



ADAPTATION FUND

AFB/PPRC.32/Inf.16
18 September 2023

Adaptation Fund Board
Project and Programme Review Committee
Thirty-second Meeting
Bonn, Germany, 10-11 October 2023

PROPOSAL FOR ENHANCED DIRECT ACCESS GRANT FOR ARMENIA



ADAPTATION FUND

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: EDA - Regular-sized Project Concept

Country/Region: Republic of Armenia
Project Title: Armenia National Adaptation Funding Facility
Thematic Focal Area: Multisector projects
Implementing Entity: Environmental Project Implementation Unit (EPIU)
Executing Entities: Environmental Project Implementation Unit (EPIU)
AF Project ID:
IE Project ID: **Requested Financing from Adaptation Fund (US Dollars):** 4,960,000
Reviewer and contact person: Farayi Madziwa **Co-reviewer(s):** Alyssa Gomes
IE Contact Person: Margarita Gasparyan

Technical Summary

The project titled “Armenia National Adaptation Funding Facility” aims to enhance the country's capacity to effectively respond to the adaptation challenges posed by climate change and enhance adaptation resilience in the regions and municipalities of Armenia through establishment of a National Adaptation Finance Facility. This will be done through the three components below:

Project/Programme Background and Context:

Component 1: Policy Delivery - Policy Decompression at the Regional/Municipal Level (USD 300,000).

Component 2: Capacitating Stakeholders - Mapping, Needs Assessment, and Capacity Building of Key Actors (USD 300,000)

Component 3: Channeling Adaptation Finance - Identification, appraisal, and financing of viable projects (USD 3,800,000).

Requested financing overview:

Project/Programme Execution Cost: USD 70,000

Total Project/Programme Cost: USD 4.470.000

Implementing Fee: USD 490,000

	<p>Financing Requested: USD 4,960,000</p> <p>The proposal includes a request for a project formulation grant of USD 50,000. However, no application form for the PFG was included with the submission.</p> <p>The initial technical review raises several issues, such as the size of the proposal above the required page limit, clear articulation of concrete adaptation measures or outputs, clear articulation of the full cost of adaptation reasoning, categorizing the proposed project in compliance with the AF ESP, and correction of the project cycle management fees and execution costs to fall within the percentage caps for those fees, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.</p>
Date:	1 September 2023

Review Criteria	Questions	Comments
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	<p>Yes.</p> <p>Armenia has been experiencing average temperature rise between 1929 and 2016 which has resulted in rapid glacier shrinking. Average rainfall has been erratic, reducing in some areas and increasing in others. Climate projections show greater rates of temperature increase for Armenia higher than the global average by the 2090s and point towards an increase in the intensity of temperature extremes. Whilst climate projections show a likely decline in average rainfall, the intensity of sub-daily extreme rainfall will increase as temperatures increase. The country therefore faces high exposure to climate hazards that make it susceptible to heatwaves, droughts, flash floods and landslides. High poverty rates which are in part linked to high unemployment rates and poor productivity of the agricultural sector which employs around 35% of the working population,</p>

		make the country vulnerable to the adverse impacts of climate change.
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. Endorsement letter signed 10 August 2023
	2. Does the length of the proposal amount to no more than Fifty pages for the project/programme concept, including its annexes?	Not cleared. The proposal is 59 pages long. CAR1: Please reduce the number of pages to within the limit of 50 pages.
	3. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Not cleared. The mandate of the AF is to fund concrete projects and programmes. Whilst the specific projects to be funded under this EDA proposal are to be identified at a later stage, an initial identification of the expected concrete outputs which will be visible, measurable, and verifiable is important to meet the requirements of a concrete project/programme. From the theory of change it is noted that there are targeted sectors where projects will be implemented and on page 25 of the proposal, nine sectors and sub-sectors have been identified in the initial stakeholder consultations. However, it is expected that consultations at this stage should be comprehensive enough to provide preliminary identification of possible concrete measures that could address climate risks and impacts and reduce vulnerability of the targeted beneficiaries. This is more so because a bullet point under the economic benefits section (pages 27-28) already indicates an intended focus on agriculture, water management, and infrastructure projects. Further, pages 31-32 state that the project will focus on adaptation measures such as promoting climate-resilient crop cultivation, water harvesting and storage, integrating climate resilience features into infrastructure development, supporting climate-resilient crop

cultivation, implementing advanced irrigation technologies, and promoting climate-smart livestock management. With these assertions, an initial identification of concrete outputs that are expected from the funding facility under component three could be identified.

CR1: Please outline concrete measures under project that have been preliminary identified in consultation with the six groups of project beneficiaries as measures to address the identified climate risks and impacts, and that would build the resilience of vulnerable groups at the local level.

At the full proposal stage, it is expected that the concrete adaptation measures will be more clearly identified and explained in more detail.

The project's objective is to enhance the country's capacity to effectively respond to the adaptation challenges posed by climate change and enhance adaptation resilience in the regions and municipalities of Armenia through establishment of a National Adaptation Finance Facility. The project thus aims to strengthen Armenia's ability to respond proactively and effectively to the challenges of climate change at the regional and municipal level, contributing to the country's adaptation resilience-building and safeguarding the well-being of its communities.

The EDA rationale is however not clear in the project justification. For example, why is the Enhanced Direct Access modality suitable to address the identified adaptation challenges. The proposal has not systematically explained how the

		<p>proposed EDA approach would enable organizations at the sub-national level, including small, local organizations to identify their adaptation needs by themselves and implement the adequate measures to address those needs.</p> <p>CR2: Please include a clear justification for EDA approach taking into consideration the points raised above.</p>
	<p>4. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Not cleared.</p> <p>The stated benefits seem generic. Six groups of beneficiary stakeholders who can access the proposed national adaptation funding facility are identified in the proposal. Whilst it is noted that the facility will have national coverage, it would be useful to clearly articulate the geographic characteristics and characteristics/traits of the end beneficiary/community targeted by the funding beyond the six stakeholder groups. e.g., will it be women, youth, urban, rural, regions prone to specific climate hazards etc.</p> <p>CR3: Please describe the characteristics of the end beneficiaries of the project, articulate whether marginalized and vulnerable groups and Indigenous communities have been identified, and describe how the equitable distribution of benefits will be ensured across the different beneficiaries.</p> <p>The expected benefits should also link to the type of concrete activities envisaged (see CR1) and an initial gender assessment should inform the identification of specific benefits to women. The proposal should also state how the equitable distribution of benefits will be ensured, and to which beneficiary groups. In addition,</p>

		<p>whilst the proposal states that the project's design prioritizes fair and equitable access to benefits (page 33), there is no clear description about how this will be done or ensured.</p> <p>CAR2: Please undertake an initial gender analysis to determine the different needs, capabilities, roles and knowledge resources of women and men.</p>
	<p>5. Is the project / programme cost effective?</p>	<p>Not cleared.</p> <p>The proposal needs to provide an explanation of why the proposed scope and approach are the logical solution for addressing the identified climate risks and impacts and what alternative approach could have been used to achieve the same project results. At the concept stage, this can be a general description, including addressing cost-effectiveness from a sustainability point of view.</p> <p>CR4: Please provide a clear description of an alternative option to the proposed measures that would realize the same outcomes, including how proposed measures are the least cost option and are ideal from a sustainability point of view.</p> <p>For the full proposal stage, quantitative estimates of cost-effectiveness should be provided where feasible.</p>
	<p>6. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?</p>	<p>Not cleared.</p> <p>The types of plans that sector plans and regional plans have been mentioned. However, the specific plans and how the project is linked to those need to be outlined,</p>

		<p>e.g., which sector plans specifically e.g., energy, biodiversity, agriculture? etc., and which regional plans specifically?</p> <p>CR5: Please clarify how the project is aligned with the national plans and strategies.</p> <p>In addition, there could be other relevant policies and strategies that are relevant but have not been included, e.g., Armenia updated NDC, 4th national communication on climate change to the UNFCCC, the Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020-2030, the Sustainable Development Strategy 2030, and any others as relevant.</p> <p>CR6: Please include reference to Armenia's NDC to the extent that it is relevant to the proposed project, including any other instruments as relevant.</p>
	7. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	<p>Not cleared.</p> <p>An initial identification of licenses, authorizations and clearances that will be required for successful implementation of project measures need to be identified. This can be expressed as technical standards that project beneficiary stakeholder groups may need to comply with due to the nature of the envisaged adaptation measures (see CR1).</p> <p>CR7: Please include to the extent relevant, national technical standards such as building codes, water quality regulations, and any other sector-specific regulations. Furthermore, in a logical manner, outline how compliance will be ensured.</p>
	8. Is there duplication of project / programme with other funding sources?	<p>Not cleared.</p>

		<p>CR8: Please clarify if there is overlap with any GEF small grants projects, and explain the areas of overlap and complementarity, and how lessons from earlier initiatives have been incorporated during the EDA project design.</p>
	<p>9. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?</p>	<p>Not cleared.</p> <p>The proposal includes a description of the features of how knowledge management will be addressed by the project. The proponent should complement this with a separate budgeted project component on knowledge management or mainstream KM throughout the proposal.</p> <p>CR9: Please include a description of:</p> <ul style="list-style-type: none"> (i) how knowledge will be gathered, which structures in the EDA model will be responsible for generating knowledge, (ii) at what stages knowledge will be gathered and disseminated and (iii) how experiences gained through the project would be tracked, analysed and fed back into the EDA project and outwards to external stakeholders..
	<p>10. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>Not cleared.</p> <p>Stakeholders consulted include national agencies, representatives of regional and municipal authorities, civil society organizations (CSOs), academia, and representatives of vulnerable communities. However, the proposal does not provide specific details on the stakeholder groups e.g., which national agencies, which communities and from which geographic regions where the project is expected to have an effect, nor the nature of those consultations. Page 36 mentions that</p>

		<p>the project also targets vulnerable groups including marginalized groups, women, children, and indigenous populations although there is no mention under the stakeholder consultation section, how their effective participation was ensured and how their concerns were factored into the design of the project and the EDA model.</p> <p>CR10: Please describe the methods used to consult the various stakeholders. In addition, if some project target areas will have marginalized and vulnerable communities and individuals, please describe how they were accommodated during the stakeholder consultations and how their concerns and feedback were incorporated into the project design.</p>
	<p>11. Is the requested financing justified on the basis of full cost of adaptation reasoning?</p>	<p>Not cleared. Whilst the key features of the project have been outlined and provide a rationale for the importance of the proposed project, clarity should be provided on whether co-financing is expected.</p> <p>The participation of the private sector is mentioned throughout the proposal, and in particular, page 12 refers to the private sector coming in with implementation funding. With this narrative, it is not clear what the extent of co-financing from private sector would be and whether this aspect poses potential risk to the successful implementation of sub-projects financed under this EDA project.</p> <p>CR11: Please provide a description of how taken solely, without additional funding from other donors, the proposed activities will help achieve the project objectives. Also provide a description demonstrating that the proposed activities are not “business as usual” and if they are, provide justification of their adoption in</p>

		the context of achieving the adaptation goals of the project.
	12. Is the project / program aligned with AF's results framework?	<p>Cleared</p> <p>The project includes alignment with outcomes 1-8.</p> <p>At the full proposal stage, the project should also be aligned with the AF core impact indicators. Please refer to the "Methodologies for reporting Adaptation Fund core impact indicators" for alignment with at least one of the AF core impact indicators available on the AF website here: https://www.adaptation-fund.org/apply-funding/project-funding/project-proposal-materials/, for the format to present the alignment.</p>
	13. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	<p>Not cleared.</p> <p>The proposal points at institutional and individual capacity strengthening, policy mainstreaming, community participation in decision making and monitoring and evaluation as elements to foster sustainability. However, as the adaptation benefits need clearer articulation (see CR2), a clearer description about how those benefits can be sustained after the end of the project and a description about how the project enables their replication should be provided.</p> <p>CR12: Please provide a description of how financing for the EDA model will be sustained and provide a description of how funded projects under the National Adaptation Funding Facility will be sustained, replicated, and scaled up at the local end beneficiary or community level.</p> <p>The role of the regional climate adaptation committees in the EDA model needs clarification as it appears that their role could be a once off and would become</p>

		<p>redundant once the regional needs assessments are done.</p> <p>CR13: Please clarify the role of the regional adaptation committees in the EDA model and how would their engagement be sustained in the longer term.</p> <p>Moreover, it is not clear how the National Adaptation Funding Facility will continue to be resourced once all the funding from the project has been disbursed during the project lifespan. In turn, it is not clear how the costs for maintaining the roster of assessors and the steering committee will be covered.</p> <p>CR14: Please clarify the plans or the vision for how the National Adaptation Funding Facility will continue to be resourced once the project ends. Clarify also if / how the cost the roster of experts and the steering committee will be financed.</p> <p>CR15: Please explain how projects funded by the National Adaptation Funding Facility will be sustained and replicated at the community and end beneficiary level to enable replication and scale up as relevant.</p> <p>There is mention of the private sector coming in with funding for projects, but no description has been provided of whether this has been guaranteed or what indications private sector has given of their willingness to provide such funding.</p> <p>CR16: Please clarify related this point.</p>
	14. Does the project / programme provide an overview of environmental and social impacts / risks	Not cleared.

	<p>identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?</p>	<p>It is noted and acknowledged that a robust initial screening against the ESP principles has been done. However, the proposal has not stated the overall category in which the screening process has classified the proposed project, that is, as either Category A, B or C in compliance with the AF ESP.</p> <p>CAR3: Please categorize the proposed project accordingly as per the requirements of the AF ESP.</p> <p>Second, due to the nature of the EDA model being proposed, the sub projects that will be funded by the National Adaptation Funding Facility are not yet identified in the proposal, and therefore their assessment against the ESP principles is not possible. The proposal should clearly acknowledge this fact, and the risk screening should be done based on those expected concrete activities or outputs that can be identified at the project concept stage. In addition, an initial gender assessment.</p> <p>In addition, as the risk of non-compliance with the AF ESP and GP is increased with the existence of unidentified sub projects (USPs), the proposal should clearly articulate the need for an Environmental and Social Management Plan (ESMP). The proposal should provide a description of how the ESMP will be applied to USPs (projects funded under the National Adaptation Funding Facility).</p> <p>CAR4: Please include a justification for the USP approach, include clear articulation of the incidence of USPs, describe the framework for compliance with the AF ESP, as well as the need for an ESMP.</p>
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Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes. It is within the USD 5 million cap for the EDA funding window
	2. Is the Implementing Entity Management Fee at or below 10 per cent of the total project/programme budget before the fee?	<p>Not cleared. The fee is 10.96%.</p> <p>CAR5: Please revise the IE management fee to not more than 10% of the total project/programme budget before the fee.</p>
	3. Are the Project/Programme Execution Costs at or below 12 per cent of the total project/programme budget (including the fee)?	<p>Not cleared. It is noted that the IE is also the EE in which case the EE fee should not exceed 1.5%. The proposed fee is 1.57%.</p> <p>CAR6: As the IE is also the EE, please revise the fee to not more than 1.5% of the total project/programme budget before the fee.</p>

Eligibility of IE	1. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes. EPIU is an accredited NIE.
Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	n/a at concept stage
	2. Are there measures for financial and project/programme risk management?	n/a at concept stage
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	n/a at concept stage
	4. Is a budget on the Implementing Entity Management Fee use included?	n/a at concept stage
	5. Is an explanation and a breakdown of the execution costs included?	n/a at concept stage
	6. Is a detailed budget including budget notes included?	n/a at concept stage
	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	n/a at concept stage
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	n/a at concept stage
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	n/a at concept stage
	10. Is a disbursement schedule with time-bound milestones included?	n/a at concept stage



ADAPTATION FUND

CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

PART I: PROJECT/PROGRAMME INFORMATION

- Title of Project/Programme:** Enhanced Direct Access
- Country:** Republic of Armenia
- Title of the Project** Armenia National Adaptation Funding Facility
- Type of Implementing Entity:** National Implementing Entity
- Implementing Entity:** “Environmental Project Implementation Unit” State Agency
- Executing Entities:** “Environmental Project Implementation Unit” State Agency
- Amount of Financing Requested:** 4,960,000 (*in U.S Dollars Equivalent*)
- Project Formulation Grant Request (available to NIEs only):** Yes No
- Amount of Requested financing for PFG:** 50,000 (*in U.S Dollars Equivalent*)
- Letter of Endorsement (LOE) signed:** Yes No
- Stage of Submission:**
- This concept has been submitted before
- This is the first submission ever of the concept proposal

Project/Programme Background and Context:

Project's economic social, development and environmental context

Country overview

Armenia is a land-locked country within the Caucasus region between Europe and Asia. The majority of the country is at high altitude (greater than 1,000 meters above sea-level), including a freshwater Lake Sevan, with a surface area of 1,279 km² and the Seven River Basin with a surface area of 4,721 km², spans approximately one sixth of the nation's total land area. As of 2022, Armenia's population was estimated at 2.78 million people¹ and its GDP at \$ 19.5 billion². Around one third of the nation's population lives in its capital city, Yerevan³.

Over the past decade, Armenia has transitioned from an industry-dominated to a service-dominated economy. As of 2016, the service sector constituted 48.8% of the labor force. Agriculture remains a major employer with a labor market share of 35.3% and there remains a relatively high rate of unemployment (18%) as well as net out-migration. GDP is distributed less evenly than employment, with around 52,8% originating in the service sector, 26,64% in the industry and only 11,34% in agriculture. Poverty persists, affecting around 26,5% (2021 data) of the population based on the national poverty line⁴.

Climate baseline

Overview

Armenia's climate can be described as highland continental, with large variation between summer highs (June to August) and winter lows (December to February). The country also experiences large climatic contrasts because of its intricate terrain, and the climates range from arid to sub-tropical and to cold, high mountains. Summer highs in Armenia's capital Yerevan average around 30°C–33°C while the average in winter is 1°C–3°C. The more mountainous regions experience lower average temperatures and prolonged periods of snow cover. The average annual precipitation is low at 526 mm. Precipitation intensity is greater in Armenia's high-altitude regions with May and June the wettest months. For Armenia, altitude is the strongest controlling factor determining the spatial distribution of temperatures and precipitation in Armenia. Sub-zero average temperatures are common in Armenia's mountain ranges while its highest average temperatures are experienced in the relatively low-lying western plains. Similarly, Armenia's highest peaks may receive up to 1,000 mm of annual precipitation while precipitation can be as low as 200 mm in the western plains.

Due to the sharply intersected relief and the development of the slope processes, Armenia is characterized by active external processes. High frequency and magnitude of hazardous hydrometeorological phenomena (HHP) are characteristic for Armenia,

¹ World Bank data portal - [Armenia](#)

² World Bank data portal - [Armenia](#)

³ [Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC](#)

⁴ ["Armenia – Country Risk Climate Profile", joint publication by World Bank and Asian Development Bank, 2021](#)

which trigger droughts, landslides, mudslides, forest fires etc. and inflict significant losses to the population and the economy⁵.

Key trends

Temperature - Armenia's NC4 reports that it experienced an average temperature rise of 1.23°C between 1929–2016. This historical rise in temperatures has resulted in the rapid shrinking of the glaciers in Armenia's mountain regions, with spatial extents retreating at around 8 m per year. Trends suggest climate variability is increasing and in 2018, Yerevan experienced a new record July temperature, reaching 42°C.

Precipitation - Armenia's NC4 reported a 10% reduction in average annual precipitation volume was documented over the period 1935–2012. The spatial distribution of precipitation changes is irregular: the northeast and central regions have become more arid. However, precipitation has increased in the southern and northwestern regions and in the western region of the lake Sevan basin. Additionally, the number of days with heavy rainfall and hailstorms has increased.

Climate future

Temperature

The model ensemble's⁶ estimate of average warming in Armenia under the highest emission pathway is an average temperature increase of 2.8°C by the 2050s and 5.8°C by the 2090s. Ensemble estimates of warming under the lowest emission pathway also present an average temperature increase of 1.2°C by the 2050s and maintain through the end of the century. Both of these temperature increases represent greater rates of increase than the global average. By the 2090s, temperatures are projected to have increased around 35% to 40% higher than the global average. Under all scenarios, except for the lowest emission pathway, the number of summer days is expected to increase, and the number of frost and ice days are expected to fall dramatically by the end of the century.

In the case of Armenia, the rate of warming in maximum temperatures, is 5.8°C by the 2090s, which is notably faster than the warming in monthly average temperature. This points towards an increase in the intensity of temperature extremes and is among the some of the largest margins of warming projected anywhere on Earth. The seasonality of future temperature changes holds some uncertainty on lower emissions pathways. However, projected warming is strongest in the summer months from June to September. The months of July, August, and September are projected to see around 50% faster warming than the winter months from November to April under the highest emissions pathway.

Precipitations

While considerable uncertainty surrounds long-term projections in regional precipitation

⁵ [National Action Program of Adaptation to Climate Change and the List of Measures for 2021-2025](#)

⁶ Climate projections referred are derived from datasets available through the WB's Climate Change Knowledge Portal. These datasets are processed outputs of simulations performed by multiple General Circulation Models (GCM).

trends, global trends are evident. The intensity of sub-daily extreme rainfall events appears to be increasing with temperature, a finding supported by evidence from different regions of Asia. However, as this phenomenon is highly dependent on local geographical contexts further research is required to constrain its impact in Armenia. For Armenia, additional uncertainty remains around future changes in average annual precipitation, as well as for changes in seasons. Model ensemble estimates are not statistically significant across all emissions pathways. However, the trend indicated, which is consistent with historical climate behavior and most models, is towards a decline in average monthly precipitation. Under all emissions pathways, an increase in the precipitation associated with a maximum 5-day rainfall event is expected more predominantly in the northern and eastern areas of Armenia. Under all emissions pathways, precipitation reductions are projected in the western regions, and under lower emissions pathways reductions are also expected in the arid northern regions. These changes match global trends, which suggests the intensity of sub-daily extreme rainfall will increase as temperatures increase, a finding supported by evidence from different regions of Asia.

Climate related natural hazards

Armenia faces significant disaster risk levels and is ranked 101 out of 191 countries by the 2019 Inform Risk Index. This ranking is driven strongly by the exposure component of risk. Armenia has high exposure to natural hazards, including, riverine, flash, and coastal, and very high exposure to tropical cyclones and their associated risks. Drought exposure is also significant. Disaster risk in Armenia is elevated due to its moderate levels of social vulnerability and the country's decent coping capacity. The risks of disasters resulting from these drivers are likely to increase as the severity and frequency of extreme climate event increases. In recent decades the annual number of events designated as hazardous hydro-meteorological phenomena (such as hurricanes, snowstorms, heat waves) has increased.

Heatwaves: Armenia regularly experiences high maximum temperatures, with an average monthly maximum of around 13.2°C and an average August maximum of 27.5°C. The current annual probability of a heat wave (defined as a period of 3 or more days where the daily temperature is above the long-term 95th percentile of daily mean temperature) is around 3%. The model ensemble projects that the annual probability of a heatwave could increase from 5% to 18% (depending on emission scenarios) by the end of the century. The country is also projected to experience a significant increase in the number of very hot days (Tmax > 35°C). However, these increases primarily reflect the continual rise in temperatures against the model baseline period of 1986–2005.

Droughts: two primary types of droughts may affect Armenia, meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region's wider river basins). When low hydrological flows also coincide with imperfect crop choices and land management practices, agricultural drought can also result. At present, Armenia faces a significant annual probability of severe meteorological drought, as defined by a standardized precipitation evaporation index of less than 2.

The 2001 drought highlighted the vulnerability of the rural poor to drought. Agencies

working in the region reported more than 25,000 poor households affected, the majority of whom were dependent on local food production which was severely damaged by the drought. The model ensemble projects a dramatic increase in the annual probability of drought increasing from 20% to over 80% (depending on emission scenarios) by the 2090s. Global overview of changes in drought conditions under different warming scenarios supports extreme projections, suggesting that the West Asia region could experience a considerable increase in the frequency of extreme drought. Under 1.5°C of warming what is currently a 1-in-100-year event may return every 20 years, and under 2°C of warming such an event may recur every 10 years or less⁷.

Extreme Precipitation, Flood, and Landslide: heavy rainfall events are known to trigger landslides and floods in rural areas of Armenia, often affecting poorer and more isolated rural communities. River levels in Armenia are particularly variable, and high flows often hit communities without forewarning, resulting in flood disasters. Flooding can result in damage to subsistence agriculture and increase the incidence of poverty and health issues. Floods also represent a risk to national economic productivity particularly when affecting the capital city, Yerevan. While most climate models project a small increase in the intensity of extreme precipitation events, uncertainty remains in precipitation projections and model ensemble estimates. The general shift in the seasonality of precipitation away from the summer months, combined with the projected loss of many of Armenia's glaciers will likely intensify extreme events and highlight a need for disaster risk reduction measures. However, research and development in the climate modelling arena is needed to support decision makers and planning efforts, specifically more reliable downscaled modelling and additional work will be needed in order to better understand and map rural exposure and vulnerability.

Climate change impacts

Natural Resources

Water: uncertainty remains around the precise trajectory of future change in the availability of water resources in Armenia and river flows are expected to reduce dramatically. While vulnerability for basin and watersheds vary, under a "worst-case scenario", average decrease in river flow is estimated at 39% by the end of the century⁸. These changes would have a significant impact on the levels of Armenia's lakes and reservoirs, with implication for society potentially coming from the resulting damage to fish stocks and decline in water levels and water quality. However, caution should be applied as these projections are derived from a single climate scenario; other scenarios provide less consistent trends. More recent analysis of runoff from Caucasus Glaciers suggests a significant increase in the short-term (up to 2022) as melting intensifies, but near total loss of glaciers and glacial meltwater towards the end of the 21st century.

A likely impact of the loss of Armenia's mountain glaciers is an increase in variability of water flows as glaciers typically act to smooth runoff over the year. Water scarcity towards the end of summer (August, September) is likely to increase. Armenia has already experienced declines in annual precipitation and desertification has been

⁷ [Global Changes in Drought Conditions Under Different Levels of Warming](#), Naumann, G., Alfieri, L., Wyser, K., Mentaschi, L., Betts, R. A., Carrao, H., . . . Feyen, L. (2018).

⁸ [Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC](#)

documented around the nation, including in the Ararat Valley, an important agricultural production area⁹. More information is needed to understand the potential threat of a broader restructuring of the nation's ecosystems, particularly whether tipping points threaten the viability of current agricultural operations.

Soil and Land Cover: a key route through which climate change may lead to soil and land degradation is through its impact on soil moisture. With very large increases in the frequency and intensity of drought projected over Armenia, the potential for declines in soil quality are significant. The Caucasus region is among many regions where an expansion of the arid and semi-arid area is projected, with the affected area growing rapidly over the 21st century under higher emissions pathways. Such changes will reduce ecosystem productivity resulting in species range shifts, and potential loss of biodiversity.

Linked to issues of land degradation and drought are potential changes to Armenia's forest cover, Armenia's NC4 estimates a potential loss of 14,000–17,500 ha (around 3%–4%) by 2030 as a result of changes to ecosystems and growing conditions, as well as increased frequency of forest fire, pest and disease outbreaks, and invasive species. Armenia has already begun to enact adaptation and restoration plans to reduce deforestation through its National Forest Policy and Strategy, improved wildfire management policies and specific area action plans such as the City of Yerevan 5-Year Plan (2019–2023) to restore the city's buffer forest layer by 40 hectares. A general trend of species range shifts towards higher altitudes is expected and conversion of lower altitude land cover to arid forest types, steppe, and semi-desert. Armenia's National Strategy and Action Program to Combat Desertification was ratified in 2015 to increasing the effectiveness of land management, raising public awareness on desertification issues and their solutions, as well as international cooperation¹⁰.

Economic Sectors

Agriculture

Climate change in Armenia is likely to influence food production via direct and indirect effects on crop growth processes. Direct effects include alterations to carbon dioxide availability, precipitation, and temperatures. Indirect effects include through impacts on water resource availability and seasonality, soil organic matter transformation, soil erosion, changes in pest and disease profiles, the arrival of invasive species, and decline in arable areas due to desertification. On an international level, these impacts are expected to damage key staple crop yields, even on lower emissions pathways. Projections estimate 5% and 6% declines in global wheat and maize yields respectively even if the Paris Climate Agreement is met and warming is limited to 1.5°C. Shifts in the optimal and viable spatial ranges of certain crops are also inevitable, though the extent and speed of those shifts remains dependent on the emissions pathway.

In some cases, changing temperature and rainfall patterns may be favorable for crop production. Under all scenarios of future climate change, the agricultural growing season could extend by 10–40 days in Armenia. However, this may also present challenges due

⁹ [Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC](#)

¹⁰ [National Strategy and Action Program to Combat Desertification in the Republic of Armenia](#)

to uncertainty and potential declines in future water resources. Armenia is already struggling with land degradation on most agricultural land; climate change could accelerate this degradation as temperatures rise and extreme weather events increase in frequency and severity. Temperature extremes are likely to result in sub-optimal growing conditions for many of Armenia's highest grossing crops, typically grains and vegetables. The increase in the number of very hot days (>35°C), even in the order of 5 days as projected for the low emissions pathway, is likely to damage yields for almost all crops grown in lowland areas of Armenia as well as for a majority of crops grown in intermediate and upland areas¹¹. Studies have suggested pressure will be amplified by a potential doubling of the average water requirement of Armenia's crops as temperatures rise. As the glacier supply depletes, and its regulating effect on flows reduces, effective water storage and management infrastructure will grow in importance.

Armenia implemented sustainable agricultural development strategies to increase the unused arable land in rotation by approximately 10,000 hectares per annum in an effort to combat projected yield reductions¹². Projections show that by the 2070s, potato crop yields will decrease by 21%, with the highest level of reduction expected in Shirak and Syunik marzes. The largest decline in the grape yields will be recorded in the Ararat Valley – by 20%¹³. At the same time the area of high productivity land is projected to shrink, with a 17% increase in less productive desert and meadow-steppe land. Agriculture, Forestry and Fisheries make up Armenia's lowest paid sector yet continue to employ over 30% of the population. These high levels of vulnerability, and risks in both slow and rapid onset hazards emphasize the serious risks climate change represents in Armenia, particularly under higher emissions pathways.

A further, and perhaps lesser appreciated influence of climate change on agricultural production is through its impact on the health and productivity of the labor force. Labor productivity during peak months has already dropped by 10% as a result of warming, and a decline of up to 20% might be expected by the 2050s under the highest emissions pathway. In combination, it is highly likely that the above processes will have a considerable impact on national food consumption patterns both through direct impacts on internal agricultural operations, and through impacts on the global supply chain. Without adaptation, the economic environment for smallholder agricultural operations is likely to become increasingly hostile¹⁴.

Urban and Energy

Research has established a reasonably well constrained relationship between heat stress and labor productivity, household consumption patterns, and (by proxy) household living standards. In general terms, the impact of an increase in temperature on these indicators depends on whether the temperature rise moves the ambient temperature closer to, or further away from, the optimum temperature range. The optimum range can vary depending on local conditions and adaptations. In Armenia, a general decline in productivity is expected due to high temperatures that are offset by a reduction in the frequency of extreme low temperatures. This trend can be measured in the change to

¹¹ [Building resilience to climate change in South Caucasus agriculture](#). World Bank

¹² [Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia for 2020–2030](#)

¹³ [Republic of Armenia – Fourth National Communication on Climate Change to the UNFCCC](#)

¹⁴ [Environmental and socio-economic vulnerability of agricultural sector in Armenia](#), Melkonyan, A. (2014), Science of The Total Environment

the annual heating and cooling degree days. The full model ensemble projects an increase in the annual cooling requirement of around 1,000°C (degree days), versus a decline in the heating requirement of around 2,000°C (degree days). This points towards a potential net energy saving. Armenia's energy policy is focused on ensuring independence and increased security of the energy sector and promotion of the sustainable development of the energy sector based on efficient use of local primary (renewable) energy resources, further development of the nuclear energy sector, diversification of energy supply sources and introduction of energy efficient and advanced technologies. In the medium term, meeting increases in electricity demand, energy system reliability, and affordability of electricity services are important challenge to be addressed¹⁵. The country has begun to increasingly invest in the development of renewable energy sources and, more specifically, in recent years, electricity generation at photovoltaic (PV) solar plants, with a longer-term interest in further development of wind and nuclear energy.

The effects of temperature rise and heat stress in urban areas are increasingly compounded by the phenomenon of the Urban Heat Island (UHI) effect. Dark surfaces, residential and industrial sources of heat, an absence of vegetation, and air pollution can push temperatures higher than those of the rural surroundings, commonly anywhere in the range of 0.1°C–3°C in global mega-cities. As well as impacting on human health (see Communities) the temperature peaks that will result from combined UHI and climate change, as well as future urban expansion, are likely to damage the productivity of the service sector economy, both through direct impacts on labor productivity, but also through the additional costs of adaptation. The Armenian economy has great dependence on activity in its capital city, Yerevan, where around half of the nation's industrial production takes place. While the economy of the city is strong, and poverty rates comparatively low, the health risks of high temperatures require consideration. The 2018 heatwave, during which a new temperature record was set in Yerevan of 42°C, illustrated the strain that extreme climate events can place on the energy system, with technical faults and high demand putting strain on the energy system. Research suggests that on average, a one degree increase in ambient temperature can result in a 0.5%–8.5% increase in electricity demand.

Heating requirements continue to be an important part of Armenian energy needs. Individual heat boilers are primarily used for heating, of which 50% use natural gas. Natural gas is followed by wood use for heating, with an estimated 35% of Armenian households using wood for heating. This is primarily driven by affordability. As the country's deforestation rates are likely to continue, the use of biomass for heating is likely to continue to the trend, which is expected to adversely affect the poorest households due to a decline in firewood availability and price increase.

Communities

Poverty and Inequality: high poverty rates prevail in Armenia. These are in part linked to high unemployment rates, but also to the poor productivity of the agricultural sector which employs around 35% of the working population. According to the Armenian Statistical Committee wages in the agriculture, fisheries, and forestry sector are the

¹⁵ [Armenia Power Sector Policy Note](#), World Bank (2016).

lowest of all the primary sectors. Many households are dependent on remittances received from migrant workers. Disruption of remittance flows is possible as a result of climate change but is an issue which is poorly understood. Due to potential high impacts of climate change on the agricultural sector in Armenia, alongside the increased risk of climate-related disasters, the country faces major challenges from climate change, particularly under higher emissions pathways.

Many of the climatic changes projected are likely to disproportionately affect the poorest groups in society. For instance, heavy manual labor jobs are common among the lowest paid whilst also being most at risk of productivity losses due to heat stress. Poorer businesses are least able to afford air conditioning, an increasing need given the projected increase in cooling days. Poorer farmers and communities are least able to afford local water storage, irrigation infrastructure, and technologies for adaptation. According to the FAO, most agricultural holdings remain small, with an average size of 1.4 ha, many farming households are poor and many already rely on remittances sent from household members who migrate for work during fallow periods on the farm.⁶⁰ Climate changes, such as changes to growing seasons, extreme weather events and species range shifts (potentially resulting in new invasive species) further threatens to expose a lack of adaptability and resilience in the population dependent on the agricultural sector. The majority of agricultural small-holders are not covered by any insurance system, resulting in reduced resilience to disaster events.

Gender: An increasing body of research has shown that climate-related disasters have impacted human populations in many areas including agricultural production, food security, water management and public health. The level of impacts and coping strategies of populations depends heavily on their socio-economic status, socio-cultural norms, access to resources, poverty as well as gender. Research has also provided more evidence that the effects are not gender neutral, as women and children are among the highest risk groups. Key factors that account for the differences between women's and men's vulnerability to climate change risks include gender-based differences in time use; access to assets and credit, treatment by formal institutions, which can constrain women's opportunities, limited access to policy discussions and decision making, and a lack of sex-disaggregated data for policy change¹⁶.

Human Health: risk to human health from climate-related hazards are expected to increase, particularly under higher emissions pathways. Risks include the increased probabilities of drought, exacerbated by the loss of mountain glaciers, and heat waves. Immediate risks include heat-related sicknesses and the increased vulnerability to malaria outbreaks. These impacts are likely to be followed by the risks to nutrition of associated agricultural losses and water shortages. Experience can be drawn from the 2001 drought, which necessitated emergency food distribution by the World Food Program to around 200,000 citizens in response to high levels of malnutrition. *Nutrition:* The World Food Program estimate that without adaptation the risk of hunger and child malnutrition on a global scale could increase by 20% respectively by 2050¹⁷. Projections suggest there could be approximately 81 climate-related deaths per million population linked to lack of food availability in Armenia by the 2050s. *Heat-Related Mortality:* research has placed a threshold of 35°C (wet bulb ambient air temperature) on the

¹⁶ [Gender Equality, Poverty Reduction, and Inclusive Growth](#), World Bank Group (2016)

¹⁷ [Two minutes on climate change and hunger: A zero hunger world needs climate resilience](#), WFP (2015)

human body's ability to regulate temperature, beyond which even a very short period of exposure can present risk of serious ill-health and death. Temperatures significantly lower than the 35°C threshold of "survivability" can still represent a major threat to human health. Climate change could push global temperatures closer to this temperature "danger zone" both through slow onset warming and intensified heat waves. Armenia has also been identified as a having particularly poor air quality in many of its urban and developed areas and associated issues may be amplified by increased incidence of extreme heat¹⁸. It is estimated that without adaptation, annual heat-related deaths in the Central Asian region, could increase 139% by 2030 and 301% by 2050.

International partnership and reporting framework

Armenia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1993, the Kyoto Protocol in 2002 and the Paris Agreement in 2017. The country's position under the Convention and the Paris Agreement is set out in the "Intended Nationally Determined Contributions" (INDC), approved by the Government of Armenia (GoA) and submitted to the UNFCCC on 22 September 2015. With the ratification of the Paris Agreement, the INDC of Armenia became its NDC for the period of 2015 – 2050. In its updated in 2021 [NDC](#), the Republic of Armenia intends to adhere to a ten-year NDC implementation period (2021-2030), including up-front information on the emission reductions to be achieved by 2030 and on adaptation measures to be undertaken as part of the NDC. Armenia's NDC establishes the country's strong commitment to climate change adaptation measures and identifies its efforts in national greenhouse gas mitigation efforts. In Armenia, key sectors identified for adaptation action include natural ecosystems, human health, water resources management, agriculture, forestry, and fisheries, energy, human settlements, infrastructure, and tourism. Country has also delivered its [Fourth National Communication on Climate Change](#) (in 2020) and its [Third Biennial Report](#) (in 2021) under the UNFCCC.

National Adaptation Planning

On 13 May 2021, the Government of the Republic of Armenia approved the "National Action Program of Adaptation to Climate Change and the List of Measures for 2021-2025" ([NAP](#)). The general objective of the NAP is to promote the reduction and management of climate risks in Armenia. This will occur by addressing the impacts of climate change, by taking full advantage of emerging opportunities, by reducing socio-economic vulnerabilities, and avoiding losses and damages due to climate change. The process will be further supplemented by building mechanisms that enable adaptation of population as well as natural, productive and infrastructure systems. The NAP process aims to ensure coordinated deployment of sectoral and regional adaptation measures. It also unifies the strategic sector and regional investment plans in climate change adaptation.

The NAP includes a series of complementary documents, that create an information baseline for moving forward, and a set of implementable, concrete measures, identified by multiple stakeholders, that are essential to reducing current and projected climate impacts in the most vulnerable national development sectors. Among them, Sector and

¹⁸ [Armenia Environmental Performance Index](#) (2019).

Marz Adaptation Plans should be mentioned. The sector adaptation plans (hereinafter - SAPs) and marz adaptation plans (hereinafter - MAPs) provide the foundation for operationalizing adaptation planning within the existing governance structures. Individual SAPs and MAPs outline the sectoral and regional responses to the challenges presented by climate change and help prioritize adaptation activities across the country. To date, SAPs for Agricultural and Water sectors and MAPs for Tavush and Shirak regions have been developed and adopted.

Sectorial NAPs (SAPs)

As per Agricultural SAP, the following 8 groups of priority measures are proposed to increase climate resilience of the sector:

1. Expansion of the list of insurable crops and risks, introduction of new insurance products;
2. Implementation of advanced irrigation technologies and organization of efficient agriculture;
3. Support to entities engaged in seed breeding and seed production in the conditions of climate change;
4. Support for the introduction of nursery certification system in RA;
5. Application of measures to mitigate the negative impact of hazardous hydrometeorological phenomena (HHMP);
6. Promotion and development of resource-saving agriculture;
7. Implementation of measures aimed at development of fodder production, improvement of fodder quality and increase of production volumes;
8. Capacity building of structures, agricultural farms and relevant specialists involved in agricultural sector;

As per Water SAP, the following 3 groups of priority measures are proposed to increase climate resilience of the sector:

1. Knowledge & adaptation capacities building for population (with specific focus at women and remote communities) and CSOs;
2. Coordination & enforcement of planning policies;
3. Investments in sustainable & reliable water services and assets;

Regional (marz) NAPs (MAPs)

As it has already been mentioned, the Marz Adaptation Plans for two regions of Armenia (Tavush and Shirak) has been developed and adopted so far decompressing priority measures to be implemented in the targeted sector taking into account regional specificities.

Project/Programme Objectives:

This Project is submitted to the Adaptation Fund by National Implementing Entity “Environmental Project Implementation Unit” State Agency under the Ministry of Environment of Armenia for funding solicitation under the Enhanced Direct Access framework to channel adaptation finance targeting addressing existing barriers and empowerment of regional stakeholders and beneficiaries to identify, appraise and implement projects (with participation of the private sector) aimed at increasing resilience of Armenia’s vulnerable communities.

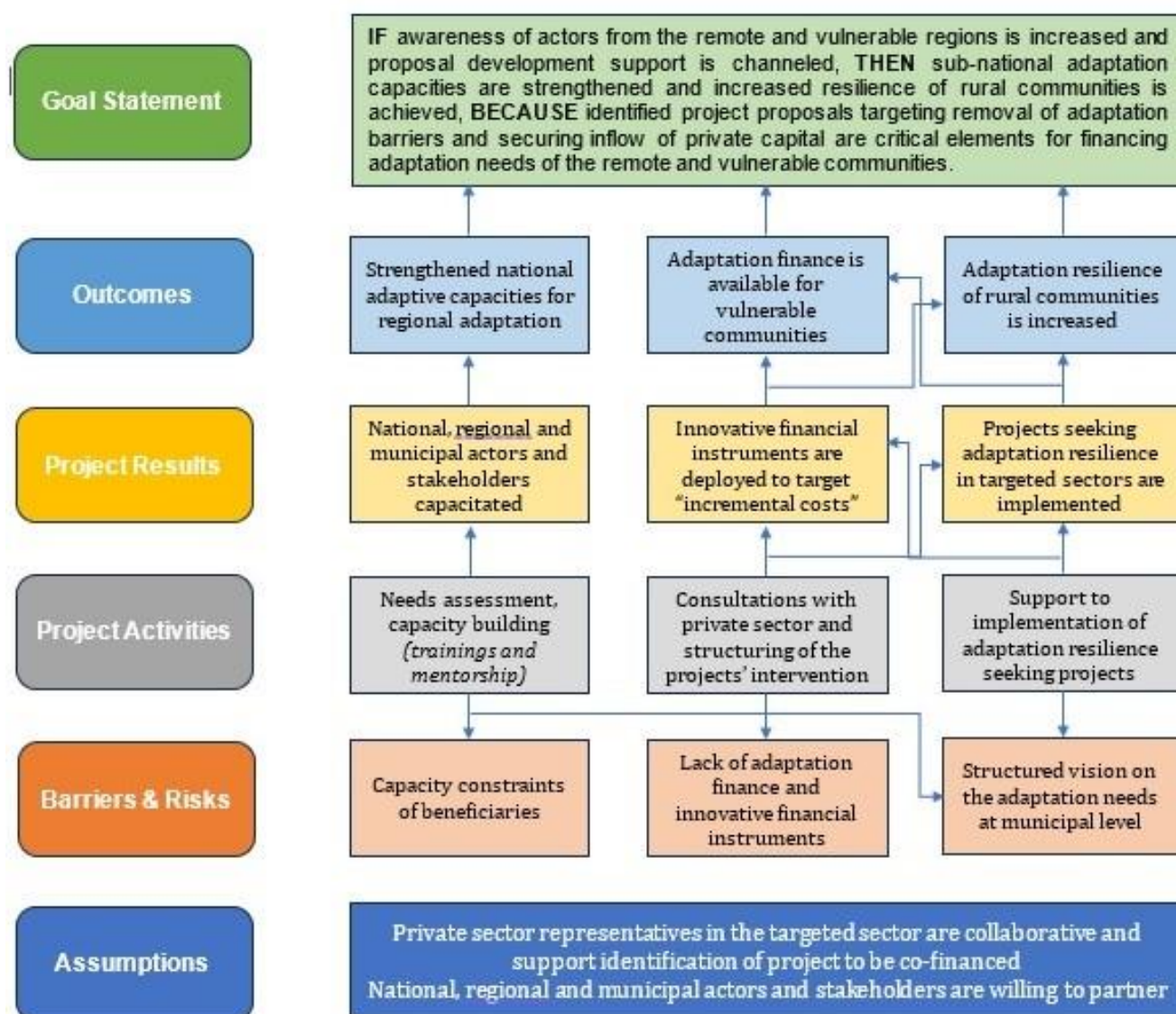
The **overall objective** of the proposed Project is to enhance the country's capacity to effectively respond to the adaptation challenges posed by climate change and enhance adaptation resilience in the regions and municipalities of Armenia through establishment of a National Adaptation Finance Facility.

Specific objectives of the Project are:

- **Increasing climate resilience of Armenia's regions** to the impacts of climate change. This involves identifying and addressing vulnerabilities in various sectors, such as agriculture, water resources, infrastructure, and ecosystems, to ensure they can withstand the changing climate and associated risks;
- **Promoting regional inclusivity** by involving various stakeholders at the regional level (regional and municipal authorities, CSOs and private sector). Collaborative efforts will ensure that adaptation measures are tailored to the specific needs and conditions of different regions and municipalities within Armenia;
- **Launching and operationalizing innovative financial instrument** (National Adaptation Finance Facility) that will provide funding for “incremental adaptation costs”, thus enabling private sector to come in with implementation funding. The facility will further fundraise to receive contributions from international donors, government budgets, private sector investments, and other funding sources to support regional adaptation projects effectively;
- **Capacity-building activities** to enhance the technical and institutional capabilities of regional stakeholders involved in climate adaptation. This will ensure that projects are identified, structured, implemented, and monitored effectively to maximize their impact and sustainability;
- **Enhance knowledge transfer and data management** to make informed decisions and develop effective adaptation resilience seeking projects. This will include assessments of climate risks, conducting vulnerability assessments, and using scientific data to inform decision-making processes;
- **Advance policy-making and good governance reform** to create an enabling environment for climate adaptation in the regions. This will include aligning marz adaptation plans (MAPs) and sectorial adaptation plans (SAPs) with climate resilience goals and integrating climate considerations into relevant policies and regulations.

By achieving these objectives, the Project aims to strengthen Armenia's ability to respond proactively and effectively to the challenges of climate change at the regional and municipal level, ultimately contributing to the country's adaptation resilience-building and safeguarding the well-being of its communities.

TOC Diagram of the Project:



Alignment of the Project with Adaptation Fund's priorities

N	Priority sectors of Adaptation Fund	AF Project Areas	Potential projects to be supported through Facility (concordant with the NAP, SAPs and MAPs)
1.	Agriculture	Climate resilient technologies and practices: ➤ drought tolerant seeds; ➤ improved irrigation systems; ➤ sustainable land management practices;	➤ Advanced irrigation technologies; ➤ Seed breeding and seed production; ➤ Resource saving agricultural practices; ➤ Hydroponic food production;

			<ul style="list-style-type: none"> ➤ Improvement of pastures and grasslands; ➤ Fodder production;
2.	Disaster Risk Reduction	<ul style="list-style-type: none"> ➤ risk and vulnerability assessments; ➤ strengthening climate information and early warning systems; 	<ul style="list-style-type: none"> ➤ anti-hail systems; ➤ forest belts and windbreaks in areas most susceptible to strong winds;
3.	Ecosystem-based Adaptation	<ul style="list-style-type: none"> ➤ wetlands management and conservation; ➤ river restoration; ➤ enhancing governance of natural resources; 	<ul style="list-style-type: none"> ➤ Fish farming;
4.	Food Security	<ul style="list-style-type: none"> ➤ helping farmers adapt to the changing climate; 	<ul style="list-style-type: none"> ➤ Advanced irrigation Technologies; ➤ Seed breeding and seed production; ➤ Resource saving agricultural practices; ➤ Hydroponic food production;
5.	Forests	<ul style="list-style-type: none"> ➤ fight land degradation; ➤ create smart agricultural practices; ➤ integrate adaptive measures within communities to conserve their forests and rich biodiversity; 	<ul style="list-style-type: none"> ➤ forest belts and windbreaks in areas most susceptible to strong winds;
6.	Cross-sectoral	<ul style="list-style-type: none"> ➤ Establishment of National Adaptation Fund; ➤ Other cross-sectoral activities; 	<ul style="list-style-type: none"> ➤ TBD (at full proposal formulation stage following results of stakeholder consultations);
7.	Rural Development	<ul style="list-style-type: none"> ➤ reversing land degradation; ➤ enhancing ecosystem services, to improve a rural population's ability to cope with climate change as well as their ability to generate income; 	<ul style="list-style-type: none"> ➤ TBD (at full proposal formulation stage following results of stakeholder consultations);
8.	Urban Development	<ul style="list-style-type: none"> ➤ adapting to sustainable challenges and engineering innovative ideas; 	<ul style="list-style-type: none"> ➤ TBD (at full proposal formulation stage following results of stakeholder consultations);

9.	Water Management	<ul style="list-style-type: none"> ➤ households employing techniques to harvest rainwater; ➤ watersheds, where ecosystem-based adaptation can improve the ability of natural systems to function effectively, thus securing water resources on a regional scale; 	<ul style="list-style-type: none"> ➤ Water-saving technologies;
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Alignment of the Project with Adaptation Fund’s Strategic Result Framework

STRATEGIC RESULTS FRAMEWORK OF THE ADAPTATION FUND	
Expected Results	Project’s Alignment
<p><u>Goal:</u> Assist developing country Parties to the Kyoto Protocol and the Paris Agreement that are particularly vulnerable to the adverse effects of climate change in meeting the costs of concrete adaptation projects and programmes in order to implement climate-resilient measures.</p>	<p>Through establishing of the National Adaptation Finance Facility proposed Project seeks to enhance the country's capacity to effectively respond to the adaptation challenges posed by climate change and enhance adaptation resilience in the regions and municipalities of Armenia.</p>
<p><u>Impact:</u> Increased resiliency at the community, national, and regional levels to climate variability and change.</p>	<p>Resiliency at the national, regional and municipal level will be increased through:</p> <ul style="list-style-type: none"> ➤ Advancing policy making and good governance capacities of key actors and stakeholders; ➤ Ensuring synchronization between and on-the-ground delivery of the priority measures defined in the National Adaptation Plan, Sectorial Adaptation Plans, Regional (Marz) Adaptation Plans and other strategy documents; ➤ Introduction of the innovative financial instruments targeted towards addressing “incremental costs of the adaptation projects” and seeking engagement of the private sector actors; ➤ Increasing awareness of the key stakeholders and collaborators in vulnerable municipalities on the challenges of adaptation resilience in their respective communities and available mitigation instruments;

<u>Outcome 1: Reduced exposure to climate-related hazards and threats</u>	
<u>Output 1.2:</u> Targeted population groups covered by adequate risk reduction systems	<u>Component 3 of the Project</u> – Channeling Adaptation Finance to the resilience building projects: ➤ Projects to be financed through Facility – anti-hail protection of the crops;
<u>Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses</u>	
<u>Output 2.1:</u> Strengthened capacity of national and sub-national centers and networks to respond rapidly to extreme weather events	<u>Component 2 of the Project</u> – Capacitating stakeholders through mapping, needs assessment and capacity enhancement (trainings and mentorships where applicable);
<u>Output 2.2:</u> Increased readiness and capacity of national and sub-national entities to directly access and program adaptation finance	<u>Component 2 of the Project</u> – Capacitating stakeholders through mapping, needs assessment and capacity enhancement (trainings and mentorships where applicable): ➤ Support in formulation of the projects seeking direct access to adaptation finance;
<u>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level</u>	
<u>Output 3.1:</u> Targeted population groups participating in adaptation and risk reduction awareness activities	<u>Component 2 of the Project</u> – Capacitating stakeholders; Under this component, awareness raising in targeted municipalities will be carried out with the purpose to: 1) increase awareness of the population on available adaptation and risk reduction activities, and 2) mobilization of the active groups among population;
<u>Output 3.2:</u> Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	<u>Component 2 of the Project</u> – Capacitating stakeholders through mapping, needs assessment and capacity enhancement (trainings and mentorships where applicable);
<u>Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets</u>	

<p><u>Output 4:</u> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability</p>	<p><u>Component 3 of the Project</u> – Channeling Adaptation Finance to the resilience building projects:</p> <ul style="list-style-type: none"> ➤ Projects to be financed through Facility – strengthening infrastructure assets’ (owned by households, farmers and SMEs in vulnerable regions) adaptability to the negative impacts of climate change;
<p><u>Outcome 5:</u> Increased ecosystem resilience in response to climate change and variability induced stress</p>	
<p><u>Output 5:</u> Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability</p>	<ul style="list-style-type: none"> ➤ TBD (at full proposal formulation stage following results of stakeholder consultations);
<p><u>Outcome 6:</u> Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas</p>	
<p><u>Output 6:</u> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability</p>	<p><u>Component 1 of the Project</u> – Decompressing policy delivery at regional and municipal level.</p> <p>Under this component the Project will help to translate key points from national strategies (National Adaptation Plan, Sectorial Adaptation Plans and Regional Adaptation Plans) into the local actions (including annual set of activities implemented by regional and municipal authorities).</p>
<p><u>Outcome 7:</u> Improved policies and regulations that promote and enforce resilience measures</p>	
<p><u>Output 7:</u> Improved integration of climate-resilience strategies into country development plans</p>	<p>N/A</p>
<p><u>Outcome 8:</u> Support the development and diffusion of innovative adaptation practices, tools and technologies</p>	
<p><u>Output 8:</u> Viable innovations are rolled out, scaled up, encouraged and/or accelerated.</p>	<p><u>Component 3 of the Project</u> – Channeling Adaptation Finance to the resilience building projects:</p> <ul style="list-style-type: none"> ➤ Projects to be financed through Facility – all those mentioned in the 4th column of the Table “<u>Alignment of the</u>

Project/Programme Components and Financing:

Fill in the table presenting the relationships among project components, activities, expected concrete outputs, and the corresponding budgets. If necessary, please refer to the attached instructions for a detailed description of each term.

For the case of a programme, individual components are likely to refer to specific subsets of stakeholders, regions and/or sectors that can be addressed through a set of well defined interventions / projects.

Armenia faces increasing challenges posed by climate change, which necessitates the establishment of a National Adaptation Finance Facility. This project aims to create a dedicated financial mechanism to enhance the country's capacity to respond effectively to climate impacts and promote sustainable development at the regional and municipal levels. The project, with a total budget of \$5 million, is designed with three key components: Policy Delivery, Capacitating Stakeholders, and Channeling Adaptation Finance.

Component 1: Policy Delivery - Policy Decompression at the Regional/Municipal Level

This component focuses on ensuring that national climate adaptation policies are effectively delivered and implemented at the regional and municipal levels in Armenia. The project will involve a comprehensive policy decompression process, which translates national-level policies into actionable and region-specific guidelines, allowing for more effective implementation.

Proposed activities:

- **Conduct Regional Climate Vulnerability Assessments:** the project team, in collaboration with regional stakeholders, will conduct detailed vulnerability assessments to identify the specific climate risks and challenges faced by each region and municipality;
- **Regional Policy Framework Development:** Based on the vulnerability assessments, a regional policy framework will be formulated, aligning national, sectorial and regional adaptation goals with the specific needs of the targeted vulnerable communities. This will involve a participatory approach, engaging local authorities, communities, and other relevant stakeholders
- **Capacity Building for Policy Implementation:** Workshops, training and follow up mentorship sessions will be organized to build the capacity of regional and municipal officials and stakeholders in understanding and implementing the climate adaptation policies. This will enhance their ability to integrate climate considerations into decision-making processes;
- **Establish Regional Climate Adaptation Committees:** To ensure effective policy delivery, Regional Climate Adaptation Committees will be established, bringing together

representatives from regional and municipal governments, NGOs, private sector, and local communities to coordinate and oversee policy implementation;

Component 2: Capacitating Stakeholders - Mapping, Needs Assessment, and Capacity Building of Key Actors

This component aims to strengthen the capacity of key stakeholders involved in climate adaptation at the regional and municipal levels. By identifying their needs and providing targeted capacity-building initiatives, the Project seeks to enhance the effectiveness of adaptation efforts.

Proposed activities:

- **Stakeholder Mapping:** A comprehensive stakeholder mapping exercise will be conducted to identify and engage relevant actors, including local NGOs, community-based organizations, academic institutions, and private sector entities;
- **Needs Assessment:** The identified stakeholders will undergo a needs assessment process to identify gaps in their knowledge, skills, and resources related to climate adaptation;
- **Tailored Capacity Building:** Based on the needs assessment, capacity-building programs, workshops, training and mentorship sessions will be designed and implemented to enhance the capabilities of stakeholders in planning and implementing climate resilience measures;
- **Knowledge Sharing and Networking:** The project will facilitate knowledge-sharing platforms and networking events, fostering collaboration and exchange of best practices among stakeholders at the regional and municipal levels;

Component 3: Channeling Adaptation Finance - Identification, appraisal, and financing of viable projects

This component focuses on identifying and financing viable climate adaptation projects at the regional and municipal levels. By channeling funds from the National Adaptation Finance Facility, the Project aims to support on-the-ground initiatives that enhance climate resilience.

Proposed activities:

- **Project Identification and Screening:** The Project team, in collaboration with stakeholders, will identify potential climate adaptation projects in different regions. These projects will undergo initial screening to ensure alignment with the regional policy frameworks;
- **Project Appraisal and Feasibility Study:** Viable projects will undergo a detailed appraisal and feasibility study to assess their technical, financial, social, and environmental viability. This will involve consultations with relevant experts and stakeholders.

- **Financial Mechanism Setup:** The National Adaptation Finance Facility will be established, including setting up the necessary financial instruments and governance structures to manage and disburse funds.

“Environmental Project Implementation Unit” State Agency under the Ministry of Environment of Armenia is national accredited entity to Adaptation Fund Green Climate Fund. It has in place all necessary policies, procedures to effectively and efficiently manage the Project (including identify, assess, finance, provide monitoring, evaluation and impact assessment to the sub-granting projects). It will also engage with private sector entities to identify viable projects that are not financed due to low IRR (caused by “incremental costs”) and will make sure that proposed projects, after receiving financing from Facility are capable to attract commercial funding.

- **Project Financing:** Approved projects will receive funding from the facility, and mechanisms will be put in place to ensure timely disbursement and effective project monitoring and evaluation;

At the Full Proposal formulation stage specific sectors and selection criteria will be designed, based also on the results of rigorous stakeholder consultations. Indicatively, the maximum size of the grants to be made available for potential beneficiaries should be not more than 100,000 USD. Also additional selection criteria for leveraging commercial funding equivalent to 1:4 might be introduced (for some sectors/sub-sectors);

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
Component 1: Policy Delivery - Policy Decompression at the Regional/Municipal Level	<ul style="list-style-type: none"> ➤ detailed vulnerability assessments of 10 regions are carried out; ➤ regional policy frameworks for 10 regions are formulated; ➤ 50 workshops, training and follow up mentorship sessions are organized to build the capacity of 500 regional and municipal officials and stakeholders; ➤ 10 regional climate adaptation committees are established and operational; 	Increased regional/municipal capacities to contribute towards formulation and execute actions deriving from National Adaptation Plan, Sectorial Adaptation Plans and Regional Adaptation Plans	300,000

<p>Component 2: Capacitating Stakeholders - Mapping, Needs Assessment, and Capacity Building of Key Actors</p>	<ul style="list-style-type: none"> ➤ 10 regional stakeholder mapping exercise is conducted to identify and engage 100 relevant actors; ➤ needs assessment of stakeholder groups is carried out; ➤ 50 capacity-building programs, workshops, training and mentorship sessions are designed and implemented to enhance the capabilities of stakeholders; ➤ knowledge-sharing platform is established and operational; ➤ 50 networking events, fostering collaboration and exchange of best practices among stakeholders at the regional and municipal levels are organized; 	<p>Capacitated stakeholders are better able to contribute towards needs identification, policy formulation and execution, as well as supporting private sector entities to implement projects seeking adaptation resilience of targeted municipalities</p>	<p>300,000</p>
<p>Component 3: Channeling Adaptation Finance - Identification, appraisal, and financing of viable projects</p>	<ul style="list-style-type: none"> ➤ Minimum 100 climate adaptation projects in all targeted regions are identified, appraised and consulted with local/municipal stakeholders; ➤ Minimum 50 climate adaptation projects from all targeted regions are approved for funding (minimum 20 in 	<p>Adaptation resilience of vulnerable communities in Armenia is increased through implementation of locally driven projects with participation of private sector;</p>	<p>3,800,000</p>

	partnership with private sector);		
Project/Programme Execution cost			70,000
Total Project/Programme Cost			4,470,000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			490,000
Amount of Financing Requested			4,960,000

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	01 September 2024
Mid-term Review (if planned)	01 September 2026
Project/Programme Closing	01 September 2028
Terminal Evaluation	10 December 2028

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project/programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

Intervention rationale

Establishment and operationalization of the Armenia National Adaptation Funding Facility is aimed at mitigating climate finance divide between vulnerable regions of Armenia and piloting innovative local adaptation actions towards achievement of national adaptation targets communicated through the National Adaptation Plan, Sectoral Adaptation Plans (so far approved for agriculture and water sectors, remaining ones are under design) and Marz (regional) Adaptation Plans (for 2 regions are approved and remaining 8 are in the pipeline).

“Environmental Project Implementation Unit” State Agency under the Ministry of Environment of Armenia, being nationally accredited entity with the Adaptation Fund and Green Climate Fund, will serve as secretariat and ensure management of targeted (sectorial and regional) call for small project proposals.

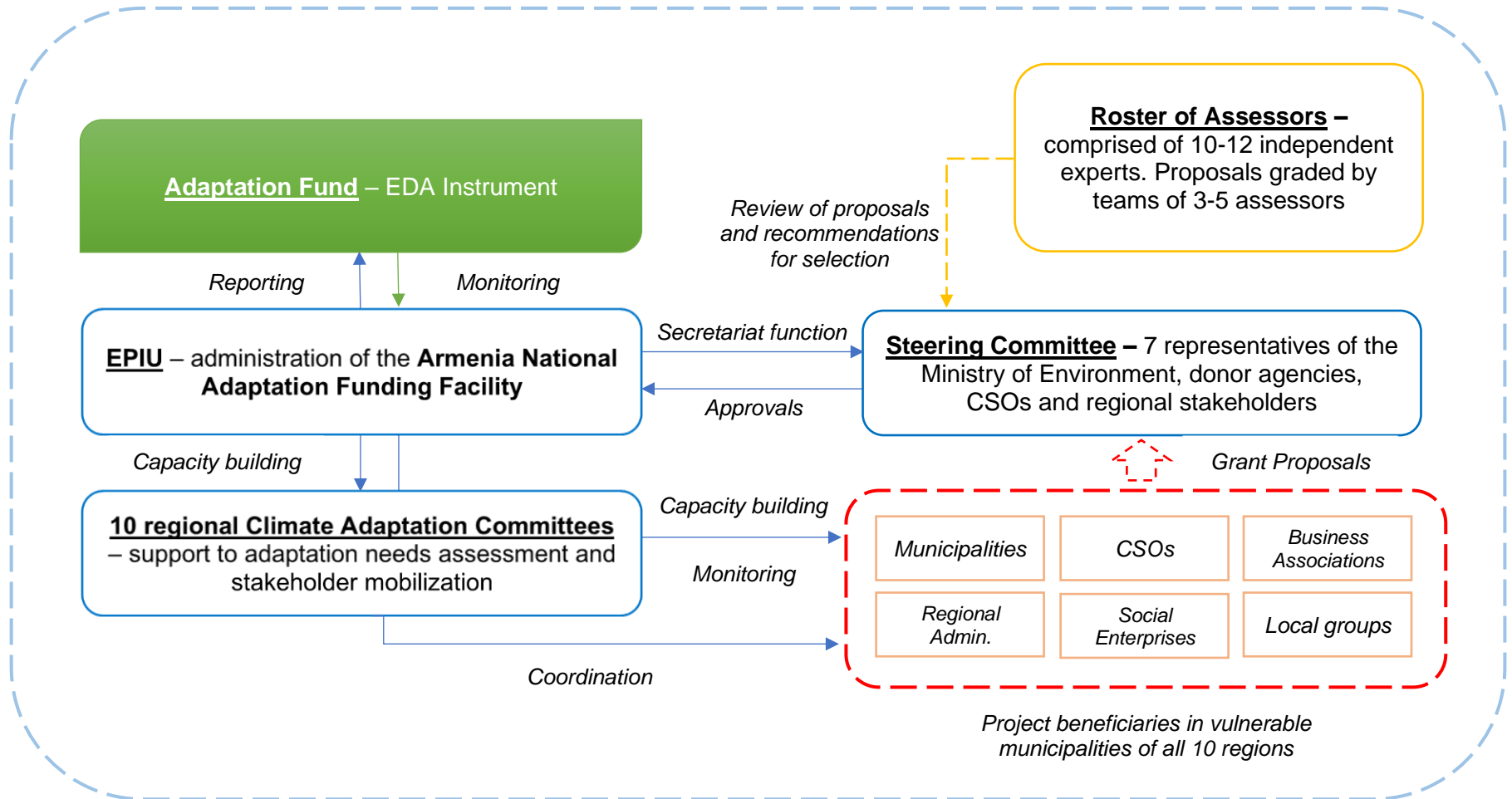
Operational framework of the Armenia National Adaptation Funding Facility

Operational/Management framework of the Armenia National Adaptation Funding Facility will be comprised of the following functions:

Steering Committee: The Steering Committee will play a crucial role in providing strategic direction and oversight to the Armenia National Adaptation Funding Facility. Comprised of 7 representatives from key stakeholders, including government officials, climate experts/influencers, key donor agencies and civil society organizations, the Steering Committee will guide the overall vision, objectives, and policies of the Fund. It will approve funding priorities, reviews recommendations of independent assessment group and approve project proposals, as well as ensure the effective utilization of resources. The committee also will be responsible for reviewing and approving project implementation monitoring and evaluation reports, ensuring transparency, accountability, and alignment with the Fund's goals.

“Environmental Project Implementation Unit” State Agency under the Ministry of Environment of Armenia: will acts as the central coordinating body responsible for managing the day-to-day operations of the Fund. It will facilitate the submission of project proposals, ensure compliance with funding guidelines, provide mentorship support and guidance to the Regional Climate Adaptation Committee (to be established in all 10 regions of Armenia) and oversee the disbursement of funds to approved projects. The EPIU will also play a vital role in financial management, budget allocation, and reporting to the Steering Committee and relevant stakeholders. Additionally, it will establish partnerships with implementing entities and ensure efficient coordination among all parties involved in project implementation.

Organigram of the operations of the Armenia National Adaptation Funding Facility:



Roster of Assessors: The roster of assessment experts will consist of 10-12 highly qualified and impartial professionals in various fields related to climate adaptation. The groups of 3 to 5 assessors will be established each time to review proposals submitted under specific solicitations (sector, sub-sector or region specific) issued by the Armenia National Adaptation Funding Facility. They assess project effectiveness, efficiency, and impact, providing valuable insights and recommendations to the Steering Committee for evidence-based decision-making. The experts' role ensures rigorous scrutiny of project proposals and enhances the overall quality and accountability of the Fund's activities.

Regional Climate Adaptation Committees: These committees operate at the regional level and are tasked with conducting thorough climate needs assessments within their respective areas. Comprising climate experts, local authorities, community representatives, and relevant stakeholders, these committees identify and prioritize climate vulnerabilities, risks, and adaptation opportunities. They engage in stakeholder mobilization and community consultations to ensure that adaptation measures address the specific needs and contexts of the regions they represent.

Beneficiaries on the Ground: The beneficiaries encompass a diverse group of stakeholders, including private sector entities, civil society organizations, social enterprises, business associations, and regional and municipal authorities. They are the ultimate recipients of the adaptation initiatives supported by the Fund. Beneficiaries play a vital role in project implementation, ensuring that adaptation measures are effectively applied at the grassroots level. Their active involvement fosters local ownership, social acceptance, and sustainability of adaptation actions, contributing to building resilient communities and ecosystems in the face of climate change impacts.

Priorities of the Armenia National Adaptation Funding Facility

During Full Proposal development stage comprehensive needs assessment and mapping (through desk research and rigorous stakeholder consultations) will be carried out to establish more specific regional, municipal and sectorial adaptation priorities for the call for proposal. However, initial consultations with key beneficiary and stakeholder groups revealed the following list of potential sectors and sub-sectors to be targeted:

1. Agriculture and Food Security:

- **Climate-Resilient Crop Cultivation:** Supporting farmers in adopting climate-resilient crop varieties and sustainable farming practices to enhance food security;
- **Irrigation and Water Management:** Implementing water-efficient irrigation systems and water management practices to cope with changing precipitation patterns;
- **Livestock Management:** Promoting climate-smart livestock practices to improve animal welfare and maintain productivity in the face of climate stresses;

2. Water Resources:

- **Water Harvesting and Storage:** Developing small-scale water harvesting and storage systems to secure water supply during periods of water scarcity;
- **Watershed Management:** Implementing measures to protect and restore watersheds, ensuring sustainable water availability for communities and ecosystems.

3. Infrastructure and Built Environment:

- **Climate-Resilient Buildings:** Integrating climate resilience features into infrastructure development, including earthquake-resistant and weatherproof structures.
- **Urban Planning and Green Spaces:** Incorporating climate adaptation considerations into urban planning and creating green spaces to mitigate heat island effects;

4. Biodiversity and Ecosystems:

- **Ecosystem Restoration:** Undertaking projects to restore degraded ecosystems, such as reforestation and wetland rehabilitation, to enhance biodiversity and ecosystem services;
- **Protected Area Management:** Strengthening management of protected areas to conserve biodiversity and enhance resilience to climate impacts;

5. Community Resilience and Social Protection:

- **Early Warning Systems:** support development of mobile application that will provide information about extreme weather events and further guidance to the farmers;
- **Social Safety Nets:** Implementing social protection measures to support vulnerable communities during climate-related emergencies.

6. Disaster Risk Reduction:

- **Community-Based Disaster Preparedness:** Enhancing community resilience through disaster preparedness and risk reduction measures;
- **Climate-Resilient Infrastructure:** Upgrading critical infrastructure to withstand extreme weather events and reduce disaster risks;

7. Renewable Energy:

- **Solar Energy:** promoting use of solar powered water pumps for irrigation in rural communities;
- **Agrivoltaic:** Promoting use of Agrivoltaic technology (installation of solar PV modules on farmlands);

8. Education and Awareness:

- **Climate Change Education:** Integrating climate change education into school curricula and awareness campaigns to foster climate-resilient behaviors;

9. Tourism and Cultural Heritage:

- **Sustainable Tourism:** Promoting climate-responsible tourism practices to protect cultural heritage and natural landscapes.
- **Cultural Heritage Preservation:** Safeguarding cultural heritage sites from climate impacts through conservation and adaptive measures.

While “Environmental Project Implementation Unit” State Agency under the Ministry of Environment of Armenia has significant experience and expertise in implementing multi-million projects in adaptation domain and targeting vulnerable regions and communities of Armenia, meantime, it still needs to establish sub-granting procedures and adopt respective manuals that will be required for successful implementation of this Project. Thus, during the Full Funding Proposal Preparation stage sub-granting manual and other necessary guidance will be developed and approved by the “Environmental Project Implementation Unit” State Agency.

Complementarity and coherence of the projects supported by the Armenia National Adaptation Funding Facility

The combination of individual projects financed by the National Adaptation Finance Facility will work synergistically to contribute to the overall increase in resilience of the vulnerable regions in Armenia. Each project, designed to address specific challenges in various sectors and sub-sectors, will collectively reinforce and complement one another, resulting in a comprehensive and integrated approach to building climate resilience. Here's how the combination of individual projects will contribute to the overall increase in resilience:

1. **Cross-Sectoral Approach:** The diverse set of projects spanning different sectors and sub-sectors, such as agriculture, water resources, infrastructure, biodiversity, and public health, ensures a cross-sectoral approach to climate adaptation. Resilience-building efforts in one sector can positively impact other sectors, leading to a more resilient and interconnected system;
2. **Multi-Level Governance:** With projects implemented at both the regional and municipal levels, the combination allows for adaptive governance and decision-making processes that are responsive to local conditions and needs. Regional projects can be tailored to address specific vulnerabilities, while municipal projects can target localized challenges, enhancing overall adaptation capacity;
3. **Complementary Actions:** Individual projects will be identified to complement each other, with one project's outputs serving as inputs or prerequisites for others. For example, a project focused on watershed management may contribute to enhanced water availability for another project implementing climate-resilient agriculture practices;
4. **Enhancing Community Resilience:** Projects targeting community resilience, early warning systems, and social safety nets will empower vulnerable communities to withstand and recover from climate impacts. These community-level efforts create a foundation for overall regional resilience, as strong and adaptive communities can contribute to the success of other projects;
5. **Ecosystem-Based Adaptation:** Projects focused on ecosystem restoration and biodiversity conservation will contribute to the resilience of natural ecosystems. Healthy and resilient ecosystems provide vital services, such as flood regulation and water purification, benefiting other sectors and reducing vulnerability to climate hazards;

6. **Infrastructure Resilience:** Projects aimed at climate-resilient infrastructure and green urban planning will protect critical assets and reduce vulnerability in cities and towns. Climate-proofed infrastructure ensures the continuity of essential services during extreme weather events, reinforcing overall regional resilience;
7. **Risk Reduction and Preparedness:** Projects addressing disaster risk reduction and preparedness will build the capacity of communities and institutions to anticipate, respond to, and recover from climate-related disasters. This reduces the potential for long-term damages and disruptions to other development initiatives;
8. **Leveraging Financing:** The combination of projects creates opportunities for leveraging funding from various sources, including national budgets, international donors, private investments, and climate funds. This enhances the overall financial capacity to implement multiple projects simultaneously and at scale;
9. **Learning and Knowledge Exchange:** As different projects are implemented across regions, lessons learned and best practices can be shared and disseminated. This knowledge exchange fosters continuous improvement, adaptive management, and replication of successful approaches to increase resilience.
10. **Long-Term Sustainability:** The collective impact of these individual projects contributes to the long-term sustainability of climate resilience efforts. As regional and municipal governments integrate adaptation into their development plans, resilience-building becomes a continuous process rather than a one-time initiative.

By combining diverse projects that address various aspects of climate resilience, the National Adaptation Finance Facility in Armenia will ensure a holistic and integrated response to the challenges posed by climate change. The collective effort of these individual projects will lead to an overall increase in resilience, strengthening the capacity of vulnerable regions to cope with the impacts of a changing climate and promoting sustainable development for the future.

B. Describe how the project/programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project/programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The proposed Project that targets the establishment of a National Adaptation Finance Facility for the regions of Armenia is designed to provide significant economic, social, and environmental benefits, with a specific focus on the most vulnerable communities and vulnerable groups within these communities, while also focusing on gender considerations. The Project aims to avoid or mitigate negative impacts by adhering to the Environmental and Social Policy and Gender Policy of the Adaptation Fund. Here's a detailed description of how the project achieves these objectives:

Economic Benefits:

- **Job Creation and Livelihood Enhancement:** By investing in climate adaptation projects at the regional and municipal levels, the Project generates employment

opportunities, especially in rural areas. Climate-resilient agriculture, water management, and infrastructure projects can enhance productivity and income, thereby improving the economic conditions of vulnerable communities;

- **Increased Investment and Revenue:** The Project's focus on climate-resilient infrastructure and sustainable tourism practices can attract private investments and promote responsible tourism. These investments contribute to local economies and generate revenue for the regions;
- **Reduced Economic Losses:** By building climate resilience in critical sectors like agriculture and water resources, the Project will help to reduce losses caused by extreme weather events and climate-related disasters. This preserves livelihoods and protects valuable assets;

Social Benefits:

- **Community Empowerment:** The Project will deploy a participatory approach, engaging local communities and stakeholders in decision-making processes. This empowerment enables vulnerable communities to contribute their knowledge and priorities, ensuring that projects address their specific needs effectively;
- **Enhanced Public Health and Well-being:** Climate-resilient infrastructure and early warning systems contribute to improved public health outcomes by reducing the health risks associated with extreme weather events, such as heatwaves and floods.
- **Social Inclusion and Gender Considerations:** The Project recognizes the importance of gender equality and social inclusion. It ensures the active participation of women and marginalized groups in project planning, implementation, and decision-making, ensuring that their voices are heard and their needs are met;

Environmental Benefits:

- **Ecosystem Restoration and Biodiversity Conservation:** Projects focusing on ecosystem-based adaptation and biodiversity conservation contribute to the restoration of natural habitats, protection of wildlife, and the preservation of ecosystem services essential for local communities;
- **Sustainable Resource Management:** Water resources management, climate-resilient agriculture, and renewable energy projects contribute to the sustainable use of natural resources, reducing environmental degradation and enhancing ecosystem health;

Vulnerable Communities and Groups:

- **Targeted Investments:** The Project will strategically direct resources towards the most vulnerable regions and communities, prioritizing areas with higher climate risks and limited adaptive capacity;
- **Social Safety Nets:** The Project will target implementation of the social protection measures to support vulnerable groups, ensuring their access to basic services and support during climate-related emergencies;

Gender Considerations:

- **Gender Mainstreaming:** The Project will mainstream gender considerations throughout the project cycle, from planning to evaluation. It should ensure that gender perspectives are integrated into project design, implementation, and monitoring, promoting gender equality and women's empowerment;
- **Women's Participation:** The Project will also encourage women's active involvement in decision-making processes, providing opportunities for capacity-building and leadership roles within the adaptation initiatives;

Avoidance and Mitigation of Negative Impacts:

- **Environmental Safeguards:** The Project adheres to the Environmental and Social Policy of the Adaptation Fund, implementing appropriate safeguards to avoid and mitigate negative environmental impacts;
- **Social Safeguards:** To prevent and address social risks, the Project will incorporate social safeguards to protect the rights and well-being of affected communities, particularly vulnerable groups;
- **Continuous Monitoring and Evaluation:** The Project will establish a robust monitoring and evaluation system to identify and address any potential negative impacts promptly. Lessons learned are to be used to improve project implementation continuously;

By adhering to the Environmental and Social Policy of the Adaptation Fund, the Project will ensure that the benefits of climate adaptation initiatives are maximized while minimizing potential negative impacts on the environment and vulnerable communities. The combination of economic, social, and environmental benefits, along with gender considerations, will help to build resilience and create a more sustainable and inclusive future for the regions of Armenia.

C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

The detailed cost-benefit analysis will be carried out during the Full Proposal preparation stage to compare the costs and outcomes of different projects or interventions. In the context of the proposed Project, the cost-effectiveness will be evaluated based on the following key aspects:

- **Project Scale and Scope:** The overall budget and scope of the project play a significant role in determining its cost-effectiveness. A well-planned and appropriately sized project that addresses the most critical vulnerabilities in the regions can be more cost-effective than larger, unfocused initiatives;
- **Prioritization of Vulnerable Areas:** If the project focuses on the most vulnerable regions and communities within Armenia, it is likely to have a higher impact and cost-effectiveness. Identifying and targeting areas with the highest climate risks can lead to better outcomes;
- **Integrated Approach:** Projects that adopt an integrated and cross-sectoral approach to climate adaptation tend to be more cost-effective. By addressing multiple

challenges simultaneously and seeking synergies between sectors, the project maximizes the use of resources;

- **Innovation and Technology:** The integration of innovative technologies and practices can enhance cost-effectiveness. Climate-resilient and sustainable technologies may reduce long-term maintenance costs and increase the project's impact;
- **Involvement of Local Communities:** Engaging local communities in project design and implementation can increase cost-effectiveness. Locals often possess valuable knowledge, contributing to the project's success while ensuring ownership and long-term sustainability;
- **Monitoring and Evaluation:** Establishing a robust monitoring and evaluation framework enables continuous learning and improvement, optimizing cost-effectiveness over time;
- **Leverage of Funding:** The ability to attract co-financing and support from various sources, such as international donors, government budgets, **private sector**, and climate funds, can improve the project's overall cost-effectiveness.

D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The proposed Project is architected in a manner to be consistent with the country's national and sub-national sustainable development strategies. It aligns with various key documents, including the National Adaptation Plan (NAP), Sectoral Adaptation Plans (SAPs), and Marz (regional) Adaptation Plans (MAPs) in the following manner:

- **National Adaptation Plan (NAP):** The Project is highly relevant to the National Action Program of Adaptation to Climate Change and the List of Measures for 2021-2025 (NAP). The NAP's general objective is to promote the reduction and management of climate risks in Armenia by addressing climate change impacts, reducing vulnerabilities, and avoiding losses and damages. The project directly aligns with these objectives as it aims to provide a dedicated financial mechanism to support the implementation of adaptation measures identified in the NAP.

Furthermore, the Project's focus on key sectors, such as agriculture and food security, water resources, infrastructure, biodiversity and ecosystems, community resilience, disaster risk reduction, renewable energy, education and awareness, and tourism and cultural heritage, closely aligns with the priorities identified in the NAP. By targeting these sectors and implementing adaptation measures such as promoting climate-resilient crop cultivation, water harvesting and storage, integrating climate resilience features into infrastructure development, and supporting renewable energy practices, the project contributes to building climate resilience, enhancing adaptive capacity, and fostering sustainable development in line with the NAP's strategic goals. Through its alignment with the NAP and its focus on key sectors, the proposed project demonstrates a comprehensive

approach to addressing climate change impacts and strengthening Armenia's resilience to climate risks.

- **Sectoral Adaptation Plans (SAPs):** The SAPs serve as the foundation for operationalizing adaptation planning within specific sectors and regions, outlining sector-specific adaptation measures and strategies to address the challenges presented by climate change. The Project aligns with the priorities identified in the Agricultural SAP and Water SAP by targeting key measures that enhance climate resilience in these sectors.

In alignment with the Agricultural SAP, the project focuses on supporting climate-resilient crop cultivation, implementing advanced irrigation technologies, and promoting climate-smart livestock management. These measures directly contribute to building climate resilience in the agricultural sector, enhancing food security, and enabling farmers to cope with changing climate conditions, as identified in the SAP.

Similarly, the project aligns with the priorities identified in the Water SAP by emphasizing water harvesting and storage systems, as well as watershed management. These measures directly address the SAP's goal of securing water supply during periods of scarcity and ensuring sustainable water availability for communities and ecosystems.

By closely aligning with the priorities outlined in the SAPs, the proposed project ensures a targeted and effective approach to adaptation planning and implementation in the agriculture and water sectors. It provides the necessary financial mechanism to support the implementation of sector-specific adaptation measures, further reinforcing Armenia's efforts to enhance resilience and manage climate risks in these critical sectors.

- **Marz (regional) Adaptation Plans (MAPs):** The Project is consistent with the Regional Adaptation Plans, which focus on addressing the climate vulnerabilities and needs of specific regions within Armenia.

The MAPs are designed to address the climate vulnerabilities and adaptation needs of specific regions within Armenia, taking into account regional specificities. The Project aligns with the priorities identified in the MAPs for Tavush and Shirak regions by targeting key measures to enhance climate resilience in these regions.

In alignment with the MAPs, the Project aims to implement region-specific adaptation measures to address the unique challenges and opportunities presented by climate change in Tavush and Shirak. By providing the necessary financial resources and support, the project enables the implementation of identified adaptation measures, as decompressed in the MAPs, tailored to the specific needs of each region.

The project's focus on enhancing community resilience through disaster preparedness and risk reduction measures aligns with the goals outlined in the MAPs. By strengthening disaster preparedness and upgrading critical infrastructure, the project contributes to building climate resilience and reducing vulnerabilities in vulnerable regions. Furthermore, the project's promotion of climate-responsible tourism practices aligns with the MAPs' aim to protect cultural heritage and natural landscapes in these regions. By fostering sustainable tourism

and safeguarding cultural assets, the project supports the region's resilience to climate impacts while promoting responsible and sustainable development.

E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

Compliance with the national standards will be described in detail in the Full Funding Proposal following the mapping of vulnerable regions and sectors/subsectors to be financed by the National Adaptation Funding Facility.

Ensuring alignment with Adaptation Fund's Environmental and Social Policy require that projects supported address the adverse impacts of climate change while avoiding unnecessary environmental and social harms. The relevance of the Project to the ESP can be described as follows:

Environmental and Social Management Commitment: The Project demonstrates a strong commitment to environmental and social management by incorporating an environmental and social management system. The implementing entities involved in the project will be responsible for assessing and addressing potential environmental and social risks throughout the project cycle. They will identify measures to avoid, minimize, or mitigate these risks, ensuring that the project aligns with the principles outlined in the ESP.

Compliance with Environmental and Social Principles: The Project adheres to the environmental and social principles set forth in the ESP. It ensures compliance with applicable domestic and international laws and respects human rights, gender equity, and the rights of marginalized and vulnerable groups. The project's design prioritizes fair and equitable access to benefits, while minimizing adverse effects on public health and cultural heritage. Additionally, the Project promotes the conservation of biodiversity and efficient use of resources, including pollution prevention and resource efficiency.

Environmental and Social Assessment and Management: The Project implements a screening process to identify potential environmental and social impacts and categorizes projects/programmes based on their severity. Category A projects/programmes with significant adverse impacts and Category B projects/programmes with less adverse impacts are subjected to a thorough environmental and social assessment. The assessment includes identifying risks and proposing measures for mitigation and management. Implementing entities are responsible for monitoring and reporting on the status of these measures throughout the project's life.

Stakeholder Engagement and Grievance Mechanism: The Project incorporates stakeholder engagement and consultation to ensure the informed participation of all relevant stakeholders. It allows affected communities and individuals to voice their concerns through a grievance mechanism, which provides a transparent and accessible process for addressing complaints related to environmental or social harms caused by the project.

F. Describe if there is duplication of project/programme with other funding sources, if any.

The proposed Project for establishing a National Adaptation Finance Facility in Armenia stands out as a unique and innovative endeavor, setting it apart from other existing climate adaptation initiatives. Unlike conventional adaptation programs that focus on individual sectors, this project takes a comprehensive and integrated approach to address climate risks in various development sectors simultaneously. By bringing together diverse stakeholders, including government entities, civil society organizations, and local communities, the project fosters a collaborative and coordinated effort towards building climate resilience across the nation.

Furthermore, the proposed National Adaptation Finance Facility offers a distinct advantage by being the first of its kind in Armenia. There are no existing initiatives that directly align with the proposed facility's specific objectives and scope. While other climate adaptation programs might address certain sector-specific challenges, none encompass the comprehensive coverage and emphasis on cross-sectoral coordination that this project offers. By avoiding duplication and focusing on unaddressed gaps, the proposed initiative maximizes efficiency and ensures that resources are channeled to areas of critical need, bolstering Armenia's capacity to cope with climate change impacts effectively. As a pioneer in the field of national adaptation planning, this project presents a valuable opportunity to set a precedent for other countries facing similar climate challenges.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

The learning and knowledge management component of the proposed Project will be designed to capture, analyze, and disseminate lessons learned throughout the implementation process. It will play a crucial role in promoting a culture of continuous learning and improvement, ensuring that valuable insights gained during the Project's execution are shared widely and applied in future adaptation efforts. The following key features define the learning and knowledge management component:

- **Learning Mechanisms:** The Project will establish robust mechanisms to capture lessons learned at various stages, including planning, implementation, and monitoring. These mechanisms will include regular workshops, stakeholder consultations, evaluations, and internal reviews. Learning will be encouraged not only from successes but also from challenges and setbacks, fostering a culture of openness and adaptability;
- **Knowledge Repository:** A dedicated knowledge repository will be developed to compile all the collected data, reports, research findings, and best practices. This centralized database will serve as a comprehensive resource for project stakeholders, providing easy access to relevant information and experiences. It will be organized in a user-friendly manner, facilitating knowledge sharing and dissemination;
- **Knowledge Exchange:** The Project will facilitate knowledge exchange platforms, bringing together stakeholders from various sectors, institutions, and communities.

These platforms could take the form of workshops, conferences, webinars, or online forums. By providing a space for dialogue and collaboration, stakeholders can share their experiences, exchange ideas, and learn from each other's successes and challenges;

- **Capacity Building:** The learning component will include targeted capacity-building activities to enhance the skills and knowledge of project stakeholders. Training sessions, workshops, and skill development programs will be conducted to strengthen the capacity of individuals and institutions involved in climate adaptation efforts;
- **Documentation and Reporting:** Regular documentation and reporting will be an integral part of the learning process. Project progress, achievements, and challenges will be thoroughly documented, along with the strategies and solutions adopted to overcome obstacles. These reports will be widely shared to facilitate learning among stakeholders and the broader climate adaptation community;
- **Continuous Improvement:** The learning and knowledge management component will emphasize continuous improvement. Lessons learned will be systematically analyzed and used to update project strategies and activities, ensuring that the project remains responsive to changing conditions and emerging challenges;

By implementing a robust learning and knowledge management component, the proposed Project will be able to maximize its impact and contribute significantly to the collective knowledge base on climate adaptation. The captured lessons and experiences will be disseminated widely to benefit other projects, programs, and initiatives in Armenia and beyond, fostering a culture of learning and resilience-building in the face of climate change.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

During the Project appraisal stage, extensive consultations have already been carried out with key stakeholder groups, including relevant national agencies, representatives of regional and municipal authorities, civil society organizations (CSOs), academia, and representatives of vulnerable communities. These preliminary consultations have been instrumental in understanding the significance of the Project and have provided valuable insights that helped shape the initial long list of sectors and sub-sectors described in the proposal. It is important to note that these initial consultations will be followed by rigorous and comprehensive consultations during the full proposal design stage to further refine and validate the Project's approach.

The engagement of these diverse stakeholder groups has been critical in ensuring that the Project addresses the needs and priorities of sectors and sub-sectors identified as critical for intervention and already visualized throughout the document. National agencies and regional authorities have shared their expertise and provided context-specific information on climate vulnerabilities and adaptation requirements. Representatives of municipal authorities have contributed valuable insights into the local-

level impacts of climate change and the specific challenges faced by communities.

CSOs have played a pivotal role in advocating for the inclusion of vulnerable communities and marginalized groups in the decision-making process. Their inputs have helped identify targeted interventions to enhance the resilience of these communities. Academia has contributed with research-based knowledge and technical expertise, enriching the project's design with innovative solutions and best practices.

The consultative process has also placed a strong emphasis on gender considerations, ensuring that the perspectives and needs of women and other vulnerable groups are taken into account. Through these consultations, the Project preparation team has gained a deeper understanding of the differentiated impacts of climate change on different genders and demographics.

Overall, the inclusive and participatory nature of the consultations has reinforced the importance of the Project and its potential to address the adverse impacts of climate change effectively. The initial long list of sectors and sub-sectors identified during these consultations serves as a starting point, providing a comprehensive foundation for the subsequent rigorous consultations during the full proposal design stage. This iterative approach ensures that the Project is well-tailored to the specific needs and priorities of the communities it aims to benefit, maximizing its positive impact on climate resilience and adaptation.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The funding requested for the Project is justified based on the full cost of adaptation reasoning, which takes into account the comprehensive scope of activities required to build climate resilience and effectively address the adverse impacts of climate change. The project's approach is based on a holistic understanding of the challenges posed by climate change and aims to implement a range of interventions across multiple sectors and sub-sectors to achieve long-term adaptation goals. Several key justifications support the funding request:

- **Comprehensive Adaptation Strategy:** The Project's adaptation strategy encompasses various sectors and sub-sectors, including agriculture, water resources, infrastructure, biodiversity, community resilience, disaster risk reduction, renewable energy, education, and tourism. This comprehensive approach recognizes that climate change impacts are multi-faceted and require a diverse set of interventions to build resilience in vulnerable systems and communities;
- **Vulnerability of Communities:** The Project targets vulnerable communities that are most exposed to climate risks, including marginalized groups, women, children, and indigenous populations. These communities often lack the resources and capacity to adapt effectively to climate change impacts. The funding requested will enable the implementation of targeted measures to enhance the resilience of these groups and reduce their vulnerability;
- **Integrated Risk Management:** The Project adopts an integrated risk management approach to identify, assess, and manage environmental and social risks associated

with adaptation activities. The funding will support the development of robust risk management plans, including measures to avoid, minimize, or mitigate potential adverse impacts on ecosystems and livelihoods;

- **Co-benefits and Sustainable Development:** The proposed adaptation interventions not only enhance resilience but also deliver co-benefits in terms of food security, water availability, ecosystem health, disaster preparedness, and renewable energy access. These co-benefits contribute to broader sustainable development goals, making the project's funding request an investment in building resilient and sustainable societies;
- **Long-term Impact and Cost-effectiveness:** By addressing adaptation comprehensively, the Project seeks to achieve long-term impact, reducing the need for continuous emergency responses to climate-related disasters. Investing in adaptation now can lead to significant cost savings in the future, as the full cost of damages and losses associated with climate change impacts will likely exceed the funding requested for proactive adaptation measures;
- **Consultative Approach:** The funding request is informed by extensive consultations with key stakeholders, including national agencies, regional and municipal authorities, CSOs, academia, and representatives of vulnerable communities. This consultative approach ensures that the project's design aligns with the needs and priorities of the communities it seeks to serve, maximizing the effectiveness and efficiency of the adaptation efforts.

And finally, the funding requested is justified based on the full cost of adaptation reasoning, as it supports a comprehensive and integrated approach to build climate resilience across various sectors and sub-sectors. By addressing the vulnerabilities of communities, delivering co-benefits, and adopting a consultative and risk-informed approach, the project presents a compelling case for funding to proactively tackle the challenges of climate change and promote sustainable development.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project/programme.

The sustainability of the Project outcomes has been a central consideration in the Project design to ensure that the positive impacts and benefits of the adaptation interventions endure beyond the Project's duration. Several key aspects have been taken into account to enhance sustainability:

- **Capacity Building and Knowledge Transfer:** The Project prioritizes capacity building among local communities, relevant stakeholders, and implementing entities. Training and knowledge transfer programs are integrated into the project design to empower local communities to take ownership of adaptation measures and sustain them in the long run. By building local capacities, communities can continue to implement and manage climate-resilient practices even after the project concludes;
- **Institutional Strengthening:** The Project invests in strengthening the institutional capacity of national agencies, regional and municipal authorities, and relevant organizations involved in project implementation. This includes providing technical support, establishing monitoring and evaluation systems, and promoting the use of

climate data and information for decision-making. Strengthening institutions ensures that climate adaptation becomes an integral part of their regular operations, fostering sustainability;

- **Policy Integration and Mainstreaming:** To ensure sustainability beyond the Project's lifespan, the project emphasizes integrating climate adaptation considerations into existing policies and planning frameworks at national, regional, and local levels. By mainstreaming climate resilience into development policies and practices, the Project's outcomes become embedded in the long-term planning and budgeting processes, contributing to lasting impact.
- **Community Participation and Ownership:** The Project adopts a participatory approach, engaging local communities, CSOs, and vulnerable groups in the decision-making processes. By involving communities in the design and implementation of adaptation measures, the project fosters a sense of ownership and responsibility for sustaining these efforts. Community involvement ensures that adaptation solutions are context-specific, culturally appropriate, and socially acceptable.
- **Financial Mechanisms and Leveraging Resources:** The Project explores innovative financial mechanisms, such as public-private partnerships to leverage additional resources for sustaining adaptation activities. By securing co-financing from private sector entities the Project aims to extend the longevity of the adaptation initiatives beyond the Project period;
- **Monitoring, Evaluation, and Learning:** The Project incorporates robust monitoring and evaluation systems to assess the effectiveness and efficiency of adaptation interventions. Regular evaluations and lessons learned will inform adaptive management, enabling the project to make necessary adjustments and improvements to enhance sustainability as the project progresses.

By integrating these sustainability measures into the project design, the Project aims to create lasting impacts and enduring resilience against the adverse effects of climate change. The focus on capacity building, institutional strengthening, policy integration, community participation, financial mechanisms, and adaptive management ensures that the project's outcomes are sustained over time, ultimately contributing to the long-term well-being and prosperity of the communities and ecosystems it serves.

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>		Risk - potential non-compliance with relevant laws and regulations at the local, national, or international levels.

		<p><u>Project's Approach</u> - Full compliance with all applicable domestic and international laws, regulations, and legal requirements to ensure the Project's activities are conducted in a responsible and lawful manner. Compliance with the law serves as a foundation for the project's legitimacy, credibility, and acceptance by stakeholders and the broader community. By upholding legal standards, the Project will seek to minimize any potential legal risks, conflicts, or negative impacts on the environment, communities, and vulnerable groups.</p> <p><u>Mitigation Measures:</u></p> <ul style="list-style-type: none"> ➤ Implementation of the comprehensive legal assessment (at the Full Funding Proposal Design Stage) to identify and understand legal framework and key requirements applicable to the Project's activities. ➤ Engagement of the legal expertise (whenever required during Project execution stage) to provide guidance and support in navigating complex legal frameworks and ensuring adherence to all relevant laws; ➤ Proactive seeking and obtaining all necessary permits, licenses, and approvals required for Project activities from relevant government authorities, ensuring timely and proper compliance; ➤ Implementation of periodic reviews to assess ongoing compliance with evolving legal requirements and making necessary adjustments to ensure continued adherence; ➤ Engagement with local communities and stakeholders to
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		<p>raise awareness of legal aspects related to the Project, promoting a shared understanding of the Project's compliance with the law;</p> <ul style="list-style-type: none"> ➤ Maintaining transparent records of all legal compliance efforts, reporting on regulatory adherence and demonstrating accountability to relevant authorities and stakeholders;
<p><i>Access and Equity</i></p>		<p><u>Risk</u> – Lack of fair and equal opportunities by vulnerable and marginalized groups/ communities to benefit from Project's activities.</p> <p><u>Project's approach</u> - Recognizing the importance of inclusivity, the Project will seek to address disparities and promote social justice by providing equitable access to project resources, services, and opportunities. It will aim to prioritize the needs of vulnerable communities, including women, children, national, religious and cultural minorities, persons with disabilities, and other marginalized groups, to ensure they are not left behind in the Project's development and implementation. By embracing the principles of access and equity, the Project seeks to foster an inclusive and sustainable approach that promotes social cohesion and empowers all stakeholders to participate fully in the Project's benefits.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Conducting a comprehensive needs assessment to identify the specific challenges and barriers faced by vulnerable and marginalized groups. This assessment will inform targeted strategies to address their unique needs;

		<ul style="list-style-type: none"> ➤ Engaging in participatory planning and decision-making processes, involving representatives from vulnerable communities to ensure their voices and perspectives are considered; ➤ Investing in capacity-building initiatives to empower vulnerable groups with the skills, knowledge, and resources necessary to actively participate in and benefit from Project activities. ➤ Adopting a gender-responsive approach, recognizing the specific needs and roles of women and men in the community. It will promote gender equality by ensuring equal access to project benefits and opportunities; ➤ Prioritization of the development of accessible infrastructure and services to ensure that persons with disabilities can fully participate in and benefit from the Project; ➤ Designing and implementing targeted interventions to address disparities and close gaps in access to resources and opportunities among different social groups. ➤ Establishing a robust monitoring and evaluation system to track the impact of its activities on access and equity, making data-driven adjustments to ensure inclusivity;
<p><i>Marginalized and Vulnerable Groups</i></p>		<p>Risk – specific needs and concerns of marginalized and vulnerable groups for active participation and meaningful inclusion into the Project’s activities are not addressed.</p> <p>Project’s approach - Project recognizes that certain</p>

		<p>communities, such as ethnic, religious and cultural minorities, refugees, internally displaced persons, and other vulnerable populations, are disproportionately affected by climate change impacts and often face significant barriers to accessing resources and opportunities. The Project is committed to providing tailored support and targeted interventions to empower these groups, enhance their resilience, and uplift their livelihoods. By acknowledging and prioritizing the needs of marginalized and vulnerable communities, the Project aims to create a more equitable and inclusive approach to climate adaptation and promote social justice.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Engaging in extensive consultations and dialogues with representatives from marginalized communities to understand their unique challenges, perspectives, and priorities; ➤ Designing context-specific and culturally sensitive solutions that align with the aspirations and traditional knowledge of marginalized groups, ensuring the relevance and effectiveness of interventions; ➤ Prioritization of the capacity building and empowerment initiatives to strengthen the resilience of marginalized communities, equipping them with the tools and skills to cope with climate-related challenges; ➤ Adopting community-based approaches that empower local marginalized groups to actively participate in decision-making processes, enhancing ownership
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		<p>and sustainability of project outcomes;</p> <ul style="list-style-type: none"> ➤ Incorporating robust social safeguards to prevent harm and protect the rights and interests of vulnerable communities, ensuring that project interventions do not exacerbate existing vulnerabilities; ➤ Engagement of the gender and social inclusion specialists who will provide expertise in designing gender-responsive and inclusive interventions for marginalized groups; ➤ Establishment of the comprehensive monitoring and evaluation system that tracks the impact of its activities on marginalized and vulnerable communities, ensuring transparency and accountability;
<p><i>Human Rights</i></p>		<p><u>Risk</u> – Human rights are not properly upheld and promoted throughout Project’s interventions.</p> <p><u>Project’s approach</u> – Project recognizes that climate change impacts are intrinsically linked to human rights, and therefore, all efforts will be made to ensure that the project respects, protects, and fulfills the fundamental rights of all individuals and communities, without discrimination. The Project will adhere to the principles enshrined in international human rights instruments and frameworks, including the Universal Declaration of Human Rights, other relevant conventions and national legislation. It will strive to prevent any adverse impacts on human rights and work towards enhancing the enjoyment of these rights for vulnerable and marginalized populations. By adopting a human rights-based approach, the Project</p>

		<p>seeks to foster a just and equitable society where the dignity and well-being of all are safeguarded, irrespective of their background or circumstances.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Conduct a comprehensive human rights impact assessment to identify potential risks and ensure that project interventions align with human rights principles; ➤ Prioritizing non-discrimination and ensuring equal access to project benefits and opportunities for all individuals and communities, without any form of discrimination based on race, ethnicity, gender, religion, disability, or other status; ➤ Utilisation of FPIC (Free, Prior, and Informed Consent) to ensure full participation and consent of local communities in decision-making processes that affect them; ➤ Facilitating meaningful and inclusive participation of affected communities in Project planning, implementation, and evaluation, allowing them to voice their concerns and contribute to decision-making; ➤ Utilisation of the transparent and accessible grievance mechanism to address any human rights-related complaints or concerns raised by project-affected communities; ➤ Implementation of human rights training for the project staff and stakeholders to ensure a clear understanding of their responsibilities and obligations regarding human rights compliance;
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		<ul style="list-style-type: none"> ➤ Promoting accountability and transparency in all Project's activities, disclosing information about project plans, progress, and outcomes to the public and affected communities;
<p><i>Gender Equality and Women's Empowerment</i></p>		<p><u>Risk</u> – Gender equality and women's empowerment are not promoted throughout Project's design and implementation.</p> <p><u>Project's approach</u> – Recognizing the differential impacts of climate change on women and men, the Project aims to mainstream gender considerations in all activities to ensure that women have equal access to resources, opportunities, and decision-making processes. It will work towards dismantling gender-based barriers and stereotypes, enabling women to actively participate in climate adaptation efforts and benefit equitably from project interventions. By addressing gender disparities, the Project seeks to create an inclusive and gender-responsive approach to climate adaptation, contributing to more sustainable and resilient outcomes.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Conducting gender analysis at the outset of the Project to identify gender-specific vulnerabilities, needs, and opportunities, informing the project's gender mainstreaming strategies; ➤ Actively engaging women at all levels of decision-making, from community consultations to project planning and implementation, ensuring their voices are heard and valued; ➤ Designing capacity-building initiatives to enhance the knowledge and skills of women,

		<p>enabling them to participate effectively in climate adaptation activities and leadership roles;</p> <ul style="list-style-type: none"> ➤ Promoting equal access to resources and services for women, including access to Project’s activities, to support their economic and social empowerment; ➤ Tailoring of the climate adaptation services and interventions in the manner to address the specific needs and priorities of women, taking into account their roles as caregivers, food providers, and guardians of natural resources; ➤ Providing training to women on climate-resilient livelihood options, fostering economic independence and reducing vulnerability; ➤ Implementing monitoring and evaluations of gender-specific outcomes using gender-responsive indicators to assess progress towards gender equality and women's empowerment;
<p><i>Core Labour Rights</i></p>		<p><u>Risk</u> – lack of compliance with the international and national labour standards and requirements.</p> <p><u>Project’s Approach</u> - commitment to uphold and promote core labour rights in all aspects of its implementation, including insurance of fair and decent working conditions for all workers involved in project activities, as identified by the International Labour Organization (ILO), to protect the rights of workers and foster a conducive and respectful work environment. Targeting prevention of any exploitation, discrimination, or violation of workers' fundamental rights, promoting social justice and</p>

		<p>equitable benefits for all individuals engaged in the Project. By upholding core labour rights, the Project aims to contribute to sustainable development that respects the dignity and well-being of workers and their communities.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Adherence to relevant international labour conventions (ILO) and standards, national requirements to protect the rights of workers, ensuring they are not subjected to any forms of forced labour, child labour, or discrimination; ➤ Collaboration with contractors, suppliers, and stakeholders to ensure ethical labour practices throughout the supply chain and value chain, promoting fair wages, safe working conditions, and respect for workers' rights; ➤ Establishment of a transparent and accessible grievance mechanism to address any labour-related concerns or complaints raised by workers, providing a safe avenue for reporting and resolving issues; ➤ Engagement with workers, providing them with information about their rights, promoting workers' organizations and collective bargaining, and encouraging their participation in decision-making processes that affect their working conditions; ➤ Implementation of training and capacity-building initiatives to raise awareness among project stakeholders, contractors, and workers about core labour rights and the importance of adhering to ethical labour practices;
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		<ul style="list-style-type: none"> ➤ Utilisation of regular monitoring and reporting mechanisms to assess the Project's compliance with core labour rights and identify areas for improvement;
<i>Indigenous Peoples</i>	<p style="text-align: center;">N/A (Armenia's population is 96% homogeneous)</p>	
<i>Involuntary Resettlement</i>	<p style="text-align: center;">N/A (for the case of small-scale community grants)</p>	
<i>Protection of Natural Habitats</i>		<p><u>Risk</u> – Activities of proposed small-scale grants negatively impacts natural habitats and ecosystems, risks their preservation and lead to unjustified conversion and degradation.</p> <p><u>Project's approach</u> – Project recognizes the intrinsic value of biodiversity and the ecological services provided by these habitats, making their protection a priority. The Project will adhere to international standards and best practices for the conservation of natural habitats, as defined by the International Union for Conservation of Nature (IUCN).</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Conducting screening of the potential impacts on natural habitats of proposed for funding small-scale projects to identify areas of concern and ecological sensitivities; ➤ Prioritization of the small-scale projects' initiatives aiming to restore or rehabilitate degraded habitats to enhance their ecological value. ➤ Engagement with local communities and relevant stakeholders to raise awareness about the significance of natural

		<p>habitats and encourage their active participation in conservation efforts;</p> <ul style="list-style-type: none"> ➤ Implementation of the continuous monitoring and evaluation to ensure strict adherence to protection measures and timely interventions if any potential threats to natural habitats are identified; ➤ Increasing awareness and capacity building for local stakeholder groups and beneficiaries to strengthen efforts for habitat protection and ensure long-term sustainability;
<p><i>Conservation of Biological Diversity</i></p>		<p>Risk – Project’s activities result in significant or unjustified reduction or loss of biodiversity in intervention areas.</p> <p>Project’s approach – The Project recognizes the crucial role of biological diversity in building resilience to climate change and ensuring ecosystem stability. It prioritizes the conservation of biological diversity and commits to minimizing any significant or unjustified reduction or loss of biodiversity within its intervention areas. The Project acknowledges the importance of conserving unique species, habitats, and ecological processes, and aims to integrate biodiversity considerations into its planning, implementation, and monitoring.</p> <p>Mitigation measures:</p> <ul style="list-style-type: none"> ➤ Implementation of the screenings of proposed for funding consideration small-scale grant projects to assess the existing biodiversity within the project area, identifying key species, habitats, and ecosystem functions;

		<ul style="list-style-type: none"> ➤ Prioritization of the Ecosystem-based Adaptation measures, such as the restoration of natural ecosystems, to enhance biodiversity and ecosystem resilience to climate change; ➤ Carrying out regular monitoring and reporting to assess the status of biodiversity conservation and to track the Project's impact on biological diversity; ➤ Collaboration with local and international conservation organizations (wherever necessary) to access expert knowledge and best practices for biodiversity conservation;
<p><i>Climate Change</i></p>		<p>Risk – Proposed for funding small-scale projects do not contribute towards increasing adaptive capacities of targeted vulnerable communities.</p> <p>Project’s approach – The Project places climate change at the core of its objectives, recognizing the urgent need to address the adverse impacts and risks posed by climate change. It aims to support climate-resilient small-scale projects to enhance the adaptive capacity of vulnerable communities and ecosystems. The Project adopts a holistic approach to climate change via prioritization of the adaptation efforts to build resilience to current and future climate impacts.</p> <p>Mitigation measures:</p> <ul style="list-style-type: none"> ➤ Promoting adoption of renewable energy technologies (such as solar) energy in adaptation infrastructures (solar powered irrigation, Agrivoltaic technology, etc.); ➤ Support afforestation and reforestation efforts in adjacent communities and increasing

		<p>resilience and income generation;</p> <ul style="list-style-type: none"> ➤ Promotion of the climate-resilient and sustainable agricultural practices;
<p><i>Pollution Prevention and Resource Efficiency</i></p>		<p><u>Risk</u> – pollution prevention and resource efficiency approaches are not integrated in the design of the small-scale projects to be supported by the Project.</p> <p><u>Project’s approach</u> – The Project places a strong emphasis on pollution prevention and resource efficiency, recognizing the importance of sustainable resource management to achieve long-term environmental and social benefits. It aims to support projects that maximize energy efficiency, minimize material resource use, reduce waste generation, and prevent the release of pollutants into the environment. By supporting resource-efficient interventions, the Project seeks to reduce its ecological footprint and minimize negative impacts on ecosystems and communities.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Prioritizing the use of energy-efficient technologies and practices in project supported to reduce energy consumption and associated emissions; ➤ Supporting water-efficient technologies and practices to reduce water consumption and promote responsible water use; ➤ Promoting climate-smart and sustainable agricultural practices to reduce the use of chemical inputs and prevent soil and water pollution;
<p><i>Public Health</i></p>		<p><u>Risk</u> – Vulnerable communities are negatively impacted/disproportionally affected by health-</p>

		<p>related challenges.</p> <p><u>Project’s approach</u> – Throughout design stage the Project aims to safeguard the well-being of communities and individuals in its areas of influence.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Requirement to small projects’ Environmental, Social and Health Management Plans (where relevant) to design and implement measures and actions to assess and manage specific risks and impact to targeted vulnerable communities arising from the activities of these projects;
<p><i>Physical and Cultural Heritage</i></p>		<p><u>Risk</u> – Supported small-scale projects small negatively impact on physical and/or cultural resources and natural values and assets located in beneficiary or adjacent communities.</p> <p><u>Project’s approach</u> – The preservation of physical and cultural heritage is a key aspect of the small projects’ design, acknowledging the importance of safeguarding irreplaceable natural, cultural, and historical assets from potential climate impacts. The Project aims to protect and conserve significant physical and cultural heritage sites, structures, and landscapes that hold cultural, historical, and ecological value for local communities and the broader region. By integrating measures to safeguard these assets, the Project aims to ensure the continuity of cultural traditions, promote sustainable tourism, and foster community resilience.</p> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> ➤ Requirement to small projects’ Environmental, Social and Health Management Plans (where relevant) to design and implement measures and actions to assess and manage

		<p>specific risks and impact to targeted vulnerable communities arising from the activities of these projects;</p>
<p><i>Lands and Soil Conservation</i></p>		<p>Risk – Supported small-scale projects do not contribute towards sustainable practices of lands and soil conservations.</p> <p>Project’s approach – Recognizing the importance of productive lands and soil health for sustainable agriculture and ecosystem services, the Project emphasizes lands and soil conservation as a fundamental aspect of its climate adaptation strategies in targeted vulnerable regions. By prioritizing support to small-scale projects that promote soil health, prevent land degradation, and enhance land productivity, the Project aims to strengthen the resilience of agricultural systems and protect valuable ecosystems from the impacts of climate change. Through sustainable land management practices, the Project seeks to secure food production, preserve biodiversity, and maintain vital ecosystem services for the benefit of local communities and the environment.</p> <p>Mitigation measures:</p> <ul style="list-style-type: none"> ➤ Prioritization of the small-scale projects (for funding consideration) that target: ➤ Soil erosion control, through implementing measures such as terracing, contouring, and agroforestry to reduce soil erosion and prevent land degradation; ➤ Conservation agriculture - promoting the adoption of conservation agriculture practices, such as minimum tillage and crop rotation, to

		<p>improve soil health and water retention;</p> <ul style="list-style-type: none"> ➤ Sustainable land use planning - incorporating climate-resilient land use planning to avoid encroachment into vulnerable areas and protect natural habitats; ➤ Reforestation and afforestation - undertaking reforestation and afforestation efforts to restore degraded lands and mitigate the impacts of climate change; ➤ Watershed Management - implementing integrated watershed management approaches to protect soil and water resources, particularly during extreme weather events; ➤ Soil moisture management - introducing water conservation techniques, like rainwater harvesting and efficient irrigation methods, to preserve soil moisture and optimize water use; ➤ Capacity Building - providing training and technical support to farmers and communities in sustainable land management practices and climate-adaptive agriculture;
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PART III: IMPLEMENTATION ARRANGEMENTS

A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
To enhance the country's capacity to effectively respond to the adaptation challenges posed by climate change and enhance adaptation resilience in the regions and municipalities of Armenia through establishment of a National Adaptation Finance Facility	<ul style="list-style-type: none"> ➤ Number of vulnerable municipalities benefiting from the enhanced direct access to adaptation finance; ➤ Proportion of vulnerable municipalities covered; ➤ Number of people residing in vulnerable municipalities benefiting from the enhanced direct access to adaptation finance; ➤ Proportion of people residing in vulnerable municipalities benefiting from the enhanced direct access to adaptation finance; 	Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	<ul style="list-style-type: none"> ➤ 2.1.1. N of staff trained to respond to, and mitigate impacts of, climate-related events (by gender); ➤ 2.2.1. N of targeted institutions benefitting from the direct access and enhanced direct access modality 	
Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
Policy Delivery - Policy Decompression at the Regional/Municipal Level				
Increased regional/municipal capacities to contribute towards formulation and execute actions deriving from National Adaptation Plan, Sectorial Adaptation Plans and	<ul style="list-style-type: none"> ➤ N of detailed vulnerability assessments carried out; ➤ N of regional policy frameworks formulated; 	Output 2.2: Increased readiness and capacity of national and sub-national entities to directly access	2.2.1 No. of targeted institutions benefitting from the direct access and enhanced direct access modality;	300,000

Regional Adaptation Plans	<ul style="list-style-type: none"> ➤ N of capacity building events carried out, and ➤ N of regional and municipal officials and stakeholders engaged in the capacity building activities; ➤ N of regional climate adaptation committees established; 	<p>and program adaptation finance</p> <p>Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability</p>	<p>6.2.1. Type of income sources for households generated under climate change scenario</p>	
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Capacitating Stakeholders - Mapping, Needs Assessment, and Capacity Building of Key Actors

<p>Capacitated stakeholders are better able to contribute towards needs identification, policy formulation and execution, as well as supporting private sector entities to implement projects seeking adaptation resilience of targeted municipalities</p>	<ul style="list-style-type: none"> ➤ N of regional stakeholder mapping exercise conducted, and N of relevant actors engaged; ➤ N of needs assessment of stakeholder groups is carried out; ➤ N of capacity-building programs, designed and implemented to enhance the capabilities of stakeholders; ➤ knowledge-sharing platform is established and operational; ➤ N of networking events, fostering collaboration and exchange of best practices among stakeholders at the regional and municipal levels are organized; 	<p>Output 2.2: Increased readiness and capacity of national and sub-national entities to directly access and program adaptation finance</p>	<p>2.2.1 No. of targeted institutions benefitting from the direct access and enhanced direct access modality</p>	<p>300,000</p>
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Channeling Adaptation Finance - Identification, appraisal, and financing of viable projects

<p>Adaptation resilience of vulnerable communities in Armenia is increased through implementation of locally driven projects with participation of private sector</p>	<ul style="list-style-type: none"> ➤ N of climate adaptation projects in all targeted regions identified, appraised and consulted with local/municipal stakeholders; ➤ N of climate adaptation projects from all targeted regions are approved for funding ➤ N of projects implemented in partnership with private sector; 	<p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level;</p> <p>Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas;</p>	<p>3.2. Percentage of targeted population applying appropriate adaptation responses</p> <p>Indicator 6.1.1 No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies</p>	<p>3,800,000</p>
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PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

<p>Hakob Simidyan</p> <p><i>Minister of Environment of the Republic of Armenia</i></p>	<p>08 August 2023</p>
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B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (National Adaptation Plan, Sectorial Adaptation plans and Marz (Regional) Adaptation Plans) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Name & Signature:



Implementing Entity Coordinator:

Armen Yesoyan, Director, "Environmental Project Implementation Unit" State Agency under the Ministry of Environment of the Republic of Armenia

Date: **08 August 2023**

Tel. and email: info@cep.am,
+37410651631

Project Contact Person:

Margarita Gasparyan, Head of Cooperation with Donors Department, "Environmental Project Implementation Unit" State Agency under the Ministry of Environment of the Republic of Armenia

Lia Apikyan, Chief Specialist of Cooperation with Donors Department, "Environmental Project Implementation Unit" State Agency under the Ministry of Environment of the Republic of Armenia

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REPUBLIC OF ARMENIA
MINISTER OF ENVIRONMENT
РЕСПУБЛИКА АРМЕНИЯ
МИНИСТР ОКРУЖАЮЩЕЙ СРЕДЫ

№ 1/08.5/11673

« 10 » « 08 » 2023

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: afbsec@adaptation-fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Enhanced Direct Access Project “Armenia National Adaptation Funding Facility”

In my capacity as designated authority for the Adaptation Fund in the Republic of Armenia, I confirm that the above national project proposal is in accordance with the government’s national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Republic of Armenia.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by “Environmental Project Implementation Unit” State Agency of the Ministry of Environment of the Republic of Armenia and executed by the same State Agency.

Sincerely,

8/10/2023

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Signed by: SIMIDYAN HAKOB 3004840588

Mr. Hakob Simidyan

International Cooperation Department
Ani Khachatryan, +37411 818 508



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