ADAPTATION FUND

AFB/PPRC.25/36
30 September, 2019

Adaptation Fund Board
Project and Programme Review Committee
Twenty-Fifth Meeting
Bonn, Germany, 7-9 October, 2019

Agenda Item 9 e)

PROPOSAL FOR INNOVATION SMALL GRANT FOR TANZANIA

Background

1. At its thirtieth meeting, having considered document AFB/B.30/5/Rev.1, the Adaptation Fund Board decided:

> *(a) To adopt the medium-term strategy as amended by the Board, as contained in the Annex 1 of the document AFB/B.30/5/Rev.1 (the MTS); and*
>
> *(b) To request the secretariat:*
>
> *(i) To broadly disseminate the MTS and work with key stakeholders to build understanding and support;*
>
> *(ii) To prepare, under the supervision of the MTS task force, a draft implementation plan for operationalizing the MTS, containing a draft budget and addressing key assumptions and risks, including but not limited to funding and political risks, for consideration by the Board at its thirty-first meeting; and*
>
> *(iii) To draft, as part of the implementation plan, the updates/modifications to the operational policies and guidelines of the Adaptation Fund needed to facilitate implementation of the MTS, for consideration by the Board at its thirty-first meeting.*
>
> *(Decision B.30/42)*

2. Pursuant to decision B.30/42, subparagraph b (ii), the secretariat prepared a draft implementation plan for the MTS, including an assessment of assumptions and risks. The secretariat shared a version of the draft with the MTS task force for comments.

3. The draft implementation plan also contains suggestions for specific funding windows that might be opened under the MTS in complement of the Fund's existing funding windows for single-country and regional adaptation projects and readiness support projects. Following the approval of the implementation plan, the secretariat would present specific proposed details for each new funding window at subsequent meetings of the Board for its consideration, in accordance with the timeline contained in the implementation plan.

4. At its thirty-first meeting, the Adaptation Fund Board discussed the draft implementation plan for the MTS, and members of the Board proposed amendments to the document. The secretariat then presented a revised draft, in document AFB/B.31/5/Rev.1. Having considered that document, the Board decided:

> *(a) To approve the implementation plan for the medium-term strategy for the Fund for 2018–2022 contained in the Annex I to document AFB/B.31/5/Rev.1 (the plan);*
>
> *(b) To request the secretariat:*
>
> *[…]*
>
> *(iii) To prepare, for each proposed new type of grant and funding window, a specific document containing objectives, review criteria, expected grant*

sizes, implementation modalities, review process and other relevant features and submit it to the Board for its consideration in accordance with the tentative timeline contained in Annex I to document AFB/B.31/5/Rev.1, with input from the Board's committees;

(iv) Following consideration of the new types of support mentioned in subparagraph (b)(iii), to propose, as necessary, amendments to the Fund's operational policies and guidelines Fund to better facilitate the implementation of such new types of support; and

[…]

(Decision B.31/32)

5. At its thirty-second meeting, the Board considered document AFB/PPRC.23/4/Rev.2, *Program on Innovation: Small Grants Projects through Direct Access Modality,* and the Board decided:

(a) To approve the process for providing funding for innovation through small grants to National Implementing Entities (NIEs), as described in document AFB/PPRC.23/4/Rev.2, including the proposed objectives, review criteria, expected grant sizes, implementation modalities, review process and other relevant features as described in the document; and

(b) To request the secretariat to prepare the first request for proposals to NIEs for US$ 2 million, to be launched at the twenty-fourth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in December 2018.

(Decision B.32/4)

6. Subsequently, the first request for proposals to NIEs for US$ 2 million was launched at the UNFCCC Conference of the Parties in December 2018.

7. The secretariat is submitting to the PPRC the final technical review of the project, pursuant to decision B.17/15, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Innovation Small Grant

Country/Region: **United Republic of Tanzania**
Project Title: **Piloting Climate Resilience Livelihood Systems in Runyinya Village, Kyerwa District**
Thematic Focal Area: **Water Management**
Implementing Entity: **National Environment Management Council (NEMC)**
AF Project ID: **TZA/NIE/Rural/2019/1/Innovation**
IE Project ID: Requested Financing from Adaptation Fund (US Dollars): **250,000**
Reviewer and contact person: **Saliha Dobardzic** Co-reviewer(s): **Imen Meliane**
IE Contact Person: **Fredrick Mulinda**

Technical Summary	The proposed project titled "Piloting Climate Resilience Livelihood Systems in Runyinya Village, Kyerwa District" has the objective of piloting solutions to improve livelihood of poor people, support water supply and agricultural production in Runyinya village. Hence, the overall objective of this project is to enhance resilience and adaptive capacity to effects of climate change while reducing income poverty among the selected community in Runyinya Village, Kyerwa District, Kagera Region. Specifically, the proposed project will address the following:- i) Improve water supply in Runyinya village; ii) Develop small-scale irrigation scheme at Runyinya village to increase community resilience and food security; and As a general comment, the proposal is not significantly different from many adaptation proposals in the agricultural sector (but is, in fact, rather typical), and it is not self-evident that this is a truly innovative project. Second, given that the purpose of this project is to enable and accelerate innovation, as well as that this is a small grant, it is not clear why all three components are required. In addition, for such a small grant that is proposing a concomitantly small demonstration intervention, there is a concern that there is no plan that would leverage the full potential of the evidence and knowledge generated. Accordingly, there are a number of comments made, of which the clarification requests are mainly concerning the first two components.

	The final review finds that the project document has not addressed/ most of the requests and does not provide sufficient information at this stage. In particular, the sustainability and the effectiveness of the proposed measures are not sufficiently justified.

Review Criteria	Questions	Comments	Comments 11 September 2019
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes.	-
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes.	-
	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Not clear. The project proposes targeted adaptation actions to address water scarcity mainly through drilling boreholes, developing a water distribution system with tanks and using drip irrigation in a highly vulnerable and agriculture dependent village. The proposed activities are mainly small-scale community-based and would help reduce the impacts of climate change on the community in the short term, but it is unclear if they will be sufficient to support facing the predicted future climate change impacts. No information was provided on the proposed water supply and underground water availability. **CR1:** Please provide more information on the reliability of the proposed water supply and the availability and sustainability of the underground water resources. Please explain whether there are other possible sources of water, for	**CR1: Partially addressed.** The information provided in pages 6 and 7 is very general and does not provide the necessary information to estimate the sustainability of the borehole, particularly as adaptation measure. Please provide more localized information on geo-hydrology and an indication of the sustainability of the borehole (yield, life span, etc). If boreholes are not well sited, designed, and installed in the first place, the water supplies will fail, and investments can be wasted.

		example, rainwater harvesting. Drip irrigation is a water-efficient technology and could be an effective approach to address climate risks to the target community. As for the component relating to the forest and fruit tree planting and bee keeping, this is not directly related to the first two components. While these activities are generally sound, these interventions require a certain scale in order to show their potential and seems questionable that the budget proposed for this intervention is sufficient to implement this component adequately. **CAR 1:** Please consider either taking out the third component, and focusing the intervention on the first two, or refocusing the intervention on the third component primarily.	**CAR 1: Partially Addressed.** The project now has two components only. However, other sections of the project proposal still make reference to activities that were under component 3, in particular Section B on economic, social and environmental benefits. Please revise Section B to reflect only the benefits of the activities under the two components.
	3. Does the project encourage or accelerate development of innovative adaptation practices, tools and technologies?	Not clear. The project is proposing drip irrigation and solar-powered borehole pumps. These technologies are not particularly innovative, but may be innovative in the particular target area. Concerning boreholes please see the comment above. Drip irrigation could be a promising, scalable approach, assuming cost-effectiveness. It is unclear why the borehole pumps would be solar-powered. It seems that the investment in the technology and the associated investment in the training on how to operate and maintain it is built upon the	**CR 2: Partially addressed** as per the information provided in page 7 with regard to solar pumps. There was no additional information provided on the sustainability, maintenance and up-take of the drip irrigation systems. Cost-effectiveness of the proposed measures is also weak. Please provide more information on these points.

		assumption that this is a sustainable, cost-effective model. It is not clear whether this is convincing. **CR 2:** The proposal should provide some justifications for sustainability and likelihood of uptake of such technologies (affordability, availability of finance, feasibility of continued operation and maintenance, etc.)	
	4. Does the project help generate evidence base of effective, efficient adaptation practices, products or technologies, as a basis for potential scaling up?	Not clear. This is linked to the uncertainty regarding the suitability and sustainability of the intervention, including lack of clear case of cost-effectiveness that would be conducive for a scale up. These points were raised above. In addition, it is unclear how the proposed pilot would then be used to share any evidence generated. **CR 3:** Please provide information on knowledge management activities.	**CR 3: Addressed** as per information provided in pages 10 and 11.
	5. Does the project engage, empower and/or benefit the most vulnerable communities and social groups?	Yes. The proposal would benefit, women, girls, farmers, and other members of the community.	-
	6. Does the project advance gender equality and the empowerment of women and girls?	Water provision is a critical service for women and girls who may have gender-specific responsibilities around the provision and use of water for household purposes.	-

Resource Availability	1. Is the requested project funding within the parameters for small grants set by the Board?	Yes.	-
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project budget before the fee?	Yes.	-
Implementation Arrangements	1. Is the project submitted through a National Implementing Entity accredited by the Board?	Yes.	-
	2. Is the timeframe for the proposed activities adequate?	Yes.	-
	3. Is a summary breakdown of the budget for the proposed activities included?	Yes.	-

ADAPTATION FUND

PROGRAMME ON INNOVATION: SMALL GRANT PROJECT PROPOSAL

PART I: PROJECT INFORMATION

Country: **United Republic of Tanzania**
Title of Project: **Piloting Climate Resilience Livelihood Systems in Runyinya Village, Kyerwa District**
National Implementing Entity: **National Environment Management Council (NEMC)**
Executing Entity/ies: **Agrodiamond Limited**
Amount of Financing Requested **250,000** (in U.S Dollars Equivalent)

Project Background and Context:

Provide brief information on the problem the proposed project is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Project background and problem statement

Communities in Kyerwa district in western Tanzania derive their livelihood and income security from climate sensitive sectors like agriculture, water and natural resources. According to the vulnerability assessment study conducted in 2019[1], the district is among the vulnerable geographical areas in the United Republic of Tanzania already impacted by climate change. The vulnerability of the district and its communities is largely driven by overdependence to rain fed agriculture and animal grazing. As a result, the currently released NAP stocktaking report signatures the district as a hotspot area, which urgently needs adaptation intervention. Furthermore, the Vulnerability and Adaptation Assessment study for the HNAP[2], indicates high malnutrition level due to climate induced food shortage, water scarcity and poverty in most villages of Kyerwa, particularly Runyinya village.

The current and projected climate change effects are therefore seen to deepen poverty, water scarcity and malnutrition levels in the district. Climate indices show that, rainfall amount, seasonality, trend and timing will continue to shift from the normal trend in the district[3]. For instance, the drought periods have been more common and severe in the area. In the period of 2016, 2017 and 2018 alone the district experienced devastating drought which resulted into crop failures and drying of water sources (Figure 1). Food insecurity and hunger is now a great social and economic concern. Shrinkage of pastureland and disrupted grazing land is a challenge to livestock keepers in most village of the district. The 2017 district report indicated that, the drought event in 2017 destroyed over 18.27 ha of maize of which 8.7ha were at Runyinya village. Food production and income generation by communities in most villages which in most cases are already poor is severely

[1] NAP Stocktaking report, 2019: United Republic of Tanzania
[2] V&A 2018: The vulnerability and Adaptation Assessment study for the Adaptation in the Health Sector (HNAP),
[3] TMA 2014: Climate projections in the United Republic of Tanzania

affected. Unfortunately, the ability of the district government budget to support these communities for food including financing various socio economic needs such as education, health and water supply is inadequate.

Projected climate scenarios by the Tanzania Meteorological Agency show that Lake Victoria regions in which Kyerwa district is located will experience even more temperature increase in the future while drought and dry spell periods will be intensified[4]. Future climate-change impacts are predicted to accelerate multiple challenges across villages in the district, affecting nearly all of the traditional water sources. Research suggests that by 2030, even if the drought frequency and intensity remain stable, 25% of the district's population will go hungry**Error! Bookmark not defined.**. The ecosystem resilience and capacity to support agriculture and safeguard human health will be jeopardized due to continued ecosystem and environmental degradation. The future decline in rainfall volume per season, coupled with increased variability in rainfall, is expected to cause serious water shortage, crop failures and reduced productivity of farming to about more than 30% of total food crop production in the District. Future climate change is projected to disrupt almost all life forms in the district and will intensify food insecurity and livelihood failures due to the reason that people and their life firms are heavily reliant on water resources and subsistence farming activities.

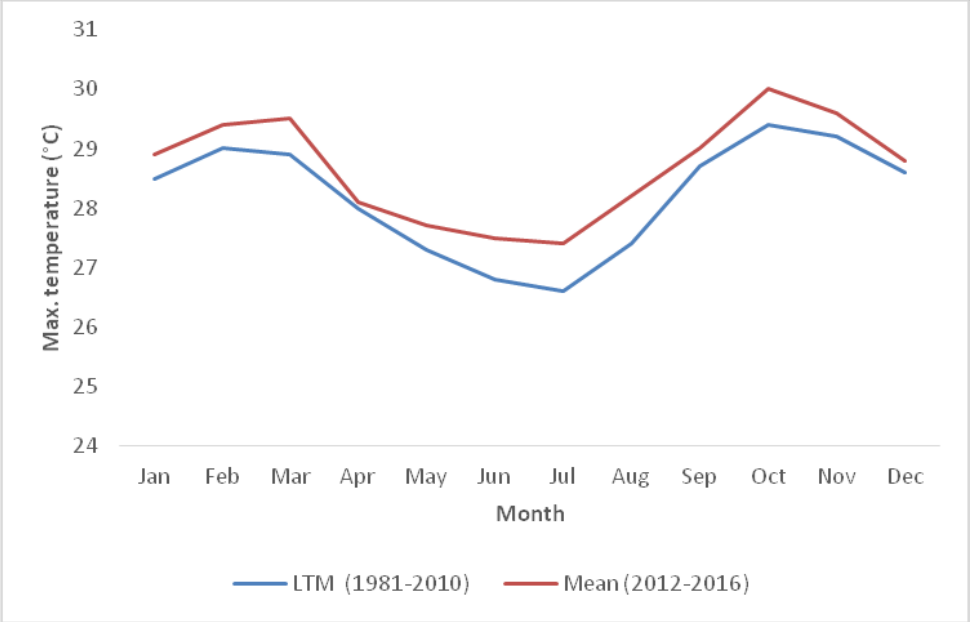

Figure 1: Monthly Mean Maximum Temperature from 2012-2016 compared to Long Term Mean Temperature (1981-2010) in Kyerwa District (Source: TMA, 2016)

More severe climate change would inevitably have far greater negative impacts to village population in Kyerwa, especially women and marginalised groups such as people with disabilities and elders. For instance, current evidence in Runyinya village already indicated that, women are forced to walk around bushes looking for water from unreliable water sources during dry periods (Plate 1). Consequently, they lose time and energy which could have been invested in productive activities; meanwhile children spend less time for schooling, and sometimes prompt them to drop from school completely. Unless novelty approaches which uses community based climate solutions

[4] TMA 2014

be implemented to enhance water availability for domestic use and crop production in the area, the trend will continue endlessly, with disastrous effect to the vulnerable community groups like women and children.

Plate 1: The photo taken from Runyinya village in 2015 illustrating the intensity of water scarcity.

Plate 2: Photo showing crop failures and bad yield in the larger area of Runyinya village Kyerwa district.

According to reports available in the district, hunger pangs were equally felt more in the past three decades in most villages, in which more than 50% of people were reported to be facing starvation due to a poor harvest. The persistent food scarcity in most villages has led to a sharp rise in food prices in the district. For instance, traditional food inflation jumped from 6.9 per cent in 2016 to 17.4 per cent in July 2018, the highest since 2010 (Plate 2). From 2016 up to now, prices of items such as beans have for instance peaked at Tsh 2700 for a kilogram, twice the usual price of between Tsh 1000 and Tsh1400. These prices are not affordable to common and marginalized village communities such as those in Runyinya. This kind of weather related vagaries has sometimes stemmed forced migration and school dropouts including deep income and food

poverty[5]. The future decline in rainfall volume per season, coupled with increased variability in rainfall, is expected to cause serious crop failures. To reverse this situation and consequently improve life quality of people while achieving climate resilient livelihood improvements requires innovative, climate-centered solutions which will essentially address water scarcity and food insecurity and rural poverty. Therefore, this project will pilot community based climate-innovations to improve resilience of livelihood systems and build adaptive capacity of Runyinya villagers. The project will invest in climate smart rural water supply to improve water security, which in turn will promote small scale drip irrigation, forest and fruit trees planting, bee-keeping and village environmental and ecosystems conservation activities. Furthermore, value addition to produces and linking farmers to internal and external market will be part and parcel of project activities. This will promote sustainability of multi-purpose climate actions, and climate resilience of the people in the pilot village.

Effects of climate change on gender issues in Kyerwa district

Research reports globally indicate that women, children, elders and people with physical challenges are highly vulnerable to the effects of climate change in most rural villages in Tanzania. Women, constitute the majority of population in villages, yet they still suffer high level of illiteracy. For instance, traditional systems in ethnical groups available in Kyerwa particularly Runyinya village, expose women to struggle mostly with domestic issues such as fetching water and cooking. They also surfer from myriad of social and economic barriers which contribute to their limited coping capacity[6]. The proposed project will integrate gender roles and special needs of marginalized groups in various activities/interventions.

Project objectives

The proposed project seeks to pilot practical and cost effective community rooted solution to improve livelihood of poor people, support water supply and agricultural production in Runyinya village. Hence, the overall objective of this project is to enhance resilience and adaptive capacity to effects of climate change while reducing income poverty among the selected community in Runyinya Village, Kyerwa District, Kagera Region. Specifically, the proposed project will address the following objectives:-

i) Enhance climate proof village water supply in Runyinya village;
ii) Implement Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village to increase community resilience and food security.

Project Components and Financing:

Project Components	Expected Concrete Outputs	Expected Outcomes	Amount (USD)
1. Enhance climate proof village water supply in Runyinya village	1.1.At least 2 boreholes drilled in Runyinya village and solar driven water pumps installed 1.2. Water storage tanks and distribution network systems installed at selected sites	Enhanced climate resilient rural water supply system in selected communities at Runyinya Village, Kyerwa district. Reduced drudgery for	111,775

[5] Mkonda Y.M 2017. Are Rainfall and Temperature Really Changing? Farmer's Perceptions, Meteorological Data, and Policy Implications in the Tanzanian Semi-Arid Zone, Journal of sustainability 9: 1412;
[6] Kyerwa district Council,2017

	1.3. Community water drawing points constructed at selected sites. 1.4. Awareness raising meetings conducted with community stakeholders to facilitate formulation of stable, effective and efficiency COWSOs at Runyinya village in accordance with the Water supply and sanitation Act,2009 1.5. Water governance by laws formulated to regulate effective use of water and protection of water sources 1.6. Gender considerate water governance arrangements for COWSOs established at Runyinya village 1.7. Technical Trainings of Trainers conducted on maintenance and operations; management of finance, accounting and group dynamics issues to selected community members of COWSOs for Runyinya village	women and children from long distance walk in search of water and firewood. Strengthened capacity on sustainable water resource management and utilization.	
2. Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village	2.1. Drip irrigation structures/schemes at Runyinya village established at selected sites 2.2 Greenhouses structures with driplines established at selected sites at Runyinya village 2.3 Nurseries for horticultural crops established, planting, management and sustainable harvesting and utilization 2.4. Selected members of farmer and women groups trained on Operation and Maintenance of drip irrigation and greenhouse facilities at Runyinya village 2.5. Tailored training on best farming practices and transformation of traditional farming system through using Farmer Field School Approach provided to farmers in the selected community of Runyinya village.	Number of farmers transformed from primitive agricultural practices to climate smart and sustainable agricultural practices in Runyinya village	97,110
7. Total Project Cost			208,885

8. Institutional Administrative Cost (9.5%)	21,531
9. Project Cycle Management Fee charged by the Implementing Entity (8.5%)	19,585
Amount of Financing Requested	**250,000**

Projected Calendar:

Table 2: Milestones for the proposed project/programme

Milestones	**Expected Dates**
Start of Project/Programme Implementation	Dec 2019
Mid-term Review (if planned)	Dec 2020
Project/Programme Closing	July 2021
Terminal Evaluation	May 2021

PART II: PROJECT JUSTIFICATION

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

i. Project components focusing on the concrete adaptation activities

The proposed Project will comprise only two components focusing on the concrete adaptation activities

Project Component 1: Enhance climate proof village water supply in Runyinya village

Water availability is the key entry point in building livelihoods resilience in Runyinya village and other communities living in Kyerwa district, who entirely depends on rainfall recharge on their traditional water sources. Water supply technology proposed in this component is the fundamental intervention where other project components will be anchored-on to build resilience of vulnerable villagers in the pilot village. The resultant outcomes from this component will lead into improved livelihoods and resilience of the villagers to climate change, improved food and nutrition security, and ecosystem services. In addition, the constructed climate proof water supply system will increase availability and access of water to village members as well as reduce labor for women and children from long distance walk in search for water. This will save time for women and children to venture into income generating activities and education respectively. To ensure sustainability of proposed water supply system, selected villagers and water committee will be trained on maintenance and operations. In addition, the local village and district authorities under the District Executive Director (DED) will be the overall authority and has the capacity to inject finances for maintenance costs of the dams after project closure. The following are expected outputs to be achieved under this component: -

1.1. At least 2 boreholes drilled in Runyinya village and solar driven water pumps installed; 1.2. Water storage tanks and distribution network systems installed at selected sites; 1.3. Community water drawing points constructed at selected sites; 1.4. Awareness raising meetings conducted with community stakeholders to facilitate formulation of stable, effective and efficiency COWSOs at Runyinya village in accordance with the Water supply and sanitation Act, 2009; 1.5. Water governance by laws formulated to regulate effective use of water and protection of water sources; 1.6. Gender considerate water governance arrangements for COWSOs established at Runyinya village; and 1.7. Technical Trainings of Trainers conducted on maintenance and operations; management of finance, accounting and group dynamics issues to selected community members of COWSOs for Runyinya village.

Suitability of the borehole drilling option

According to Kyerwa District Profile, there about 70 boreholes drilled in the entire district. However, majority of member of the rural communities in Kyerwa district depends on traditionally dug shallow wells for domestic water supply. These wells are habitually drilled in valley areas where water retention last for shorter period after the rainy seasons leading into long treks for women and children in search for water. Moreover, such shallow wells are prone to contamination from animal and human excreta especially during the flooding seasons thus exposing users to waterborne diseases.

The method selected to obtain water for irrigation and domestic use for this project is boreholes drilling. This is because there are no reliable surface water sources in the village and boreholes are much resistant to climate variations when compared to other available options, coupled with the recharging factor. According to the information available in the government, groundwater in Kyerwa can be stricken at a depth of 40m. With depth increase up to an average of 120m, groundwater in Kagera region has a greater and more reliable recharge rate as it is influenced by Lake Victoria basin..[7],

Solar water pumps will be used to pump water from boreholes banking on the readily available solar radiation in the village and affordable energy storage technologies. Solar energy is considered the best innovative option for driving water pumps because it requires no regular running cost, is less costly compared to power tariffs which are burdensome for poor villagers, and is easily accessible as most of remote village areas are not connected to the national grid. In addition, the solar pumps have a guarantee of 20 years and do not require much skills to maintain; so they can be fixed by already available technicians when given training. A similar successful practice has been documented by Engineers without borders-Sweden in collaboration with MAVUNO NGO in Karagwe district, who used solar water pumps to supply water from boreholes in Chonyonyo area[8].

Component 2: Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village

Like in many other rural villages in Kerywa district farming system in Runyinya village is being challenged by several challenges including poor farming practices and reliance on rainfall. As already described above, rain seasons are not reliable and are unpredictable, they have shifted trends such that droughts and dry spell periods are more common than wet spells. Rains are more erratic, coming at unexpected times in and out of seasons. This causes farmers in Runyinya to suffer the most from food insecurity due to crop failures and reduced farm productivity. Therefore, under this output, the project intends to increase resilience of farmers to effects of climate change and variability by improving farming systems in pilot communities within the village. Indicative project outputs to be implemented under this component includes: -

2.1. Drip irrigation structures/schemes at Runyinya village established at selected sites; 2.2. Greenhouses structures with driplines established at selected sites at Runyinya village , 2.3 Nurseries for horticultural crops established, planting, management and sustainable harvesting and utilization , 2.4. Selected members of farmer and women groups trained on Operation and Maintenance of drip irrigation facilities at Runyinya village; and 2.5. Tailored training on best farming practices and transformation of traditional farming system through using Farmer Field School Approach provided to farmers in the selected community of Runyinya village

ii. Contribution to Climate Resilience

[7] Baumann, E., Ball, P. and Beyene, A. (2005). Rationalization of Drilling Operations in Tanzania Review of the Borehole Drilling Sector in Tanzania

[8] https://www.ewb-swe.org/water-supply-chonyonyo

The proposed project seeks building climate resilient livelihood systems as a powerful adaptation practices for the pilot project to improve people's life quality at village levels. This project strives to improve water availability, income diversification and access to ecosystem services to human communities in the area through two project components to enhance communities' adaptive capacity and contribution climate change mitigation measures. Measures proposed under the current project will directly contribute to household and community income generation through increased water security, increased productivity of cash and food crops from small drip irrigation schemes, selling products and services from bee-keeping, fruits with high value plants, selling products from home gardens and reduced poverty of various groups including the majority young women who are currently vulnerable to HIV/AIDS because of high levels of poverty and unemployment. Throughout the above mentioned concrete adaptation activities, there will be elements of capacity building to local communities, improved access to technical information, change of behaviour and practice, improved infrastructure, improved resource governance, enhanced ecosystem health, improved knowledge for resource management, utilisation, and market access. All these will contribute to increased capacity of rural communities for adaptation and resilience to climate change.

B. *Project's economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Strategy to avoid or mitigate negative impacts, in compliance with the* ***Environmental and Social Policy of the Adaptation Fund.***

The two components of this project will considerably contribute to economic, social and environmental benefits at village, district, national and at the international level. The proposed interventions under this project will improve adaptive capacity of the most vulnerable communities in Tanzania. Each component activities are well linked to both environmental and socio-economic to improve the wellbeing of the people and their supporting natural ecosystems. Equally, the project is well informed by the Environmental and Social Policy of the Adaptation Fund to avoid and mitigate unseen negative impacts including gender considerations, social-economic and environmental benefits as follows:-. **a) Social benefits** - The project inspires to improve rural water systems, foster food security, and transform farming practices and improved livelihood systems. All these have multiple benefits and positive contribution to the existing social systems in the project site including solving climate driven social and gender related problems. For instance, gender based challenges linked to climate change effects such as water scarcity, food shortage and challenges for drop out of school girls due to inadequate water supply and food insecurity; **b) Economic benefits** -The proposed project will extensively contribute to economic benefits as it is design to promote transformation of livelihood systems and quality of life among villagers through stimulating drivers of key economic growth activities in the pilot project site. In particular, the activities outlined in each output of the components will lead to increased water security and agriculture production and move vulnerable communities beyond rain fed subsistence farming to small scale irrigation farming system which will allow selling of excess crops produce, fruits and other ecosystem goods and services. This project will also build sustainable market and will link villagers to financial services as well as promoting credit cooperatives (SACCOs); and **c) Environmental benefits** – The project will have several environmental benefits, including contribution to climate change mitigation, ecosystems and, biodiversity conservation, land management and climate smart agriculture. The project is expected to have multiplier effect through ecosystem restoration by attracting planting of valuable tree species like fruit, nitrogen fixing and ornamental trees that will increase ecosystem goods like bee products and services like pollination, climate mitigation, soil fertility improvement in the villages. Environmental benefits of this project is also expected to contribute to climate resilience of rural communities through improved ecological functions and services, reversed land degradation weather amelioration, creation of alternative income of vulnerable communities specially women and girls through selling bee products such as honey and wax.

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

According to NAPA,2007, NAP 2019, and NDC, 2019, Tanzania has prioritized sector specific climate change adaptation actions based on based on their potential for positive effects on economic development,

social capital and environmental management. Cost-effectiveness of the interventions was a criterion used to measure their contributions to adaptation and economic development. As such, the interventions proposed under NAPA, and NDC are the most urgent and were assessed to be cost-effective. The activities proposed in the current project to be funded by the AF are in line with those priorities identified under NAPA, NDC and in the NAP stock taking report as described in Part IID and as such are already identified as cost-effective by the United Republic of Tanzania. The proposed project addresses the water, agriculture and forestry and natural resource sectors which were identified as the most vulnerable to climate change; ranking number 1, 2 and 4 respectively being the priority areas for adaptation interventions by NAPA and recently by the NDC and the NAP stock taking report. The proposed interventions in this project are also of top priority for each of the 3 sectors mentioned above. NAPA and the NGD emphasize establishment and development of small scale drip irrigation systems and innovation of alternative farming systems as the top priorities in the agriculture sector. In the water sector, priority is on drilling boreholes to established village water schemes and promotion of water harvesting interventions. Restoration of the degraded land , which is also an expected multiplier effect of this in this project, is given top priority in the forestry sector by these policy documents. Also, due to the fact that this project will implemented in one village, its operational costs will also be reduced through the involvement of the local villagers, government authorities where the interventions will be implemented to support in some aspects of the project including Monitoring and Evaluation.

D. *Project consistency with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.*

The **National Climate change Strategy (2012) priorities and objectives:**

Water is conceived being among the main source of livelihoods, harnessed for domestic, agriculture, industrial use. Climate change is negatively impacting water sources, therefore addressing these climate change induced impacts will allow continuous availability for these elements which are important for sustaining livelihoods, economic growth and social development. In response, as due to the growing concerns over negative climate changes and climate variability, Tanzania like many other countries has vested into several initiatives to curb the situation include developing the National Climate Change Strategy[9]. National Climate Change Strategy was devised seeking for enhancing the technical, institutional and individual capacity of the country to address the impacts of climate change. In order to achieve this, the National Climate Change Strategy has identified several strategic interventions (SI), among which are proposed by this project: G) – facilitate access to water resources; J)– enhancing decentralization of water sources management.

Agriculture: In Tanzania, the agricultural sector is reckoned being among the economic development pillars of which more than 80% of population within the country depending on climate sensitive rain-fed agriculture as source of livelihood[10] . However, adverse effects of climate change have also been recorded within different government reports[11] [12] as cited from CIAT and World Bank. The dependence of agriculture on rainfall increases risks of droughts and floods. Therefore, reducing vulnerability of the sector to climate

[9] UNDP (2007). Human Development Report 2007/2008: Fighting climate change: human solidarity in a divided world. Palgrave Macmillan, New York

[10] United Republic of Tanzania - URT (2009a). Climate change and agriculture policy brief. Vice President's Offi ce, Division of Environment, Dar es Salaam

[11] United Republic of Tanzania - URT (2008). State of the environment report 2008. Vice President's Offi ce, Division of Environment, Dar es salaam.

[12] CIAT; World Bank. 2017. Climate-Smart Agriculture in Tanzania. CSA Country Profiles for Africa Series. International Center for Tropical Agriculture (CIAT); World Bank, Washington, D.C. 25 p.

change will significantly contribute to socio-economic development and ensure food security. Cognizant of the situation, Tanzanian government has set several priorities, of which the current project will also thrive to make its contribution to enhance the resilience of the communities to climate change induced impacts, through: a) Assessing crop vulnerability and suitability (cropping pattern) for different Agro-ecological zones; c) Promoting appropriate irrigation systems; d) Promoting early maturing and drought tolerant crops; e) Enhancing agro-infrastructural systems; f) Promoting appropriate indigenous knowledge practices; i) Strengthening post-harvest processes and promote value addition; j) Addressing soil and land degradation by promoting improved soil and land management practices/techniques; k) Strengthen integrated pest management techniques; l) Promote use of pest/disease tolerant varieties; and m) Strengthen early warning systems for pest surveillance.

Forestry: With regards to the forestry sub-sector, climate change is reported to have affected many of forest and ecosystem processes. Expanding forest cover and use of adaptive species as well as linking conservation areas is pivotal in adapting to climate change and ensuring continuity in the availability of ecosystem goods and services hence improving the livelihoods of rural communities. All the same, the proposed project will further strengthen efforts invested by the Government particularly on the following areas of emphasis: a) Enhancing control of forest fire, disease and pest breakout; b) Enhancing conservation of forests biodiversity and control of invasive species; c) Supporting alternative livelihood initiatives for forest dependent communities; d) Promoting establishment of woodlots; and f) Strengthening and up scaling of community based forest management best practices.

NAPA: Similarly, the Government further recognizes the extreme vulnerability of communities to climate change as the aspect of poverty, which needs to be addressed from different perspectives include instituting the National Adaptation Programme of Action (NAPA) in 2007. NAPA underscores that Agriculture, Water and Forestry are of high priority sectors that requires interventions for adaptation to climate change. The proposed project is in consistent with the NAPA as it is contributing to the following NAPA emphasized activities in order to enhance climate resilience to the vulnerable rural communities in Tanzania.
***Agriculture Sector*:** i) Increase irrigation to boost crop production in all areas; ii) Introduce alternative farming systems; iv) Create awareness on the negative effects of climate change; v) Increase the use of manure and fertilizer; vi) Range management for livestock production; and vii) Control pests, weeds, and diseases.

***Water Sector*:** i) Develop alternative water storage programs and technology for communities
Promote water harvesting and storage facilities; ii) Develop reservoirs and underground water abstraction; iii) Community based catchments conservation and management programs – partially addressed; iv) Develop new water serving technologies in irrigation.

***Forestry sector*:** i) Increase irrigation by using appropriate water efficient technologies to boost crop production in all areas; iii) Develop water harvesting and storage programs for rural communities particularly those in dry lands; vii) A forestation programmes in degraded lands using more adaptive and fast growing tree species; and xii) Water harvesting and recycling. Based on this, the proposed project project recognizes remarkable efforts made by the Tanzanian Government, include other stakeholders, whereas these initiatives must be sustained and deepened by enhancing resilient capacities of communities to climate change across all targeted areas of intervention, and the nation at large.

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

The proposed project is designed in such a way as to be in itself a learning ground and knowledge bank. The innovative ideas behind it will be piloted and all information gathered throughout the project lifetime will be shared through relevant channels and promoted for upscaling. The project will learn from similar experiences of using borehole solar water pumps from nearby Karagwe district, each progress and success

stories will be documented inform of short multimedia, reports and booklets. In both components 1 and 2 issues of knowledge management are highlighted. For instance awareness raising meetings and Trainings of Trainers under component one; and Tailored training on best farming practice under component 2 are avenues through which important lessons learned in the process will be documented and disseminated to enable upscaling of the innovations. In addition, NEMC will collaborate with Kyerwa District Council to document the best cases, disseminate through newsletters, brochures, websites, and upscale them elsewhere. Other popular avenues including radio, newspapers and video documentaries will be used to communicate success stories as part of the project outcome knowledge management. In each step pre-knowledge of the villages i.e. on water resources use and solar use and maintenance will be assessed during the feasibility study before the intervention and training to set the baseline for M&E after the project implementation.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

Executing Agency: Agrodiamond Limited will be the overall executor of the project, through the services of a Project Management Unit, which will be staffed with a Project Coordinator, an Assistant Project Coordinator, and a Project Accountant who will also serve as Project Administrative Support Staff. The Project Coordinator, the Assistant Project Coordinator, the Accountant are referred here as project personnel. The executor will work in close collaboration with the village and district government where necessary deploy the service of district professionals in the necessary fields such as agriculture, apiculture etc.

Implementing Entity: National Environment Management Council (NEMC), which is also, the National Implementing Entity (NIE) of the Adaptation Fund (AF) in Tanzania will be responsible for the overall management of the project and monitoring of project outcomes/outputs and reporting.

Description: The project shall be implemented for the period of two and half years (30 Months) from Dec 2019 to June 2022.

Procedures			
Phase	**Steps**	**Start Date**	**Completion Date**
First: Before the Project	Submission of the Concept Note to NEMC	08/07/2019	19/07/2019
	To introduce the project to the Government Institutions/Agencies and other stakeholders for collaboration initiatives.	09/08/2019	10/10/2019
	To conduct feasibility studies in order to collect data for Construction and establishing drip irrigation structures/schemes and preparation of project work plan	15/10/2019	15/11/2019
	To invite and provide parts of project works to Sub Contractors	25/11/2019	31/11/2019
Second: During the Project	To conduct advocacy campaigns to selected communities who shall participate in the implementation of the project	15/12/2019	05/01/2020
	Construction and establishing drip irrigation structures/schemes	15/01/2020	15/05/2020
	To construct water storage facilities for vulnerable small scale farming communities	01/06/2020	30/12/2020

	To train community for improving farming knowledge for various small scale farming options	02/01/2021	02/03/2021
	To promote bee keeping activities in woodland, hills and mountainous systems and fruit plants as improved ecosystem based income generating activities	15/03/2021	15/05/2021
	To engage farmers in fruit plants and timber-tree planting in residential areas, along streets and roadsides and degraded landscapes and establish ecological schools in selected villages	01/06/2021	30/07/2021
	To install surface and subsurface irrigation systems including overhead galvanized storage tanks and pumping facilities.	09/08/2021	09/12/2021
Third: After Completion of the Project	To conduct monitoring, coaching and mentoring for the project sustainability involving neighboring communities of the project.	10/01/2022	Continuous
	To conduct evaluation sessions of project to determine its relevance and value for money	01/05/2022	Quarterly
	Finally to hand over the project to the village and district authorities.	15/10/2022	31/12/2022

B. Describe the measures for financial and project / programme risk management.

Precautionary measures for financial and project risk management will be formulated to foresee those risks before they happen. The risk categories on delayed fund disbursement for project implementations and procurement processes are pertinent risks of the proposed project, which all together have mitigation measures. The table below summarizes mitigation measures for financial and project/programme risk management.

SN	FINANCIAL AND PROJECT RISKS	MITIGATION MEASURES
1.	Delay of fund	Submit funds in time (NEMC)
2.	Reluctance of some community members and stakeholders to cooperate among themselves	Involvement of all stakeholders from the beginning and improving the individual involvement in terms of personal values, connectivity between community members, enhancing social relations and new skills and knowledge.
3,	Destruction of projects infrastructures	Proper construction and installations Provision of security systems and guards
4	Procurement processes	Public Procurement procedures should be clearly adhered
5	Exchange rates fluctuations	Bank of Tanzania rates will be followed
6	Reluctance of stakeholders to adopt ecological based and climate resilient livelihood systems and conservation practices	Sensitization of communities to influence peoples knowledge and attitudes and, hence the actions they take to adapt to climate change impacts and define their contribution to global mitigation efforts.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

Kyerwa District Council will address both social and environmental opportunities and risks in an integrated manner, recognizing the interrelatedness of social and environmental issues at early stages during the designing and implementation phases. This project is designed in consistence with Environmental and Social Policy of the Adaptation Fund. Proposed activities will be reviewed at every stage for potential social and environmental risks and will ensure that potential adverse impacts are assessed and avoided, or where avoidance is not possible, minimized, mitigated, and managed.

SN	ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT	MITIGATION MEASURES
1.	Willingness of the communities to engage in the project	Involvement of the community in project design and implementation to realize tangible benefits.
2.	Lack of understanding of the project details	Awareness Creation

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

NEMC will be responsible for managing the mid-term review/evaluation and the terminal evaluation. The Project Coordinator and his Team will participate actively in the process. The project will be reviewed or evaluated on bi-annual basis (mid-year and end of the year basis). The purpose of the review/evaluation is to provide an independent assessment of project performance at mid-term, to analyse whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes in the most efficient and sustainable way. In addition, it will verify information gathered through the Adaptation Fund tracking tools. An independent terminal evaluation (TE) will take place at the end of project implementation. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process. The direct costs of reviews and evaluations will be charged against the project evaluation budget.

Activity	Responsible person	Timeframe
Inception meeting	Executing entity project coordinator	Within 2 months of project starting
Baseline survey	Executing entity project coordinator	Within 2 months of project starting
Mid-term review	NIE/ External consultant	15 months
NIE annual visits	NIE project coordinator	Annual
Annual meetings	Executing entity project coordinator	Annual
Final evaluation report	External consultant	30 months
Audit reports	External auditor	Annual
TOTAL		

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

Expected results	Indicators	Baseline	Targets	Means of verification	Milestone
The overall objective is to enhance resilience and adaptive capacity to effects of climate change while reducing income poverty among the selected communities in Runyinya Village.					
Resilience and adaptive capacity to effects of climate change while reducing income poverty in the selected communities of Kyerwa District Council enhanced.	Percentage of people with improved livelihoods and resilient to climate change Number of households disaggregated by gender with improved food and nutrition security. Number of people adopted diversified sources of income generation activities Number of female and male headed HHs having access to water supply	To be established during the baseline study	At least 30% increase in crop and livestock productivity at the end of the project. At least 50 ha of land planted with adapted fruits/forest tree by the end of the project. At least 50% of adopted diversified sources of income generation activities 60 female and 40 male headed HHs having access to water supply	• End of project M&E reports • Journal articles published • Quarterly, annual, Mid-term and final project evaluation reports	Within and beyond the project life
Component 1: To enhance climate proof village water supply in Runyinya village					
Climate proof village water supply in Runyinya village	1.1. At least 2 boreholes drilled in Runyinya village and solar driven water pumps		At least 10 irrigation schemes established in Runyinya Village	Periodic project reports.	Within year one of the

Expected results	Indicators	Baseline	Targets	Means of verification	Milestone
enhanced.	installed. 1.2. Water storage tanks and distribution network systems installed at selected sites 1.3. Community water drawing points constructed at selected sites. 1.4. Number of constructed water supply channels . 1.5. Awareness raising meetings conducted with community stakeholders to facilitate formulation of stable, effective and efficiency COWSOs at Runyinya village in accordance with the Water supply and sanitation Act,2009 1.6. Water governance by laws formulated to regulate effective use of water and protection of water sources 1.7. Gender considerate water governance arrangements for COWSOs established at Runyinya village 1.8. Technical Trainings of Trainers conducted on maintenance and operations; management of finance, accounting and group dynamics issues to selected community members of COWSOs for Runyinya		Increased agroforestry trees, crop, fish and livestock productivity, biodiversity and vegetation cover. Improved governance on water use rights and management of forest resources. Reduced drudgery and time for women	Project annual impact assessment reports. Mid-term project reports final project evaluations.	project implementation

Component 2: Implement Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village to increase community resilience and food security					
Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village to increase community resilience and food security implemented.	2.1. Drip irrigation structures/schemes at Runyinya village established at selected sites 2.2. Selected members of farmer and women groups trained on Operation and Maintenance of drip irrigation facilities at Runyinya village 2.3. Tailored training on best farming practices and transformation of traditional farming system through using Farmer Field School Approach provided to farmers in the selected community of Runyinya village	To be established during the baseline study	- Number of farmers transformed from primitive agricultural practices to climate smart and sustainable agricultural practices in Runyinya village	Periodic project reports surveys, studies Project annual impact assessment reports Mid-term project reports final project evaluations Village data	At the end of the project implementation

F. Demonstrate how the project / programme align with the **Results Framework of the Adaptation Fund.**

Project Objective(s)	***Project Objective Indicator(s)***	***Fund Outcome***	***Fund Outcome Indicator***	***Grant Amount (USD)***
To enhance Climate proof village water supply in Runyinya village.	1.1. At least 2 boreholes drilled in Runyinya village and solar driven water pumps installed. 1.2. Water storage tanks and distribution network systems installed at selected sites 1.3. Community water drawing points constructed at selected sites. 1.4. Number of constructed water supply channels . 1.5. Awareness raising meetings conducted with community stakeholders to facilitate formulation of stable, effective and efficiency COWSOs at Runyinya village in accordance with the Water supply and sanitation Act,2009 1.6. Water governance by laws formulated to regulate effective use of water and protection of water sources 1.7. Gender considerate water governance arrangements for COWSOs established at Runyinya village 1.8. Technical Trainings of Trainers conducted on maintenance and operations; management of finance, accounting and group dynamics issues to selected community members of COWSOs for Runyinya	Outcome 1: Increased adaptive capacity within relevant development and natural resource sectors	-Physical infrastructure improved to withstand climate change and variability-induced stress. Enhanced climate resilient rural water supply system in selected communities at Runyinya Village, Kyerwa district. Reduced drudgery for women and children from long distance walk in search of water and firewood. Strengthened capacity on sustainable water resource management and utilization.	***100,000***

To Implement Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village to increase community resilience and food security .	2.1. Drip irrigation structures/schemes at Runyinya village established at selected sites 2.2. Selected members of farmer and women groups trained on Operation and Maintenance of drip irrigation facilities at Runyinya village 2.3. Tailored training on best farming practices and transformation of traditional farming system through using Farmer Field School Approach provided to farmers in the selected community of Runyinya village	Outcome 2: Increased ecosystem resilience in response to climate change and variability-induced stress Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level Outcome 4: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	-Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses Modification in behavior of targeted population	*70,000*

Project Outcome(s)	***Project Outcome Indicator(s)***	***Fund Output***	***Fund Output Indicator***	***Grant Amount (USD)***
1.1 Improved livelihoods and resilience to climate change of the rural communities, improved food and nutrition security, and	• Number of people with increased resilience to climate change • Number of households with increased food and income security	Output 4: Vulnerable physical, natural, and social assets strengthened in response to climate change Impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	*100,000*

ecosystem services *1.2* Reduced drudgery for women and children from long distance walk in search of water and firewood 1.3 Strengthened capacity on sustainable water resource management and utilization	• Proportion of people with enhanced social security (by improved literacy and health) • Increased number of people with knowledge on sustainable management and utilization of water resources	Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	1.1 No. and type of risk reduction actions or strategies introduced at local level 3.1.2 No. of news outlets in the local press and media that have covered the topic	
1.1 Improved ecosystem health and delivery of ecosystem goods and services *1.2* Increased sources of employment opportunities resulting from fruits and forestry venture *1.3* Reduced land and forest degradation in the community landscape 1.4 Strengthened knowledge and skills on establishment, propagation and management of fruits and forest tree species	• Percentage increase in forest resources for resilience to climate change • Number of people sustainably using fruits and forest products • Proportion of land and forest rehabilitated • Increased number of people with knowledge on establishment, propagation and management of fruits and forest tree species (1000 farmers per village anchored on 50 focus youths)	Output 5: Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities	5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets) 3.1.1 No. and type of risk reduction actions or strategies introduced at local level 3.1.2 No. of news outlets in the local press and media that have covered the topic	*70,000*

3.1 Improved household livelihoods and income generation of local communities from crop, livestock and domestic water use. *3.2* Improved equitable water use for multiple agroecological needs by the community; *3.3* Improved governance of water and use of forest resources for climate resilience in target village communities 3.4 Improved capacity on governance of water and use of forest resources for climate resilience in target village communities 3.5 Enhanced capacity of people with knowledge on integrated and diversified technologies for crops and livestock production	• Percent increase in income, • Reduced nutrition related illness • Increased number of households in food and nutrition security n face of climate change • Number of farmers, students and policy makers with improved capacity in strategies in climate change adaptation • Number of people adopted to technologies for adaptation and mitigation of impacts of climate change • Increased number of people with knowledge on integrated and diversified technologies for fish, crops and livestock production	Output 6: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities Output 7: Improved integration of climate-resilience strategies into country development plans	3.1.2 No. of news outlets in the local press and media that have covered the topic 7.1. No., type, and sector of policies introduced or adjusted to address climate change risks 7.2. No. or targeted development strategies with incorporated climate change priorities enforced 3.1.1 No. and type of risk reduction actions or strategies introduced at local level	*30,000*

G.*Detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.*

Component Budget	**Personnel**	Consumable	Equipment(Solar pump ,pipes etc)	Transport	Consultancy	Bore holes and water storage tanks establish ments	Maintena nce costs	M&
Component 1 Enhance Climate proof village water supply in Runyinya village	12,880	1,200	16,300	5,000	7,600	50,490	5,000	3,5
Component 2: Implement Climate Smart-Community-Based (CSCB) - small scale irrigation scheme at Runyinya village to increase community resilience and food security	12,400	3,500	11,220	7,223	5,820	0.0	16,757	5,1
Total Project operation costs	25,280	4,700	27,520	12,223	13,420	50,490	21,757	8,6
Administrative cost of NIE (8.5%)	2,370.29	440.68	2,580.31	1,146.05	1,258.28	4,734.01	2,039.97	80
Institution Administrative costs (9.5%)	2,605.74	484.45	2,836.62	1,259.89	1,383.27	5,204.26	2,242.60	88
Total Fund request								

Personnel: Per diem during travels, Coordination allowance, Special task honoraria, secretary and attendance, financial and admin assistance, Supporting staff, dissemination, Staff time, farmer and local GOVT facilitation and Research assistants time

Consumables: Fuel and lubricants, Stationery, Printing and publication, animal feeds, tree seeds, scions and rootstocks, fertilizers, approved natural pesticides

Equipment: irrigation, livestock infrastructure, shade screen nets, nursery equipment

Transport and Vehicle: Fuel

Consultancy: Irrigation structures designing, construction, nursery establishment, surveys,

Contractors and service providers: construction and commissioning of water irrigation structures, nursery and screen houses and irrigation infrastructures

Maintenance Costs: Materials, labour, irrigation facilities and replacement of defaulted facilities

Monitoring & Evaluation: Field visits per diems, facilitation for local government, farmers, and VEO special task allowance,
Training: Technical staff, local government, farmers and VEO facilitation allowance,

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

A. Record of endorsement on behalf of the government[13] *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:*

Ambassador Joseph E. Sokoine Deputy Permanent Secretary	*Date: 31st July 2019*

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.

Vice President's Office	

B. **Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (National Strategy for Growth and Reduction of Poverty 2010-2015; National Climate Change Strategy 2012, Tanzania Vision 2025 and in the National Adaptation Programme of Action (NAPA) 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.	
 ***Fredrick F. Mulinda*** Implementing Entity Coordinator	
Date: *3rd August 2019*	Tel. and email: **+255 753 240 517**, nieaf@nemc.or.tz / kasigazi.koku@gmail.com
Project Contact Person: Denis Kiwali	
Tel. And Email: +255 756 444 133, deniskiwali@gmail.com	

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In reply please quote:

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Vice President's Office
Building,
Ihumwa,
P. O. Box 2502,
DODOMA

Our Ref: BA. 90/201/01/3

31st July, 2019

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

Re: Endorsement for Piloting Climate Resilience Livelihood Systems in Runyinya Village, Kyerwa District

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

Accordingly, I am pleased to endorse the above proposal with support from the Adaptation Fund. If approved, the project will be implemented by National Environment Management Council and executed by Agrodiamond Limited.

Sincerely,

Ambassador Joseph E. Sokoine
For Permanent Secretary

All correspondences should be Addressed to ***Permanent Secretary,***