



## INCEPTION WORKSHOP REPORT

### Strategic Water Harvesting Technologies for Enhancing Resilience to Climate Change in Rural Communities in Semi-Arid Areas of Tanzania (SWAHAT)

**Donor:** Adaptation Fund (AF)

**Implementing Entity:** National Environment Management Council (NEMC)

**Executing Entity:** Sokoine University of Agriculture

**Date of Inception Workshop:** 13 October, 2021

**Date of this Report:** 30 October 2021



## 1.0 INTRODUCTION

### 1.1. Project background

The SWAHAT project intends to address the climate change-induced impacts due to drought, floods and water scarcity causing reduction in crops and livestock productivity, and forest degradation in rural semi-arid areas in Tanzania

Majority of semi-arid rural communities live and derive their economy from a rural agrarian setting. Climate change has come with devastating effects on agriculture in

the semi-arid areas leading to drought, floods and water scarcity causing direct consequence on social, economic, gender and environment. As a result, food availability, natural resource utilisation and income generation by the vulnerable semi-arid communities is severely affected. The government and donor community is obliged to set aside large sums of budget to support such communities for food as well as financing various socio economic needs such as food aid, education, health and water supply. This call for concrete climate change adaptation interventions that will enhance resilience of the vulnerable communities in the semi-arid rural dwellers. The project will be implemented in drought and flood prone semi-arid regions of central and western Tanzania particularly Dodoma, Singida, and Tabora.

Among the key climate change related impacts affecting communities living in the in these semi-arid regions is water scarcity. Water scarcity is therefore the major driver of vulnerability to climate change. Lack of water resulting from drought, damaged landscapes and loss through floods leads into crop failure and famine, reduced livestock productivity, loss of land cover, drying of natural water bodies and other surface and ground water and limited access of water for domestic uses. As a result most of the semiarid rural community faces limited or lack of livelihoods diversification for adaptation to impacts of climate change.

In the semi arid areas, coping strategies for adaptation to water scarcity is done by few dedicated farmers who dig small pits (<3 m diameter; < 2m deep) and small ponds for tapping surface run-off water to be used for irrigating vegetables in small plots, livestock drinking and domestic use (cooking and washing). In addition, there exist burrow pits as left overs of excavation from road construction activities. These burrow pits have proved to be useful sources of water to the local communities. They support to a small scale, irrigation of crops, drinking points for livestock, save as spontaneous fish and other aquatic habitat and domestic water supply. However, these burrow pits as well as the locally dug pits and ponds are small often polluted and contaminated and not strategically designed to cater for multiple and integrated activities effective for enhancing adaptive and resilience capabilities of affected semi arid rural communities to climate change.

The project will design water-harvesting dams and integrated innovations to accommodate agriculture, livestock and domestic water and fuel wood needs. These innovations will target livestock production, aquaculture, horticulture and afforestation for climate change adaptation of the vulnerable rural communities. The vulnerable rural communities of semi arid areas have the will to sustain their livelihood through engagement in one or more of these innovative technologies, but they are constrained by lack of reliable water supply due to dependency on rain-fed agriculture and impacts of climate change.

## **1.2. Economic viability of the project**

Climate change impacts have reduced agricultural productivity of semi-arid rural communities thus affecting economic and livelihoods diversification. Tanzania has a population of 55 million people with approximately 80% depending on agriculture as

a source of livelihoods. As agriculture is important in the economy of Tanzania, accounting for 60% of the export earnings and employing 84% of the rural population. Crucial components of the agricultural sector are food crops, at 55% of the total agricultural GDP, livestock at 30%, and traditional export crops at 8%. Furthermore, over 80% of rural communities in rural semi-arid areas depend on rain fed agriculture for their survival. Agriculture drives livelihoods of rural communities in Tanzania; however, this agriculture is largely dependent on rainfall and therefore subject to high vulnerability to climate change impacts associated with droughts and floods. Drought leads to crop failure while excessive rainfall and run off leads to crop loss in most semi arid regions of Tanzania.

The dams from this project will therefore supply water for domestic use, irrigation agriculture, aquaculture and livestock production as well as reforestation of the degraded landscapes. The strategic water harvesting interventions in this project have been designed to improve economic viability of rural communities in semiarid areas through recycling water as much as possible by avoiding losses from drought and floods. With this approach, it is expected to increase productivity that will generate surplus for income generation of target rural communities. Intensive livestock and poultry production will benefit from pastureland and animal husbandry infrastructure that will be established downstream of the dam which in turn will supply manure for soil fertility improvement for horticulture and other land production systems. Afforestation integrated with apiculture interventions will be done on the degraded landscapes with the aim of increasing production of honey and wood products (e.g fuel wood and timber) for domestic use and income generation and very importantly restore habitats for biodiversity conservation and ecosystem resilience. Afforestation and apiculture shall (among other potential benefits to be realized) restore the green infrastructure, capture and distribute water more spatially and temporally and provide efficient pollination services to the natural and agriculture systems for sustainable biodiversity and crop productivity. These are concrete adaptation activities that will bring income diversification and enhanced resilience to impacts of climate change and reflect on both local and national economy.

The lifestyle and economic strategy of people living in semi arid regions is traditionally characterized by their need to ensure adequate water supply and protection against food shortages. Moving with livestock in search of water and pasture resources is one of the main livelihood adaptation and resilience strategies. The fact that some of these areas are regarded as not suitable for cultivation and that rainfall patterns are unpredictable and are subject to great fluctuations means people are not attracted to live in them and therefore migration are quite common. Implementation of water harvesting and integrated strategies will ensure social settling of rural community for agriculture and livestock sustainability.

## **2. Objectives of Inception workshop**

The Inception Workshop for the Adaptation Fund funded project “Strategic Water Harvesting Technologies for Enhancing Resilience to Climate Change in Rural Communities in Semi-Arid Areas of Tanzania (SWAHAT” was held on the 13<sup>th</sup> October 2021. The purpose of the Inception Workshop was to officially launch and commence the implementation of the project. Design of this project started in 2018 therefore, the workshop was meant to provide an opportunity to refresh awareness of the project key stakeholders.

The specified objectives of the workshop were to:

1. Officially launch and commence the implementation of the Project.
2. To provide opportunity to review the approved project document and obtain stakeholders contribution to the overall approach, components and activities
3. Clarify roles and responsibilities of stakeholders

The workshop was officially opened by the guest of honor Mr. Emmanuel Nyanda, Director of Sector Coordination, on behalf of the Permanent Secretary of the President’s Office – Regional Administration and Local Government.

Prior to remarks from the guest of honor, there were some welcoming remarks from the coordinator of Adaptation Funds in Tanzania Mr. Fredrick Mulinda followed by the speech from the Director General of the National Environment Management Council (NEMC), given in representation by Dr. Franklin Rwezimula.

. A total of 29 participants attended the workshop including people from media. out which 6 of the participants were women and 23 were male. The workshop was facilitated by the SWAHAT project. The workshop was conducted through presentation, questions and answers and groups discussions. Followed by plenary session.

The Project design and implementation plan was presented by the Project Leader Prof. Paul Kusolwa on behalf of the project executing team.

Group discussions were set according to geographical locations of the project sites where stake holders representative of respective regions were represented. Issues for group discussion included the following.

- i. Methodology of project implementation
- ii. Time frame and timing of activities
- iii. Expected outputs from the project
- iv. Identify challenges

The program of the workshop is attached in Appendix 1.

### **3. SYTHESIS OF THE WORKSHOP**

#### **3.1 The AF in Tanzania**

The United Republic of Tanzania signed the Framework Convention on Climate Change –UNCFCC in 1992 and ratified it in 1996. The meeting of the member states established various funding mechanisms for Mitigation, and Adaptation of Climate change. Among the Funding mechanism is the Adaptation Fund (AF) that supports Members from Developing countries to adapt to the negative impacts of climate change through implementation of concrete adaptation actions.

The Adaptation Fund is designed to support developing member states to directly access of the funding without passing their applications through multilateral entities. Through this arrangement in Tanzania, the National environmental Management Council was appointed by the Vice presidents Office to apply for accreditation as the National implementing Entity for the Adaptation Fund, and was successfully accredited in 2017. NEMC has a role of ensuring the country gets its share of adaptation funds to deal with the problem of climate change. The fund is in form of National Projects targeted at solving climate change challenges.

In Tanzania, NEMC collaborates with stakeholders from various institutions to develop country projects targeting most vulnerable communities for the sake of building their climate change adaptive capacities. SWAHAT is one of the projects developed and approved by Adaptation Fund Board to be implemented in 4 districts of the semi-arid areas in Tanzania.

#### **3.3 Linkage of SWAHAT and Various Sectors of the government**

SWAHAT has been designed to align with national and subnational policies, strategies and plans on climate change as well as cross-sectoral policies such as those on forestry, agriculture, livestock, fisheries, water and environment. The United Republic of Tanzania has signed and ratified several multilateral agreements including those under United Nations such as the UNFCC, UNCCD and The CBD. All national level policy and legal documents takes into account these signed and ratified multilateral agreements. This project aims to tackle climate change related challenges facing semi-arid communities of Tanzania by building their adaptive capacity as well as resilience against the adverse effects brought by climate change. Some of the policies, strategies and plans, which the project conforms with are summarized in the following paragraphs.

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.

With regards to the forestry sub-sector, climate change is reported to have affected many of forest and ecosystem processes. The National Forest Policy of 1998 and

subsequent acts programs and plans have the overall goal of enhancing the contribution of forests to sustainable development and conservation biodiversity for the benefit of current and future society. The SWAHAT project will strengthen efforts invested by the Government Forestry Sector particularly Enhancing conservation of forests biodiversity and control of invasive species; Supporting alternative livelihood initiatives for forest dependent communities; Promoting establishment of woodlots; and Strengthening and up scaling of community based forest management best practices.

Agricultural Sector Development Programme II (**ASDP II**):. The SWAHAT will contribute in fulfilling the agenda of ASDP II particularly on 4 priority areas: Priority Area 1 (PA 1) emphasize on sustainable water and land use management for crops livestock and fish and system's resilience to climate change. This priority conform with SWAHAT in component ONE; b) PA 2 of ASDP II emphasize on enhanced agricultural productivity and profitability (crops, livestock and fish) and this is in line with SWAHAT components 3 and 4.

#### **Livestock sector adaptation initiatives:**

The livestock sector adaptation initiative of Tanzania aims to enhance the resilience of the livestock industry to the impacts of climate change. This is especially important in rural semi arid areas where the livestock industry is quite dominant. This aim is in consistence with SWAHAT project strategic interventions spelt out in component 1,3 and 4. The proposed project will therefore contribute to the following national strategic interventions for improving livestock adaptation capacities to with stand negative impacts of climate change: a) Promoting climate change resilient traditional and modern knowledge on sustainable pasture and range management systems; b) Promoting development and implementation of land use plans in the semi arid areas; f) Promoting livelihood diversification of livestock keepers; and g) Improving the traditional livestock keeping system.

**Fisheries:** The SWAHAT interventions are also within the Government frameworks, and most particularly on: Promoting aquaculture, Enhancing protection and conservation of aquatic ecosystems productivity, and diversity.

**Water Sector (Addressed by SWAHAT component 1 and 2):** i) Develop alternative water storage programs and technology for communities, (ii) 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 (Addressed by SWAHAT component 2):** i) Afforestation programmes in degraded lands using more adaptive and fast growing tree species; ii) Develop community forest fire prevention plans and programmes; iii) Strengthen community based forest management practice; (iv) Promotion of appropriate and efficient technologies to reduce use of wood in particular to this rural household firewood usage and v) Enhance the development of buffer zones and wildlife migratory routes.

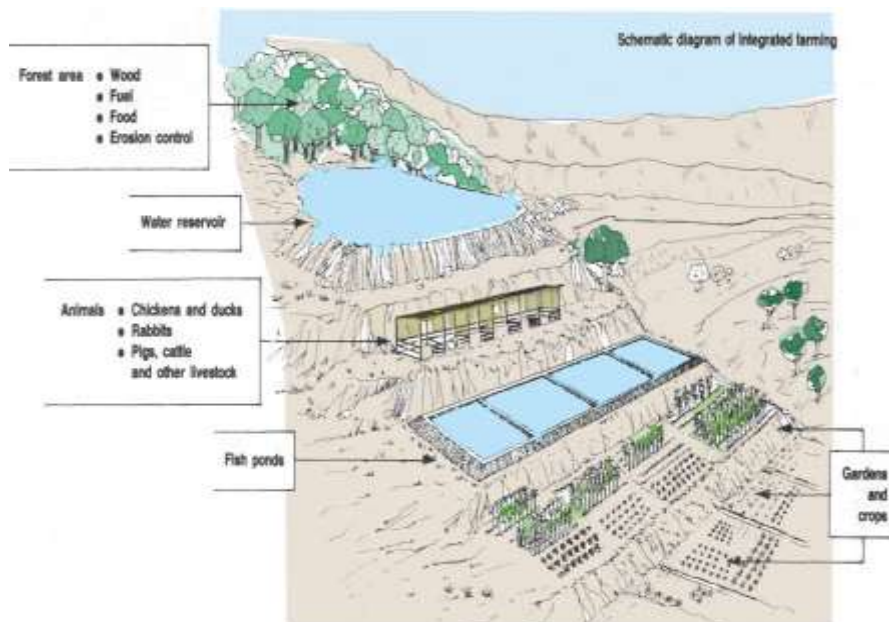
### 3.4 The SWAHAT Project Overview

An overview of the project was presented by the project leader Prof. Paul Kusolwa



In this workshop a PowerPoint presentation aimed at refreshing and increasing awareness of the stakeholders to the project SWAHAT. Workshop participants were highlighted on the following: the background of project emphasizing on the real problem facing various communities in the project sites. Furthermore, workshop participants were informed on the project component and implementation framework of project activities

#### 3.4.1 Project Background and the problem





Workshop participants were refreshed on the concept of the project, as per figure. 1 indicating a water catchment as will be enforced with vegetation cover up-stream of a dam; the dam is expected to provide water for livestock, excess water for establishment of fishponds, and provision of irrigation water for tree nursery and vegetable gardening by the community.

Workshop participants were further detailed on evidence of problems of climate change in semiarid areas where they are staying by showing evidence of the CC problems.



Evidence of community needs for water storage dams from borrow pits that eventually became a rescue to various community members saving for livestock water drinking points, domestic water for washing and other domestic activities, water for vegetable farming and source of water for building houses.



Large herds of livestock walking long distance to reach drinking points





Women and Children waiting to take turns to fetch water for domestic use



Broken embankment and spillway of one of the dams in the project site. Note the dryness of the dams in the dry season. The dams were completely dry by only 4 months after rainfall has stopped. Communities and livestock's has to travel long distance in search of water.



Poor governance of water catchment of dams, leading to high siltation and insufficient water storage for the community during dry spell. This situation, requiring intervention to increase adaptation of community to water scarcity.

### 3.4.2 Project Objectives

Participants were informed of the 5 main objectives:

- 1: Installation and rehabilitation of community water harvesting dams and facilities:
- 2: Develop and implement participatory afforestation program for locally adapted fruit and forest trees
- 3: Develop integrated climate resilient livelihoods diversification through improved technologies in agriculture
- 4: interventions for integrated management of emerging climate change related crops and livestock pests and diseases
- 5: Knowledge Management

#### 3.4.3 Project Outputs and Implementation

- Output 1.1: Six (6) water-harvesting dams constructed and rehabilitated and boreholes established for increased water availability.
- Activity 1.1.1: Land Survey, dam site mapping and land clearing of dam sites:
- Activity 1.1.2: Excavation of dams to water storage/capacity, re-installation of dykes and construction of spillways
- Activity 1.1.3: Installation of bore holes

#### Output 1.2 Improved Management and conservation of the dams' catchment areas

- Activity 1.2.1: Planting of forest trees in the catchment areas to protect water-harvesting dams
- Activity 1.2.2: Establish water user groups for governance mechanism for equitable water resource

#### Output 2.1: Six community fruits and forest trees nurseries established.

- Activity 2.1.1: Establishment and management of community nurseries
- Activity 2.1.2: Selection and collection of of the best adapted tree species for semi arid areas
- Activity 2.1.3: Optimization of propagation methods for each of the selected species under standard nursery establishment and management

#### Output 2.2: At least 100,000 locally adapted fruits and forest trees will be planted in local communities' farms and catchments

- Activity 2.2.1: Planting of forest trees and fruits in the catchments and degraded land
- Activity 2.2.2: Management, Monitoring and evaluation of growth and performance of planted trees
- Activity 2.2.3 Demonstration of making and sustainable use of fuel wood through energy saving cook stoves

#### Project Component 3: Develop integrated climate resilient livelihoods diversification through improved technologies in agriculture

- Output 3.1: 6 aquaculture model farms established.
- Activity 3.1.1: Excavations and establishment of model fish ponds
- Activity 3.1.2: Stocking of fingerlings and management of fish ponds
- Activity 3.1.3: Introduce water and nutrient reuse systems from fish to vegetables

**Output 3.2:** Six vegetable model farms established

- Activity 3.2.1: Establishment and management of vegetable crops;
- Activity 3.2.2: Design and establish irrigation systems for vegetable crops (overhead, furrow or drip irrigation);
- Activity 3.2.3: Develop vegetable nurseries and gardens.

**Output 3.3:** Establish water drinking points, pasture and fodder for livestock production

- Activity 3.3.1: Establishment of livestock water drinking points to reduce siltation and contamination;
- Activity 3.3.2: Establish model pasture farm for demonstration



Locally made Livestock drinking point with turbid water, this is a local initiatives for adaptation to water scarcity for livestock drinking points.



**Output 4.1:** Dip tanks for control of tickborne diseases constructed

- Activity 4.1.1: Site selection, excavation of pits and building dip tanks
- Activity 4.1.2: Formation of village committee for dip tank management

**Output 4.2:** Plant health clinics and surveillance systems established

- Activity 4.2.1: Establishing plant health clinics surveillance systems
- Activity 4.2.2: To establish insect traps based on abundant species in the location for early warning

### **Project Component 5: Knowledge Management**

**Output 5.1** Increased knowledge on water harvesting, safety and sustainable water management and catchment conservation

- Activity: 5.1.1 Conduct training workshops on safety and sustainable use of harvested water

**Output 5.2** Enhanced capacity of community members on establishment and management of fruits and forest trees

- **Activity 5.2.1** Farmers Groups training on nursery techniques, establishment and management
- **Activity 5.2.2** Capacity building on appropriate skills and knowledge on tree planting, management and income generation
- **Activity 5.2.3** Dissemination for wider capacity building to stakeholders
- **Activity 5.2.4:** Mainstreaming training and establishment of farmer schools

**Output 5.3** Enhanced capacity and skills on management of income generation

- 5.3.1 Training of farmers in the target communities on fish farming practices
- 5.3.2 Development of manuals and fliers on aquaculture and value addition and marketing
- 5.3.3 Training of farmers on value chain of different adapted commercially high value vegetable crops
- 5.3.4 Training on apiary and postharvest handling of vegetable crops
- 5.3.5 Training on improved livestock management for climate change adaptation

**Output 5.4** Increased capacity of semi arid rural communities in management of pests and diseases

- Activity 5.4.1 Formation and training of dip tank user groups and dip-tank attendants
- **Activity 5.4.2:** Participatory surveillance and scouting for identification of major insect pests
- **Activity 5.4.3** Participatory design diagnostic tools for pest and disease and implementation of management options /IPM technologies

### 3.5 Issues Raised from Questions and Answers session

<b>Question</b>	<b>Answers</b>
1. DED Nzega, requested for addition of 2 more dams	The budget and is limited to the selected dams only may be further request if justified need to be requested for funding from AF. This request was later on raised by almost every participant from the districts indication that is demand driven intervention.

2. More funding for Youth and women in the village can it be further supported as loan through SWAHAT?	The AF funded projects does not give loan support – AF coordinator Tanzania
3. Is there a possibility for New dams construction together with the current rehabilitation?	The Project has received limited funds for implementation of the proposed and selected dams for the moment. Land availability will also require further negotiation from the community landowners.
4. If Project design can be flexible will it be possible to accommodate borrow pits left over from railway construction in Bahi and Manyoni?	The budget seems fixed at the moment. However, it will be recommended to request for extra funding to support such intervention of upgrading the borrow pits into dams to serve the community as adaptation strategy for eater scarcity in the surrounding communities.
5. Is it possible to structure schedules of activities to be set for each district, that the plan looks too general and not specific to respective district	The project is designed in such a way that during implementation of a given activity in the each component it will be uniformly implemented almost ate the same time in all district with minimal modifications associated with community availability rain seasons or farming activities.
6. Requested that the Knowledge component, Trainings should start with SMS extension Officer first to receive the training.	The project is supposed to engage community members in a participatory training approach involving farmers and extension officers depending on appraised innovation.
7. Monitoring and evaluation was requested to be a regular process during implementation of the project activities	The Adaptation funds requires a mid-term review program for monitoring and evaluation ant the middle of the project in implementation and at the end of implementation
8. Is budget for project implementation allocated to each respective district?	The budget is allocated to respective activates in each project component as indicated in the presentation
9. Are there any studies done on the possible depth of bore holes in the project sites?	Currently not however in the semi arid locations the average depth is expected not to exceed 150m to reach water. Further survey is to be done at the survey phase.
10. How is Governance of the project and stake holders	NEMC is the overall implementing entity of the projects coordinating and

	managing funds for all the approved projects executed by executing institutions. It will be responsible for financial management and reporting of the projects in a quarterly basis. NEMC also is responsible for ensuring proper implementation of activities by the executing entity.
Participants requested for refreshing and updates of the numbers and sited of selected dams since stakeholders consultation	Participants were informed on the final selected dam sites as Ibugule and Mtitaa (Bahi district); Mkwese (Manyoni district), Nguriti (Igunga District), Ntobha and Utwigi ( Nzega District).

### 3.6 Plenary session

Participants were divided based on their locations where participants from Nzega and Igunga formed one group and those from Bahi and Manyoni formed the second group. The role of the group was to brainstorm and discussion on the timing of various projects interventions in their areas.

Feedback from the discussion

Location	Intervention	Suggested time for implementation
Nzega and Igunga	Dams	July to September
	Tree Nursery	September
	Tree Planting	September to October
	Integrated activities (veg gardens)	Second year after dams
	Dip tanks and drinking troughs	Any time between as planned by the project
Bahi and Manyoni	Dams	October through December
	Tree Nursery	January through February
	Tree Planting	April
	Integrated activities	May on wards
	Dip tanks and drinking troughs	December second year or third year

The workshop was closed at 16.00hr by remarks from Dr. Justus Nsenga by thanking all participants and wishing them a safe travel back to their respective destination. Looking forward to meet then during project execution as agreed in the schedules.





**Appendix 1. Program for the SWAHAT Project Launching at RAS- Conference Hall, Dodoma 13<sup>th</sup> October, 2021**

<b>Time</b>	<b>Event</b>	<b>Responsibility</b>
0900 - 0930	Arrival of participants and registration	Dr. Dino Andrew, Dr. Mirende Kichuki, Dr. Justus Nsenga
0930-0945	Welcoming remarks and self introduction	Dr. Dino Woisso
0945-1000	Remarks from the Coordinator of AF-Fund, and welcoming of the Director General of NEMC	Mr. Fredrick Mulinda
1000 - 1015	Remarks from the Director General of NEMC, and welcoming of the Guest of Honour	Eng. Dr. Samwel Mafwenga
1015 - 1035	Opening speech by the Guest of Honour, (Director of Sector Coordination, President's Office - Regional Administration and Local Government)	Guest of Honour
1035 - 1040	Vote of thanks	Mr. Kiomoni Kibanga (DED Nzega District)
1040-1100	Group photograph	All
1100 - 1130	Health Break	All
1130 - 1210	Project presentation	Prof. Paul Kusolwa



1210 1240	-	Questions and Comments	Participants and Facilitator
1240 1330	-	Group Discussions	Groups
1330 1430	-	Lunch Break	All
1430- 1530		Plenary session and Way Forward	Participants/Facilitator
1530 1600	-	Closing and Departure	Dr. Justus Nsenga

## Appendix 2 Work plan

# Workplan

Component	Activity	Year 1	Year 2	Year 3	Year 4
Component 1 Installation, rehabilitation and establishment of community water harvesting dams	Land Survey, dam site mapping and land clearing of dam sites:				
	Excavation of dams to water storage depth/capacity, re-installation of dykes and construction of spillway				
	Installation of bore holes and water supply canals for strategic interventions				
	Planting of forest trees in the catchment areas to protect water harvesting dams				
	Establish water user groups for governance mechanism for equitable water resource sharing				
	Establishment and management of community Nurseries				

Component 3: Develop integrated climate resilient livelihoods diversification for climate change	Excavations and establishment of model fish ponds				
	Stocking of fingerlings and management of fish ponds				
	Construction of water and nutrient recycling systems from fish to vegetable				
	Establishment and management of horticultural crops				
	Design and establish irrigation systems for horticulture crops				
	Develop vegetable nurseries, vegetable gardens and apiary units				
	Construction of livestock water drinking points and water delivery trenches				
	Establish model pasture paddocks for rotational grazing				

Component 4: Formulate and implement interventions for integrated management of emerging pests and diseases	Site selection, excavation of pits and building dip tanks				
	Formation of village committee for dip tank management				
	Establishing plant health clinics and surveillance systems in field crop production				
	To establish insect traps based on abundant species in the location for early warning				

Component	Activity	Year 1	Year 2	Year 3	Year 4
Component 5: Knowledge Management	Conduct training workshops on safety and sustainable use of harvested water				
	Farmers Groups training on nursery techniques, establishment and management				
	Capacity building to communities on tree planting and management skills and income generation				
	Dissemination for wider capacity building and knowledge dissemination				
	Mainstreaming training into various platforms and establishment of farmer schools				
	Training of farmers in the target communities on fish farming practices				
	Development of manuals and fliers on aquaculture and value addition and marketing				
	Training of farmers on value chain of different adapted commercially high value vegetable crops				
	Training on apiary and postharvest handling of vegetable crops				
	Training on modern livestock management for climate change adaptation				
	Participatory surveillance and scouting for identification of major insect pests and vectors				
	Formation and training of dip tank users and dip tank attendants				
	Participatory design diagnostic tools for pest and disease and implementation of management options /IPM technologies				

### Appendix 3 Speech from the Director General NEMC

**HOTUBA YA MKURUGENZI MKUU WA NEMC, MHA.DKT. SAMUEL G. MAFWENGA, ILIYOSOMWA KATIKA WARSHA YA UFUNGUZI WA MRADI WA UVUNAJI WA MAJI ILI KUKABILIANA NA MABADILIKO YA TABIA NCHI KATIKA NYANDA KAME, ILIYOFANYIKA KATIKA UKUMBI WA OFISI YA RAS JIJINI DODOMA, TAREHE 13 OKTOBA, 2021**

**Mgeni Rasmi, Katibu Mkuu, Wizara ya Tawala za Mikoa na Serikali za Mitaa Profesa Riziki Shemdoe,  
Wakurugenzi Watendaji wa Halmashauri za Wilaya (Bahi, Manyoni, Igunga, na Nzega),  
Wataalamu mbalimbali kutoka Halmashauri za Wilaya husika,  
Watafiti kutoka Chuo Kikuu cha Sokoine cha Kilimo (SUA),  
Ndugu Wana-Habari,  
Mabibi na Mabwana,  
Nawasalimu kwa jina la Jamhuri ya Muungano wa Tanzania.**

Kwa niaba ya Baraza la Taifa la Hifadhi na Usimamizi wa Mazingira (NEMC) napenda kuwakaribisha nyote mlioweza kufika katika warsha hii muhimu, ambayo hasa inaweka alama ya kuanza kwa mradi huu muhimu wa kuhimili mabadiliko ya tabianchi wilayani Bahi, Manyoni, Nzega na Igunga.

**Ndugu mgeni rasmi**, kwanza kabisa napenda kutoa shukrani zangu kwa waandaaji wa warsha hii kwa maandalizi na makaribisho mazuri, na pia niwashukuru washiriki kutoka kwenye Wizara, Idara na Taasisi za Serikali, Vyuho, Serikali za Mtaa, wanahabari pamoja na waalikwa wote. Ni dhahiri kwamba ni kwa jitihada zenu mradi huu umeweza kuwepo na hatimaye leo utazinduliwa rasmi.

**Ndugu Mgeni rasmi**, imekuwa ni safari ndefu tangu NEMC ilipopata ithibati ya kuwa Wakala wa Taifa wa Mfuko wa Kimataifa wa Kuhimili Mabadiliko ya Tabianchi (*National Implementing Entity of the Adaptation Fund*) mwishoni mwa mwaka 2017. Ithibati hiyo ni mojawapo ya fursa ambazo Taifa letu limepata ili kukidhi vigezo vya kupokea mgao wa fedha za kuhimili mabadiliko ya tabianchi zilizotengwa kwa ajili ya nchi zinazoendelea ambazo ni wanachama wa Mkataba wa Umoja wa Mtaifa wa Mabadiliko ya Tabianchi (*United Nations Framework Convention on Climate Change-UNFCCC*)

**Ndugu Mgeni Rasmi**, ni vema kuwafahamisha kwamba, pamoja na Tanzania kuwa na mgao wake wa fedha za kuhimili mabadiliko ya tabianchi, haiwezekani kuzipata fedha hizo bila kufanya kazi kubwa ya kuandika andiko la mradi linaloakisi hali ya tabianchi ya eneo husika kwa uthibitisho wa takwimu za kisayansi. Aidha, andiko hilo linatakiwa kukidhi vigezo na masharti ya mfuko wa *Adaptation Fund*.

Nichukue fursa hii kukipongeza Chuo Kikuu cha Sokoine kwa kazi kubwa ya kuandaa andiko la mradi huu lililokubalika kimataifa. Wakati wote zinapopatikana fedha za kutekeleza mradi, ifahamike kwamba nyuma yake kuna watu waliojitolea nguvu, muda na akili zao kubuni, kuandika, kufanya mapitio na marekebisho hadi kukamilisha andiko linalofaa kuidhinishwa.

**Ndugu Mgeni Rasmi**, mradi huu ni matunda ya Serikali ya Jamhuri ya Muungano wa Tanzania kuendeleza ushiriki wake na kutekeleza majukumu yake katika Mkataba wa Umoja wa Mataifa wa Mabadiliko ya Tabianchi pamoja na itifaki na mikataba mingine iliyo chini yake. Ushiriki huu ndio unaotupa fursa ya kupokea fedha moja kwa moja kutoka kwenye mfuko wa *Adaptation Fund* bila kuhitaji kupitia kwenye mashirika mengine ya nje. Hii ni kutokana na ukweli kwamba tayari tumejenga mfumo thabiti wa kitaasisi unaoaminika kimataifa hata kupata ithibati ya kupokea na kusimamia fedha hizi.

Pongezi za pekee ziende kwa Ofisi ya Makamu wa Rais (OMR) ambayo ni mratibu wa kitaifa wa masuala ya mabadiliko ya tabianchi kwa kutoa mwongozo wa kisera na kimkakati katika masuala haya. Aidha, ni OMR iliyoiteua NEMC kupitia mchakato wa kupata ithibati, na pia ni OMR ambayo huidhinisha maandiko ya miradi kabla hayajawasilishwa kwenye Bodi ya *Adaptation Fund* kwa mapitio na maamuzi.

**Ndugu Mgeni Rasmi**, napenda kuwakumbusha kwamba mradi huu unalenga kufanya shughuli zitakazochangia kuleta uhimili wa mabadiliko ya tabianchi katika wilaya za Bahi, Manyoni, Igunga, na Nzega, kama zilivyoainishwa katika andiko la mradi lililoidhinishwa. Hilo ndilo jukumu kubwa la Mfuko wa *Adaptation Fund* na ndiyo kaulimbiu yake—**kuwezesha nchi zinazoendelea kuhimili athari za**

***mabadiliko ya tabianchi, hususan kwa jamii zinazoathirika zaidi.*** Kwa sababu hiyo, NEMC kama wakala wa Mfuko, jukumu letu ni kusimamia na kuhakikisha kwamba mradi unatekeleza kazi hizo kwa ufanisi. Tunaamini kwamba watekelezaji wataendeleza ushirikiano waliouonesha tangu mwanzo ili kuleta manufaa kwa wakazi wa wilaya wanufaika na Taifa kwa ujumla.

**Ndugu mgeni Rasmi**, ni jambo la kujivunia kwamba Bahi, Manyoni, Igunga, na Nzega ni kati ya wilaya za mwanzo kabisa kunufaika na fedha hizi. Ifahamike kwamba fursa ya kupata fedha hizi ni ya nchi nzima na hivyo zingeweza kupelekwa sehemu nyingine zenye mahitaji ya kuhimili mabadiliko ya tabianchi. Hivyo, wilaya hizi nne zinapongezwa kwa kunufaika na mradi ambao andiko lake limekuwa mojawapo kati ya maandiko manne yaliyopita katika mchujo wa maandiko 106 yaliyowasilishwa NEMC. Hata hivyo, kuwa wa kwanza katika utekelezaji ni jambo linaloleta wajibu wa kuonesha mfano katika utekelezaji ili wanufaika watakaofuata waweze kujifunza. Si hivyo tu, bali pia utekelezaji wenye ufanisi utavutia hata wafadhili wengine kuweka fedha zaidi kwenye mfuko kwa ajili ya kuendeleza kazi zilizoanzishwa na mradi huu sambamba na kulipatia Taifa letu sifa nzuri katika jumuiya ya kimataifa.

**Ndugu mgeni rasmi**, nimefarijika sana kuona umepewa heshima hii leo kwa sababu mradi huu unakwenda kutekelezwa kwenye Halmashauri ambazo ziko chini ya Wizara yako. Uwepo wako. Hii inaonyesha ni jinsi kazi za mradi huu umezipa uzito unaostahili na kwetu hii ni dalili njema ya ushirikiano wa pamoja kuhakikisha kwamba changamoto za mabadiiliko ya tabianchi zinazowakabili watanzania zinatatuliwa.

**Ndugu mgeni rasmi**, nisiwe na maneno mengi sana kwa sababu ninajua waratibu wa mradi watatupitisha kwenye kazi za mradi na mpango kazi wake kwa ufasaha zaidi. Niahidi kwamba NEMC tutaendelea kutoa ushirikiano na msaada wowote utakaohitajika kusudi mradi huu uweze kutekelezeka na kukamilika kwa wakati huku mafanikio yake yakionekana na kudumu kwa faida ya vizazi vya sasa na vijavyo.

Baada ya kusema hayo nawashukuru tena waandaaji wa warsha hii kwa kunipa nafasi ya kusema haya maneno ya utangulizi. Nawatakia warsha njema na utekelezaji mzuri wa mradi.

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13<sup>th</sup> October 2021

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