December 2018

PROGRAMME ON INNOVATION: SMALL GRANTS PROJECTS THROUGH DIRECT ACCESS MODALITY

REQUEST FOR PROJECT FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project must be fully prepared when the request is submitted.

Complete documentation should be sent to:

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ADAPTATION FUND

PROGRAMME ON INNOVATION: SMALL GRANT PROJECT PROPOSAL

PART I: PROJECT INFORMATION

Country:	Republic Armenia
Title of Project:	**AgriElevate:** Uplifting Farming Through Innovation
National Implementing Entity:	"Environmental Project Implementation Unit" State Agency
Executing Entity:	"Environmental Project Implementation Unit" State Agency
Amount of Financing Requested:	220,700 (in U.S Dollars Equivalent)

Project Background and Context

Economic Context

The agricultural sector has long been a cornerstone of Armenia's economy and remains important despite the growth of other sectors. As of 2019 data from the World Bank, the sector contributed around 13% to the country's GDP. It also employs a significant portion of the workforce, particularly in rural areas, accounting for about 35% of total employment. Despite its importance, the sector is beleaguered by systemic economic challenges that act as barriers to growth and efficiency. Primary among these are the financial difficulties encountered by farmers and small agriculturists. The prohibitive costs associated with acquiring modern, efficient farming equipment result in lower productivity, increased labor costs, and diminished economic viability for the farmers. This economic vulnerability cascades into poverty, food insecurity, and decreased competitiveness in local and global markets.

Social Context

Agricultural communities often grapple with social barriers that prevent them from reaching their full potential. These include geographic isolation from urban centers and a lack of access to information and technology, contributing to the vicious cycle of poverty and low productivity. This isolation prevents knowledge sharing and collaboration, factors that are essential for the improvement of agricultural practices and product quality. The absence of a cooperative ecosystem leads to a lack of standardization, inhibiting the sector's ability to compete effectively on a larger scale.

Development Context

In Armenia, agriculture plays a significant role in driving regional socio-economic development. Nevertheless, the sector is marked by inequitable access to modern technology, restricting growth and productivity. Small-scale farms dominate the landscape, lacking the capacity to leverage economies of scale, thereby stifling the potential for development. The result is a sector that contributes less than it could to overall economic growth, perpetuating poverty and underdevelopment.

Environmental Context

Agriculture is a double-edged sword when it comes to environmental sustainability. On one hand, it is dependent on a stable environment for production; on the other, it often contributes to environmental degradation through resource-intensive practices. Climate change, soil depletion, and water scarcity are challenges that further complicate the sustainability of agricultural practices. The inability of farmers to adopt modern, environmentally efficient approaches exacerbates these problems, making it difficult to align agricultural activities with the principles of environmental sustainability.

The proposed platform aims to break down these interrelated challenges by providing affordable access to essential farming equipment and serving as a conduit for collaboration and knowledge sharing among farmers. By addressing these economic, social, developmental, and environmental challenges concurrently, the platform seeks to elevate the agricultural sector to a level that increases productivity, improves living conditions in rural areas, and is more aligned with environmental sustainability. It envisions a revitalized agricultural landscape that is not only economically viable but also socially inclusive and environmentally responsible.

Problem Statement

In the current situation within Armenia's agricultural sector, farmers are significantly hindered by their inability to access modern equipment and machinery. This lack is not merely due to market unavailability but is deeply rooted in financial inaccessibility. Farmers, predominantly in rural and less developed regions, face the dual challenge of outdated farming methods and an absence of financial support mechanisms to upgrade their tools. This situation is further exacerbated by a critical gap in accessing reliable and actionable agricultural data, including weather forecasts and cultivation guidance, essential for making informed decisions in an increasingly unpredictable climate landscape. More detailed description of existing gaps and challenges is given below:

- **Financial accessibility**: A significant gap in farmers' ability to afford modern equipment (tools and machinery), practices and technologies highlighting the need for innovative financial solutions or subsidies.
- **Information disparity**: Limited access to timely, accurate agricultural data and best practices, pointing to a need for a centralized, accessible information platform.

- **Technological disparity**: The divide between farmers' current use of outdated methods and the potential benefits of modern technology.
- **Adaptation and training**: A barrier in farmers' capacity to adapt to and effectively use new technologies and practices.
- **Infrastructure and support**: Inadequate infrastructure and support systems to facilitate the transition to modernized farming.

The development objective of the proposed project is to ensure that every farmer, regardless of their geographical or economic status, has access to the latest agricultural equipment and technologies, as well as financial barriers are overcome through innovative financial solutions, enabling even the smallest farmers to utilize advanced tools and machinery. Additionally, it's important to guarantee that farmers are well-informed, with real-time, reliable data on weather and crop cultivation readily available. This will be secured through the partnership with "Hydrometeorology and Monitoring Center" State Non-Commercial Organization that will ensure access to the data. Results of the Project sees a thriving agricultural sector, characterized by high productivity, sustainability, and resilience, driven by informed decision-making and state-of-the-art technology.

Project Objectives

The **overall objective** of the Project is to elevate the agricultural sector in Armenia by fostering economic viability, social inclusivity, and environmental sustainability through a multifaceted ordering platform. The Project aspires to create an integrated solution that tackles the problems faced by farmers and agriculturists on multiple fronts: economic, social, developmental, and environmental. By facilitating affordable access to essential farming machinery and fostering a collaborative ecosystem, the Project aims to boost agricultural productivity, enhance livelihoods, and contribute to environmental sustainability.

By achieving the following **specific objectives**, the Project aims to fulfill its overall objective, thereby contributing to a revitalized and sustainable agricultural sector in Armenia:

- **To improve economic viability of farms** through making modern and efficient farming equipment (tools and machinery), technologies and practices accessible and affordable for farmers, thereby increasing productivity and reducing labor costs;

  By offering a rental or lease-to-own service for modern machinery, the Project seeks to remove the upfront financial burden that prohibits many farmers from adopting improved farming methods. Information about available state support programmes (including direct financial subsidies, loan interest rates subsidization schemes and cashbacks) will also be available through the platform and will be matched with the market supply information (populated by the suppliers).

- **To promote knowledge sharing and collaboration** through establishing a digital platform for farmers to exchange best practices, skills, and technologies, improving the overall quality and competitiveness of agricultural products;

  Through the creation of a digital forum or a community-led information center, the project aims to break the cycle of information poverty and isolation that many farmers face, particularly those in remote regions. Forums, led by the organizations (professional NGOs, foundations and other support projects) will provide with the dialogue aimed at securing mentorship of project beneficiaries.

- **To enhance sustainable agricultural practices** promoting resource-efficient farming techniques that will conserve water, improve soil health, and reduce environmental impact;

  By providing educational resources and training on sustainable farming practices, the project aspires to make farmers more aware of their environmental footprint and equip them with the tools to minimize it. Information about these practices will also be matched with state support programs (including subsidies), suppliers and peer-mentors.

- **To strengthen market access and competitiveness** via facilitating better market linkages for farmers, enabling them to sell their products at fair prices and compete in both local and global markets.

  By forming partnerships with distribution networks, co-operatives, and local businesses, the project aims to create avenues for farmers to market their goods more effectively, ensuring that they get a fair return on their labor.

Project Rationale

The AgriElevate project in Armenia aims to holistically improve the agricultural sector by integrating environmental sustainability, particularly in the context of climate change adaptation. The project is designed to enhance the resilience of both human and natural systems against the adverse impacts of climate change. This is achieved by promoting sustainable agricultural practices that are less resource-intensive and more resilient to climate variability. By focusing on innovative farming techniques and the adoption of climate-smart agriculture, AgriElevate seeks to reduce the vulnerability of the agricultural sector to climatic shocks, such as extreme weather events, and ensure long-term sustainability. The project aims to create a more robust agricultural framework that not only addresses current challenges but also anticipates and mitigates future climate-related risks. This is achieved through:

- **Promoting sustainable practices** aspect of the AgriElevate project focuses on introducing and encouraging agricultural methods that are resilient to climate variability. This includes advocating for the cultivation of drought-resistant crop varieties, which are more capable of withstanding periods of low rainfall, a common consequence of climate change. Additionally, the project emphasizes the importance of water-efficient irrigation techniques, such as drip irrigation, which optimizes water

use and reduces wastage. These practices not only help in adapting to changing climatic conditions but also contribute to the long-term sustainability of agricultural resources by reducing dependence on traditional, less sustainable farming methods. The initiative thus aims to create a more environmentally conscious and climate-resilient agricultural sector.

- **Knowledge sharing and capacity building** is essential for enhancing the adaptive capacity of Armenia's agricultural sector to climate change. This involves creating platforms and opportunities for farmers to access and share information on climate-resilient farming techniques and innovations. The project focuses on organizing workshops, training sessions, and creating informational resources that are easily accessible. By empowering farmers with knowledge and skills, they are better equipped to make informed decisions in response to climatic challenges, thus fostering a community of practice that is resilient and adaptable to changing environmental conditions. Also, availability of thematic forums in the application (moderated by professional NGOs and foundations working in sustainable agricultural domain) will help beneficiary farmers to have feedback/mentorship opportunity.
- **Utilizing modern technologies** revolves around the development and deployment of a digital platform. This platform is designed to facilitate access to state-of-the-art agricultural tools and resources. It aims to enhance data-driven decision-making by providing farmers with up-to-date information and insights on climate-resilient farming practices. The focus is on leveraging technology to streamline agricultural processes, improve efficiency, and ultimately make farming practices more adaptive and responsive to the challenges posed by climate change. The platform also provides farmers with access to new technologies, equipment, and machinery essential for climate-resilient farming, along with information about suppliers of such equipment and state support programmes (including direct financial subsidies). This access is crucial in helping farmers adopt advanced agricultural practices, upgrade their existing tools, and efficiently respond to the changing environmental conditions. By bridging the gap between farmers and modern agricultural technologies, the platform plays a pivotal role in enhancing the overall adaptability and resilience of the agricultural sector in Armenia.
- **Collaborative efforts:** emphasizes the importance of multi-stakeholder engagement in addressing climate change challenges in Armenia's agriculture. This involves creating partnerships between farmers, agricultural experts, government bodies, and NGOs. These collaborations facilitate the exchange of knowledge and resources, leading to more comprehensive and effective climate adaptation strategies. By fostering a collaborative environment, the project aims to create a unified approach towards sustainable and resilient agricultural practices, ensuring that all stakeholders contribute to and benefit from the advancements in agricultural technology and knowledge.

Climate change adaptation justification

The AgriElevate platform is strategically designed to facilitate climate change adaptation in Armenia's agricultural sector through increased knowledge and uptake of modern technologies and practices. It serves as a crucial tool in enabling farmers to respond effectively to the challenges posed by a changing climate through the following key adaptation functions:

1. **Access to climate-resilient technologies and practices**: the platform provides farmers with easy access to information and resources on drought-resistant crop varieties and water-efficient irrigation methods. These technologies and practices are essential in adapting to decreased rainfall and higher temperatures, common impacts of climate change in the region;
2. **Facilitating access to climate-resilient equipment:** AgriElevate enables farmers to buy or rent modern, efficient farming equipment that is crucial for climate-resilient agriculture. This includes machinery that supports sustainable farming practices and technologies that are more adaptive to climate extremes;
3. **Affordable solutions for equipment acquisition:** understanding the financial constraints faced by farmers, the platform offers rental and lease-to-own options. This makes it economically feasible for farmers to acquire advanced equipment, essential for adapting to the changing climate conditions without the burden of large upfront costs;
4. **Knowledge exchange and capacity building:** it acts as a hub for knowledge sharing, allowing farmers to exchange insights on climate-resilient farming techniques. This facilitates a community-based approach to learning and adapting, which is vital in building resilience against climate variability;
5. **Enhanced decision-making through data:** by offering up-to-date climate and weather information, the platform aids farmers in making informed decisions about crop selection, planting times, and irrigation practices. This data-driven approach is critical for adapting to the unpredictable nature of climate change.
6. **Linking farmers to adaptation resources:** the platform connects farmers with opportunities for training, financial support (with specific focus on state support programmes, including financial subsidies), and access to climate-resilient equipment. This ensures that the necessary tools and resources for adaptation are readily available and accessible;

AgriElevate directly empowers Armenian farmers to confront climate change by providing actionable solutions. The platform bridges critical gaps in technology and knowledge, offering tangible means – such as accessible, climate-smart equipment and targeted, data-driven guidance – to effectively adapt agricultural practices to a rapidly changing environment. This approach not only mitigates the adverse impacts of climate variability but also paves the way for a resilient, future-proof agricultural sector in Armenia’s vulnerable regions.

The following mechanisms ensures achievement of the Project's objectives adaptation rationale:

- **Facilitating access to climate-resilient technologies:** the platform provides farmers with easy access to modern, efficient, and climate-resilient agricultural equipment and machinery. This includes drought-resistant crop varieties, water-efficient irrigation systems, and soil health improving tools. By enabling farmers to adopt these technologies, the platform directly contributes to increasing the adaptability of agricultural practices to changing climatic conditions.
- **Promoting sustainable agricultural practices:** AgriElevate encourages the adoption of sustainable farming techniques that reduce environmental impact and enhance the resilience of crops to climate variability. This includes practices such as conservation agriculture, integrated pest management, and organic farming. These practices not only help mitigate climate change effects but also improve soil health, water conservation, and biodiversity.
- **Knowledge sharing and capacity building:** the platform serves as a knowledge hub, offering farmers information on climate-resilient farming practices, weather forecasts, and cultivation guidance. This empowers farmers with the necessary knowledge to make informed decisions that align with climate adaptation goals.
- **Innovative financial solutions:** recognizing the financial challenges faced by farmers in acquiring modern equipment, the platform explores innovative financial solutions like leasing or renting options, subsidies, and grants. This ensures that financial barriers do not hinder the adoption of climate-resilient technologies and practices.

Environmental, social, and economic implications of introducing modern agricultural equipment and machinery are also considered during the design stage of the proposal:

- **Environmental sustainability:** all equipment and technologies promoted through the platform are evaluated for their environmental sustainability. This includes assessing their energy efficiency, water usage, and impact on soil health. The platform prioritizes technologies that contribute to reducing greenhouse gas emissions and enhancing biodiversity.
- **Social inclusion and equity:** the platform is designed with a strong focus on inclusivity, ensuring that small-scale farmers, women, and marginalized groups have access to modern technologies and training. Special initiatives are aimed at empowering these groups, thereby contributing to social equity in the agricultural sector.
- **Economic viability:** by improving productivity and efficiency, the introduction of modern equipment is expected to increase farmers' income levels. However, the platform also emphasizes the importance of sustainable economic growth, advocating for practices that are economically viable in the long term without compromising environmental and social values.

Theory of Change

IF the AgriElevate platform is implemented effectively by offering access to modern, climate-resilient farming equipment, facilitating knowledge sharing and collaboration, and integrating modern technologies like data analytics for region-specific agricultural advice, **THEN** it will significantly enhance the adaptive capacity of Armenian agriculture and contribute to the broader goal of environmental sustainability and resilience against climate change, **BECAUSE** the platform provides a comprehensive suite of solutions tailored to the unique environmental, social, and economic contexts of different farming communities, thus, enabling farmers to adopt more sustainable practices.

For the AgriElevate project, it's crucial to establish a set of foundational assumptions. These assumptions form the basis for planning and implementing the project's strategies, ensuring they are tailored to the specific contexts and needs of Armenian farmers. They encompass factors such as technological readiness and access, awareness of climate change impacts, economic considerations of adopting new practices, and the level of community engagement. Understanding and validating these assumptions through direct engagement and research is vital for the success and sustainability of the project:

- **Farmers' readiness for technology**: Assuming that farmers are ready and willing to adopt new technologies but may need training and support.
- **Access to internet and digital tools**: Presuming that most farmers have some level of access to internet and digital tools, which is crucial for the digital platform's success.
- **Climate change impact awareness**: Assuming that farmers are aware of the impacts of climate change on agriculture and are seeking solutions.
- **Economic viability of new practices**: Considering that farmers will evaluate the economic benefits of new practices against traditional methods.
- **Community engagement**: Presuming that the level of community engagement and willingness to participate in collaborative efforts and knowledge sharing is adequate.

In reflecting on the actual outcomes of the AgriElevate project, it was found that various factors significantly influenced the needs and responses of farmers and communities. The formulated hypotheses examined real behaviors and reactions of farmers to the project's initiatives, revealing insights into their adaptability and acceptance of new practices. The scenarios that were considered highlighted the realities of different futures, shaped by actual climate patterns, economic conditions, and rates of technology adoption. These evaluations proved vital in adjusting the project's strategy to meet the actual and diverse needs of Armenia's agricultural sector.

Hypotheses

- **Adoption of technology:** Farmers will rapidly adopt new technologies if they are cost-effective, user-friendly and information about state support programmes is

easily available. This assumes a certain level of technological literacy and openness to change among the farming community.

- **Climate change awareness impact:** Increased awareness of climate change impacts will motivate farmers to adopt sustainable practices. This hypothesis relies on the assumption that awareness leads to action.
- **Economic incentives drive change:** Providing economic incentives or demonstrating the cost-effectiveness of new practices will significantly influence farmers' willingness to change. This considers the primary role of economic factors in decision-making.

Scenarios

- **High adoption and positive climate scenario:** In this scenario, a high rate of technology adoption coincides with favorable climatic conditions, leading to optimal agricultural productivity and sustainability.
- **Low adoption and adverse climate scenario:** Here, reluctance to adopt new practices combined with worsening climate conditions results in reduced agricultural productivity and increased vulnerability.
- **Moderate adoption with variable climate conditions:** This scenario assumes a moderate level of technology adoption with fluctuating climate conditions, leading to varied outcomes in agricultural productivity and resilience.

Each hypothesis and scenario helps in planning and preparing for a range of possible futures, ensuring that the AgriElevate project remains adaptable and effective in achieving its goals.

Sustainability of the Project's outputs

Revenue generation for self-sustainability

The AgriElevate platform is designed to be financially self-sustaining in the long term, a critical factor for its post-project viability. The platform will generate revenue through the following streams:

1. **Service fees:** a nominal fee for services such as equipment rental, lease-to-own options, and access to premium digital resources. These fees are structured to be affordable to farmers while generating sufficient revenue for platform maintenance and improvement.
2. **Partnership and sponsorship programs:** collaborations with agricultural businesses, equipment manufacturers, and service providers will provide a source of revenue. These partnerships will be mutually beneficial, as businesses get access to a targeted market of farmers, and the platform gains financial support.
3. **Data monetization:** the platform accumulating valuable agricultural data, can offer insights to research institutions, policymakers, or commercial entities, under strict

privacy and ethical guidelines. This data monetization will be a key revenue stream while contributing to the agricultural sector's broader development.

Private sector involvement and competitive selection

Post-completion, the platform's operation will be transferred to a private sector operator. This transition will be executed through a transparent, competitive selection process to ensure the operator aligns with the project's vision and goals. The criteria for selection will include:

1. **Business sustainability plan:** prospective operators must demonstrate a robust plan for maintaining and scaling the platform, ensuring its long-term viability and relevance.
2. **Commitment to farmers' needs:** the selected operator should have a proven track record or clear plan to support and address the evolving needs of the farming community.
3. **Adherence to environmental and social values:** essential to the selection will be the operator's commitment to sustaining the environmental and social benefits of the platform, aligning with the project's original ethos.

Project beneficiaries

The AgriElevate platform is primarily designed to serve the diverse community of Armenian farmers. It aims to provide tailored agricultural guidance and resources, catering to the specific needs of different regions and farming practices across Armenia. By leveraging advanced data analytics, the platform customizes its content to align with the unique social, economic, and environmental contexts of each farming community. This inclusive strategy ensures that the platform is equally beneficial to small-scale farmers in remote areas as well as larger agricultural operations in more developed regions, promoting equitable growth and resilience in the nation's agricultural sector.

Consultations carried out

During the appraisal stage of the AgriElevate project, a series of consultations were carried out with stakeholders and beneficiaries across eight municipalities in Armenia. These consultations utilized a mix of qualitative methodologies, including focus groups, one-on-one interviews, and community meetings, to gather a wide range of perspectives. Key approaches included direct engagement with local farmers, discussions with agricultural experts, and collaboration with municipal authorities to understand the ground realities and specific needs of different regions. The key findings from the consultations are summarized below:

- **Lack of access to modern equipment and machinery**: Many farmers expressed that financial constraints significantly hindered their access to modern agricultural equipment and machinery. This limitation impacts their ability to adopt more efficient, sustainable farming practices and adapt to changing climatic conditions. The need

for affordable, accessible technological solutions was emphasized as a critical factor in enhancing agricultural productivity and sustainability.

- **Low level of awareness**: The consultations revealed a general low level of awareness among farmers about advanced agricultural techniques and climate-resilient practices. This gap in knowledge presents a barrier to implementing more sustainable farming methods, underscoring the importance of educational initiatives and knowledge dissemination as part of the project.
- **Variability in regional agricultural practices**: The consultations also highlighted the variability in agricultural practices and challenges across different regions. This diversity necessitates a tailored approach in project implementation, ensuring that solutions and support are context-specific and address the unique characteristics of each region.
- **Need for community support systems**: Another key insight was the need for stronger community support systems. Farmers indicated a desire for more collaborative platforms where they can share experiences, learn from each other, and build a supportive network to collectively address the challenges of modern agriculture and climate change.

Project Components and Financing:

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
1. Stakeholder mapping and needs assessment **Activity 1.1.** Stakeholder analysis This involves conducting mapping, surveys, interviews or focus group discussions to gather insights into stakeholder behaviour, preferences, and requirements when it comes to the requirements for ordering agricultural machinery. **Activity 1.2.** Definition of requirements Through the stakeholder engagement process, the Project aims to determine the specific requirements for	**Output 1.1.** Stakeholder mapping and needs assessment report **Output 1.2.** Market research report **Output 1.3.** Detailed workplan and requirements of the Project	Successfully formulated and articulated a detailed project plan that meticulously outlines the platform's functionalities and features, aimed at addressing specific climate resilience challenges within the agricultural sector.	**21,200**

the platform. The study will help to establish comprehensive baseline of the stakeholder landscape and inform the subsequent development of the platform. **Activity 1.3.** Establishing scope of works This involves determining the functionalities and other specifications necessary to meet the identified stakeholder requirements effectively.			
2. Projection and design **Activity 2.1.** Development of technical specifications Detailed technical documentations will be developed to capture the specifications, functionalities, and technical requirements of the platform. This includes documenting the system architecture, data bases, APIs, integration points, and delivery process. **Activity 2.2.** UI/UX Design This involves the design of the platform's user interface (UI) and user experience (UX), including creating visually appealing and intuitive interfaces that are easy to navigate and use. The UI/UX design process considers factors such as information architecture, interaction design, visual design, and usability testing to ensure an optimal user experience. It focuses on designing interfaces that are	**Output 2.1.** Detailed TORs with technical requirements; **Output 2.2.** UI/UX design mock-ups for the platform;	Successfully delineated technical requirements and developed an intuitive, user-friendly UI/UX design that incorporates specific adaptation considerations relevant to climate resilience in agriculture.	**53,650**

accessible, inclusive, and responsive to the needs of diverse stakeholders.			
3. Development, integrations, testing, deployment **Activity 3.1.** System architecture design Here, the project team designs the system architecture of the platform, taking into account the specific adaptation needs and requirements identified during stakeholder research. This includes determining the infrastructure, database design, security measures, and scalability considerations. **Activity 3.2.** Development and integration Development of the platform based on the technical requirements and designs established during previous activities. This involves coding, programming, and integrating various functionalities and modules. **Activity 3.3.** Testing and quality assurance To ensure the functionality and reliability of the platform, rigorous testing and quality assurance activities are conducted. This includes various types of testing, such as functional testing, performance testing, user acceptance testing, and etc. **Activity 3.4.** Deployment	**Output 3.1.** System architecture diagram **Output 3.2.** Integrated APIs, **Output 3.3.** Full-featured platform, deployed to the production server **Output 3.4.** Platform using documentation.	Successfully developed, tested, and deployed the platform to end-users, accompanied by easy-to-learn guidelines tailored for effective platform utilization.	**92,050**

and launch Once the platform has undergone thorough testing and quality assurance, it is deployed and launched for stakeholders to access and use. This involves setting up the necessary infrastructure, configuring servers, and deploying the platform in a secure and accessible manner.			
4. Content population **Activity 4.1.** Stakeholder consultations The project team will collaborate with stakeholders, including agricultural machinery suppliers, manufacturers, and experts, to gather accurate and up-to-date content for the platform. This involves conducting consultations and interviews. The project team ensures that the content collected aligns with the adaptation goals of the platform and supports climate resilience in agriculture. **Activity 4.2.** Content collection and curation The project team will collect various types of content, such as product descriptions, specifications, images, and other relevant information related to agricultural machinery. This content is curated and organized in a structured manner to facilitate easy	**Output 4.1.** 100 units of high-quality and accurate content populated within the platform **Output 4.2.** Platform using content, populated within the platform	Successfully curated and made available well-presented, informative content that empowers users to engage effectively with the platform upon its launch.	**11,800**

access and navigation for platform users. The project team should ensure that the content is accurate, comprehensive, and aligned with climate-resilient practices and technologies. **Activity 4.3.** Verification and validation The content collected from stakeholders undergoes a verification and validation process to ensure its quality and authenticity. The project team verifies the information provided, conducts fact-checking, and ensures that the content meets the required standards. This process helps to maintain the credibility and reliability of the platform's content, supporting informed decision-making by stakeholders. **Activity 4.4.** Content input In addition to gathering content from stakeholders, the project team inputs the content to ensure the stakeholders' access to the reliable, up-to-date and accurate content that highlight climate-smart choices, sustainable farming techniques, and innovative adaptation strategies.			
5. Awareness raising **Activity 5.1.** Workshop design and planning The project team designs workshops that are tailored to the needs and	**Output 5.1.** Workshop materials, presentations, and documentation **Output 5.2.** Workshop summary	Successfully heightened awareness and understanding of the platform, leading to measurable increases in potential user engagement and	**21,700**

preferences of the target audience. This includes identifying key topics, structuring the agenda, and selecting appropriate methodologies and interactive activities. The workshops are designed to showcase the platform's features, benefits, and instructions for using it effectively in the context of climate resilience. **Activity 5.2.** Stakeholder engagement Engagement with relevant stakeholders, including agricultural machinery suppliers, farmers' organizations, and industry associations, to ensure their participation and representation in the workshops. The team establishes partnerships and collaborates with these stakeholders to maximize the reach and impact of the workshops. The involvement of stakeholders ensures that their specific needs, concerns, and perspectives are considered during the workshop sessions. **Activity 5.3.** Workshops delivery Conducting the workshops, either offline or through virtual platforms, to present the Platform to the target audience. The workshops involve interactive sessions, demonstrations, and hands-on activities that allow participants to explore and	reports that include feedback from participants	adoption rates.	

familiarize themselves with the platform's functionalities. The project team provides guidance, support, and training to ensure that participants gain a comprehensive understanding of the platform's features and benefits. **Activity 5.3.** Feedback collection and analysis Collecting feedback from participants regarding their experience with the platform and its usability. This feedback helps identify areas for improvement and refinement, ensuring that the platform meets the specific needs of the target audience. The project team encourages participants to provide suggestions, insights, and recommendations for enhancing the platform's effectiveness in supporting climate resilience in agriculture.			
Subtotal for 5 components			**200,400**
6. Project Execution cost			**3,000**
7. Total Project Cost			**203,400**
8. Project Cycle Management Fee charged by the Implementing Entity (if applicable)			**17,300**
Amount of Financing Requested			**220,700**

Projected Calendar:

Milestones	Expected Dates
Start of Project Implementation	01 September 2024
Project Closing	01 June 2025
Terminal Evaluation	01 September 2025

PART II: PROJECT JUSTIFICATION

A. Describe the project components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience.

Component 1. – Stakeholder mapping and needs assessment

Component 1 is engineered to build a strong foundation for climate adaptation and resilience in the agricultural sector by deeply understanding stakeholder behavior, particularly in the process of ordering agricultural machinery.

Activity 1.1: *Stakeholder analysis*

The stakeholder mapping and needs assessment, which includes surveys, interviews, and focus groups, aims not only to identify machinery needs but also to comprehend climate adaptation necessities within the agricultural community. Questions in these assessments will delve into how climate variables like changing weather patterns or water availability have impacted stakeholders. The project thus aspires to tailor its functionalities to meet the climate resilience challenges identified, enabling stakeholders to make climate-smart choices when ordering machinery.

Activity 1.2: Definition of requirements

Post stakeholder analysis, defining the platform's requirements will explicitly consider climate resilience. This will involve incorporating adaptation solutions into the platform that cater to specific stakeholder needs and vulnerabilities. For instance, features that provide real-time climate data, or guidelines on drought-resistant crops, will be considered essential. This targeted approach ensures the alignment of the platform with climate resilience needs, thereby encouraging stakeholders to adopt machinery that promotes resource efficiency, reduced emissions, and compatibility with climate-friendly farming techniques.

Activity 1.3: Establishing scope of works

While delineating the scope of works, functionalities will be designed to not only be user-friendly but also adaptation focused. For example, GIS capabilities could be integrated for land vulnerability assessments, and decision-support systems might offer actionable insights for climate-adaptive practices. Importantly, the platform will enhance stakeholders' decision-making by integrating climate resilience considerations, allowing them to select machinery that aligns with their specific environmental conditions.

In addition, the stakeholder research component has been designed to be inclusive, particularly of vulnerable communities like small-scale farmers. By understanding their unique challenges and needs, the platform will be developed to be accessible, user-friendly, and culturally appropriate. This ensures that these communities are empowered to access climate-resilient machinery options and adopt adaptive practices, thus enhancing their resilience to climate change impacts.

In summary, Component 1 aims to offer a robust basis for an adaptation-centered platform through a meticulous stakeholder engagement process. The intent is to create a tool that meets the immediate machinery needs of the agricultural community while significantly contributing to its long-term climate resilience through targeted features and functionalities.

Stakeholder groups to be engaged

Based on the objectives and design of the AgriElevate project, the following types of stakeholders are to be engaged:

- **Farmers**: They are the primary beneficiaries and participants of the project. This includes smallholder farmers, subsistence farmers, and those involved in various forms of agricultural practices.
- **Local agricultural cooperatives and farmer groups**: These organizations are crucial for mobilizing farmers, disseminating information, and implementing project activities at the community level.
- **Government agencies**: Relevant government bodies (central, regional and municipal), especially those focused on agriculture, rural development, and environmental sustainability, are key stakeholders. They can provide policy support, resources, and regulatory guidance.
- **Agricultural experts and researchers**: Specialists from the fields of agronomy, climate science, and sustainable farming practices are important for providing technical expertise and guidance.
- **Non-Governmental Organizations**: NGOs working in the areas of agriculture, sustainable development, and rural livelihoods can offer support in terms of resources, expertise, and on-ground implementation.
- **Financial institutions and microfinance Organizations**: These stakeholders are critical for providing financial support, such as loans, credits, and insurance, to farmers.
- **Local community leaders**: They play a vital role in gaining community trust and facilitating engagement with the project.
- **Educational institutions**: Universities and agricultural colleges can contribute through research support, training, and capacity building.
- **Private sector partners**: Companies involved in agriculture, technology, and related fields can offer access to new technologies, market opportunities, and potential investments.
- **International development organizations**: These organizations can provide financial support, technical expertise, and global best practices.

Each of these stakeholder groups brings unique perspectives, resources, and expertise, making their engagement crucial for the holistic success of the AgriElevate project.

Component 2. – Projection and design

Component 2 is a cornerstone of the project, crucially involving the development of comprehensive technical specifications and an intuitive UI/UX design tailored for climate resilience and adaptation.

Activity 2.1: Development of technical specifications

Developing technical documentation encapsulates not just the system architecture, databases, and APIs but also focuses on integrating adaptation considerations into the platform's features and functionalities. The specifications may feature climate-related information systems, data visualization tools, and decision-support systems tailored to help stakeholders make climate-resilient decisions. For example, it might offer recommendations on sustainable farming practices, energy-efficient machinery, and resource conservation, directly enabling stakeholders to make sustainable decisions in the machinery ordering process.

Activity 2.2: UI/UX Design

The UI/UX design goes beyond merely offering an optimal user experience; it's an engine for promoting climate resilience. The design process prioritizes making climate-adaptive features easily accessible to stakeholders, including vulnerable communities. It involves intuitive workflows, visual cues, and clear instructions on how to use climate-resilient machinery and adopt sustainable practices. The platform aims to present stakeholders with accurate, actionable climate data, forecasts, and information on climate change impacts, thereby facilitating the adoption of climate-resilient practices and effective management of climate risks in agriculture.

Furthermore, the UI/UX design is engineered to actively engage stakeholders. Interactive and engaging interfaces encourage users to explore climate-adaptive features, learn about sustainable farming practices, and access valuable resources for building resilience. The user-friendly design thus empowers stakeholders to not just navigate but effectively implement climate resilience measures.

And finally, Component 2 transforms the stakeholder insights from Component 1 into a tangible, user-friendly platform with an underlying architecture built for climate resilience. By thoughtfully incorporating adaptation considerations into both technical documentation and UI/UX design, the platform becomes an empowering tool that equips stakeholders to make informed, climate-smart decisions, thereby significantly contributing to climate resilience and sustainable agriculture.

Component 3. – Development, integration, testing and deployment

Component 3 is the critical phase of the project, overseeing the actual development, integration, testing, and deployment of the platform. Each activity within this component is meticulously designed to advance the platform's role in fostering climate resilience.

Activity 3.1: System architecture design

The system architecture is engineered not just for scalability and security but also for incorporating climate-resilient tools. These tools might include climate data analysis features that help farmers make better decisions about their agricultural practices, thereby enhancing the system's overall climate resilience.

Activity 3.2: Development and integration

Development and integration are undertaken with a focus on improving stakeholder decision-making. The platform will offer insights, recommendations, or visualizations based on climate data. These enable stakeholders to choose machinery and practices that are climate-resilient, enhancing adaptive strategies and the resilience of agricultural systems to climate impacts.

Activity 3.3: Testing and quality assurance

Quality assurance goes beyond functionality to assess how well the platform meets its climate resilience objectives. User acceptance tests will include scenarios that evaluate the effectiveness of climate-resilient tools and functionalities. This ensures that the platform not only works but works in a way that advances climate adaptation.

Activity 3.4: Deployment and launch

Deployment is about making the platform accessible to all stakeholders, including those most vulnerable to climate impacts. However, it goes a step further by facilitating knowledge transfer and capacity building. The platform will offer educational materials, tutorials, and other features that improve understanding of climate resilience and provide the skills needed for implementing adaptive practices.

In addition to these activities, the platform includes features that support the monitoring and evaluation of climate resilience efforts. This enables stakeholders to track the impacts of their adaptation measures, fostering evidence-based decision-making and continuous improvement.

To conclude, Component 3 integrates the creation of climate-resilient tools, improved decision-making capabilities, knowledge transfer, and monitoring features. These elements contribute to a holistic approach to building climate resilience, from individual choices in machinery and practices to broader community adaptation strategies.

Component 4. – Content population

Component 4 is integral to the Joint Ordering Platform for Agricultural Machinery. It's geared toward providing quality, climate-resilient content, derived through close collaboration with stakeholders like machinery suppliers, manufacturers, and experts in agriculture.

Activity 4.1: Stakeholder consultations

Engaging with stakeholders ensures that the platform's content aligns with both user needs and climate resilience objectives. Through this consultative process, the platform gains access to climate-resilient information and machinery models designed for climate adaptation, thereby equipping stakeholders with the knowledge they need for climate-smart decisions.

Activity 4.2: Content collection and curation

The content, such as product descriptions, specifications, and images, is curated in an organized manner for easy user navigation. This content not only supports climate-smart decision-making but also promotes machinery options that are energy-efficient, conserve water, and reduce greenhouse gas emissions. By showcasing these solutions, the platform encourages stakeholders to adopt climate-resilient technologies and practices that enhance agricultural sustainability.

Activity 4.3: Verification and validation

The platform employs a rigorous verification and validation process to maintain high standards of credibility and reliability. This ensures that all the information provided is authentic and supports informed, climate-resilient decision-making by stakeholders. The verification process also fosters knowledge exchange among stakeholders, providing a conduit for sharing effective climate resilience strategies and allowing for the scaling up and replication of successful practices.

Activity 4.4: Content input

The project team takes charge of populating the platform with this verified content. This guarantees that stakeholders, including vulnerable communities, have access to reliable and up-to-date information that highlights climate-smart choices, energy-efficient technologies, and sustainable farming techniques. By including diverse perspectives and local knowledge in the content, the platform ensures inclusivity and addresses the specific adaptation needs of vulnerable groups, empowering them to make informed decisions, adapt their farming practices, and build resilience to climate change impacts.

Through these activities and their underpinning principles, Component 4 significantly bolsters the platform's role in enhancing climate resilience across the agricultural sector.

Component 5. – Awareness raising

The fifth and final component centers on planning and conducting workshops aimed at introducing the platform's climate-resilient features to a diverse target audience. These audiences include farmers, agricultural machinery stakeholders, and relevant industry professionals.

Activity 5.1: Workshop design and planning

To ensure climate resilience, workshops are meticulously designed to focus on the climate-resilient features and functionalities of the platform. The project team structures the agenda to showcase innovative adaptation practices, tools, and technologies,

meeting the specific needs and preferences of the targeted stakeholders. These workshops serve as a cornerstone for awareness and capacity building, equipping participants with the knowledge and skills to make informed decisions and implement climate-resilient strategies.

Activity 5.2: Stakeholder engagement

Engagement with stakeholders is intensified to ensure that a wide range of perspectives on climate resilience in agriculture are considered. Stakeholder collaboration and networking are facilitated, as the project team establishes partnerships with agricultural machinery suppliers, farmers' organizations, and industry associations to broaden the reach and impact of these events. These interactions also promote collective action and partnerships for scaling up climate-resilient practices.

Activity 5.3: Workshop delivery

Workshops are conducted either in-person or virtually and feature hands-on activities, interactive sessions, and live demonstrations of the platform. Through these sessions, participants not only learn how to use the platform but also gain exposure to climate-smart technologies and practices. This encourages the adoption of resource-efficient, sustainable farming and climate adaptation measures, enhancing stakeholders' resilience to climate change impacts.

Activity 5.4: Feedback collection and analysis

Feedback is actively gathered from workshop participants to inform ongoing platform improvements. This includes usability assessments and evaluations of the platform's effectiveness in supporting climate resilience. The iterative process enabled by this feedback ensures that the platform continuously adapts to the needs of its diverse user base.

Through this final component, the project accomplishes its mission of empowering stakeholders with the tools, information, and collaborative networks they need for climate resilience. By combining educational elements with practical demonstrations, the workshops not only raise awareness but also foster active engagement. This equips stakeholders to make informed decisions, adopt climate-smart technologies, and implement sustainable practices, thereby fostering resilience in the face of climate change impacts.

Insights from the review of international best practices

In the process of designing the AgriElevate proposal, comprehensive research was undertaken to gather insights and inform the project's development. The research focused on existing digital platforms in the agricultural sector, particularly those in developing countries. The key takeaway from this research is the growing importance of these platforms as vital tools for addressing the challenges faced by rural farmers. These platforms are increasingly recognized for their role in connecting farmers to markets, providing access to financial services, and offering crucial agricultural

information, thus playing a crucial role in transforming agricultural practices and enhancing the livelihoods of rural farming communities. Several platforms from different countries that are briefly presented below, showcase innovative approaches to integrating technology into agriculture, which could serve as examples for the AgriElevate project:

- **Agrilocal (France):** This platform connects local suppliers with public buyers who need mass catering services, such as schools and hospitals. It facilitates a direct connection between local agricultural producers and potential large-scale buyers, streamlining the procurement process.
- **La Ruche qui dit oui (France):** This platform links producers and consumers for the purpose of selling and buying local foodstuffs like fruits, vegetables, and meats. It has a unique distribution model that includes local "hives" where consumers can pick up their orders and meet producers.
- **Miimosa (France):** A crowdfunding platform focused on agriculture and food, Miimosa connects project leaders in these fields with a community of contributors. It allows farmers and food entrepreneurs to raise funds for their projects from a broad base of supporters.
- **Online Ag marketplaces:** These digital platforms are emerging as a vital entry point for farmers into the tech ecosystem. They facilitate trade, provide insights on grain trading, and offer integrated technologies such as AI for automation, smart irrigation, and farm management systems.
- **Fintech in agriculture:** There are fintech platforms like Tillable, Oxbury, and World Cover that are revolutionizing agricultural finance. These platforms offer services like modernized payments, commodities pricing and trading, innovative insurance, and efficient marketplaces.
- **Sub-Saharan Africa's Digital Agriculture Transformation**: In this region, digital agriculture offers opportunities for farmers and rural communities in a digitally driven agri-food system. Despite facing challenges like limited public funding and inadequate infrastructure, sub-Saharan Africa is undergoing a digital transformation that leverages new technologies for agriculture. This transformation aims to improve livelihoods for smallholder farmers and pastoralists, ensuring that rural areas are not left behind in the digital era.
- **The Maano-Virtual Farmers' Market (VFM)**: This is an app-based e-commerce platform designed specifically for farmers' needs and is a product of the World Food Programme's Innovation Accelerator. It aims to provide a transparent, open, and trustworthy space for smallholder farmers and buyers to negotiate fair prices and deals. The platform helps connect smallholder farmers to markets, allowing them to interact with traders and other buyers. The initial piloting in Zambia showed promising results, with significant interest from national and international buyers.

Each of the platforms identified through extensive research showcases innovative approaches to integrating technology into agriculture, particularly in developing countries. These platforms address a broad spectrum of challenges that rural farmers

face, ranging from financial accessibility to market connectivity and information dissemination. For instance, platforms like Agrilocal in France and The Maano-Virtual Farmers' Market in Zambia demonstrate how technology can effectively bridge the gap between farmers and markets, enabling them to negotiate fair prices and establish more sustainable business practices. Fintech solutions, as seen in examples like Tillable and Oxbury, offer novel financial services tailored to the agricultural sector, enhancing access to credit and insurance. Moreover, these platforms often incorporate advanced data analytics and mobile technology, making them more accessible to farmers in remote areas.

This wealth of insights provides valuable guidance for the AgriElevate project in Armenia. By harnessing similar technological solutions, the project can tailor its approach to meet the specific needs of Armenian farmers, addressing key issues such as limited access to modern farming equipment, financial services, and timely agricultural information. The integration of these technology-driven solutions into the AgriElevate project could significantly enhance the efficiency, productivity, and sustainability of Armenia's agricultural sector, empowering farmers to thrive in an increasingly digital world.

B. Describe how the project 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 will avoid or mitigate negative impacts, in line with the Environmental and Social Policy of the Adaptation Fund.

The Project is designed to offer holistic benefits, spanning economic, social, and environmental dimensions, with an intentional focus on the most vulnerable communities and within-community groups, including women and marginalized sectors. This approach is in strict alignment with the Environmental and Social Policy of the Adaptation Fund.

Economic benefits

- **Enhanced productivity and economic gains**: The platform simplifies the ordering and acquisition process of agricultural machinery, fostering efficiency and productivity for stakeholders, especially farmers. Improved productivity is expected to lead to increased income and economic sustainability.
- **Market access and economic resilience**: The platform serves as a conduit for creating market linkages and expanding trade opportunities for local farmers, thus stimulating rural economies and reinforcing economic resilience within vulnerable communities.

Social benefits

- **Knowledge sharing and capacity building**: Through workshops and stakeholder engagement, the project empowers community members, industry experts, and

machinery stakeholders with the information and tools they need for adopting climate-smart technologies and resilient agricultural practices.

- **Inclusive social empowerment**: Special care is taken to include women and marginalized groups in all project phases, from planning to implementation. This inclusive approach is aimed at reducing social inequities and ensuring that benefits accrue equitably across the community.

Environmental benefits

Promotion of climate-resilient practices: The platform highlights climate-smart agricultural practices and technologies, encouraging sustainable land management, resource efficiency, and overall environmental resilience.

Resource conservation: By focusing on climate-resilient technologies, the project not only conserves vital natural resources like water and soil but also helps mitigate greenhouse gas emissions, contributing to long-term ecological balance and community well-being.

Avoidance and mitigation of negative impacts

- **Alignment with environmental and social safeguards**: The project strictly adheres to the guidelines and criteria set by the Environmental and Social Policy of the Adaptation Fund. This includes comprehensive risk assessments and the deployment of measures aimed at mitigating any negative impacts on both the environment and social structures.
- **Stakeholder engagement for impact mitigation**: Local communities, farmers, and other stakeholders are continually engaged through consultations and workshops to ensure their perspectives and concerns are integrated into the project. This stakeholder-centric approach fosters transparency and accountability, aiding in the early identification and mitigation of any adverse impacts.
- **Ongoing monitoring and evaluation**: Robust monitoring and evaluation mechanisms are integrated into the project lifecycle. These mechanisms not only ensure the project's alignment with social and environmental standards but also offer avenues for continuous improvement and adaptation.

By strategically intertwining these facets, the project aims to maximize positive impacts while minimizing negative ones, thus driving sustainable, resilient, and inclusive development.

Vulnerable communities and groups within these communities

Definition

In the context of the AgriElevate Project, vulnerable communities in Armenia are those that are most impacted by the challenges in the agricultural sector, especially under the

evolving conditions of climate change and economic pressures. These communities include:

- **Smallholder and subsistence farmers**: often with limited access to modern agricultural technologies and resources, these farmers face significant challenges in increasing productivity and sustainability.
- **Rural populations**: these communities, especially in remote areas, that have limited access to markets, financial services, and essential agricultural information, which hampers their ability to effectively engage in and benefit from agricultural activities.
- **Economically disadvantaged groups**: this includes farmers and families living below the poverty line who lack the financial resources to invest in improved agricultural practices or equipment.
- **Women in agriculture**: women, often being key contributors to the agricultural workforce, might face specific challenges, including limited access to land, credit, and training.
- **Youth**: young people in rural areas might lack opportunities for education and training in modern agricultural practices, leading to a generational gap in farming methods and sustainability.
- **Communities affected by climate change**: Areas particularly susceptible to climate change impacts, such as regions prone to droughts, floods, or soil degradation, where traditional farming practices are no longer viable.

Identifying and supporting these vulnerable communities is crucial for the success of the AgriElevate project, as it aims to uplift the agricultural sector in a manner that is inclusive, sustainable, and resilient.

Engagement strategies

Engaging with vulnerable communities in the context of the AgriElevate project requires a strategic and empathetic approach. Here are key strategies for effective engagement:

- **Community involvement and consultation**: actively involve community members in the planning and implementation stages. This can be achieved through community meetings, focus groups, and participatory planning sessions, ensuring their needs and perspectives are integral to project design.
- **Tailored training and education programs**: develop training programs that are specifically designed to address the unique challenges and needs of these communities. This includes practical training in sustainable farming techniques, financial literacy, and access to new technologies.
- **Partnerships with local organizations**: collaborate with local NGOs, community groups, and agricultural cooperatives that have existing relationships and trust within these communities. These organizations can facilitate better communication and understanding of the local context.

- **Accessible and inclusive communication**: ensure that all communication materials are accessible, using local languages and considering literacy levels. Use various communication channels like radio broadcasts, local gatherings, and mobile technology to reach a broader audience.
- **Gender-sensitive approaches**: recognize and address the specific challenges faced by women in agriculture. This could involve creating women-only training sessions or support groups to ensure they have equal access to resources and knowledge.
- **Youth engagement**: develop specific programs to engage young people, such as mentorship programs, agricultural innovation competitions, or youth-led community projects, to make agriculture more appealing to the younger generation.
- **Financial support and incentives**: provide financial support or incentives to encourage participation and investment in new practices. This could be in the form of microloans, subsidies for purchasing equipment, or rewards for adopting sustainable practices.
- **Resilience building and climate adaptation**: focus on building resilience against climate change impacts through training in climate-smart agriculture and the provision of resources to adapt to changing environmental conditions.
- **Monitoring and feedback mechanisms**: regularly monitor the engagement activities and establish feedback mechanisms to ensure the strategies are effective and make necessary adjustments based on community input.
- **Empowerment and capacity building**: aim not just to provide immediate aid but to empower these communities to become self-reliant. This involves building their capacity to manage agricultural activities sustainably and independently.

By implementing these strategies, the AgriElevate project can effectively engage with and support vulnerable communities, leading to more sustainable and equitable agricultural development in Armenia.

Gender considerations and Project's approach

In the context of the Proposal, the current status of women and girls in the regions is characterized by traditional gender roles that significantly influence their engagement with environmental resources and their access to resources and services:

- **Gender roles and responsibilities:** in the regions, traditional gender roles shape the involvement of men and women in various sectors. Men are primarily engaged in labor-intensive activities, while women predominantly participate in sectors such as education, healthcare, and particularly agriculture, while also shouldering the majority of domestic responsibilities. This division of labor results in distinct experiences for men and women in terms of environmental degradation and climate change impacts. Women, especially, may experience heightened challenges due to resource scarcity. Women's representation in decision-making processes related to

environmental management is often limited, which can exacerbate the challenges they face.

- **Access to resources and services:** there is a notable disparity in access to crucial resources such as land ownership, credit facilities, and agricultural training between men and women in the project's target communities. Women's limited access to these resources impedes their capacity to effectively adapt to climate change and to adopt sustainable agricultural practices.

The project aims to address these disparities by ensuring equitable access to resources and services. Special emphasis will be placed on supporting women in sustainable agriculture practices and resource management. The project incorporates several measures to promote gender equality and support the empowerment of women within its framework:

- **Participation in project activities**: The project will actively work to remove cultural and socioeconomic barriers that limit women's participation in community-level environmental initiatives. Efforts will be made to ensure that women have equal opportunities to participate in all project activities. This includes a strong focus on engaging women in training sessions, community meetings, and decision-making processes, especially those related to environmental management and adaptation strategies.
- **Gender-sensitive project design and implementation**: The project is designed in the manner to be sensitive to the distinct needs, roles, and contributions of both men and women. This sensitivity extends to considering gender-specific vulnerabilities in the planning of strategies for project implementation. Furthermore, the project aims to empower women by creating avenues for them to lead and actively participate in community engagement initiatives.
- **Monitoring and evaluation**: In the project's monitoring and evaluation framework, gender-specific indicators will be a key component. The collection of sex-disaggregated data is crucial to assess the different impacts of the project on men and women. This data will be instrumental in informing continuous adjustments to the project, ensuring that benefits are equitably distributed across genders.
- **Policy alignment**: Proposed approach is in alignment with the Adaptation Fund's commitment to gender equality and women's empowerment. Additionally, the project's approach aligns with Armenia's national gender policies, contributing to broader objectives of gender equity and inclusion.
- **Capacity building on gender issues**: To maintain a gender-sensitive approach throughout the project lifecycle, capacity-building activities focused on gender issues will be provided for project staff and local stakeholders. This training is designed to enhance their understanding of gender dynamics and equip them with the necessary skills to effectively integrate gender considerations into their work.

By implementing these measures, the Project aims to create an inclusive environment that not only supports the involvement of women in environmental and agricultural

initiatives but also fosters broader goals of gender equality and empowerment within the communities it serves.

C. Describe how the project encourages or accelerates development of innovative adaptation practices, tools or technologies and/or describe how the project helps generate evidence base of effective, efficient adaptation practices, products or technologies, as a basis for potential scaling up.

The project is strategically designed to act as a catalyst for the development and dissemination of innovative adaptation practices, tools, and technologies, while also serving as a platform for generating an evidence base that could facilitate the scaling up of effective and efficient adaptation solutions.

Encouragement of innovative adaptation practices

- **Content-rich platform**: The Joint Ordering Platform for Agricultural Machinery is more than just a transactional interface; it's an evolving repository of climate-resilient information. By continually updating the platform with data on emerging technologies and best practices in sustainable agriculture, the project creates an ever-expanding knowledge base that can inspire innovation.
- **Collaborative content creation**: Working closely with stakeholders allows the platform to feature not just commercially available solutions but also experimental or less conventional technologies and practices that have shown promise in localized tests or academic research.
- **Workshops and capacity building**: These events often feature presentations on innovative climate-resilient technologies or practices, potentially sparking interest among stakeholders in adapting or further innovating these solutions for their local contexts.

Innovation components of the proposed intervention

The AgriElevate project's innovation in climate change adaptation stems from its multifaceted approach. It integrates advanced technology and data analytics into its platform, offering real-time climate data and guidelines for climate-resilient practices. This enables stakeholders to make informed, climate-smart choices in their agricultural activities. The project's design is inclusive, focusing on the needs of vulnerable communities, ensuring that the solutions are accessible and effective. The platform's innovative features, such as GIS capabilities for land vulnerability assessments and decision-support systems, directly contribute to enhancing climate resilience in the agricultural sector. The AgriElevate project's innovative aspects include:

- **Using an application for rent of modern equipment and machinery**: This platform allows farmers to rent or lease modern, efficient farming equipment, which they might not afford otherwise. It removes the financial barrier to accessing advanced technology, facilitating the adoption of innovative, climate-resilient agricultural practices.

- **Sharing necessary information to farmers through the same application**: The platform acts as a digital hub for farmers, providing them with vital, up-to-date information and best practices in agriculture. This includes real-time climate data, guidelines on drought-resistant crops, and techniques for sustainable farming. By centralizing access to this knowledge, the project ensures that farmers, particularly those in remote regions, are not isolated from critical advancements and information.

These elements are designed to directly address climate change challenges and enhance agricultural productivity and sustainability.

Generation of evidence base for scaling up

- **Feedback loops**: The project places a significant emphasis on gathering user feedback, both through platform interactions and workshop discussions. This feedback is analyzed to measure the effectiveness and efficiency of featured practices and technologies, creating an evidence base for their broader applicability.
- **Monitoring and evaluation**: Robust monitoring and evaluation mechanisms are integrated into the project to continually assess its impact. This data not only feeds into project refinement but also serves as empirical evidence for the effectiveness of showcased adaptation practices and technologies.
- **Case studies and success stories**: The project aims to document real-world applications of showcased practices and technologies, converting them into case studies and success stories that can be disseminated to a wider audience, thereby creating a compelling argument for their scaling up.
- **Stakeholder collaboration and networking**: By fostering an environment of shared learning and collective problem-solving, the project provides a platform for stakeholders to collaborate on scaling up effective practices. Networking opportunities at workshops and other events can lead to partnerships aimed at wider dissemination or further refinement of promising practices and technologies.

By combining these elements, the project aims to not only feature but also validate innovative, climate-resilient technologies and practices. In doing so, it contributes to building a stronger, more extensive evidence base that can serve as a robust foundation for the future scaling up of these solutions, driving broader, more impactful climate resilience.

D. Please confirm whether the project meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and is in line with the Environmental and Social Policy of the Adaptation Fund.

The Project is committed to aligning its activities with all relevant national technical standards and is designed to be fully compliant with the Environmental and Social Policy of the Adaptation Fund. Here are some of the ways in which the project meets these requirements:

National technical standards

- **Environmental assessment**: Project is categorized as having zero impact on the environment (category C) so no environmental assessment is needed;
- **Building codes**: Project does not involve the construction of any physical infrastructure, such as workshops or distribution centers, so there is no issue of compliance with national building codes to ensure structural integrity and resilience, especially with respect to climate-related factors.
- **Agricultural machinery standards**: The machinery featured on the Joint Ordering Platform will meet or exceed relevant national technical standards, ensuring that they are safe, efficient, and environmentally responsible.
- **Data security and privacy**: The online platform will adhere to national laws and standards related to data protection and cybersecurity, ensuring the confidentiality, integrity, and availability of user data.

Aligning with the Environmental and Social Policy of the Adaptation Fund

- **Social and environmental safeguards**: The project's design includes mechanisms for environmental and social risk assessments, following the guidelines laid out by the Adaptation Fund. This involves identifying potential negative impacts and developing plans to mitigate or avoid them.
- **Inclusivity and gender sensitivity**: Aligned with the Adaptation Fund's focus on vulnerable communities, the project incorporates inclusivity and gender considerations into its operations. It strives to include marginalized groups and ensures equitable access to project benefits.
- **Stakeholder engagement**: Consistent with the Adaptation Fund's policy, the project engages in transparent and meaningful consultation with stakeholders, including local communities, to incorporate their views and concerns into project design and implementation.
- **Monitoring and reporting**: The project is committed to ongoing monitoring and evaluation to ensure adherence to both national standards and the Adaptation Fund's policy. This will include regular reporting to document compliance and adapt activities as needed.
- **Transparency and accountability**: The project will make all findings, from environmental assessments to monitoring and evaluation reports, publicly available to ensure transparency and accountability.

By proactively aligning its activities with national standards and the policies of the Adaptation Fund, the project ensures it operates within a framework of sustainability, accountability, and inclusive development.

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

The project recognizes the importance of capturing and disseminating lessons learned for both internal improvement and broader sectoral impact. To this end, a robust Learning and Knowledge Management Component is integrated into the project's overall framework. Here's how it will function:

Data collection and analysis

- **Activity logs:** All activities, whether they are stakeholder engagements, content additions to the platform, or workshops, will be meticulously logged. These logs will include challenges encountered, solutions implemented, and outcomes.
- **Feedback mechanisms:** Various methods for collecting feedback will be utilized, such as surveys, focus group discussions, and stakeholder interviews, to continuously assess the project's effectiveness.
- **Impact assessments:** Quantitative and qualitative data will be collected to evaluate the project's impact on promoting climate resilience, especially within vulnerable communities.

Internal reviews and adaptation

- **Periodic reviews:** On a quarterly basis, the project team will review all collected data and feedback to identify key lessons and areas for improvement.
- **Adaptive management:** Insights gathered from the reviews will be used to adapt and refine the project strategies, ensuring they remain aligned with the project's objectives and stakeholder needs.

Knowledge sharing platforms

- **Online resource center:** An online repository will be created on the Joint Ordering Platform where stakeholders can access key findings, best practices, case studies, and other educational materials.
- **Stakeholder webinars:** Periodic webinars will be organized to disseminate key findings and encourage interactive discussions among stakeholders.

External Dissemination

- **Workshops and conferences:** Key lessons will be presented at relevant workshops, conferences, and other public forums to reach a broader audience, including policymakers, academics, and other interested parties.
- **Publications:** Research papers, policy briefs, and case studies will be published in recognized journals and platforms to contribute to the global knowledge base.

- **Media outreach:** Key milestones and lessons will be shared with the public through various media channels, including social media, newsletters, and press releases.

Feedback Loop

- **Stakeholder input:** Throughout this process, input will be actively sought from stakeholders to continually refine the knowledge management strategy itself, ensuring it remains effective and relevant.

By implementing this comprehensive Learning and Knowledge Management Component, the project aims to not only improve its own interventions but also to contribute to the wider understanding and adoption of climate-resilient practices and technologies.

F. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project. Describe how the project will engage, empower and/or benefit the most vulnerable communities and social groups, including gender considerations, in line with the Environmental and Social Policy of the Adaptation Fund.

The Joint Ordering Platform for Agricultural Machinery Project has identified several environmental and social impacts and risks that are relevant to its activities.

- **Environmental impacts:** The project recognizes the potential environmental impacts associated with its interventions, such as changes in land use, resource consumption, and waste generation. It takes into account the need to minimize these impacts and promote sustainable environmental practices throughout the project's implementation.
- **Climate change resilience:** The project focuses on building climate resilience in vulnerable communities. It acknowledges that climate change disproportionately affects the most vulnerable populations and seeks to address their specific adaptation needs. By implementing climate-resilient practices and technologies, the project aims to enhance the resilience of these communities to climate-related risks and improve their livelihoods.
- **Social impacts:** The project acknowledges the social impacts of its activities, such as potential changes in employment patterns, community dynamics, and access to resources. It seeks to ensure that these impacts are positive and inclusive, contributing to the social well-being of the communities involved.

The key approaches to engage, empower, and benefit the most vulnerable communities and social groups include:

- **Stakeholder engagement:** The project actively engages with stakeholders, including vulnerable communities, social groups, and women, throughout all stages of the project. Their inputs and concerns are incorporated into decision-making

processes, ensuring their meaningful participation and empowerment.

- **Capacity building:** The project focuses on building the capacity of vulnerable communities and social groups to actively participate in and benefit from adaptation initiatives. It provides training, knowledge-sharing, and skill development programs to enhance their understanding of climate change, adaptation practices, and sustainable livelihood options.
- **Inclusive decision-making:** The project promotes inclusive and participatory decision-making processes that consider the perspectives and priorities of vulnerable communities and social groups. It creates platforms for dialogue, consultation, and collaborative decision-making, enabling their voices to be heard and considered.
- **Benefits for vulnerable communities:** The project aims to deliver tangible benefits to vulnerable communities and social groups. This includes improving their access to climate-resilient infrastructure, services, and resources, enhancing their livelihood opportunities, and increasing their adaptive capacities.

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

The Joint Ordering Platform for Agricultural Machinery Project aims to holistically address the intricate challenges of climate change adaptation in the agricultural sector. It employs a multi-dimensional approach that encompasses research, system architecture, content creation, capacity building, monitoring, and evaluation. Given this scope and complexity, the financial resources requested are both justified and essential for the project's success, especially when considered through the lens of the full cost of adaptation reasoning.

The project serves vulnerable communities particularly susceptible to climate change impacts, who often lack the necessary resources for effective adaptation. These communities require immediate, sustainable interventions to enhance resilience and safeguard livelihoods. The platform's development itself calls for significant investment in technological infrastructure, such as system architecture, software development, and API integration, to offer a robust, user-friendly interface rich in climate-resilient agricultural resources.

Moreover, the project places a strong emphasis on capacity building. It includes an array of workshops, training programs, and knowledge-sharing initiatives tailored to equip stakeholders with the skills and understanding needed to implement effective adaptation measures. Adequate funding is crucial for the design, delivery, and impact assessment of these capacity-building activities, as well as for the robust monitoring and evaluation processes planned.

Additionally, the project aims to generate an evidence base for effective, scalable adaptation practices and technologies. Such a repository will not only validate the project's immediate impacts but also offer a foundation for future scaling-up initiatives, thereby ensuring that investments in adaptation yield sustainable, long-term benefits.
To summarize, the funding requested is integral to the project’s multifaceted design, from its technology-heavy platform development to its community-centric capacity-building initiatives, all aimed at long-term resilience and sustainable impact. The full cost of adaptation reasoning underlines not just the immediate implementation needs but also the broader, long-term benefits, which include both human and environmental resilience to the changing climate.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

The implementing entity (IE) for the Project will be "Environmental Project Implementation Unit" State Agency, as the National Implementing Entity for the Adaptation Fund. Replicating the longstanding work and experience of EPIU in working directly with national stakeholders (public and private organizations, academy, NGO's), and considering past success of EPIU implementing Programmes at national and international level, the Government of the Republic of Armenia has explicitly endorsed this AF project to be executed by EPIU. EPIU role in the framework of the project is fully in line with its leading institutional role in the implementation of environmental sector projects.

The Project Management Board (PMB) will be responsible for making management decisions for the AF project. In addition, the board will: i) undertake project assurance (monitoring and evaluation); ii) ensure performance improvement; and iii) ensure accountability and learning; iv) approve and closely monitor work plan to ensure its fulfillment and that it contributes to achieving project objectives; and (vi) approve the interim and final reports.

The PMB will comprise of designated representatives from relevant ministries, EPIU staff and relevant civil society organizations. The Project Management Board will choose a member from its composition to serve as secretary to the PMB. The PMB will approve work plan and procurement plan, and review project narrative reports as well as any deviations from the approved plans.

The overall management of the AF project will be executed by EPIU staff as NIE.

The following implementation services will be provided by EPIU for the AF project:

- overall coordination and management of EPIU's NIE functions and responsibilities, and the facilitation of interactions with the AFB and related stakeholders;
- oversight of portfolio implementation and reporting on budget performance;
- quality assurance and accountability for outputs and deliverables at the project development phase, during implementation and on completion;
- receipt, management and disbursement of AF funds in accordance with the financial standards of the AF;
- information and communication management to track and monitor progress (financial and substantive) of project implementation;

- oversight and quality assurance of evaluation processes for project performance and ensuring that lessons learned/best practice are incorporated to improve future projects;
- monitoring project activities, including financial matters, and preparing monthly and quarterly progress reports, and organizing monthly and quarterly progress reviews;
- supporting the PMB in organizing PMB meetings;
- managing relationships with project stakeholders including donors, NGOs, government agencies, and others as required.

The selection of private companies to execute various components of the AgriElevate project is a critical process that ensures the project's objectives are met with efficiency, innovation, and sustainability. The process involves several key steps, outlined below, along with the criteria used for selection and the projected timeline for this process.

Selection Criteria

- **Expertise and experience:** companies must demonstrate a proven track record in agricultural technologies, climate change adaptation strategies, or other relevant fields. This includes experience in implementing projects of similar scope and complexity.
- **Technological capability:** the ability to deploy modern, innovative solutions that can significantly impact agricultural productivity and climate resilience.
- **Local knowledge and presence:** companies with a strong understanding of the local context, including environmental, socio-economic, and cultural factors, will be prioritized to ensure the solutions are tailored and relevant.
- **Sustainability and scalability:** companies that propose solutions with a clear path to sustainability and the potential for scalability across different regions of Armenia.
- **Compliance and ethical standards:** companies must adhere to high ethical standards, including respect for labor rights, environmental protection, and anti-corruption policies.

Selection process

- **Call for proposals:** an open call for proposals will be issued, inviting private companies to submit their applications, outlining their qualifications, experience, and proposed solutions.
- **Evaluation committee formation:** a multi-disciplinary evaluation committee, including project stakeholders, experts in agriculture, climate adaptation, and procurement specialists, will be formed to review the proposals.
- **Proposal review and decision making:** proposals will be reviewed against the established criteria, and a recommended entity selected based on the combined scores.

- **Due diligence and reference checks:** conduct due diligence, including financial stability checks and reference checks, to verify the agency's track records.

B. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

The project will be monitored through a set of M&E activities, the budget of which is provided below. The monitoring will be carried out by the dedicated M&E expert and will be based on targets and indicators set in Projects Results Framework.

Following reports and evaluations will be developed throughout the project:

Monitoring Plan (MP) - should be approved by the NIE before commencing of the project activities and it will detail all activities to be executed, all milestones and goals which will be reached and dates for each indicator to be executed.

Quarterly Status Reports (QSR) - project management unit should submit QSRs to the NIE at the end of each operating quarter. QSRs will present how the indicators identified in project results framework are executed, what challenges PMU faces during the execution process and identify any constraints. Quarterly Status Reports will present monitoring process on executed activities.

Final Report (FR) - Final report will be presented one month prior to the end of the project. The main focus will be placed at assessing project results framework. Also, the final report will address the impact of the Project and its sustainability issues.

External Audit Report (EAR) - with the periodic financial statements, external audit report will be prepared in accordance with Financial Regulations set by the Government.

Deliverable	Responsible	Cost
Monitoring plan, quarterly status reports, final report	M&E expert	**3.000 USD**
External audit report	Audit company to be subcontracted	**2.000 USD**

Learning and knowledge management

This section is a foundational component, underpinning the project's commitment to continuous learning and knowledge sharing. It details the strategies and systems put in place to ensure that knowledge generated from the project is effectively captured,

managed, and disseminated. It also outlines the methods for documenting learning outcomes, the processes for continuous improvement based on feedback, and the mechanisms for sharing this knowledge with all stakeholders. This holistic approach to knowledge management is crucial for achieving the project's objectives and for contributing to the broader field of sustainable agriculture in Armenia.

a. Knowledge management system

The Knowledge management system proposed for the AgriElevate project is designed to effectively capture, store, manage, and disseminate knowledge generated throughout the project's lifecycle. Outline of the proposed system is:

- **Digital knowledge repository**: A centralized, cloud-based digital repository will be established to store all project-related documents, reports, data, and multimedia content. This repository will be accessible to all project stakeholders and will be equipped with search and retrieval functionalities.
- **Data collection tools**: Digital tools like surveys, feedback forms, and mobile applications to gather data and insights from various project activities will be actively utilized. These tools will be designed to capture both quantitative and qualitative data.
- **Collaborative platforms**: Collaborative platforms like intranets or project management software will be implemented to facilitate real-time knowledge sharing and collaboration among team members. These platforms will also host forums for discussions and idea exchange.
- **Content management system** will be deployed to manage the creation, modification, and publication of digital content, ensuring that all knowledge materials are up-to-date and easily accessible.
- **Learning management system** will be used to deliver, track, and manage training and educational content. It will host e-learning modules, instructional videos, and interactive learning resources.
- **Monitoring and Evaluation (M&E) tools** will be implemented to track project progress, assess the effectiveness of various interventions, and capture lessons learned. These tools will help in continuously updating the knowledge base with new insights and best practices.
- **Knowledge sharing events**: Regular workshops, webinars, and conferences will be organized to disseminate knowledge and learnings. These events will also serve as platforms for stakeholder engagement and feedback collection.
- **Documentation and reporting**: Systematic documentation of project activities and outcomes, including the development of comprehensive reports, case studies, and best practice guides.
- **Security and backup**: Robust security measures will be implemented to protect sensitive data and ensure regular backups to prevent data loss.

b. Learning outcomes and processes

Learning outcomes and processes are defined to ensure systematic learning and knowledge acquisition throughout the project's lifecycle. It focuses on establishing clear learning objectives, implementing robust methodologies for knowledge capture and assessment, and ensuring the practical application and dissemination of this knowledge. The overarching aim is to go beyond meeting immediate project objectives, by fostering a continuous learning environment that contributes to the sustained development and enhancement of Armenia's agricultural sector.

- **Identification of learning outcomes**: The following specific, measurable learning outcomes are defined that are aligned with the project's objectives:
  - ✓ **Increased adoption of sustainable agricultural practices** - one of the primary learning outcomes is the measurable increase in the adoption of sustainable and climate-resilient farming practices among the participating farmers. This involves tracking changes in farming methods, usage of resources, and implementation of new techniques.
  - ✓ **Enhanced knowledge and skills in modern farming techniques** - improvement in farmers' knowledge and skills related to modern farming equipment, digital agricultural tools, and efficient farming practices. This would be assessed through pre- and post-training evaluations.
  - ✓ **Improved agricultural productivity and efficiency** - increase in agricultural productivity and efficiency as a result of using the platform and its resources. Metrics include yield per hectare, resource utilization efficiency, or economic gains.
  - ✓ **Strengthened community engagement and collaboration** - enhancement of community engagement and collaborative efforts among farmers, which should be evaluated through the number of active users on the platform, participation in community workshops, and the level of knowledge exchange and support within the farmer community.
- **Data collection and feedback mechanisms**: through tools such as surveys, interviews, and focus groups to collect feedback from various stakeholders including farmers, project staff, and partners. This feedback will provide insights into the effectiveness of different project components.
- **Monitoring and Evaluation (M&E)**: robust M&E framework that systematically track progress towards learning outcomes. This includes setting up indicators, data collection schedules, and analysis plans to measure the impact of the project's interventions.
- **Reflective practices**: regular reflection sessions among the project team and stakeholders to discuss successes, challenges, and lessons learned. These sessions will foster a culture of continuous learning and improvement.
- **Documenting and reporting**: maintaining detailed records of project activities, outcomes, and learning points. Regular reports will be prepared to document these findings, providing a comprehensive overview of the project's impacts and learnings.

- **Knowledge sharing**: knowledge-sharing events such as workshops, seminars, and webinars to disseminate the learnings from the project. This will not only benefit the immediate project stakeholders but also the wider agricultural community.
- **Capacity building initiatives**: training programs, mentorship schemes, and e-learning modules to build the capacity of farmers and other stakeholders. The content of these initiatives will be continually updated based on the learning outcomes and feedback received.
- **Utilization of digital platforms**: for the dissemination of learning materials and outcomes. This include the project's website, social media, or a dedicated learning management system.
- **Adaptive management**: using the learning outcomes to inform and adapt the project's strategies and activities. This adaptive management approach ensures that the project remains responsive to the needs and challenges that emerge over its course.

c. Knowledge sharing platforms

The knowledge sharing platforms are a crucial component for disseminating information and facilitating interaction among stakeholders. Here's a detailed description of how these platforms will be structured and utilized:

- **Digital forum and community platform**: creating an online forum or community platform where farmers, agricultural experts, and other stakeholders can interact, share experiences, and discuss various topics. This platform shall include discussion boards, Q&A sections, and thematic groups focused on specific aspects of agriculture.
- **Webinar and online workshop system**: regular webinars and online workshops on various agricultural topics that include demonstrations of new technologies, training on sustainable farming practices, or discussions on market trends. The platform for these events should support live interactions, Q&A sessions, and access to recorded sessions for later viewing.
- **E-learning modules and resources**: developing and hosting a series of e-learning modules and resources that cover key agricultural topics. These resources should be easily accessible and cater to different learning styles, including videos, interactive tutorials, and downloadable guides.
- **Mobile application**: considering the increasing use of smartphones, the app can be a valuable tool for knowledge dissemination. The app will provide access to the digital forum, e-learning resources, market information, and real-time notifications about upcoming events or important updates.
- **Social media channels**: utilizing social media platforms to share information, stories, and updates about the project. Platforms like Facebook, Twitter, and Instagram will be used to reach a broader audience and engage with the community in a more informal and interactive way.

- **Collaborative document sharing**: implementing a system for collaborative document sharing where stakeholders can contribute to and access a repository of best practices, research papers, case studies, and policy documents.
- **Feedback and evaluation mechanism**: including a mechanism within these platforms for collecting user feedback and evaluating the effectiveness of the knowledge shared. This involve surveys, user analytics, and comment sections to gauge engagement and learning outcomes.

d. Knowledge deliverables

Within the framework of the Project, several key knowledge deliverables will be produced to capture and disseminate the knowledge and learning outcomes. These deliverables will be essential in sharing insights, best practices, and innovations gleaned from the project. Here are the details of these knowledge deliverables:

- **Comprehensive project reports**: regularly produced (interim and final) reports detailing the progress, challenges, and achievements of the project. These reports will include data analysis, case studies, and lessons learned, serving as a vital resource for stakeholders to understand the project's impact.
- **Workshop and training materials**: development of a variety of materials for workshops and training sessions, such as presentations, participant handbooks, and training guides. These materials will be designed to facilitate learning and skill development among the farmers and other project participants.
- **Best practices and technical manuals**: publishing manuals and guidebooks that detail the best practices developed and utilized in the project. These documents will provide technical guidance on sustainable farming practices, use of modern equipment, and effective farm management strategies.
- **Policy briefs and recommendations**: preparation of policy briefs and recommendation papers based on the project's findings. These documents will be aimed at influencing policy decisions and advocating for scalable models of successful practices identified in the project.
- **Digital content for online platforms**: producing various digital content such as blog posts, infographics, and interactive tools for the project's website and social media channels. This content will be geared towards engaging a wider audience and disseminating knowledge in an accessible format.
- **E-learning modules and webinars**: development of online learning modules and webinar series that cover key topics relevant to the project. These digital learning tools will allow for broader access to the project's knowledge base, especially for remote or busy stakeholders.
- **Research papers and articles**: publishing research papers and articles in relevant agricultural and development journals. These papers will share the insights and analytical findings from the project with the academic and professional community.

e. Dissemination strategy

The dissemination strategy for Project should be comprehensive and multifaceted, aimed at effectively sharing the knowledge and findings from the project with a wide range of stakeholders. Here's a detailed approach:

- **Digital platforms:**
  - ✓ **Project website:** regularly update the project website with reports, articles, and news. Incorporate a blog or news section for ongoing updates and insights.
  - ✓ **Social media:** use platforms like Facebook, Twitter, LinkedIn, and Instagram to share bite-sized information, updates, and engage with a broader audience. Utilize hashtags, live sessions, and interactive posts to increase visibility and engagement.
- **Email newsletters:** send out regular email newsletters to subscribers, including project updates, upcoming events, and highlights from newly published materials.
- **Community outreach and workshops:**
  - ✓ Organize community workshops and meetings in various regions to disseminate information directly to farmers and local stakeholders. Use these events to distribute printed materials and facilitate discussions.
  - ✓ Collaborate with local community leaders and agricultural extension officers to reach a wider audience.
- **Webinars and online workshops:** host webinars and online workshops to reach stakeholders who cannot attend in-person events. Record these sessions and make them available on the website and social media for later access.
- **Collaborations with educational institutions:**
  - ✓ Partner with agricultural colleges and universities to incorporate findings and best practices from the project into their curricula.
  - ✓ Organize guest lectures and presentations for students.
- **Media engagement:**
  - ✓ Engage with local and national media to publish articles and stories about the project's impact and findings.
  - ✓ Organize press conferences or media days to highlight significant milestones or findings.
- **Publications:**
  - ✓ Publish detailed reports, policy briefs, and research papers. Distribute these through academic channels, libraries, and online platforms.
  - ✓ Produce and distribute manuals, guidebooks, and training materials to relevant stakeholders.
- **Networking events and conferences:**

- ✓ Participate in agricultural, environmental, and development conferences to present the project findings.
- ✓ Leverage networking events to disseminate information to a broader professional audience.

➢ **Stakeholder specific communications:**

- ✓ Tailor communication materials and strategies for different stakeholder groups, such as policymakers, farming communities, and industry players, ensuring relevance and impact.

Feedback mechanism: Implement a feedback mechanism to gather input from stakeholders on the dissemination strategy and materials, allowing for continuous improvement.

C. Include a simple results framework for the project proposal, including milestones, targets and indicators.

Component	Activity	Milestone	Target	Indicator
Component 1. Stakeholder mapping and needs assessment	**Activity 1.1.** Stakeholder analysis	Completion of stakeholder analysis	Stakeholder analysis report	Clear understanding of stakeholders' preferences and requirements
	Activity 1.2. Definition of requirements	Completion of research on requirements	TORs; Market research report	Identification of key requirements; Market landscape framework
	Activity 1.3. Establishing scope of works	Completion of scope of work definition	SOW document	Clearly defined project scope and specifications
Component 2: Projection and design	**Activity 2.1.** Development of technical specifications	Development of technical documentation	Technical requirements specification document	Clearly defined technical requirements and specifications
	Activity 2.2.	Completion of UI/UX design	UI/UX design mockups for	User-friendly and visually

	UI/UX design		the platform	appealing interface design
Component 3: Development, integrations, testing, deployment	**Activity 3.1.** System architecture design	Finalization of system architecture	System architecture diagram	Well-designed and scalable system architecture
	Activity 3.2. Development and integration	Development and integration	Ready platform and integrated APIs	Functional and integrated platform components
	Activity 3.3. Testing and quality assurance	Testing and quality assurance	Full-featured platform	Rigorously tested and reliable platform
	Activity 3.4. Deployment and launch	Deployment and launch	Deployed and launched platform, user documentation	Successfully deployed and accessible platform
Component 4: Content population	**Activity 4.1.** Stakeholder consultations	Completion of stakeholder engagement	Arrangements with different stakeholders	Arrangements with the stakeholders for collecting the content.
	Activity 4.2. Content collection and curation	Collection and curation of content	100 units of collected content	Curated and organized content aligned with climate-resilient practices
	Activity 4.3. Verification and validation	Verification and validation of content	Valid content	Verified and authentic content that meets required standards
	Activity 4.4. Content input	Completion of content input	Populated content within the platform	Informative and climate-smart content available on the platform

Component 5: Awareness raising	**Activity 5.1.** Workshop design and planning	Design and planning of workshops	Workshop materials, presentations, and documentation	Well-structured workshops tailored to the target audience
	Activity 5.2. Stakeholder engagement	Stakeholder engagement	Well-conducted workshop for stakeholders	Active participation and representation of stakeholders in workshops
	Activity 5.3. Workshop delivery	Workshop delivery	Delivered workshop	Increased awareness and understanding of the platform
	Activity 5.4. Feedback collection and analysis	Feedback collection	Feedback collected from participants	Valuable insights and suggestions for platform improvement

D. 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 elevate the agricultural sector in Armenia by fostering economic viability, social inclusivity, and environmental sustainability through a multifaceted	Share of the output produced by beneficiaries in the total agricultural output of Armenia	Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies	8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	-

ordering platform.				
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
<u>Outcome 1.</u> Successfully formulated and articulated a detailed project plan that meticulously outlines the platform's functionalities and features, aimed at addressing specific climate resilience challenges within the agricultural sector.	1. Functionalities and features alignment score; 2. Stakeholder engagement and approval Rate; 3. Quality and standards adherence index:	Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	**21,200**
<u>Outcome 2.</u> Successfully delineated technical requirements and developed an intuitive, user-friendly UI/UX design that incorporates specific adaptation considerations relevant to climate resilience in agriculture.	1. Technical requirements fulfillment score; 2. UI/UX adaptation relevance index ; 3. User satisfaction and usability rate;	Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	**53,605**
<u>Outcome 3.</u> Successfully	1. Platform deployment completion rate;	Output 8: Viable	8.1. No. of innovative	**92,050**

developed, tested, and deployed the platform to end-users, accompanied by easy-to-learn guidelines tailored for effective platform utilization.	2. User onboarding success rate; 3. User engagement and retention index;	innovations are rolled out, scaled up, encouraged and/or accelerated.	adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	
<u>Outcome 4.</u> Successfully curated and made available well-presented, informative content that empowers users to engage effectively with the platform upon its launch.	1. Platform functionality success rate; 2. User onboarding efficiency; 3. User satisfaction and usability score;	Output 8: Viable innovations are rolled out, scaled up, encouraged and/or accelerated.	8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	**11,800**
<u>Outcome 5.</u> Successfully heightened awareness and understanding of the platform, leading to measurable increases in potential user engagement and adoption rates.	1. Awareness reach metric; 2. Engagement-to-user conversion rate; 3. User retention rate	Output 3.2: Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	3.2.2 No. of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders	**21,700**

E. Include a budget, including a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Output	Item	Budget Notes	Total Budget (in USD)
Component 1: Stakeholder mapping and needs assessment			
Output 1.1 Stakeholder mapping and needs assessment report	Consulting Company N 1	Implementation of the comprehensive stakeholder mapping and needs assessment in the beneficiary regions	**5,000**
Output 1.2 Market research report	Consulting Company N 1	Implementation of the market research to understand the demand	**14,000**
Output 1.3 Detailed workplan and requirements of the Project	Consulting Company N 1	Determining the functionalities and other specifications necessary to meet the identified stakeholder requirements effectively.	**2,200**
Component 2: Projection and design			
Output 2.1 Detailed TORs with technical requirements	ICT Developer Company N 1	Development of the detailed technical documentation	**13,600**
Output 2.2 UI/UX design mock-ups for the platform	ICT Developer Company N 1	Design of the platform's user interface (UI) and user experience (UX), including creating visually appealing and intuitive interfaces that are easy to navigate and use	**40,000**
Component 3: Development, integrations, testing, deployment			
Output 3.1 System architecture diagram	ICT Developer Company N 1	Designs of the system architecture of the platform, taking into account the specific adaptation needs and requirements identified during stakeholder research.	**15,000**
Output 3.2 Integrated APIs	ICT Developer Company N 1	Development of the platform based on the technical requirements and designs established during previous activities.	**40,000**
Output 3.3	ICT Developer Company N 1	Various types of testing, such as functional testing,	

Full-featured platform, deployed to the production server		performance testing, user acceptance testing, and etc.	**17,050**
Output 3.4 Platform using documentation	ICT Developer Company N 1	Setting up the necessary infrastructure, configuring servers, and deploying the platform in a secure and accessible manner.	**20,000**
Component 4: Content population			
Output 4.1 100 units of high-quality and accurate content populated within the platform	ICT Developer Company N 1	Collaboration with stakeholders, including agricultural machinery suppliers, manufacturers, and experts, to gather accurate and up-to-date content for the platform.	**5,800**
Output 4.2 Platform using content, populated within the platform	ICT Developer Company N 1	Collect various types of content, such as product descriptions, specifications, images, and other relevant information related to agricultural machinery and populating the platform	**6,000**
Component 5: Awareness raising			
Output 5.1 Workshop materials, presentations, and documentation	Consulting Company N 1	Identifying key topics to be discussed during the workshop, structuring the agenda, and selecting appropriate methodologies and interactive activities	**6,700**
Output 5.2 Workshop summary reports that include feedback from participants	Consulting Company N 1	Conducting the workshop to present the Platform to the target audience	**15,000**
TOTAL for Project's 5 Components			200,400
Project Execution costs (EPIU)1.5% of total budget)			3,000
TOTAL Project Costs			**203,400**
IE Fee / Oversight Costs (*max 8.5% of total budget)			**17,300**
GRAND TOTAL			**220,700**

IE Fee / Oversight Costs *(*max 8.5% of total budget)*

Item	Responsible	Budget
I. Project Management		
Project Coordinator	*EPIU PMU*	8,000 $
Social and Gender risk assessment specialist	*EPIU PMU*	4,300 $
Subtotal for Project Management		**12,300 $**
Quarterly and Final Report	*EPIU PMU*	3,000 $
External Audit	*National audit company*	2,000 $
Subtotal for Monitoring & Evaluation		**5,000 $**
TOTAL		

Project Execution costs (EPIU)1.5% of total budget

Item	Budget
Administrative Support	2,000$
Field trips	1,000$
TOTAL:	**3,000$**

F. Include a disbursement schedule with time-bound milestones.

80% - upon signature of grant agreement

20% upon approval of the final financial and narrative reports

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[1] *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:*

Hakob Simidyan *Minister of Environment*	Date*: September 29, 2023*

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 (……list here…..) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social 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* *Acting Director of "EPIU" SA*	
Date: September 29, 2023	Tel. and email: info@cep.am +37410 651 631

[6] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Project Contact Person: Armen Yesoyan, Acting Director of ‘’EPIU’’ SA
Mary Martirosyan, Acting Leading Specialist of Project Implementation and Monitoring Department of ‘’EPIU’’ SA
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