from other countries.
- **Detailed Engagement Plan**: To further enhance the financial sustainability, a detailed engagement plan will be developed early in the project implementation (in the inception phase and in parallel with Activities 1.3.2, 1.4.1 and 1.4.2. The engagement plan will establish clear steps to secure sustained funding, outline concrete actions to build national financial support, and facilitate structured dialogues with the Ministry of Finance and potential private sector partners. Through this plan, the project will actively engage stakeholders to integrate climate resilience activities into the national budget and encourage co-financing partnerships, providing a structured pathway for long-term financial support beyond the project duration.

166. Community engagement and ownership

- **Local capacity building:** Empower local communities by providing continuous training on climate resilience practices and involving them in the design and implementation of adaptation and mitigation initiatives. For instance, community workshops on sustainable agricultural practices and disaster preparedness will equip local leaders with the skills to maintain and expand these initiatives independently. Women and youth groups, in particular, will benefit from targeted training programs, enhancing their resilience and leadership in climate adaptation.
- **Awareness campaigns:** Implement ongoing public awareness campaigns to educate communities about the importance of climate resilience and their role in sustaining these efforts. Radio programs, social media campaigns, and community theater can be effective tools for raising awareness and promoting community-led initiatives.

167. Technology and infrastructure maintenance

- **Regular maintenance schedules:** Develop and adhere to a maintenance schedule for all weather monitoring equipment and software infrastructure to ensure their continued functionality and accuracy. Allocate budget for regular maintenance and upgrades, ensuring long-term operational capacity. This includes training local technical staff to handle routine maintenance and troubleshooting, thereby reducing dependency on external support.
- **Technology transfer:** Facilitate the transfer of advanced technologies and best practices from international partners to local institutions. Ensure that local technical staff are trained to operate and maintain new technologies. Collaborations with international meteorological organizations can provide access to cutting-edge technologies and training programs.

168. Monitoring and evaluation

- **Performance indicators:** Establish clear performance indicators and regularly monitor and evaluate the effectiveness of climate services and disaster risk management activities. Use this data to make informed adjustments to strategies and operations. For example, metrics on the accuracy of weather forecasts and the timeliness of early warning messages will help assess the impact of the project's interventions.
- **Feedback mechanisms:** Create mechanisms for community feedback and participation in monitoring and evaluation processes, ensuring that local insights and experiences inform ongoing efforts. Community feedback sessions and suggestion boxes can be utilized to gather valuable input from beneficiaries.

169. Sustainable business models

- **Revenue generation:** Develop business models that generate revenue to support climate services, such as offering premium climate information services to private sector clients or implementing cost-recovery mechanisms for certain services. For example, subscription-based weather forecasts for agricultural businesses can generate revenue while supporting climate resilience.
- **Innovative financing:** Explore innovative financing mechanisms such as climate bonds, insurance products, and other financial instruments that can provide sustainable funding for climate resilience activities. Partnerships with financial institutions can help develop and implement these mechanisms, ensuring a steady flow of resources.

170. International collaboration and support

- **Partnerships:** Maintain and expand partnerships with international organizations and donor agencies to continue receiving technical and financial support. Leverage these partnerships for ongoing capacity building and technology transfer. For instance, collaborations with the World Bank, UNDP, and regional climate centers will provide Togo with valuable insights and resources.
- **Global framework alignment:** Ensure that Togo's climate resilience strategies remain aligned with global frameworks and initiatives, facilitating access to international funding and support. Adherence to frameworks like the Sendai Framework and the Global Framework for Climate Services (GFCS) will position Togo to benefit from global best practices and funding opportunities.

C.6. Financial management/procurement (max. 300 words)

171. The project's financial management will adhere to GCF and BOAD's rigorous financial accounting standards, disbursement procedures, and procurement guidelines to ensure transparency and efficiency. Procurement will follow BOAD's 2016 guidelines, promoting sound, fair, and transparent processes through international calls for tenders, open consultations, and limited consultations. All procurement activities during project implementation will be carried out by ANPC following BOAD rules and regulations cited above.

172. **Procurement arrangements**: BOAD encourages procurement systems that are transparent and efficient. The guidelines for procurement of consultancy services and for awarding contracts for works, goods, and services will be strictly applied. All procurements will be carried out by ANPC following BOAD's rules and procedures. As part of its AE oversight and supervisory responsibilities, BOAD will analyze procurement files and provide a no-objection decision to ensure compliance with its standards. ANPC's procurement activities will be carried out by the PMU under supervision of the Project Steering committee to ensure implementation follows the Project Operation Manual.

173. **Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT):** BOAD has a Financial Security Policy inspired by international standards and regional directives to prevent money laundering and terrorist financing. This policy mandates thorough due diligence, including assessment of clients' transactions and civil/criminal backgrounds, in compliance with WAEMU Directive 02/2015. BOAD will also engage in administrative investigations into corruption, fraud, and other illicit activities.

174. **Audit and reporting:** Financial audits will align with BOAD's guidelines for financial reporting and auditing of projects. The Financial Agreement with Mali requires the submission of audited financial statements within six months after each fiscal year-end. An independent external auditor, appointed within four months of project effectiveness, will audit the financial statements according to international auditing standards. BOAD will prepare a Management Letter, outlining recommendations for improving accounting records, systems, controls, and compliance with financial covenants.

175. **Fiduciary standards:** BOAD ensures that its fiduciary standards are adhered to by implementing a Know Your Customer (KYC) due diligence process. This process includes anti-money laundering evaluations and thorough assessments of project sponsors. BOAD's financial management system guarantees that funds are utilized for their intended purposes, and periodic financial reviews and audits are conducted to maintain accountability and compliance.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

D.1. Impact potential (max. 300 words)

176. The impact potential of the project in Togo is profound, aligning closely with the Green Climate Fund's (GCF) indicators and international climate frameworks. The project aims to significantly increase the resilience of Togo's population, particularly the most vulnerable communities, and to reduce the number of people affected by climate-related disasters. By enhancing climate data collection, strengthening disaster risk management, and improving early warning systems, the project will support sustainable climate services and community resilience. These efforts are designed to integrate into national planning, thereby ensuring long-term sustainability and alignment with global climate goals:

177. **Linking Project Outcomes to Climate Impact Potential:** The project aligns with international frameworks such as the Sendai Framework for Disaster Risk Reduction and the Global Framework for Climate Services (GFCS). This alignment will enhance Togo's ability to access international funding and support, further strengthening its climate resilience efforts. By contributing to global climate goals, the project will help Togo meet its commitments under international agreements, thereby reinforcing its role in the global climate resilience community. The project's interventions address climate risks, and contribute to measurable adaptation benefits:

(i) **Addressing Climate Risks Through Adaptation:** by upgrading weather monitoring equipment, enhancing hydrometeorological data collection, and establishing a National Framework for Climate Services (NFCS), the project will enable precise forecasting and timely dissemination of climate information. This will directly reduce the impacts of floods, droughts, and other extreme weather events on vulnerable communities. Capacity building for institutions such as ANPC, ANAMET, and DRE will enhance disaster risk management and preparedness. Training programs on advanced disaster response techniques and risk modeling will result in effective contingency planning and reduced exposure to climate hazards.

(ii) **Adaptation Beneficiaries:** The project will directly benefit approximately 1 336 072,000 individuals, including: farmers utilizing improved climate information for agricultural decision-making, communities in hazard-prone areas receiving early warnings, emergency responders and local authorities equipped with improved tools for disaster preparedness. **Indirect Beneficiaries:** An estimated 7 924 792,00 individuals across the regions benefiting indirectly through enhanced food security, disaster mitigation, and strengthened climate resilience services. **Disaggregation by Gender:** Of the direct beneficiaries, 50% shall be women, reflecting the gender-responsive design of project activities. Beneficiaries were calculated using data on population density, exposure to climate hazards, and the geographic reach of early warning systems. Avoidance of double counting was ensured by cross-referencing data from beneficiary categories. (See annex 16).

(iii) **Geographic Scope and Coverage:** The project targets regions most vulnerable to climate risks, including [specific regions or nationwide scope]. The direct beneficiaries represent 14,43% of the population in these areas, while the indirect beneficiaries account for 85,57% of the national population.

178. **Enhanced climate data collection and analysis:** Upgrading weather monitoring equipment and enhancing software infrastructure will lead to more accurate and comprehensive climate data collection and analysis by ANAMET and DRE. For instance, installing advanced meteorological stations across the country will provide real-time data that is critical for early warning systems and decision-making. This improved data collection will reduce the adverse impacts of extreme weather events by enabling precise forecasting by the hydrometeorological services (ANAMET and DRE) and timely interventions by the ANPC, the Togolese Red Cross (CRT) and many other stakeholders within the National Platform for Disaster Risk Reduction.

179. **Strengthened disaster risk management:** Enhancing the capacity of the National Agency of Civil Protection (ANPC) and other relevant institutions will improve Togo's ability to manage and respond to disasters. This includes better risk modeling, contingency planning, and coordination among stakeholders within the National Platform for Disaster Risk reduction. For example, training ANPC staff in advanced disaster response techniques and providing them with state-of-the-art risk modeling tools will lead to more effective disaster preparedness and response.

180. **Improved early warning systems:** The establishment and operationalization of a National Framework for Climate Services (NFCS) and a National Disaster Risk Management Framework will ensure the efficient and timely dissemination of early warning information to communities and authorities. Early warning systems will be enhanced through partnerships with telecommunications companies to broadcast alerts via SMS, reaching even remote areas. This proactive approach will help save lives and protect property by allowing for preemptive actions.

181. **Sustainable climate services:** Developing a business delivery model and financial strategy for sustainable climate services will ensure their long-term viability. This includes advocating for increased national budget allocations and exploring public-private partnerships. For instance, establishing a climate services fund with contributions from both government and private sector stakeholders will provide a steady stream of resources to maintain and expand climate information services.

182. **Capacity building for climate resilience:** Extensive capacity building for ANAMET, ANPC, DRE and community members will equip them with the skills and knowledge needed to manage and respond to climate risks effectively. Training programs on advanced meteorological and hydrological techniques, disaster response, and climate adaptation strategies will create a more informed and capable workforce and community. This investment in human capital will ensure the sustainability of climate resilience measures.

183. **Improved coordination and collaboration:** Strengthening institutional frameworks and developing inter-institutional coordination mechanisms will enhance collaboration and communication among key stakeholders of the National Platform for Disaster Risk reduction. Regular coordination meetings and the creation of joint task forces will improve the overall efficiency and effectiveness of climate resilience efforts. This collaborative approach will lead to a more cohesive and comprehensive national response to climate threats.

184. **Empowered local communities:** Involving local communities in the design and implementation of adaptation and mitigation initiatives will empower them to take ownership of these efforts. This will foster a sense of responsibility and commitment to sustaining climate resilience measures. Community-driven projects, such as reforestation and water conservation initiatives, will be supported to ensure local buy-in and long-term success.

185. **Knowledge sharing and best practices:** Establishing platforms for information sharing and best practices will facilitate the dissemination of successful strategies and innovations in climate resilience. Regional workshops, online portals, and collaborative networks will enable continuous learning and improvement, benefiting not only Togo but also other countries facing similar climate challenges. This exchange of knowledge will enhance the global understanding of effective climate resilience strategies.

186. **The project's impact potential is vast**, targeting key areas of climate resilience and aligning with GCF outcomes and international frameworks. By focusing on enhanced data collection, strengthened disaster management, improved early warning systems, and sustainable climate services, the project aims to build a resilient future for Togo. The involvement of local communities, the development of sustainable business models, and the establishment of robust coordination mechanisms will ensure the long-term success and scalability of the project's outcomes. These efforts will not only reduce vulnerability but also promote sustainable development, benefiting Togo's population and contributing to global climate resilience goals. **The project’s transformative potential lies in its ability to mitigate the impacts of climate hazards while fostering sustainable development.** By targeting systemic issues such as weak data collection, limited disaster preparedness, and insufficient community engagement, it delivers measurable benefits to Togo’s most vulnerable populations. This approach ensures that the project contributes to long-term climate resilience and adaptation at both the local and global levels.

D.2. Paradigm shift potential (max. 300 words)

187. By 2030, Togo is committed to achieving significant advancements in climate resilience through a comprehensive strategy integrating mitigation, adaptation, and disaster risk reduction efforts. This initiative is

crucial for safeguarding the country's vulnerable populations and critical infrastructure against the escalating impacts of climate change. Aligned with sustainable development goals, Togo's agenda encompasses improved food, water, and energy security while promoting empowerment, capacity building, technological innovation, and sustainable natural resource management under principles of good governance. A pivotal initiative within this transformative framework is the development of a mobile web application, funded by the Climate Investment Funds. This application aims to fortify community resilience, starting with a pilot in Greater Lomé before expanding nationwide. This innovative tool not only enhances property protection but also saves lives, exemplifying Togo's proactive approach to climate adaptation. Furthermore, the project seeks to cultivate partnerships to revitalize the Hydrometer project, further bolstering Togo's resilience efforts and positioning it as a regional leader in climate resilience.

188. **Paradigm shift goal:** The paradigm shift in Togo's climate resilience strategy aims to strengthen and implement transformative policies and plans that reduce the exposure and vulnerability of its population, economic sectors, and critical infrastructure to climate hazards and climate change impacts. By fostering a proactive and integrated approach to climate resilience, Togo seeks to lead in sustainable development through enhanced disaster preparedness, adaptive governance, and resilient infrastructure. This shift is underpinned by strategic investments in technology, capacity building, and policy integration, ensuring that climate resilience becomes embedded in national development agendas and practices.

"IF accurate and timely climate information services are operationalized by enhancing existing data collection and analysis systems, upgrading weather monitoring equipment, and improving legislative and policy frameworks, and national as well as local stakeholders are provided with infrastructure, technical capacity building, and financial support, **THEN** livelihoods in the impacted sectors, which include Public Health, Agriculture and Food Security, Education, Transportation and Industrial Safety, of vulnerable populations of Togo will be strengthened, and private and public infrastructure assets will be more resilient, **BECAUSE** planning and response actions to hazards such as floods, strong winds, epidemics/epizootics, vegetation fires, droughts, and technological risks will be informed by climate information services and risk-based decision-making.**"**

189. **Assumptions:** Togo's climate resilience strategy rests on critical assumptions backed by robust planning and technological advancements. Firstly, the strategic placement and continuous maintenance of meteorological and hydrological stations are crucial for accurate data collection across flood-prone areas, supporting effective forecasting and early warning systems (UNDP, 2021). Secondly, the modernization of data collection equipment enhances data accuracy, vital for predicting and responding to climate-related hazards (World Bank, 2020). Lastly, leveraging advanced technologies in modeling and forecasting ensures reliable climate information services, empowering decision-makers and communities to proactively manage climate risks (WMO, 2019). The assumptions underpinning Togo's climate resilience efforts provide the foundational support necessary for effective planning and response mechanisms. Strategic investments in meteorological and hydrological infrastructure ensure that reliable data forms the cornerstone of early warning systems, essential for preemptive disaster management. Furthermore, advancements in technology not only improve data accuracy but also facilitate informed decision-making across various sectors, thereby enhancing overall resilience.

190. **Identified transition risks:** Despite strategic planning and technological advancements, Togo faces transition risks that could impact the sustainability and effectiveness of its climate resilience initiatives. Changes in political leadership or shifts in governance priorities may disrupt continuity in funding and support for resilience projects (UNEP, 2022). Moreover, rapid technological advancements pose challenges as outdated systems risk becoming obsolete without continuous upgrades and adaptation (UNDRR, 2020). Urbanization and demographic changes further complicate resilience efforts, placing strain on infrastructure and altering vulnerability profiles (UN-Habitat, 2021). The transition risks associated with Togo's climate resilience agenda underscore the importance of adaptive governance structures and sustained investment in technological upgrades. Political stability and long-term commitment are crucial for maintaining momentum in climate resilience efforts, ensuring that evolving challenges are met with proactive and adaptive responses. Moreover, technological innovation must be ongoing to keep pace with global advancements, ensuring that Togo remains at the forefront of climate adaptation strategies.

191. **Identified physical risks:** Climate change exacerbates physical risks in Togo, presenting formidable challenges across various sectors. Altered rainfall patterns, temperature extremes, and coastal erosion threaten agricultural productivity, urban infrastructure, and coastal communities (IPCC, 2021). The increased frequency of floods, heatwaves, and coastal storms amplifies vulnerabilities, particularly affecting agriculture-dependent rural areas and densely populated urban centers (World Bank, 2020). Physical risks associated with climate change highlight the urgent need for robust adaptation measures and infrastructure resilience. Addressing these challenges requires comprehensive strategies that integrate climate science into policy frameworks and prioritize investments in resilient infrastructure.

192. **Identified barriers:** Multiple barriers hinder Togo's climate resilience efforts, posing challenges to effective implementation and sustainability. Inadequate coverage and functionality of meteorological and hydrological stations undermine the reliability of climate data, hampering early warning systems (UNDP, 2021). Policy gaps in disaster risk reduction fail to prioritize resilience in national and local planning frameworks, limiting coordinated efforts across sectors (UNDRR, 2020). Financial constraints and operational challenges further impede infrastructure maintenance and expansion, hindering resilience-building initiatives (World Bank, 2020). The barriers identified within Togo's climate resilience landscape underscore the importance of targeted interventions and strategic partnerships. Addressing these challenges requires a multi-faceted approach that enhances data infrastructure, strengthens policy frameworks, and mobilizes financial resources.

193. **Activities to leverage barriers:** Effective strategies to overcome barriers involve targeted activities that enhance resilience and sustainability. Togo plans to upgrade meteorological and hydrological stations, improving data collection reliability and enhancing early warning systems (WMO, 2019). Advocacy efforts are underway to integrate disaster risk reduction into national policies, fostering a holistic approach to resilience across sectors (UNEP, 2022). Mobilizing international climate finance supports sustainable infrastructure development and resilience-building initiatives, ensuring long-term resilience and adaptation (UN-Habitat, 2021). The activities designed to leverage barriers are integral to Togo's climate resilience strategy, aiming to transform challenges into opportunities for sustainable development.

194. **Expected outputs and outcomes:** Strategic activities are expected to yield substantial outputs and outcomes that enhance Togo's resilience to climate risks. Enhanced early warning systems, driven by improved data collection and technology, will deliver accurate forecasts and timely alerts, minimizing disaster impacts on vulnerable communities (IPCC, 2021). Strengthened institutional capacity through training and policy integration will empower institutions to manage climate risks effectively and foster adaptive governance (UNDP, 2021). Community engagement and information dissemination will enhance local resilience and response capabilities, fostering community empowerment and sustainable development (World Bank, 2020). The interconnected nature of these outputs and outcomes underscores the holistic approach to climate resilience in Togo.

195. **Knowledge Transfer:** The project will emphasize knowledge transfer by establishing a structured framework for collaboration among local and international experts. Through activities such as Activity 1.2.2, the project will coordinate training workshops and develop customized learning materials for key stakeholders in Togo, including ANAMET, ANPC, and community representatives. This will create a pool of skilled individuals proficient in climate information services (CIS), disaster risk reduction, and early warning systems, ensuring that local knowledge and expertise are enhanced and retained. Furthermore, technical partnerships with organizations like WMO and the African Risk Capacity (ARC) will further promote best practices and build local capacity to independently manage and scale CIS over time.

196. **Sustainability of project interventions:** The project includes a robust financial strategy under Activity 1.4.1 to advocate for increased national budget allocations to maintain CIS infrastructure and support operational needs post-project. Additionally, the project will develop a public-private partnership model in Activity 1.4.2 to diversify funding sources, incorporating private capital through innovative financing mechanisms. Together, these activities ensure long-term financial sustainability by securing ongoing funding and building institutional capacity to maintain climate resilience efforts.

197. **Scalability and Replicability:** Scalability and replicability are integral to the project's approach. Lessons from CREWS Togo will be applied and expanded upon, with particular focus on strengthening community-level resilience and CIS. Concretely, this project will build upon the achievements of CREWS, specifically in flood and drought monitoring, by integrating these systems within a national framework that can serve as a model for neighboring countries. The scalable nature of the project will enable Togo to replicate its methodologies and protocols in other regions and potentially contribute to a standardized CIS approach across West Africa.

D.3. Sustainable development (max. 300 words)

198. The proposed project holds significant promise for sustainable development, aligning directly with Sustainable Development Goals (SDGs) 13 (Climate Action) and 5 (Gender Equality). It aims to address critical gender disparities in disaster risk management (DRM) in Togo, where women face substantial barriers in accessing training and understanding early warning systems (EWS), exacerbating their vulnerability to climate impacts.

199. Currently, women constitute a majority of those disproportionately affected by climate change in Togo. For instance, during the 2007 floods in Togo, women and children were particularly vulnerable due to limited access to safe shelters and healthcare services, highlighting the urgent need for gender-responsive disaster risk reduction measures (UN Women, 2021). They often lack access to information and resources, hindering their ability to participate effectively in DRM initiatives and respond to climate-related risks.

200. The project seeks to empower women by enhancing their involvement in EWS and climate risk management through targeted capacity-building initiatives. For example, similar projects in neighboring countries have successfully integrated women into community-based disaster management committees, ensuring their participation in decision-making processes and enhancing community resilience (UNDP, 2020). By improving communication channels tailored to women's needs and ensuring the accessibility of warning messages, the project aims to increase their participation and effectiveness in disaster preparedness and response efforts.

201. Moreover, the project aligns with regional frameworks such as the ECOWAS Gender Strategy and Action Plan for Disaster Risk Reduction, which emphasizes the importance of gender mainstreaming in climate resilience initiatives across West Africa. By integrating gender considerations into project objectives, activities, and outcomes, Togo can address the specific vulnerabilities and barriers faced by women in DRM (ECOWAS, 2018).

202. Togo's national policies, including the National Policy for Gender Equity and Equality and the National Civil Protection Policy for 2030, provide a robust framework for mainstreaming gender equality in DRM. Key actions will include raising awareness among communities about gender disparities in disaster risk, building the capacities of both women and men in climate resilience strategies, and ensuring that vulnerable groups, particularly women, are supported throughout all phases of disaster management (Government of Togo, 2021).

203. In the project proposal, a detailed gender action plan will be developed to guide the integration of gender perspectives from planning through to implementation and evaluation. This plan will allocate resources specifically for gender-focused activities, such as targeted training sessions and awareness campaigns tailored to women's needs. By enhancing women's participation and leadership in DRM, the project not only strengthens climate resilience but also promotes gender equality and contributes to sustainable development goals in Togo (UNDP, 2020).

204. Project activities will directly engage women in training workshops on disaster preparedness, risk reduction strategies, and leadership roles within community-based organizations. For example, workshops will incorporate gender-sensitive approaches to disaster management, empowering women with the tools to advocate for their communities' needs in policy dialogues and resource allocation discussions.

205. Components of the project will include the establishment of gender-responsive early warning systems that consider the specific needs and vulnerabilities of women. This will involve developing communication strategies that are accessible to women, ensuring that warning messages are disseminated through channels that reach women effectively, such as community networks and mobile platforms. By enhancing access to timely and relevant information, the project aims to enable women to make informed decisions and take

proactive measures to protect themselves and their communities from climate risks.

206. Expected impacts of these efforts include improved resilience of women and vulnerable communities to climate hazards, enhanced gender equality in disaster response and management, and strengthened community cohesion and preparedness. By fostering inclusive and gender-responsive approaches, Togo can build a more resilient society that is better equipped to mitigate and adapt to the impacts of climate change, thereby advancing both local development priorities and global sustainability agendas.

D.4. Needs of recipient (max. 300 words)

207. The critical need for effective implementation of climate resilience strategies in Togo has been underscored by various diagnostic reports and assessments from international bodies such as the CADRI Mission of the UNDP, the World Bank, and the WMO. These reports highlight a significant funding gap that impedes the execution of action plans derived from these strategies. Despite the existence of comprehensive studies and strategic frameworks, Togo struggles to translate plans into concrete actions due to financial constraints and resource limitations.

208. This funding opportunity is pivotal for addressing these challenges by supporting the effective implementation of climate resilience action plans tailored to Togo's specific vulnerabilities. Rural communities, including women, youth, seniors, and urban residents in flood-prone areas, are particularly vulnerable. For instance, small-scale farmers in rural Togo, who constitute a significant portion of the agricultural sector, often belong to vulnerable groups and face severe impacts from floods that destroy crops and disrupt livelihoods.

209. According to Togo's National Adaptation Programme of Action (NAPA), agriculture employs over 60% of the population and contributes significantly to the GDP (NAPA, 2012). However, climate change threatens agricultural productivity, with projections indicating increased frequency and intensity of extreme weather events such as floods and droughts. These challenges disproportionately affect vulnerable groups who rely on agriculture for their livelihoods. Small-scale farmers, who often lack access to financial resources and advanced agricultural technologies, are particularly at risk.

210. Government efforts to support agricultural development and resilience-building initiatives are crucial but require enhanced support to effectively reach vulnerable groups. Women in Togo, who play a central role in agricultural production and processing, are key beneficiaries of targeted interventions aimed at improving their access to resources, market opportunities, and climate-smart agricultural practices. Enhancing the resilience of women farmers not only supports food security but also promotes gender equality, aligning with the Sustainable Development Goals (SDGs) 2 (Zero Hunger) and 5 (Gender Equality).

211. The project will focus on activities such as providing technical assistance, promoting climate-resilient agricultural practices, facilitating access to markets, and strengthening community-based organizations. These interventions aim to enhance the adaptive capacity of rural communities, particularly women and small-scale farmers, by equipping them with the knowledge and resources to mitigate climate risks and sustain their livelihoods. Examples include training programs on sustainable farming techniques, establishing women-led cooperatives, and providing microfinance opportunities to support climate-resilient agriculture. Consent will be obtained through participatory processes led by community leaders, elders, and representatives, ensuring full understanding and voluntary agreement on all aspects of project activities. To ensure a safe and respectful environment for all project participants, SEAH (Sexual Exploitation, Abuse, and Harassment) prevention measures are integrated into every aspect of project implementation, with particular emphasis on interactions with local communities. All project staff and contractors will receive mandatory training on SEAH prevention, and clear codes of conduct will be enforced to uphold ethical standards in all community engagements. Additionally, accessible and confidential grievance mechanisms will be established within communities to allow safe reporting and prompt response to any SEAH-related concerns.

212. Expected impacts include improved food security, increased resilience to climate-related hazards, enhanced incomes through value addition in agriculture, and the empowerment of women in agricultural value chains. By addressing these critical needs and strengthening implementation capacities, the project aligns with Togo's national development goals and contributes to broader climate resilience and disaster risk management frameworks.

213. In summary, this funding will enable Togo to translate strategic climate resilience plans into actionable measures that directly benefit vulnerable communities across multiple sectors. It aims to build resilience, ensure sustainable development, and foster inclusive growth across the country, aligning with Togo's

commitment to achieving the SDGs and advancing climate resilience efforts at the national level. The project will mitigate the impacts of various hazards such as floods, which result in the loss of human life, destruction of road infrastructure, residential houses, and educational establishments. Similarly, it will address challenges posed by strong winds, which often lead to the destruction of roofs of houses, classrooms, and health centers, impacting community resilience and infrastructure stability.

214. Moreover, the project will enhance preparedness and response capabilities against epidemics and epizootics, aiming to reduce human life loss and economic decline associated with health crises. Efforts will focus on combating vegetation fires, mitigating socio-economic losses like human life and food reserves, and preventing environmental degradation, including atmospheric and air pollution. Drought mitigation strategies will target land degradation and biodiversity loss while addressing agricultural and food security crises caused by reduced harvests and rising food prices. Finally, the project will enhance preparedness for technological risks such as transport accidents and industrial hazards, ensuring safer infrastructure and reduced risks associated with hazardous materials transportation.

215. Efforts towards disaster risk reduction in Togo must extend beyond mitigating these hazards. Initiatives also need to bolster public health systems to manage epidemic outbreaks effectively, enhance agricultural practices to ensure food security despite climate variability, fortify educational facilities against natural disasters, secure transportation infrastructure to withstand extreme weather events, and bolster industrial safety measures to minimize risks from technological hazards.

216. To effectively address these challenges, targeted efforts are crucial to vulnerable populations. Women, who often bear the brunt of disaster impacts due to their roles in food production and caregiving, require tailored support in disaster preparedness, access to resources, and inclusion in decision-making processes. Youth need opportunities for education on disaster resilience, while seniors require specialized care and support systems. Urban residents in flood-prone areas need resilient infrastructure and early warning systems to protect their homes and businesses.

D.5. Country ownership (max. 500 words)

217. Togo has demonstrated robust commitment to Disaster Risk Management (DRM) through a series of strategic initiatives and institutional frameworks aimed at enhancing resilience and reducing disaster risk across the country. The foundation of Togo's DRM strategy includes pivotal milestones such as the National Action Program for Adaptation to Climate Change (2009) and the National Investment Program for Environment and Natural Resources (2010). These frameworks integrate DRM activities within broader climate change adaptation strategies, as outlined in Togo's Accelerated Growth and Employment Promotion Strategy (2013) and the National Development Plan (2018–2022).

218. In 2017, Togo further strengthened its DRM capabilities by establishing the National Agency for Civil Protection (ANPC), which plays a central role in coordinating DRM interventions. ANPC's mandate encompasses the coordination of disaster response, risk reduction initiatives, and the implementation of early warning systems. This agency oversees crucial functions such as the meteorological information bulletin, annual updates of the national multi-risk contingency plan, and the integration of disaster risk considerations into national policies and development plans. ANPC's efforts are pivotal in ensuring a coordinated and effective response to natural disasters and climate-related hazards across Togo.

219. The National Meteorological and Hydrological Service (ANAMET) complements ANPC's efforts by providing essential meteorological and hydrological data critical for early warning systems and disaster preparedness. ANAMET monitors weather patterns, forecasts, and hydrological conditions, which are essential for predicting and mitigating the impacts of climate-related hazards such as floods, droughts, and storms. Through ANAMET's network of weather stations and data collection initiatives, Togo enhances its capacity to anticipate and respond to weather extremes, thereby improving resilience among vulnerable communities.

220. Togo's commitment to international climate action is underscored by its Nationally Determined Contribution (NDC) submitted to the UNFCCC in 2016, with an updated version in June 2021. The NDC emphasizes Togo's strategic priority to enhance adaptive capacities in human settlements, including the establishment of an early warning system. Additionally, Togo has consistently reported progress and priorities through its series of National Communications to the UNFCCC, demonstrating a comprehensive approach to addressing climate change impacts across key sectors such as energy, water resources, agriculture, forestry, land use, and coastal zones.

221. Togo has benefited significantly from international support in strengthening its DRM capacities. The United Nations Development Programme (UNDP) has been instrumental in providing technical assistance and capacity building to enhance Togo's DRM frameworks. Through initiatives supported by UNDP, Togo has improved institutional coordination, developed risk reduction strategies, and enhanced community resilience.

222. Furthermore, the African Risk Capacity (ARC), a specialized agency of the African Union, has supported Togo in enhancing its financial resilience to climate-related disasters. ARC provides innovative insurance solutions and contingency planning support, enabling Togo to access rapid financial assistance in response to climate emergencies.

223. The World Meteorological Organization (WMO) has also played a crucial role in supporting Togo's meteorological and hydrological services. WMO provides technical expertise, training, and resources to strengthen ANAMET's capacity in weather monitoring, early warning systems, and climate data management. This support has been essential for Togo to improve its climate resilience through better forecasting and preparedness for weather-related disasters.

224. The lessons learned from ongoing DRM projects, including the current initiative, will be instrumental in informing future interventions. These insights will be leveraged to enhance early warning systems and modernize infrastructure such as the Hydrometer, crucial for mitigating risks in vulnerable communities. The outcomes of this project will serve as a catalyst for mobilizing resources and scaling up efforts to strengthen Togo's resilience against climate change impacts.

225. Furthermore, the project emphasizes innovation in hydrometeorological data collection and analysis, tailored to specific climate threats and the needs of diverse stakeholders at both sectoral and community levels. This innovative approach will not only enhance project effectiveness but also set a precedent for future DRM initiatives in Togo and beyond.

226. **Project management capabilities of the National Civil Protection Agency:** In the space of 8 years, the agency has implemented several projects.

Projects implemented by the Agency as a whole

No.	Titled	Duration	Amount	Financial partner	Geographical area
1	Project to strengthen the resilience of vulnerable communities to climate change and disasters in areas highly exposed to risks	4 years	2,160,300 US dollars	UNDP	The entire national territory
2	Strengthening the resilience of communities in the Savanes region to disaster risks	8 months	256,000 US dollars	UNDP	Savanes region in particular: - Commune Kpendjal 1 - Commune Kpendjal 2 - Commune Kpendjal West 2
3	Strengthening disaster risk governance and recovery capacity	4 years	800,000 US dollars	EU through UNDP	The entire national territory
4	Project to support post-flood recovery 2022 in ECOWAS member states	6 months	1,073,778 US dollars	ECOWAS	The entire national territory
5	Strengthening the emergency response system in northern Togo, in the Savanes region	12 months	250,000 US dollars	UNHCR	The entire national territory

227. ***Projects of which certain components are implemented by the National Civil Protection Agency***

No.	Titled	Duration	Amount	Financial partner	Geographical area
1	Component 2: Strengthening civil protection services, disaster risk reduction and provision of services to CREWS end users	4 years	1,150,000 US dollars	BM	The entire national territory
2	Program effectiveness/emergencies component	4 years	US$397,000	UNICEF	The entire national territory
3	Humanitarian assistance to people of concern to UNHCR	6 months (Waiting to start)	719,733 US dollars	UNHCR through ECOWAS	Savanes region
4	Component 1: Digital advisory service for the prevention and management of agricultural and food crises of the West Africa Food System Resilience Program (FSRP)	5 years	10 million US dollars	BM	The entire national territory

228. In summary, Togo's proactive measures in DRM and climate resilience underscore its strong ownership of national strategies and commitments to international frameworks. The integration of lessons learned and innovative approaches from this project will pave the way for sustainable DRM practices, ensuring continued progress towards resilient and adaptive communities in the face of climate change.

D.6. Efficiency and effectiveness

D.6.1. Estimated cost per t CO_2 eq, defined as total investment cost / expected lifetime emission reductions (Mitigation and Cross-cutting)	(a) Total project financing	US$ 27,025,747
	(b) Requested GCF amount	US$ 24 987 000
	(c) Expected lifetime emission reductions	_____ tCO_2eq
	(d) Estimated cost per tCO_2eq (d = a / c)	US$_____ / tCO_2eq
	(e) Estimated GCF cost per tCO_2eq removed (e = b / c)	US$_____ / tCO_2eq
D.6.2. Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund's financing, disaggregated by public and private sources (Mitigation and Cross-cutting)	(f) Total finance leveraged	US$ 27,025,747
	(g) Public source finance leveraged	US$ 2 038 746,61
	(h) Private source finance leveraged	
	(i) Total Leverage ratio (i = f / b)	92,46%
	(j) Public source leverage ratio (j = g / b)	7,54%
	(k) Private source leverage ratio (k = h / b)	

D.6.3. Describe how the financial structure is adequate and reasonable in order to achieve the proposal's objective(s), including addressing existing bottlenecks and/or barriers; providing the minimum concessionality; and without crowding out private and other public investment. (max. 500 words)

229. The financial structure proposed for the project aims to ensure the efficient and effective achievement of its objectives by tackling existing bottlenecks and obstacles, while ensuring the minimum concessionality required. This structure is designed to avoid crowding out private and other public investment, thus ensuring a balanced and sustainable approach to financing.

230. Adequacy and reasonableness of the financial structure: The project's financial structure comprises mainly grants and some in-kind contributions. The justification for the concessionality requested is based on the additional cost and risk premium associated with climate resilience projects. These projects often face higher initial costs and longer payback periods, which can discourage private investment. By incorporating

concessional financing from the Green Climate Fund (GCF), the project can mitigate these risks and attract additional funding from private and public sources.

231. Justification of requested concessionality: The level of concessionality requested is the minimum required to make the investment viable. This is due to the high initial costs of acquiring basic equipment and software, and the need for long-term investment in climate resilience infrastructure and systems, which generally do not offer immediate financial returns. The concessionality provided by the Global Fund helps bridge the financial gap, making the project attractive to other investors (e.g. insurance companies) by reducing risk and increasing the potential for a positive return on investment.

232. Efficiency and effectiveness: The project is designed to produce significant adaptation effects, primarily in relation to the total funding required. By focusing on setting up a multi-hazard early warning system and improving climate information services, the project addresses critical vulnerabilities and builds community resilience in Togo. This approach is compared with references from similar projects and the pre-existing national scheme, demonstrating a high expected return in terms of reducing the impacts of climate hazards and improving disaster preparedness.

233. Summary of financial analysis:

a) Expected financial rate of return: The project aims to strengthen the adaptive capacities of the Togolese population and is expected to achieve a financial rate of return that justifies the initial investment through grant support.
b) Financial needs and gaps: The project identify a clear need for concessional financing to cover the gap between available public funds and the total investment required. This gap is due to the high costs of upgrading infrastructure and setting up comprehensive early warning systems.
c) Constraints and obstacles: The main obstacles are limited access to initial capital, the high cost of technology and infrastructure, and the need to build the capacity of local institutions. Concessional financing reduces the financial burden on local players.

234. Incorporation of technologies and best practices: The project incorporates the best available technologies and practices in climate information services and early warning systems. Innovations include the use of digital tools, improved data management systems and international collaborations for capacity building. These advances enable the project not only to meet current standards, but also to set a precedent for future initiatives.

E. ANNEXES

E.1. Mandatory annexes

☒	Annex 1	NDA No-objection Letter(s) (Template)
☒	Annex 2	Pre-feasibility (or feasibility) study (Guidance)
☒	Annex 2a	Logical Framework (Template)
☒	Annex 2b	Timetable (Template)
☒	Annex 3	Budget plan that provides breakdown by type of expense including AE fees (Template)
☒	Annex 4	Gender assessment and action plan (Template)
☒	Annex 5	UNDP Co-financing commitment letter if applicable (Template)
☒	Annex 6	Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule
☒	Annex 7	Risk assessment and management (Template)
☒	Annex 8	Procurement plan model (Template)
☒	Annex 9a	Legal Due Diligence (regulation, taxation and insurance) (Template)
☐	Annex 9b	Legal Opinion/Certificate of Internal Approvals (Template)

E.2. Other annexes to be submitted when applicable/requested

☒	Annex 10	Togo CIEWS Theory of Change
☒	Annex 11	Togo CIEWS ESS screening
☒	Annex 12	Environmental and Social Action Plan (ESAP) (Template)
☒	Annex 13	Togo CIEWS Structured intervention
☒	Annex 14	Togo Business Model Canvas for CIEWS
☒	Annex 15	First level AML/CFT (KYC) assessment
☒	Annex 16	Vulnerability and impact estimation in Togo

***** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents. *****