

# Proceedings

**1<sup>st</sup> Regional Forum for Horn of Africa**

**on**

**“African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa”**

**1<sup>st</sup> to 3<sup>rd</sup> February 2017**

**Nairobi, Kenya**



**April 2017**



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Group photograph of delegates and invited guests attending the Regional Forum

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## Table of Contents

Acknowledgements.....	iii
List of Abbreviations and Acronyms .....	vi
Executive Summary .....	<b>Error! Bookmark not defined.</b>
1.0 Introduction.....	1
2.0 Official Speeches and Remarks .....	3
2.1 Opening Speeches and Remarks .....	3
2.2 Closing Remarks .....	11
3.0 Papers Presented .....	13
3.1 Strategies and opportunities for Combating Desertification in Horn of Africa: UNCCD Experiences in Kenya by NFP Kenya.....	13
3.2 African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa .....	16
3.3 Outline of Capacity Development Project for Sustainable Forest Management in Kenya (CADEP-SFM) .....	22
3.4 Draft Terms of Reference .....	25
3.5 A Tool for Collecting Good Practices for Combating Desertification in Horn of Africa.....	29
3.6 CADEP-SFM Knowledge Management System .....	31
3.7 3S Initiative Sustainability, Security and Stability in Africa .....	33
4.0 Country Reports .....	37
4.1 Combating Desertification to Strengthen Resilience to Climate Change in Djibouti.....	37
4.2 Eritrea’s Experience in Combating Drought, Land Degradation and Desertification and its Strategies to adapt and mitigate Climate Change .....	42
4.3 Experiences to Restore Degraded Landscape of Ethiopia .....	54
4.4 Combating Desertification in Somalia.....	58
4.5 Desertification and Current Status of Woodland Resources in South Sudan .....	61
4.6 Comments and observations on country reports .....	64
5.0 Donors Perspectives.....	65
5.1 Combating Desertification and Building Resilience in Sahel and the Horn of Africa.....	65
5.2 Combating Desertification: Global Environment Facility Approach and Programmes.....	71
5.3 Opportunities for Countries in the Horn of Africa to Create Possible Linkage with Related Initiative on Combating Desertification.....	74
6.0 Field Visits .....	76
6.1 Overview of On-farm Field Visits, Makueni County, Kenya.....	76
6.2 On-farm Field Visit at Makueni County .....	78
6.3 Visit to Mr. Jonathan Kituku Munyala’s Farm .....	78
6.4 Visit to Mr. Jeremiah Ngaya’s Farm.....	82
6.5 Comments and lessons learnt by delegates from the field visit .....	84
7.0 Tabulated Action Plans .....	85
7.1 Introduction.....	85
7.2 Action plan for Djibouti.....	86
7.3 Action plans Eritrea .....	87
7.4 Action plan for Ethiopia.....	88
7.5 Action plan for Kenya.....	89
7.6 Action plan for Somalia .....	90
7.7 Action Plan for South Sudan.....	91
7.8 Action Plan for Sudan.....	92
8.0 Discussions and Way forward.....	93
8.1 Panel Discussions Output.....	93
8.2 Interactive Discussion on Opportunities for the Horn of Africa to Combat Desertification .....	95
8.3 Commitments and Proposed Way forward .....	96

**List of Annexes**

Annex 1: List of delegates to the 1<sup>st</sup> Regional Forum for the Horn of Africa.

Annex 2: Country Report Format.

Annex 3: Statement for TICAD VI Side Event.

Annex 4: Programme for 1<sup>st</sup> Regional Forum for the Horn of Africa.

Annex 5: Scanned Confirmation of Attendance List.

## List of Abbreviations and Acronyms

3S	Initiative Sustainability, Security and Stability
AAD	Action Against Desertification
ACP	Africa, Caribbean and Pacific
AfDB	Africa Development Bank
AFR	African Forest Land Restoration
ASALS	Arid and Semi-Arid Lands
AU	African Union
CADEP - SFM	Capacity Development Project for Sustainable Forest Management
CBOs	Community Based Organization
CBD	Convention on Biological Diversity
CBM	Capacity Building Marketplace
CG	County Government
CIG	Common Interest Group
CILSS	Permanent Interstates Committee for Drought in the Sahel
CSOs	Civil Society Organizations
COP	Conference of Parties
DNA	Designated National Authority
DLDD	Desertification, Land Degradation and Drought
ECOWAS	Economic Community of West African States
EoJ	Embassy of Japan
EU	European Union
FAO	Food Agricultural Organization of the United Nations
FFS	Farmer Field School
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGW	Great Green Wall
GIZ	German Agency for International Cooperation
GTP	Growth and Transformation Plan
GoJ	Government of Japan
GoK	Government of Kenya
ha	Hectare
IGAD	Inter-governmental Authority on Development
IGAs	Income Generating Activities
ITK	Indigenous Technical Knowledge
JICA	Japan International Cooperation Agency
KEFRI	Kenya Forestry Research Institute
KFS	Kenya Forest Service
LDN	Land Degradation Neutrality
LPG	Liquid Petroleum Gas
M&E	Monitoring and Evaluation
MENR	Ministry of Environment and Natural Resources
MEA	Multilateral Environmental Agreements
MoU	Memorandum of Understanding
NAPAs	National Adaptation Plan of Actions
NAPs	National Action Programmes
NEMA	National Environment Management Authority
NEPAD	New Partnership for Africa's Development
NFMS	National Forest Monitoring System
NFP	National Forest Programme

NGO	Non-Governmental Organization
NTFPs	Non -Timber Forest Products
ODA	Official Development Assistance
PFM	Participatory Forest Management
PNRM	Participatory Natural Resource Management
PS	Principal Secretary
REDD+	Reducing Emissions from Deforestation and Land Degradation
SLM	Sustainable Land Management
SDGs	Sustainable Development Goals
TCP	Technical Corporation Programme
TCTP	Third Country Training Programme
TICAD VI	Sixth Tokyo International Conference on African Development
ToR	Terms of Reference
TSP	Target Setting Programme
TV	Television
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nation Development Programme
UNFCCC	United Nation Framework Convention on Climate Change
WB	World Bank
WOCAT	World Overview of Conservation Approaches and Technologies

## **Executive Summary**

### **Background**

The African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa has been developed against the background that; the Sahel and Horn of Africa region face mounting environmental deterioration and that much of the region is dry and highly degraded, and suffers from frequent and severe droughts. It has also been recognized that climate change is likely to accelerate desertification within the region. Therefore, addressing desertification and strengthening resilience to climate change has been identified as the key strategy to making nations of the region achieve sustainable development.

The key outputs of the African Initiative are; building a network, knowledge sharing and improving access to finance. Knowledge and experiences of good natural resource practices from participating Horn of Africa countries will be shared through internet and non-internet based systems, and during various scheduled regional events, which include; fora and meetings, technical workshops and writeshops, seminars, follow-up visits and conference.

The Ministry of Environment and Natural Resources (MENR)-Kenya, and Kenya Forestry Research Institute (KEFRI) in partnership with Japanese International Development Agency (JICA) organized the 1<sup>st</sup> Regional Forum, in Muguga, Kenya from 1<sup>st</sup> – 3<sup>rd</sup> February 2017 under the auspices of the Capacity Development Project for Sustainable Forest Management in Kenya (CADEP-SFM). The Forum was a follow-up of two major events that took place in Kenya in 2016, namely: The Preparatory Meeting for the Sixth Tokyo International Conference for African Development (TICAD VI) Side Event of African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa, and the Launch of the African Initiative in Nairobi during TICAD VI Summit.

### **Objectives of the Forum**

The purpose of the Forum was to:

1. Provide a forum for Horn of Africa countries to meet and build consensus on issues pertaining to combating desertification in the region.
2. Create awareness and ensure a common understanding of the agenda of the African Initiative.
3. Provided member countries from Horn of Africa with an opportunity to collectively propose, discuss and develop actions for implementation, monitoring, evaluation and reporting mechanism of the African Initiative.
4. Familiarize, discuss and adopt tools for collecting and sharing good practices for combating desertification in Horn of Africa.
5. Share experiences, challenges, and opportunities in combating desertification in Horn of Africa.
6. Establish robust networks for lobbying and raising awareness on the agenda of the African Initiative; seeking political support; and combating desertification in the Horn of Africa.
7. Discuss possible linkage and harmonization with other related initiatives on combating desertification.

### **Expected Outputs of the Forum**

1. Awareness and common understanding of the African Initiative.
2. Consensus on implementation strategy, monitoring, evaluation, as well as reporting mechanisms for Africa Initiative.
3. Adoption of Terms of Reference (ToR) for implementation of African Initiative.
4. Share main experiences, challenges and opportunities in combating desertification in Horn of Africa.
5. Development of a roadmap and commitment to implementation of African Initiative.



6. Establishment of networks for continued sharing of information on best practices for combating desertification within and among Horn of Africa countries.

### **Forum Participation and Delivery**

The Forum was opened by the Minister of Environment and Natural Resources, Kenya, Prof. Judi Wakhungu. The Embassy of Japan in Kenya, officers from JICA Headquarters Tokyo and JICA–Kenya Office participated in the Forum. Delegates from seven Horn of Africa countries namely; Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, and Sudan participated in the Forum. Other delegates included: development partners and international organizations from United Nations Conference on Combating Desertification (UNCCD), Food and Agricultural Organization of the United Nations (FAO), Global Environment Facility (GEF), United Nations Development Programme (UNDP) and World Agroforestry Centre (ICRAF). In addition the Sahel Region was represented by a delegate from Senegal.

During the Forum, in-house paper presentations and deliberations, group work, panel discussions, presentation of country reports by delegates, country action plans development as well as field excursions to two farmers in Makueni County were adapted as the main mode of Forum delivery. The field visit was an integral part of the Forum and was meant to give the delegates an opportunity to see, learn, cross-examine, and appreciate investments in combating desertification and sustainable forestry management. Delegates from the seven Horn of Africa countries shared main achievements, challenges and opportunities for combating desertification in their countries, discussed draft Terms of Reference (ToR) and tools for collecting good practices. Development partners shared opportunities available for countries in the Horn of Africa to access finances and to create possible linkages with related Initiatives on combating desertification in Sahel and the Horn of Africa.

### **Main Challenges, Opportunities and Recommendations/Resolutions identified and Lessons Learnt during the Forum**

The following were the main points arising from the Forum:

#### ***Challenges***

- Identifying and halting root causes of land degradation to enable development of land restoration strategies.
- Managing conflict over natural resources
- Social insecurity and migration of populations arising from desertification

#### ***Opportunities***

- Availability of good practices for combating desertification
- International support: There are opportunities for funding from international communities, provided countries develop bankable proposals that can address issues of desertification.
- Regional planning and integration.
- Education awareness on protection of natural resources.
- Piloting to gain farmers confidence for out-scaling as technologies being promoted should be seen to be working.
- Joint projects with neighbouring countries to combat land degradation and desertification.

#### ***Lessons Learnt***

- Countries within Horn of Africa have different climatic, social and political conditions. Due to these differences, all good practices for combating desertification in various countries may not be wholly adoptable in all countries.

- The Horn of Africa countries have common problems of desertification and land degradation. However, each country has different strategies to address these challenges. Countries can learn from each other and adapt technologies and practices that are relevant and applicable to their localities.
- Charcoal is a common commodity in Africa, and the industry is driven by the local or external market.
- There is lack of proper land use planning to cater for technologies such as water harvesting, development of non-timber forest products as well as tourism and eco-tourism.
- There is an opportunity to combat desertification in the drylands through use of innovative technologies such as on-farm growing of drought tolerant indigenous trees like *Melia volkensii* and *Acacia* species.
- For success, farmers need to have a strategic plan that encompasses:
  - i. Short-term plan: growing of drought tolerant crops e.g legumes and cereals.
  - ii. Mid-term plan: growing of perennial crops e.g mangoes and livestock keeping.
  - iii. Long-term: tree growing.
- Farmers in arid areas can adapt to changing climate through use of local solutions such as indigenous pasture growing
- Research is key to promotion of good practices. For instance, KEFRI has carried out research and provided information on how to collect and process local germplasm of high quality, as well as how to establish and manage *Melia* tree species.
- It is important to monitor what happens beyond documentation of the good practices, preferably through monitoring and evaluation (M&E).
- Farmers should consider harvesting more rain water from runoff to increase available water for irrigating crops rather than entirely relying on rain.
- Integrated farming ensures food security and income generation for the farmer.
- Farmers exposed to land management options provide an important human resource for information dissemination

### ***Recommendations/Resolutions***

- Terms of Reference (ToRs) were recommended and participating countries given time to familiarize, critically analyze and consult widely within their respective countries and provide comments if any before finalization.
- The ToRs shall be reviewed as need arises to take into account any emerging issues.
- The tool for collecting good practices was adopted.
- There is need for harmonized tools for data collection with other tools already in use, such as the WOCAT good practice collection tool.
- Indigenous technical knowledge (ITK) and conflict management strategies are key elements in combating desertification and such knowledge should be considered for collection as good practices.
- There is need to form common interest working groups based on countries with similar ecological, political and economic conditions and challenges, who can work towards adopting good practices relevant to their countries.
- To promote networking, websites should be developed and hosted by partner organizations, and tools for interaction such as wikis, blogs availed where the members can interact
- Repository of information should not only be in the website as many local communities who are the end users of good practices may not have access to the same. Simple dissemination materials such as manuals, leaflets and guidelines should therefore be developed for grass-root usage.
- There is need for participating countries to provide additional support to the African Initiative
- The Initiative's activities should be country-driven.
- Development partners such as JICA and UNCCD are committed to collecting good practices and upgrading the KEFRI website through which this information will be shared.

- Delegates should make use of the UNCCD capacity building market place.
- Countries should initiate and prepare concepts and proposals to tap on the funding opportunities presented during the Forum. Therefore, it is incumbent upon each individual country to initiate any engagement with the donors.
- Action plans developed by the participating countries showed commitment to the Initiative. The action plans should be improved to form a basis for projects for JICA and other development partners to support.
- It was recognized that no single organization can work alone for sustainable land management. There is need to build synergies across all the sectors in allied to natural resources that include; forestry, land, water and agriculture.
- There is need to monitor the impacts of scaling up the good practices, to establish if the African Initiative objective of combating desertification and making nations and communities resilient to climate change has been achieved.

### **Conclusions**

- The Initiative provides a unique platform where participating countries can now share knowledge. However, since climate change is eminent, there is need for the Horn of Africa countries and development partners to urgently avert desertification by availing financial and human resources to achieve land degradation neutrality.
- For the African Initiative to succeed, there is need to learn from, and collaborate with other similar Initiatives in Africa. This can be achieved through links to UNCCD website, holding joint meetings with other partners and forming networks. However, members need to have an enabling environment to maintain networks.
- The Initiative will contribute towards improving the lives of vulnerable populations, sustainable development, and peace and stability in the African region. The actions of participating countries will determine how fast this can be achieved.
- From the country presentations, it was clear that there are good practices from the various countries which can be shared by other countries.
- Since development partners such FAO, GEF, UNCCD indicated their willingness to support the Horn of Africa countries, participating countries should approach these partners with relevant proposals.

### **Commitments and Proposed Way Forward**

1. Each country was expected to:
  - a) Hold briefing to policy and major stakeholders.
  - b) Refine the Country Action Plans.
  - c) Initiate resource mobilization activities for implementation of the Country workplan for African Initiative.
  - d) Nominate and submit names of three (3) Technical persons to participate in the Technical Meeting to be held in in Kenya in September 2017.

## **1.0 Introduction**

The Government of Kenya (GoK), through the Ministry of Environment and Natural Resources (MENR) and the Kenya Forestry Research Institute (KEFRI) have collaborated on various projects with the Government of Japan (GoJ) through Japan International Cooperation Agency (JICA) for the last 30 years, since 1986, in development of forestry in Kenya. This collaboration has mainly concentrated on research and development of forestry in the drylands of Kenya, and capacity development by sharing of information, technologies and good practices with other sub-Saharan Africa countries through the Third Country Training Programme (TCTP). Through these projects, KEFRI has developed capacity and gained experience in regional cooperation, networking and sharing of information.

Currently, a Technical Cooperation Project between GoK and GoJ through JICA entitled “Capacity Development for Sustainable Forest Management (CADEP-SFM) in the Republic of Kenya” has been developed for implementation from 2016 to 2021. The overall goal of this Project is to ensure sustainable forest management is promoted in Kenya towards the national forest cover target of 10%, as envisaged in Kenya’s development blue print, Vision 2030. This goal will be achieved through five outputs, namely: Policy Support; Pilot Implementation through County Government and Private Sector; REDD+ Readiness; Tree Breeding; and Regional Cooperation. The main aim of the Regional Cooperation component is to enhance capacity for promoting knowledge sharing and transfer of technologies for strengthening resilience to climate change within Sub-Saharan Africa.

Activities of the Regional Cooperation component will be integrated and harmonized with those of the “African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa”, thereafter referred to as “African Initiative”. The African Initiative has been developed against the background that; the Sahel and Horn of Africa regions face mounting development challenges and environmental deterioration, and that much of these regions are dry, highly degraded, and suffer from frequent and severe droughts mainly as a result of climate change. It has also been recognized that climate change is likely to accelerate desertification within the Sahel and Horn of Africa. Therefore, collectively combating desertification and strengthening resilience to climate change is the key to making nations of these regions achieve sustainable development.

Acknowledging that drought and desertification have not been given sufficient international attention despite their importance and urgency, the MENR, KEFRI and JICA organized a Preparatory Meeting to the launch of the African Initiative in July 2016 in Nairobi, Kenya. The Meeting discussed how countries in Sahel and Horn of Africa, and development partners can accelerate their efforts to address these challenges and building consensus on the African Initiative. The African Initiative was thereafter launched in August 2016 during the Sixth Tokyo International Conference on African Development (TICAD VI) Side Event held in Nairobi, Kenya. During the launch, a Statement was signed by the MENR, JICA, Government of Senegal and United Nations Convention to Combat Desertification (UNCCD) to accelerate efforts to combat desertification and to strengthen nations and communities’ resilience to climate change in the Sahel and Horn of Africa.

### **Objective and Structure of the African Initiative**

The main objective of the African Initiative is to contribute to making nations and communities resilient to climate change by promoting measures for combating desertification in the Sahel and Horn of Africa.

The MENR-Kenya will be the Regional Hub for Horn of Africa and is therefore responsible for coordinating activities of the African Initiative in the Horn of Africa. JICA Headquarters will be the Secretariat and will coordinate the Initiative in the Sahel and Horn of Africa.

### **Purpose of the Regional Forum for Horn of Africa**

A key strategy to fulfilling the objective of African Initiative is to share knowledge and experiences within and among Horn of Africa countries on priority areas that include: combating desertification; protecting, restoring and promoting sustainable use of terrestrial ecosystems; sustainably managing forests; halting and reversing land degradation and biodiversity loss; adaption and mitigation of climate change; improving food security; and minimizing water and energy deficits.

The key outputs of the Initiative are; building a network, knowledge sharing and improving access to finance. Knowledge and experiences of good natural resource practices from participating Horn of Africa countries will be shared through internet and non-internet based systems, and during various scheduled regional events, which include; forum and meetings, technical workshops, writeshops, seminars, follow-up visits and a conference proposed to be held in the final project year.

The MENR-Kenya and KEFRI in partnership with JICA organized a Regional Meeting under the African Initiative, referred to as the “Regional Forum”, in Nairobi, Kenya from 1<sup>st</sup> – 3<sup>rd</sup> February 2017. The purpose of the Forum was to:

1. Provide a forum for Horn of Africa countries to meet and build consensus on issues pertaining to combating desertification in the region.
2. Create awareness and ensure a common understanding of the agenda of the African Initiative.
3. Provided member countries from Horn of Africa with an opportunity to collectively propose, discuss and develop actions for implementation, monitoring, evaluation and reporting mechanism of the African Initiative.
4. Familiarize, discuss and adopt tools for collecting and sharing good practices for combating desertification in Horn of Africa.
5. Share experiences, challenges, and opportunities in combating desertification in Horn of Africa.
6. Establish robust networks for lobbying and raising awareness on the agenda of the African Initiative; seeking political support; and combating desertification in the Horn of Africa.
7. Discuss possible linkage and harmonization with other related initiatives on combating desertification.

### **Expected Outputs of Regional Forum for Horn of Africa**

1. Awareness and common understanding of the African Initiative.
2. Consensus on implementation strategy, monitoring, evaluation, as well as reporting mechanisms for Africa Initiative.
3. Adoption of Terms of Reference (ToR) for implementation of African Initiative.
4. Share main experiences, challenges and opportunities in combating desertification in Horn of Africa.
5. Development of a roadmap and commitment to implementation of African Initiative.
6. Establishment of networks for continued sharing of information on best practices for combating desertification within and among Horn of Africa countries.

### **Countries Participating in the African Initiative and 1<sup>st</sup> Regional Forum for Horn of Africa**

Seven (7) Horn of Africa countries namely: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, and Sudan attended the Regional Forum and will participate in the African Initiative. The list of the delegates is provided as Annex 1.

### **Country Reports**

During the Regional Forum, invited African Initiative Focal Points shared main achievements, challenges and opportunities in combating desertification as per provided format (Annex 2).

## **2.0 Official Speeches and Remarks**

### **2.1 Opening Speeches and Remarks**

#### **Opening Remarks by Director KEFRI, Dr. B.E.N. Chikamai**

Kenya Forestry Research Institute (KEFRI) is a State corporation in the Ministry of Environment and Natural Resources, in the State Department of Natural Resources. The Institute was established in 1986 as a centre of excellence in forestry research for development.

KEFRI has three areas of operation or mandates, namely:

1. Conduct research in forestry and allied natural resources. The Institute undertakes research so as to generate technologies and information for the sustainable management of forestry.
2. Disseminate research findings. As we are generating the technologies, we ensure that stakeholders have access to information, which is availed through various dissemination pathways.
3. Establish partnerships and cooperate with other research organizations and institutions of higher learning in joint research and training. We have various institutions, organizations, universities and partners we collaborate with in matters of joint research and training. For instance it is through such partnership that you are here today, attending this Forum.

KEFRI has benefited immensely from the cordial relationship between the Governments of Kenya and Japan, a relationship that has been in existence since the inception of the Institute. KEFRI has been in existence for the last 30 years and this year we are celebrating 30 years of excellence as a State corporation. The Institute has benefited from the Government of Japan at two levels namely; through Grant Aid and Technical Cooperation Programme (TCP). Grant Aid availed to KEFRI was used to; put up the Institutes headquarters here at Muguga, and provide facilities at Muguga and Kitui Regional Centres. The Grant Aid arrangement was implemented between 1985 and 1994 for which we greatly appreciate. We have also received Grant Aid support in terms of field and laboratory equipment, which has made this organization to be a centre of excellence in research in the region. We appreciate this particular support through the Embassy of Japan.

Under the Technical Cooperation Programme (TCP) arrangement, we have been able to participate in five collaborations. The first Project under the TCP was on Social Forestry Development in 1987 to 1997, a 10-year collaboration. During this Phase, we screened a number of tree species and subsequently identified about 3 or 4 species which have become key indigenous species for afforestation and reforestation in the drylands. During the screening aspects of propagation and establishment were also researched on to promote technology developed. The Project, therefore, clearly identified important tree species that are suitable for the drylands.

This was followed by another project called Social Forestry Extension Model Project (SOFEM) from 1998 to 2002. Through this Project we were able to come up with an extension methodology known as Farmer- to-Farmer extension, which is still quite useful. Through this methodology, farmers are able to pass technologies they have learnt from us to other farmers in an efficient and effective way.

The SOFEM Project was followed by the Intensified Social Forestry Project (ISFP) from 2002 to 2009. This Project was largely implemented by Kenya Forest Service (KFS), which came up with the Forest Farmer Field Schools (FFFS) extension methodology. This has become an effective methodology for transferring technologies to farmers and among farmers.

Currently, we are implementing a project on Drought Tolerant Species for Adaptation to Climate Change, where JICA is working with our team from KEFRI. Through this Project, we have made significant gains in breeding species, which are tolerant to drought and climate change, which is here with us. We are trying to develop species which can be able to survive in this changing climate scenario so that we can be able to overcome the challenges brought by the changes.

As part of our mandate to disseminate information, we are also focusing on availing technologies, through Social Forestry Training. I want to appreciate that again we have collaborated with the Government of Japan through JICA by coming up with a Regional Training Programme on Social Forestry Training that brings together member countries of Eastern, Central and Southern Africa. We have been running this programme since 1995. The first and second Phase of this programme entitled; Promotion of Social Forestry in Africa was implemented for 10 years from 1995 to 2004. This was followed by Enhancing Adoption of Social Forestry in Africa from 2005-2008, t Mitigating Climate Change in Africa through Social Forestry from 2009-2013 and currently, we are implementing Adaptation to Climate Change through Social Forestry from 2014-2018.

In addition to the Social Forestry Training programme and the project on breeding for drought tolerant tree species, we are now implementing a Technical Cooperation Project (TCP) Project, entitled Capacity Development Project for Sustainable Forest Management (CADEP-SFM). The Project is at its initial stage with project activities having commenced in mid - 2016. This is where we have the teams from JICA, KEFRI, the Ministry of Environment and Natural Resources and the Kenya Forest Service (KFS) working together. It is within the framework of this particular Project that you are here now. The project's main goal is to come up with strategies for sharing knowledge, exchange of best practices and learning from one another. This particular Forum is supported under Component five as a Regional Cooperation activity within the partnership of the Government of Kenya, Japan and JICA.

Thank you.

**Speech by JICA's Chief Representative Ms. Keiko Sano during the Opening Ceremony of the Horn of Africa Regional Forum on African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa, Held at KEFRI Headquarters Muguga on 1<sup>st</sup> February, 2017**

Honorable Cabinet Secretary, Ministry of Environment and Natural Resources, Prof. Judi Wakhungu,  
Deputy Ambassador, Embassy of Japan, Mr. Yoshihiro Katayama,  
Principal Secretary, State Department for Natural Resources, Ministry of Environment and Natural Resources, Dr. Margaret Mwakima,  
Conservation Secretary, Ministry of Environment and Natural Resources, Mr. Gideon Gathaara,  
Director, Multilateral Environmental Agreements, Ministry of Environment and Natural Resources, Mr. Richard Mwendandu,  
Director, Kenya Forestry Research Institute, Dr. Ben Chikamai,  
Development Partners Representatives Present,  
Distinguished Guests,  
Ladies and Gentlemen,

Good morning.

It is my great pleasure to speak before you during this very important forum. This is the first Regional Forum in the Horn of Africa for the African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa.

For organizing this Forum, I would like to thank the Chief Advisor Mr. Takano and his team of the Capacity Development Project for Sustainable Forest Management (CADEP-SFM) in the Republic of Kenya. In particular, I express my appreciation to Ms. Honjo and Dr. Ebby Chagala-Odera for their relentless efforts to ensure its success.

Distinguished guests,

A brief paper on this Forum explained everything about its background, including the explanation of the African Initiative, the core of the Forum. Therefore, I do not want to repeat it all, but allow me to put emphasis on the three key outputs of the Initiative. These are; Building a network, knowledge sharing, and improving access to finance.

Today, I would like to raise three points on how to drive this Initiative by taking the opportunity of this Forum, in order for us to contribute to making nations and communities resilient to climate change. First, I would like to stress the importance of adoption of the Terms of Reference (ToR) and Tools for Collecting Good Practices. These have been developed under CADEP-SFM. The ToR clearly identifies the challenges related to desertification and gives examples of the areas of good practices such as land rehabilitation, reforestation, afforestation, and establishment of woodlots, among others.

In the Tools for Collecting Good Practices, a detailed criteria for identification of good practice is listed. In addition to that, the responsibilities and roles of participating countries of the Initiative are defined in the ToR. Therefore, I believe that the adoption of the Terms of Reference (ToR) and Tools for Collecting Good Practices during this Forum will be a major step towards practical implementation of activities under the Initiative. These guiding and reference documents will not just provide direction for participating countries but breathe life to the Initiative.

My second point is to promote actual knowledge sharing. After good practice has been identified, collected and documented, the next step is to share it. Let me introduce one excellent example of good practice today, the Project on Development of Drought Tolerant Trees for Adaptation to Climate Change



in Drylands of Kenya, implemented by the Kenya Forestry Research Institute (KEFRI) with support from JICA.

As more drought resistant tree species are needed, the Project is breeding improved *Melia volkensii* and *Acacia tortilis* in order to enhance their adaptability to the effects of climate change. I have no doubt that other participating countries of the Initiative will be very keen to understand the technologies and actual activities of this project for applying in the homelands.

For promoting actual knowledge sharing, thanks to CADEP-SFM, several meetings at both policy and technical levels will be held for sharing knowledge and good practices. I hope all these interactions will provide very good opportunities for participating countries to implement the ToR of the Initiative.

Finally, as my third point, I would like to emphasize the importance of monitoring the progress of activities by participating countries from now on. I trust that after sharing the country reports by participating countries during this Forum, the timely submission of progress reports every six months is quite necessary to maintain the momentum towards achievement of the Initiative.

Participating countries are expected to form groups to address their common interests. This will provide an ideal platform for sharing the reports and achievements made. I am sure that this kind of continuous communication will sustain enthusiasm in the Initiative and keep the fire burning.

Distinguished guests,

To conclude my remarks, I would like to share my confidence in this Initiative - African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa. The Initiative will truly pave way towards improving the lives of vulnerable populations, sustainable development, and peace and stability in the region. The actions of participating countries will determine how fast and how far we will move.

On JICA's part, as a booster for the implementation of the Initiative, I assure you of our strong support for active interactions amongst the countries. Let us maintain a common vision and remain united in resolve. Let us forge together forward to fight desertification and strengthen resilience against climate change in the Sahel and Horn of Africa.

Thank you.

**Opening Remarks by Dr. Margaret Mwakima, Principal Secretary Ministry of Environment and Natural Resources, State Department of Natural Resources, during the Official Opening of the 1<sup>st</sup> Regional Forum on African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa, Held at KEFRI Headquarters, Muguga, on Wednesday, 1<sup>st</sup> February 2017.**

The Cabinet Secretary MENR, Prof. Judi Wakhungu,  
Development Partners,  
Director KEFRI, Dr. Ben Chikamai,  
Director KFS, Emilio Mugo,  
Distinguished Delegates,  
All protocols observed,  
Ladies and Gentlemen,

As I warm up to welcoming the Cabinet Secretary for Ministry of Environment and Natural Resources to grace this occasion and to officially open the Regional Forum, may I add my voice in warmly welcoming you to Kenya.

Within the same token, you are aware that environment and development are interdependent. Any phenomenon or actions which would contribute to impacting negatively on the balance between the two variables would constitute a threat to our own survival. Evidently, climate change is real. Therefore, combating desertification to strengthen resilience to climate change is key and inevitable in the Sahel and Horn of Africa.

Sustaining this process necessitates embracing and collectively promoting strategic and practical measures for combating desertification. The African Initiative is focused on this realization, hence this Forum is a step towards achieving this goal.

Ladies and Gentlemen,

This Forum draws delegates from seven (7) countries in the Horn of Africa, namely; Djibouti, Eritrea, Ethiopia, Somali, South Sudan, Sudan and Kenya. The Forum is also enriched by the participation of delegates from Japan which is our international development partner and the Sahel Region who are involved in natural resources management for the benefit of our communities and environment. We appreciate JICA's timely vision and consistency in supporting environment and development initiatives within the dryland ecosystems and particularly towards the African Initiative.

The deliberations by this forum will be embraced in a 3-day programme involving in-house and field sessions whose resolutions are expected to positively drive the process of combating desertification in our region.

With those few remarks, it is now my honor to welcome the Cabinet Secretary, Ministry of Environment and Natural Resources Prof. Judi Wakhungu to grace the occasion by officially opening this Regional Forum.

Thank you.

**Speech by Prof. Judi Wakhungu, EGH, Cabinet Secretary Ministry of Environment and Natural Resources, during the Official Opening of the Regional Forum on African Initiative, held at KEFRI Headquarters, Muguga, on Wednesday, 1<sup>st</sup> February 2017.**

The Ambassador of Japan to Kenya,  
Chief Representative JICA Kenya,  
Representative from JICA Office in Japan,  
Development Partners,  
Director, Kenya Forest Service,  
Director, KEFRI,  
Distinguished Delegates,  
Ladies and Gentlemen,

I am pleased to join you here today to officiate at the opening of this Regional Forum, which has brought together delegates from the Horn of Africa, the Sahel region and Japan. Allow me to take this opportunity, on behalf of the Government of Kenya, the Ministry of Environment and Natural Resources, and on my own behalf, to warmly welcome all the delegates to this meeting, and to Kenya. This Forum is indeed, an important event as it will provide the delegates with a unique chance to discuss opportunities for making countries and communities within the Horn of Africa and the Sahel more resilient to climate change.

Ladies and Gentlemen, I note with appreciation that this Forum comes as a follow-up of two major events that took place in Kenya mid last year, and these are: First, The Preparatory Meeting for TICAD VI Side Event of African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa, which was held here at KEFRI in July 2016; and Second, The Launch of the African Initiative, held in August 2016, in Nairobi during TICAD VI Summit.

It was with much honour and pride that Kenya hosted the TICAD VI Conference last year, and this was the first time the Summit was held in Africa, since its inception in 1993. The TICAD VI Summit which focused on advancing Africa's sustainable development agenda, also reflected on new and emerging challenges, and opportunities, as well as priorities for Africa, especially those advocated in both regional and global agenda.

Distinguished Delegates, Ladies and Gentlemen,

A major outcome of the TICAD VI Side Event on the African Initiative was the development and adoption of a "Statement" outlining new commitments to accelerate efforts to make Africa more resilient to climate change. We all recognize that though Africa has in recent past made great progress in various spheres of development, emerging challenges such as climate change, desertification and natural resource degradation continue to impact negatively on the continent, thus eroding gains already made in various sectors. It is widely acknowledged that Africa is most severely impacted by climate change and is extremely vulnerable to climate variability due to its low adaptive capacity. It is with much encouragement therefore to note that this Forum, held under the umbrella of African Initiative is a re-affirmation of our commitment in Africa to turning climate change, and other environmental challenges into opportunities.

Ladies and Gentlemen,

Without a doubt, Africa is rich in natural resources. Many livelihoods within the continent are closely linked to land and forestry resources. Therefore, sustainable productivity of agricultural land and forestry resources will remain key to addressing livelihoods challenges and climate change impacts.

As we meet here today, we need to be more sensitive than ever to the current negative trends in land and forest degradation, and that our communities are less able to guarantee food and water security, and are less able to generate viable incomes, while coping with the impacts of climate change and desertification. This scenario is unfortunately, currently being witnessed here in Kenya due to the failure of the short rain season at the end of last year.

Ladies and Gentlemen,

Adopting and integrated landscape approach, embracing urgent and collaborative action to restore, protect and sustainably manage our forestry resources will be essential to achieving the Sustainable Development Goals (SDGs). To achieve these goals, we must work together within the Horn of Africa to combat desertification. However, for Africa to reverse land degradation, we ought to strive to shorten the timeframe required for ecosystem rehabilitation through accelerated sharing of existing natural resource good practices and technologies.

Ladies and Gentlemen,

Allow me to mention that Kenya has developed a National Climate Change Response Strategy whose main purpose is to put in place robust measures needed to address most challenges posed by climate variability in various sectors. In the forestry sector, adaptive measures being promoted in Kenya include; intensified and sustained afforestation and reforestation, encouraging agroforestry to ensure that rural households meet their wood requirement especially for energy, and involving forest adjacent communities in forest and woodland management through participatory approaches such as “Participatory Forest Management” and “Farmer Field Schools”. In order to promote efforts to slow increase in greenhouse gases, Kenya has embarked on an ambitious mitigation intervention programme of restoring the country's forest cover to at least 10% by 2030. I am happy to report that through this programme, we have been able to increase the tree cover from 6.9% in 2012 to the current cover of about 7.2%.

Kenya, like most sub-Saharan Africa countries has an extensive drylands, which comprise over 80% of our land area and we have recognized that for such vulnerable ecosystems, the tree component is the pillar to environmental and land productivity, and has great potential to enhance opportunities for tree based enterprises. Through research, we have identified and improved tree species highly productive and adapted to dryland conditions. A flagship species for drylands is *Melia volkensii*, a tree that has received encouraging acceptance by farmers due to its multiple uses: the *Melia volkensii* innovation was a collaborative venture between research and development institutions, as well as farmers.

Distinguished guests, Ladies and Gentlemen,

As I conclude, it behooves me to mention that a major challenge to accelerate adoption of technologies already developed within our continent has been inadequate approaches to scale up good practices in forestry and agriculture. It is increasingly recognized that different stakeholders and communities need to be actively involved in natural resources management and development of technologies especially through participatory approaches to ensure sustainable management, conservation and utilization of natural resources. Participatory extension approaches will no doubt provide motivation for our people to conserve the environment once they realize the socio-economic and environmental benefits they accrue from such actions. I am therefore encouraging the Forum delegates present here today to share good practices from their home countries on natural resources management. I am confident that by closely working together, we can successfully address challenges brought by climate change.

Lastly, allow me Ladies and Gentlemen, to appreciate development partners represented at this Forum. We appreciate your commitment to working closely with us to achieve sustainable development by ensuring progress and the achievements, of the African Initiative outputs. Permit me to propose that during this Forum, kindly try to embrace an integrated technology dissemination platform by building lasting partnerships and networks for continued sharing of information on good practices for combating

desertification in the Horn of Africa. In addition, it is essential for you to provide options to communities to access such vital information.

Distinguished Delegates,

As we deliberate and make commitments during this Forum to implement the African Initiative, let us, together, with the rest of the world commit to addressing global and local challenges that are constantly emerging by relentlessly coming up with innovations and solutions to counter them.

Distinguished Guests, Ladies and Gentlemen, it is now my great pleasure to declare this First Regional Forum on: "African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in Horn of Africa" officially opened.

Thank you.

## **2.2 Closing Remarks**

### **Vote of Thanks and Remarks by Delegates**

Delegates from participating countries were very grateful to the Government of Kenya, KEFRI and JICA for organising the Forum and giving them a chance to participate in the meeting. They applauded the new Initiative given its uniqueness, since participating countries now have a Forum for sharing knowledge. The delegates indicated that they had gained a lot during the 3-day Forum during the in-house presentations, deliberations and field visit. The delegates hoped to disseminate and to scale up the good practises learnt from Kenya. They observed that since climate change was eminent, there was need for the Horn of Africa countries to urgently avert desertification by availing financial and human resources to revert land degradation.

### **Remarks by Director KEFRI Dr. B. E. N. Chikamai**

The Director KEFRI appreciated all the delegates who had made the Forum a success, through their active participation. The Director noted that the programme was rigorous, given the in-house sessions and the field visit to Makueni County. He thanked the Conservation Secretary MENR, Kenya, Mr. Gideon Gathaara for facilitating a very crucial session of the programme namely; discussions on Adoption of ToR for African Initiative and on way forward. He suggested the need to come up with a clear road map for African initiative to reduce desertification in Africa. He noted that in Africa, the vagaries of climate change effect, especially drought has become a common feature, thus presents more challenges for food and water security, environmental conservation and improved livelihood.

### **Remarks by FAO Representative Mr Festus Akinifesi**

Mr. Festus Akinnifesi, on behalf of FAO Regional office, thanked JICA for financing the Forum and for inviting FAO. He also acknowledged KEFRI for hosting the Forum and for the Institute's hospitality. Mr. Akinnifesi noted that for the three days of the Forum, delegates witnessed rich deliberations and exchange of knowledge and ideas on how to combat desertification, which he applauded as a great achievement. He indicated that the field visit was an eye opener on the technologies KEFRI has developed and promoted and its impacts to the local farmers, a process which should be emulated by all to transform lives. Mr. Akinnifesi reiterated the need to keep the momentum and to remain focused and as he recognised that no single organization can work alone. He emphasised the need to work together to achieve the intended outcomes and to build synergies across all the sectors that include; forestry, land, water and agriculture among other allied sectors, "since in all these sectors, there is a common vision which can be achieved if we work together". He also pointed out that there was need to put sustainability in all what we do to ensure that future generations are not compromised.

Mr. Akinnifesi informed the meeting that FAO was ready to support the Horn of Africa countries, KEFRI and JICA to achieve the common goals of the African Initiative.

### **Remarks by Representative from JICA Headquarters Ms. Mari Miura**

Ms. Miura thanked the Forum organisers for giving her the opportunity to deliver remarks on behalf of JICA. She appreciated the delegates for attending the Forum; and noted three key achievements of the Forum which are:

- Networking of key stakeholders from different countries.
- From the country presentations, it was clear that there are good practises from the various countries which can be shared by other countries.

- Action plans by the participating countries showed commitment to the Initiative, which was the real voice from partner countries. The action plans give an idea on how JICA can support partner countries.

Ms. Miura thanked the GoK, MENR and KEFRI for their input in organising, and hosting the Forum, noting that this was the third time such an event was held in Kenya under JICA support. She thanked the delegates for attending and actively participating in the Forum as well as, CADEP-SFM and JICA Kenya Office for making the Forum a success. She hoped to see the delegates again at a future date.

**Closing Remarks Mr. Gideon Gathaara, Conservation Secretary MENR Representing the PS State Department of Natural Resources, Dr. Margret Mwakima**

In his closing remarks, Mr. Gathaara appreciated; the Director KEFRI for hosting the Forum, representatives from JICA and Ministry of Environment and Natural Resources - Kenya, FAO Headquarters and the delegates for their participation in the Forum.

Mr. Gathaara noted that desertification and land degradation is a reality and is going to be exacerbated by climate change. He indicated that climate change is a very expensive phenomenon in all countries. He noted that an economic cost analysis of climate change undertaken for Kenya, demonstrated that, the cost was about 3% of the country's GDP. He appreciated that during the Forum, the delegates were able to develop a way forward to combat desertification and, working within the framework of the African Union (AU) the African Initiative would make great contribution to land restoration.

The Conservation Secretary noted that land restoration in the African continent has made great strides, which was highlighted during the meeting in Bonn when Africa came up with an Africa Forest Restoration proposal of planting 100 million ha with Kenya committing to restoring 5.5 million ha. He indicated that with this Initiative, we can contribute to the acreage under forest. while at the same time addressing desertification. However, he noted that we need an integrated approach to address desertification. On the way forward, Mr. Gathaara noted the need for resource mobilisation to actualize the Initiative and to make the action plans developed a reality.

Mr. Gathaara also noted with appreciation that the Forum programme was very practical as it dealt with issues that affected livelihood of our people in Africa. He appreciated participants, delegates and invited guests for making the Forum a reality, successful and eventually achieving the objectives of the Forum.

Mr. Gathaara finally declared the 1<sup>st</sup> Regional Forum on "African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in Horn of Africa" officially closed.

### **3.0 Papers Presented**

#### **3.1 Strategies and opportunities for Combating Desertification in Horn of Africa: UNCCD Experiences in Kenya by NFP Kenya**

*Richard Mwendandu*

##### **Introduction to UNCCD**

The convention was adopted on 17<sup>th</sup> June 1994 and came into force on 24<sup>th</sup> December 1996. The convention aims at combating desertification and mitigating the effects of drought in the countries affected through effective action at all levels supported by international cooperation and partnership arrangements in the framework of an integrated approach to help achieve sustainable development. Important dates for UNCCD are:

Date signed: 14<sup>th</sup> October 1994.

Date of Ratification: 24<sup>th</sup> June 1997.

Effective date: 22<sup>nd</sup> September 1997.

##### **Objectives of the Convention**

- To combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification particularly in Africa.
- The convention focuses on long-term integrated strategies targeting improved productivity of land, rehabilitation of land, conservation and sustainable management of land and water resources, leading to improved conditions in particular at community level.

##### **Ratification of UNCCD by Kenya**

- The country ratified the convention on 24<sup>th</sup> June 1997.
- As per the Constitution of Kenya, 2010 Chapter 1 Article 2: any treaty or convention ratified by Kenya shall form part of the law of Kenya under this Constitution.
- Therefore, the provisions under UNCCD are part of Kenya laws.

##### **Obligations of Kenya to UNCCD**

- Give priorities to combating and mitigating the effects of drought and allocate resources.
- Establish strategies and priorities within the framework of sustainable development plans and/or policies to combat desertification and mitigate the effects of drought.
- Address underlying causes of desertification.
- Promote awareness and facilitate participation of local population particularly women and youth to support Desertification, Land Degradation and Drought (DLDD) issues (Wetlands, IBD, WDCD, WED).
- Provide an enabling environment for DLDD through strengthening of policies and legal frameworks and establishing long-term policies and action plans.

##### **Implementation of UNCCD IN Kenya**

- The convention is implemented in Kenya through the coordination of the Ministry of Environment and Natural Resources which is the focal ministry of the UNCCD in the country.
- National Environment Management Authority (NEMA), the Designated National Authority (DNA) to the convention has established a National Desertification Committee composed of relevant key stakeholders to provide leadership in the implementation of the convention in the country.



### **Implementation of UNCCD in Kenya: The NAP process**

- To achieve the UNCCD objectives countries/Parties were to develop the National Action Programmes (NAPs) to domesticate the convention.
- Kenya prepared its first NAP in 2002 and has been implementing it for the last 12 years.
- The country finalized the second generation NAP in 2015, which is aligned to the 10 year UNCCD strategy.
- A NAP is an action plan supported by international co-operation arrangements and aim at reclaiming degraded areas, reducing further degradation, and conserving areas that are not degraded.

### **Objectives of the NAP**

- Develop mechanisms for effective implementation of activities identified under NAP process in a flexible and iterative process.
- Mainstream the identified NAP priority areas into major national development initiatives and frameworks.
- Facilitate active participation of all stakeholders, particularly the local communities in the NAP process.
- Establish a spirit of partnership among cooperating institutions.
- Strengthen coordination by putting in place relevant policy, legal and institutional frameworks.
- Ensure sufficient and sustainable financial resources and mechanisms.

### **NAP alignment process**

- The alignment process was guided by the Guidelines put out by UNCCD Secretariat.
- Tools used included:
  - Decision support tool to assist alignment with the five operational objectives.
  - Decision support tool to assist in identification of revision requirements.
- The process is to answer the following: How? Why? In what way? with whom? – should we manage the ASALs in Kenya.
- Consultation workshops were organized to involve a wider stakeholder at national and regional/county levels where very fruitful discussions occurred to enrich the document.
- Therefore, the exercise was highly participatory involving all relevant sectors.
- The NAP was adopted and published and its being implemented across the country by various stakeholders as indicated in the action matrix in the document.
- The country requires support to implement the NAP.

### **Implementation of UNCCD in Kenya: Post 2015 Development Agenda**

- At a summit in New York in September 2015, the International Community adopted Sustainable Development Goals (SDGs) with the main objective being to end poverty, protect the planet and ensure prosperity for all.
- The relevant goal to UNCCD is 15: *to 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.*
- The specific target is 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world.
- The 12<sup>th</sup> Session of Conference of Parties (CoP) to UNCCD held in Ankara in October, 2015 agreed on crucial decisions to fast tract the incorporation of Land Degradation Neutrality (LDN)

target in the implementation of the convention, including the formation of Inter-governmental Working Group to steer the process.

- Parties agreed on the need to embrace the SDGs especially Goal 15, Target 15.3 on attaining LDN. The country is supposed to formulate voluntary targets to achieve LDN in accordance with the specific national circumstances and development priorities, taking into account the list of options for operationalization of LDN at the national level.
- The Ministry is leading the process of LDN target setting at the national level through a consultative process. The process is being facilitated by Global Mechanism and partners and will involve extensive stakeholder consultations. So far more than 100 countries across the globe including Kenya are participating in the LDN Target Setting project. The LDN TSP will undertake LDN activity of baseline surveys and implementation framework of the LDN target.
- The LDN TPS is using three land-based progress indicators for target setting, namely: Trends in land cover; Trends in land productivity or functioning of the land; and Trends in carbon stock above and below ground to be measured in terms of soil organic carbon stocks.
- The LDN TPS process will be supported by provision of global datasets to monitor the above indicators in absence of national datasets.

#### **UNCCD implementation: Achievements**

- Formulations of policies, legislations, strategies and programmes on DLDD issues.
- Finalized the National Action Plan (NAP) on desertification to the UNCCD 10 year strategic plan.
- Mobilization of all stakeholders to carry out activities aimed at halting land degradation and desertification in the country.
- Mainstreamed land degradation and desertification in all sectors by incorporating these issues in sector plans.
- Finalized the 5<sup>th</sup> National report for 2014 on the implementation of the convention and submitted to the UNCCD Secretariat.
- Mobilization of resources for DLDD activities.
- Public awareness: Celebration of WDCD annually on June 17<sup>th</sup>.
- Capacity building to key stakeholders.
- Participated in Global meeting of Parties and Intercessional meetings.

#### **Challenges of implementation of the Convention**

- Low funding.
- Increased land degradation.
- Low public awareness.
- Weak linkages in implementation between the two levels of government (National, County).

### 3.2 African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa

Mari Miura

#### Background

- Desertification in Sahel and Horn of Africa.
- Poverty, food insecurity, climate change, water shortage.
- Instability: Extreme violence, refugees.
- Combating Desertification is important and urgent issue for sustainable development of the countries and peace and stability of the region and the world.

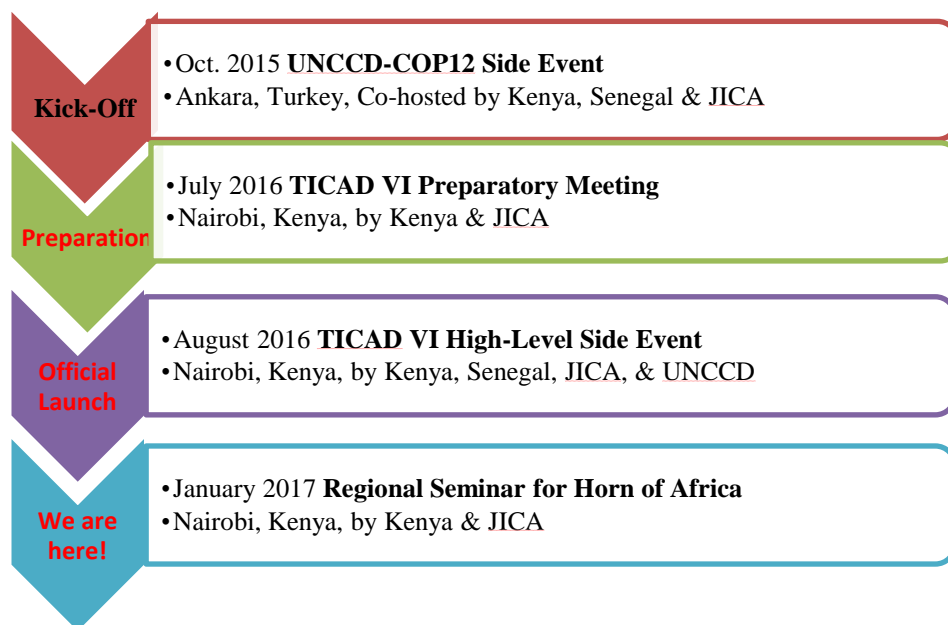
#### However,

- There is insufficient international attention and finance for combating desertification in the region.
- Knowledge for combating desertification is not well accumulated in the countries.



- Launch a new initiative for combating desertification with African ownership.

#### Development of African Initiative



**Official launch at TICAD VI 27 August 2016, Nairobi**

 **The Gov't of Japan**   
@JapanGov 

The New African Initiative for Combating Desertification: officially signed and launched today at #TICADVI!



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 **The Gov't of Japan**   
@JapanGov

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(1/2) @JudiWakhungu: Kenya is grateful to partner w/ #JICA in assuring building capacity & tech transfer. #TICADVI

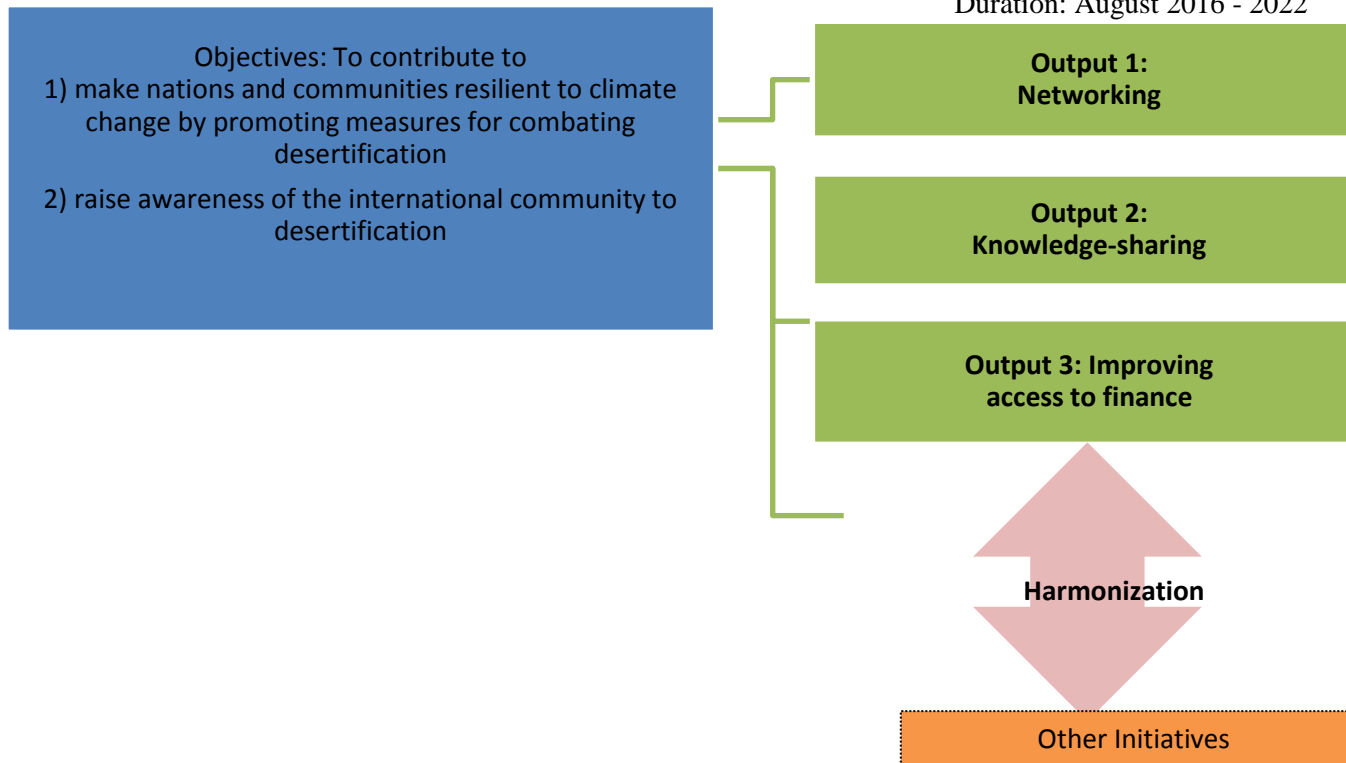


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## Objectives and Outputs



### Tentative activity of the African Initiative

- Workshops for networking, knowledge-sharing and facilitating the access to finance.
- High-level events on the occasion of international conferences for urging further international responses to desertification and climate change.
- Developing useful tools to promote networking/knowledge-sharing/access to finance.
- Others.

\* Any activities can be implemented jointly or harmonized with other related initiatives.

### Partner organizations

#### Co-organizers

- Government of Kenya: Ministry of Environment and Natural Resources (Horn of Africa).
- Government of Senegal: National Food Security Council, JICA and UNCCD (Sahel).
- Japan International Cooperation Agency (JICA)\*.
- United Nations Convention to Combat Desertification (UNCCD)\*.

#### Partner Organizations

- Food and Agriculture Organization of the United Nations (FAO).
- Global Environment Facility (GEF).
- Permanent Interstates Committee for Drought Control in the Sahel (CILSS).
- Intergovernmental Authority on Development (IGAD) (TBC).
- African Union (TBC) \* As of August, 2016.
- Any organization that wish to contribute to the Initiative are welcomed.

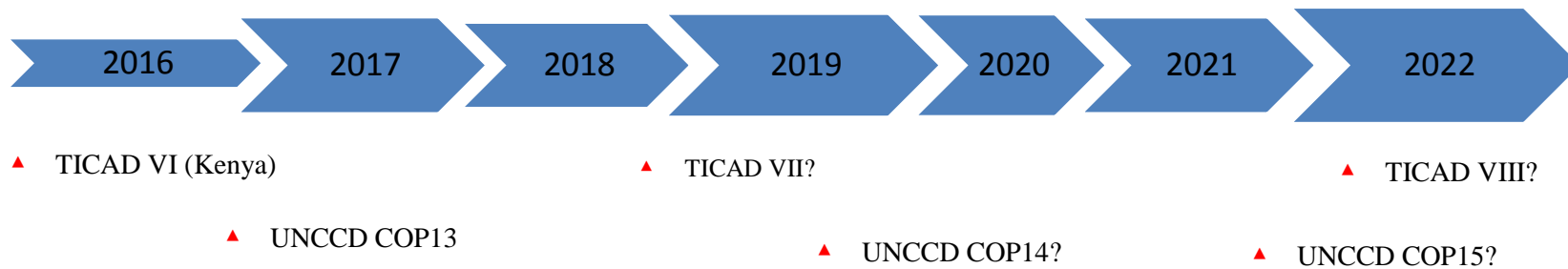
#### Secretariat

- Global Environment Department, Japan International Cooperation Agency (JICA)\*.

### JICA's inputs to African Initiative

Country	Title	Contents of related Component	Duration & C/P
Kenya	TC: Capacity Development Project for Sustainable Forest Management in the Republic of Kenya (CADEP)	Collect good practice for strengthening the resilience to climate change and drought and share it in the region  <i>* In component 5: Regional cooperation</i>	May, 2016 – May, 2021 Kenya Forestry Research Institute (KEFRI) and Ministry of Environment
Senegal	TC: Project for Reinforcement of Resilience in Senegal	Regional cooperation: to be discussed	2017-2022 Executive Secretariat of National Council for Food Security (SECNSA)
Sahel / Horn of Africa	Training Course in Japan: Combating Desertification to Strengthen Resilience to Climate Change in Sub-Saharan Africa	Enhance participants' capacity for promoting measure to combat desertification	2017-2019 10 participants x 3 years

## Timeframe



### 2017

- March 1-3: Regional Seminar for Sahel (Senegal)
- September: UNCCD COP13 (China)
- November: 1<sup>st</sup> JICA Training Course in Japan  
Events in the Horn of Africa ... next presentation

## **TICAD VI Nairobi Declaration**

*We acknowledge that addressing climate change, the loss of natural resources, desertification, El Nino, natural disasters, as well as forced displacement, in a timely manner is essential to achieve social stability.*



### **What can we discuss?**

- How we can maintain and extend network?
- How we can collect good practices / lesson learns?
- How we can share knowledge to wider stakeholders?
- How we can improve access to finance of partner countries?
- How we can approach higher and political level?



### **3.3 Outline of Capacity Development Project for Sustainable Forest Management in Kenya (CADEP-SFM)**

*Kenichi Takano*

#### **Background of the Project**

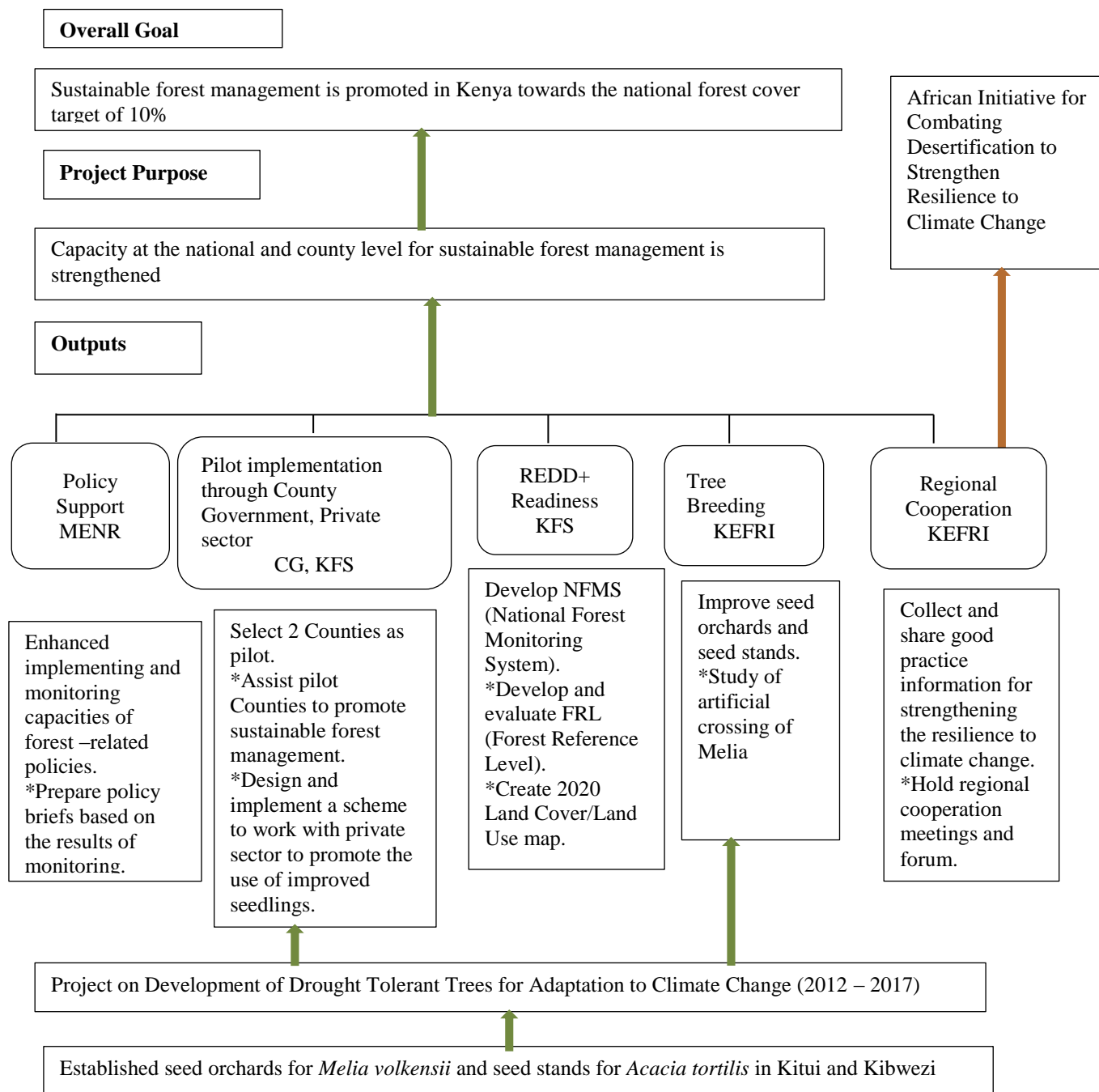
The government of Kenya (GOK) has set a goal to increase the forest cover from 7% to 10% by 2030 as outlined in the country's Constitution 2010. Climate Change is a crucial issue in Kenya. It is projected that in the next 100 years, the average temperature in the East Africa region could increase by 3°C as a result of climate change. The promotion of REDD+ will contribute to increasing the forest cover and climate change mitigation policy in Kenya. For more than 20 years, JICA has provided technical cooperation for KEFRI and KFS on promoting social forestry, research and development of breeding for draught tolerant varieties. GOK requested Japan for a technical cooperation on the capacity development for sustainable forest management, including the support to Kenya's REDD+ readiness activities, in 2015.

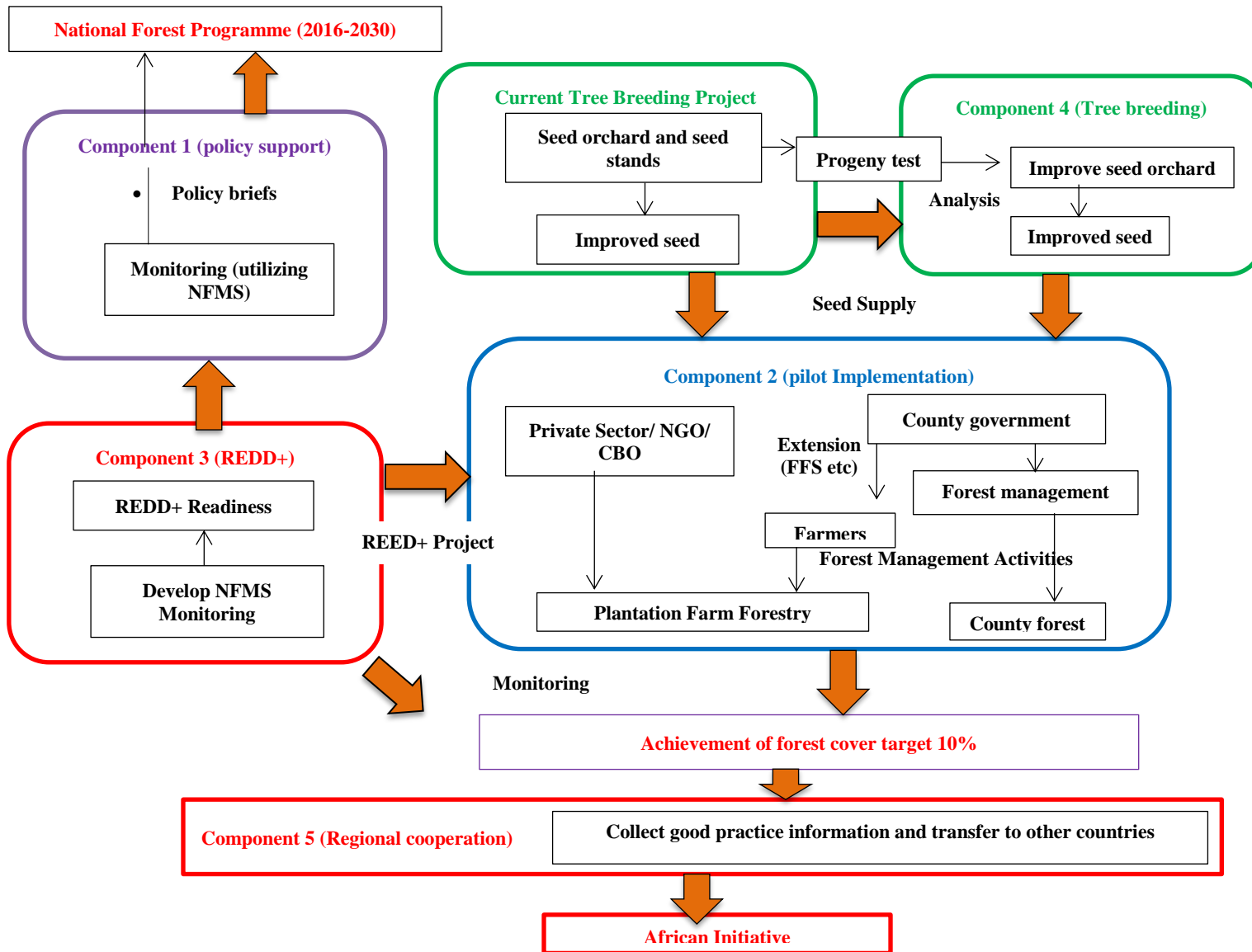
The Capacity Development Project for Sustainable Forest Management in Kenya (CADEP-SFM) is a five year project that will run from June, 2016 – June, 2021. The project will be implemented by Ministry of Environment and Natural Resources (MENR), Kenya Forest Service (KFS), Kenya Forestry Research Institute (KEFRI), and County Governments (CG). The overall goal of the project is to promote sustainable forest management in Kenya towards the national forest cover target of 10% by 2030. The project will build the capacity of national and county governments through Policy support, Pilot implementation through county government and private sector, REDD+ readiness, tree breeding and regional cooperation. Through the Regional Cooperation, KEFRI will collect and share good practice information for strengthening resilience to climate change.

## Capacity Development Project for Sustainable Forest Management in Kenya: framework

**Project period:** June, 2016 – June, 2021 (5 years)

**Implementing Agency:** Ministry of Environment and Natural Resources (MENR), Kenya Forest Service (KFS), Kenya Forestry Research Institute (KEFRI), County Governments (CG)





### 3.4 Draft Terms of Reference

*E. Chagala-Odera, J. Wanjiku, M. Karanja, Y. Honjo and M. Mukolwe*

#### Background

The African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa has been developed to enhance sharing of knowledge and experiences, and to facilitate technology transfer among African countries in order to collectively combat desertification. The African Initiative has been developed against the background that; the Sahel and Horn of Africa region face mounting development challenges and environmental deterioration and that much of the region is dry and highly degraded and suffers from frequent and severe droughts. It has also been recognised that climate change is likely to accelerate desertification within the region. Therefore, addressing desertification and strengthening resilience to climate change has been identified as the key strategy to making nations of the region achieve sustainable development.

#### Objectives of the African Initiative

The African Initiative will run for a period of five years, from August 2016 to 2021. The main objective is; to contribute to making nations and communities resilient to climate change by promoting measures for combating desertification in the Sahel and Horn of Africa.

The objective will be achieved through: Establishment of a network; Knowledge sharing; and Improving access to finance.

#### Scope

##### Countries participating in the African Initiative

The African Initiative will be undertaken in seven (7) Horn of Africa Countries namely; Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan and Sudan. Kenya will be the regional hub. Participating institutions and organizations in target countries will be those involved in forestry, agricultural and allied natural resources.

##### Issues to be addressed in combating desertification

Participating countries will be expected to promote adoption of good practices that address the challenges within the drylands as outlined in Table 3.1.

**Table 3.1: Challenges and options for combating desertification**

No.	Challenges	Good practices for adoption in combating desertification
1	Land degradation	<ul style="list-style-type: none"><li>• Land rehabilitation and restoration through; reforestation, afforestation, and land protection techniques</li><li>• Climate smart agriculture</li></ul>
2	Vegetation degradation	<ul style="list-style-type: none"><li>• Drought tolerant tree re-seeding techniques</li><li>• Species enrichment planting</li></ul>
3	Overgrazing	<ul style="list-style-type: none"><li>• Natural pasture improvement</li><li>• Transhumance</li><li>• Herd management planning</li></ul>
4	Shortage of biomass energy	<ul style="list-style-type: none"><li>• Establishment of woodlots</li><li>• Efficient woody biomass conversion and use techniques</li></ul>
5	Unstable food production	<ul style="list-style-type: none"><li>• Participatory crop breeding</li></ul>
	Soil degradation	<ul style="list-style-type: none"><li>• Soil conservation techniques</li><li>• Sand dune stabilization</li></ul>
6	Water shortage	<ul style="list-style-type: none"><li>• Water harvesting and water conservation techniques</li><li>• Water purification techniques</li></ul>

7	Poverty and poor livelihood practices	• Income Generating Activities (IGAs)
8	Weak community participation in natural resource management	• Promote Participatory Natural Resource Management (PNRM)
9	Poor dissemination of good practices	• Dissemination approaches of the good practices
10	Inadequate information on good practices	• Repackage information on good practices

### Responsibilities of Participating Countries

Each participating country will:

- Collect good practices from their country. Such practices should: have a high potential for adoption; be effective and successful; be innovative; be environmentally, economically and socially acceptable. Practices can be sourced from; research and development organizations, institutions of higher learning, extension agents, NGOs, CBOs, farmers and interest groups.
- Write and submit progress reports to CADEP-SFM project management.
- Share good practices within and among Horn of Africa countries.
- Incorporate African Initiative project activities into institutional budgets and annual work plans.
- Identify potential partners for financing and resource mobilization.

### Tasks of Participating Countries

#### Participate in regional cooperation meetings and fora

Participating countries will participate in the following meetings and fora: Policy level meetings; Technical Meetings; Training; Project conference and Monitoring and Evaluation. The number and time schedule of meetings and fora as summarized in Table 3.2.

**Table 3.2: Meetings and fora schedule**

Activity	Year 1 2016/17	Year 2 2017/18	Year 3 2018/19	Year 4 2019/20	Year 5 2020/21	Remarks
Policy level meetings (Fora)						Y1: Feb 2017 Y4: Sep 2019
Technical meetings						Y2: Sep 2017 Y3: Sep 2018 Y4: Sep 2019
Monitoring and Evaluation						To be undertaken by Kenya / JICA Y4: May 2019
Training on access to finance						Y2: Sep 2017 Y3: Sep 2018 Y4: Sep 2019
Project Conference						Y5: Feb 2021

**NB: Y=year**

### Collect information on good practice for strengthening resilience to climate change and drought in sub-Saharan Africa

Participating countries will:

- Apply prescribed good practice information collection tools.
- Collect good practices in forestry, agricultural and allied natural resources through field visits, meetings, workshops, and trainings using prescribed tools. Collected good practices should be in the form of text, audio, video, pictures, diagrams and maps.

## **Accumulation of collected good practice information and establishment of database**

Participating countries will:

- Develop good practice content using the prescribed template.
- Submit completed prescribed template for good practice to KEFRI for review and uploading to database.
- Repackage collected good practices from the database to target various end users in participating country. Categories of repackaged information will include; posters, leaflets, brochures, manuals, pamphlets, bulletins, booklets and audio visual. The information collected should be repackaged to a language that is user friendly and easy to understand especially by farmers.

Kenya will:

- Establish a database.
- Review the submitted prescribed template for good practice from participating countries.
- Upload the reviewed good practices on database in form of text, audio, video, pictures, diagrams and maps.

## **Share collected knowledge with and transfer technologies to other countries in Sub-Sahara Africa**

Participating countries will:

- Present collected good practice information and sharing status during various project fora.
- Share information within and among participating countries through:
  - Print media such leaflets, manuals, posters, brochures, as well as mass media such as radio and TV.
  - Use internet-based methods: such as websites, social media and e-mail.

## **Access to finance**

- Participating countries will attend training on resource mobilization.

## **Networking**

Participating countries will:

- Agree on Common Interest Group (CIG) from perspective of United Nations Conference to Combat Desertification (UNCCD).
- Establish networks of CIG on combating desertification.

## **Monitoring and Evaluation**

- Participating country focal points will submit progress reports to CADEP-SFM management every six (6) months using a prescribed format.
- Participating countries will be involved in mid-term evaluation of the African Initiative.
- Participating countries will report progress during the project conference.

## **Comments and resolutions by delegates on Terms of Reference**

Other necessary actions for promoting the initiative:

- To include responsibilities of the Secretariat, for instance, they could identify areas of support to promote the Initiative.
- Responsibility of the Secretariat shall be developed by JICA for inclusion in the ToR.
- These Terms of Reference shall be read together with TICAD VI Statement (Annex 3), and shall be understood as an integral part of the same.

- The Terms of Reference shall be reviewed to take into account any emerging issues. The current ToR shall be reviewed after one year.
- There is need for participating countries to understand; how networks would be formed, the process of knowledge sharing and how to access finance. For instance, should networks to be formed at global or regional level or just within the country? How will participating countries be connected as there will be need for in-flow and out-flow of information?
- What is the intervention of JICA in assisting knowledge sharing as countries are not at the same level of development? However existing Initiatives may be used for sharing information. For instance during the COP 12 to be held in China, a side event will be organized for sharing information.
- The ToR were recommended by delegates pending input from members countries within a period of six weeks after the end of the Forum.
- The ToRs are very important as they are to deliver the Initiative objectives.
- During TICAD VI, JICA and UNCCD made commitments, one of which was to facilitate collection of good practices. UNCCD may consider introducing a special market place for Horn of Africa on its website.
- Donors will expect to be contacted by individual countries noting that each agency has its mechanism and strategies for doing so. Therefore, it is incumbent upon each individual country to initiate engagement with the donors. It was noted that FAO has offices in all Horn of Africa countries and participants were encouraged to get in touch with these offices.

### 3.5 A Tool for Collecting Good Practices for Combating Desertification in Horn of Africa

*J. Wanjiku, M. Karanja, E. Chagala-Odera, M. Mukolwe and Y. Honjo*

#### Introduction

Climate change is currently the biggest challenge affecting the world over. Africa for instance continues to experience extreme weather events associated with climate change that include: frequent droughts which alternate with severe flooding; increased temperatures, incidences of diseases and desertification. These negative impacts continue to severely degrade Africa's natural resources, leading to food and water deficit, increased poverty levels, with the poorest vulnerable communities being most affected. However, though climate change effects paint a grim picture, the world today has more knowledge, information and technologies that can be applied to boost resilience to climate change and consequently combat desertification. It is therefore possible, using a wide range of technologies to limit further climate change impacts through adoption of good practices that mitigate and help communities to adapt to a changing climate as well as offer sustainable livelihood options and strategies for food security.

#### Good practice identification

##### Good practice definition

A good practice can be defined as a technology, technique or innovation that has been tested and validated, and adopted by a large group of end users with great success in combating desertification, stopping land degradation and consequently leading to sustainable land management. Such a practice, which can be termed as a model, can then be promoted for wide scale adoption within and among countries with similar climatic and socio-cultural conditions.

##### Criteria for identifying good practice

A good practice can be identified as one that meets at least one third of the criteria outlined in Table 3.3.

**Table 3.3: Good practice identification criteria**

No.	Criteria	Explanations on the practice
1.	Effective and successful	<ul style="list-style-type: none"><li>• Proven its relevance as an effective way to achieve a specific objective by solving a given challenge.</li><li>• Successfully adopted and has had a positive impact on individuals and/or communities.</li></ul>
2.	Technically feasible	<ul style="list-style-type: none"><li>• Easy to learn and to implement without difficulties, especially by end users such as farmers and pastoralists.</li></ul>
3.	Replicable and adaptable	<ul style="list-style-type: none"><li>• Can be replicated and is adaptable to solve similar problems in varying situations and sites.</li></ul>
4.	Applicability	<ul style="list-style-type: none"><li>• Be able to address climate change challenges and to combat desertification.</li></ul>
5.	Environmentally sound	<ul style="list-style-type: none"><li>• Does not pollute or lead to environmental degradation.</li><li>• Guarantee positive impact over time</li></ul>
6.	Economically viable	<ul style="list-style-type: none"><li>• Economically feasible to make it worth changing end users established habits</li><li>• Affordable alternative to older practices</li><li>• Economically beneficial to save money or generate income</li></ul>
7.	Socially acceptable	<ul style="list-style-type: none"><li>• Not offend or disturb social attitudes</li><li>• Culturally sensitive</li></ul>
8.	Innovative	<ul style="list-style-type: none"><li>• Demonstrates progressive and continued solutions to pressing environmental and social challenges such as climate change, food security, environmental resilience and gender empowerment</li></ul>
9.	Sustainable	<ul style="list-style-type: none"><li>• A 'good practice' meets current needs, without compromising the ability to address future needs</li></ul>



		<ul style="list-style-type: none"> <li>• Contributes to economic and social development, as well as environmental protection</li> </ul>
10.	Participatory	<ul style="list-style-type: none"> <li>• Developed through participatory approaches in order to generate a sense of ownership in decision making and actions to be implemented</li> </ul>

### Template for collecting good practices

The template can be used as a checklist to ensure as much as possible relevant information has been captured while documenting the good practice. The practice will be documented as outlined in the following template. Identifying and documenting good practices will be aided by use of 7W helpers namely: What? How? Who? Which? Where? When? Why? (Table 3.4).

**Table 3.4: Template for compiling good practices**

Element	Information expected
<b>Title</b>	<ul style="list-style-type: none"> <li>• What is the title of good practice?</li> </ul>
<b>Target audience</b>	<ul style="list-style-type: none"> <li>• Who is the main beneficiary of the technology? e.g. livestock, crop or tree farmers; forest adjacent communities, extension agents etc.</li> </ul>
<b>Type of publication</b>	<ul style="list-style-type: none"> <li>• Indicate the type of publication e.g. manual, guideline, leaflet, brief</li> </ul>
<b>Introduction</b>	Provide a short description of the good practice being addressed: <ul style="list-style-type: none"> <li>• Where is this good practice?: indicate area and country</li> <li>• What is the initial situation and challenge being addressed?</li> <li>• Specify the period during which the practice has been carried out.</li> </ul>
<b>Objective</b>	What is the aim of the practice?
<b>Approach</b>	Describe how the practice was acquired and is being undertaken to address the challenges identified <ul style="list-style-type: none"> <li>• Describe the message and technical content accurately and structure the message in logical flow</li> <li>• Ensure the text is simple and easy to understand</li> <li>• If measurements are communicated, ensure that they are clear and audience can act on what is stated</li> <li>• Use illustrations, pictures, videos etc</li> <li>• How has dissemination been undertaken? e.g. through various fora and events</li> </ul>
<b>Impact</b>	<ul style="list-style-type: none"> <li>• Include testimonies from beneficiary and other end users. Evidence such as storytelling by beneficiary(s) showing the benefits of the good practice is encouraged.</li> <li>• Have the beneficiary(s) livelihoods been environmentally, socially and/or economically improved and if yes, how?</li> </ul>
<b>Innovations and Success factors</b>	<ul style="list-style-type: none"> <li>• What are the conditions (economic and social) that needs to be in place for the good practice to be successfully replicated in a similar context?</li> <li>• Where can the practice be best applied environmentally - climatic conditions and soil type?</li> <li>• Where else has the good practice been found to be successful?</li> <li>• Who else has adopted the good practice?</li> </ul>
<b>Constrains</b>	<ul style="list-style-type: none"> <li>• What are the challenges encountered in applying the good practice?</li> <li>• What are the weaknesses of the practice?</li> <li>• How have these challenges been addressed?</li> </ul>
<b>Lessons learned</b>	What are the key messages and lessons learned from the good practice experience?
<b>Conclusion</b>	Explain the impact and usefulness of the good practice.

*Adapted from the FAO good practice website*

### **3.6 CADEP-SFM Knowledge Management System**

*Esther Manyeki*

**This addresses CADEP-SFM Output 5.3, 5.4 and 5.5**

**Output 5.3-** Collect Good Practice information for strengthening the resilience to climate change and drought in the horn of Africa

**Output 5.4-** Accumulate the collected information in a database on KEFRI website

**Output 5.5-** Share the collected knowledge with and transfer technologies to other countries in the horn of Africa

According to Dr. Richard Taflinger, research is a systematic inquiry into a subject in order to discover or revise facts, theories and applications. When you're exploring a topic, you want to gather as much evidence, experience and observation for you to begin building your theories. Once the information is gathered, the description and presentation of the conclusion has to be laid out.

A lake is refreshed by giving out its water; otherwise the water is salty and rarely usable to benefit its environment. Thus, information gained in research creates a knowledge base in the researcher. Knowledge, for it to be helpful, needs to be shared.

Our goal is to share knowledge we gain on good practices for strengthening the resilience to climate change and drought in the Horn of Africa, and have that knowledge available and accessible in a repository.

#### **The knowledge management system**

The knowledge management system provides a platform to;

- Collect knowledge and good practices.
- Share knowledge.
- Collaborate (work together).
- Store knowledge (for future generations or use) as a repository.
- Protect data and knowledge (data/ information security).

#### **Share knowledge**

This is achieved by:

- Visibility – making the information available and accessible.
- Discussions.
- Comments.
- Searching.

#### **Collaborate**

This is achieved by:

- Communities of practice - A group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly. e.g sustainable forest management.
- Working together in teams (groups).

#### **Protect data and knowledge**

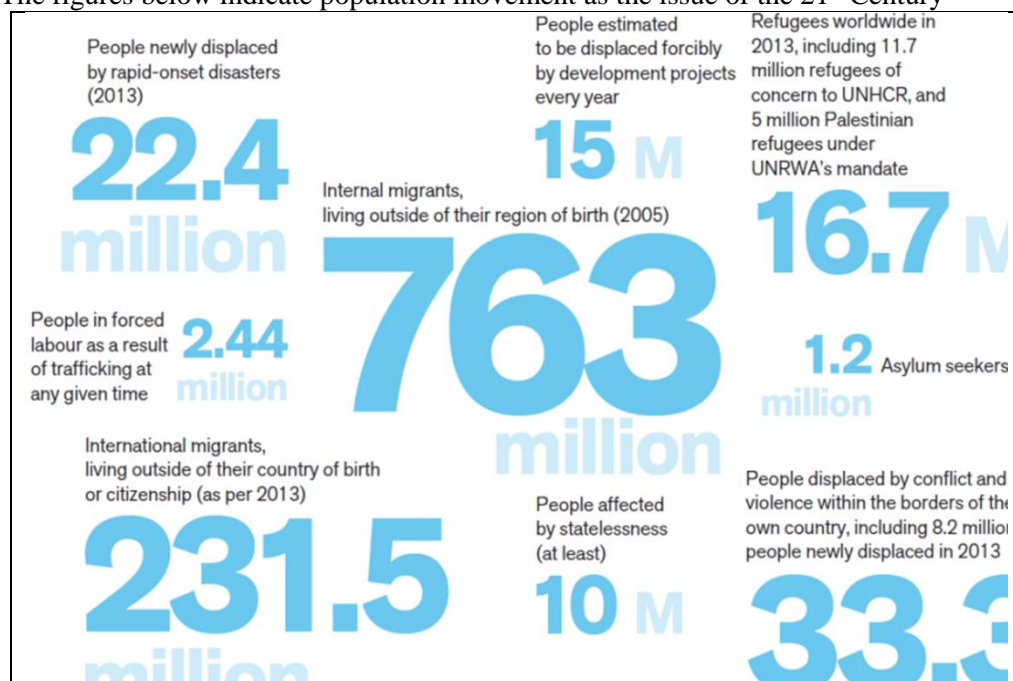
This is achieved by

- The KM system enables the author to determine the viewers who can access their data to view or make changes to it.
- Unless the author wishes this to be the case, data is not open to the public. This is achieved by using access control.
- Press the Ctrl key on the keyboard, then click on the link <http://km.kefri.org:8085/do/view/Main/WebHome>

### 3.7 3S Initiative Sustainability, Security and Stability in Africa

*Baidy Ba, Senegal*

The figures below indicate population movement as the issue of the 21<sup>st</sup> Century



#### The Challenge in Africa

- Over the next 10 years, an additional 330 million young Africans will enter the labour market.
- During the same period, an estimated 60 million people are at risk of being forced to move from degraded land, both within and outside the continent.
- Extremist groups capitalize on this sense of hopelessness. One in two young people who joins a rebel movement cites unemployment as the main reason for doing so.
- The continent was home to more than 15 million internally displaced persons in 2015. More than 30 million people were affected by food security due to the effects of El Nino in 2016.

#### Objectives of the 3S Initiative

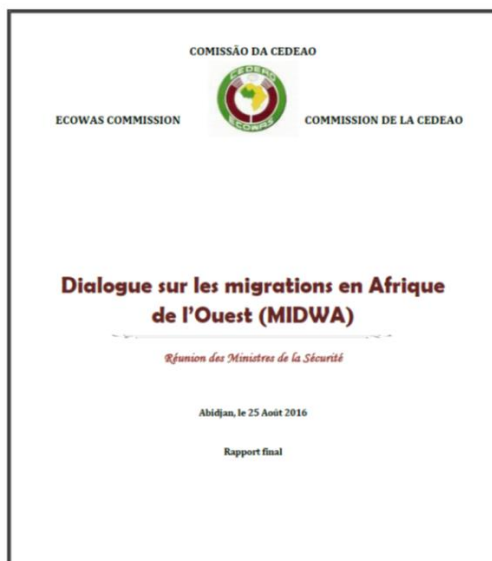
The 3S Initiative aims to address the root causes of instability in Africa, particularly migration and conflict related to natural resource degradation.

The objective of the 3S Initiative is to provide alternatives to forced migration and radicalization by:

- Creating jobs for young people, women and migrants through the restoration of degraded lands.
- Strengthening land access and tenure rights.
- Enhancing early warning systems to predict drought and other natural disasters and effectively respond to displacement of populations.

The following contexts explains

#### 1) ECOWAS – MIDWA



#### IV. Results of the Session

11. At the Migration Dialogue for West Africa, the ECOWAS Security Ministers made the following recommendations:

“Political commitment of the African continent through Ministers in charge of Environment/Climate Change at the COP 22 in Marrakesh in November 2016, to propose practical measures to address the impact of climate change and land degradation on migration and to promote green jobs”.

##### 2) COP 22, Marrakech: 3S Declaration, 14 November 2016

- Co-chaired by Mr. Abdoulaye Balde, Minister of Environment and Sustainable Development of Senegal and by Dr. Abdeladim Lhafi, COP 22 Commissioner and High Commissioner of Water, Forest and Fight against Desertification of Morocco.
- Dialogue between the African ministers in charge of environment and climate change and those in charge of NEPAD.

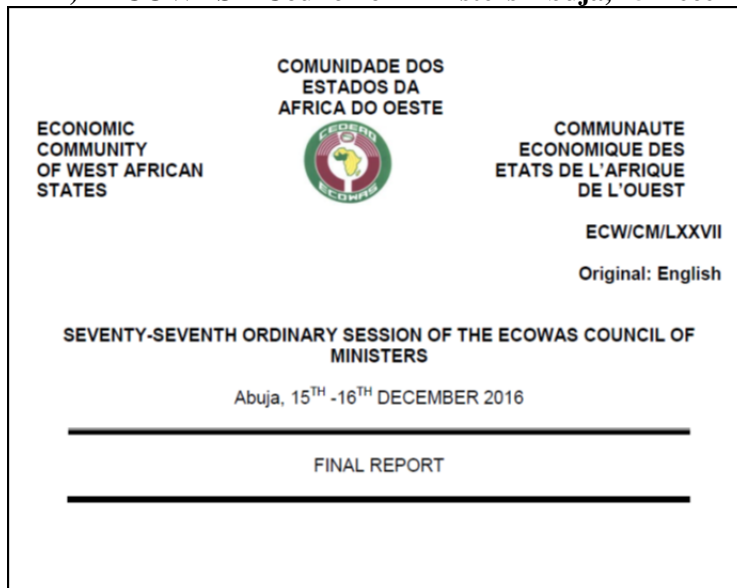
##### 3) COP 22: Declaration of the 1<sup>st</sup> African Action Summit for Continental Co-Emergence Marrakech, 16 November 2016

“We, the African Heads of State and Government, meeting in Marrakesh on 16 November 2016, at the invitation of His Majesty Mohammed VI, King of Morocco, for the First Africa Action Summit, held on the sidelines of the 22nd Conference of the Parties to the United Nations Framework Convention on Climate Change (...).”

#### We commit to:

- Speeding up the implementation of initiatives that have already been identified or launched, not only by building on our own resources, but also by mobilizing multilateral and bilateral donors as well as non-state actors. These include:
  - Initiatives aimed at enhancing our continent’s resilience to the threats of climate change, in particular (...) the "Security, Stability and Sustainability" initiative (...).

#### 4) ECOWAS – Council of Ministers Abuja, 15 December 2016



149. The Republic of Senegal informed Council about the 3S initiatives (Sustainability, Security and Stability in Africa), which are related to the problem of climate change, migration and natural resources degradation in West Africa. The Republic of Senegal invited ECOWAS Member States to join the initiative.

### 3S Declaration

Decided to create a Task Force for sustainability, stability and security in Africa with a view to:

- a) Integrate land degradation and the impacts of climate change as one of the main causes of migration and population movement in National Action Plans (NAPs), national adaptation plan of actions (NAPAs) and national development plan.
- b) Adopt drought early warning systems and coordinate disaster risk reduction activities that integrate reliable scientific data with local and traditional knowledge.
- c) Develop concrete policies and incentives to promote a positive cycle of green growth, including the creation of green jobs and the promotion of investment opportunities for migrants and returnees; providing sufficient tools to start income generating activities; and establishing value chains for rural products for the newly revitalized areas.

And promote with other responsible national authorities:

- a) Cross-cutting programmes for education and green employment for youth and returnee re-integration.
- b) Strengthen land tenure at national and local level in compliance with national and international guidelines.
- c) Identify hotspots of land degradation, population movement and migration.
- d) Track new pastoralist routes to prevent the emergence of tensions over natural resources.
- e) Integrate natural resource management into security strategies and migration policy.
- f) Reinforce cooperation between all actors to ensure that the interrelationship between risks, vulnerabilities and climate resilience is captured and reflected in multi-hazard risk assessments and peace and stability analysis.

The recommendations of the Task Force will be presented, via appropriate channels, at key events in 2017 including:

- High-level meeting on the follow up of the Valletta Summit and its action plan.

- G7 and G20.
- UNCCD COP 13.
- UNFCCC COP 23.
- AU-EU Continental Summit on Youth Employment.

The Secretariat of the Task Force will be housed at the Secretariat of the UNCCD.

### **The Triple S Initiative Options for Financing**

- a) 3S targets are adopted by a donor process.
  - G7/G20.
- b) Different donors support different actions.
  - Boost the UE/Africa dialogue → creation of a 3S dedicated fund of 100 million Euro under the Valletta Trust Fund.
  - Promote synergies with TICAD VI.

### **The 3S Initiative**

Deliverables for the G7/G20

In order to:

- Create at least 2 million new jobs for the vulnerable groups identified.
- Rehabilitate 10 million ha of degraded lands in 250.000 villages.
- Train 10 people per village and provide, at least, 4 ha per person.

Each G20 country will have to commit to:

- Create 100.000 new green jobs.
- Rehabilitate 500.000 new hectares of degraded lands.

### **Action Plan**

- By 2025, create at least 20 million new jobs for the vulnerable groups identified;
- Rehabilitate 10 million ha of degraded lands in 250.000 villages;
- Train 10 people per village and provide, at least, 4 ha per person.

### **Link with African initiative**

To implement 3 S project;

- Strong network among countries and development partners.
- Knowledge sharing to enhance effectiveness of activities.
- Access to finance at all levels mainly for local communities facing climate change and land degradation.

### **What next in Sahel region?**

- Regional Forum:
  - a) Same level as Horn of Africa.
  - b) Share experiences and good practices.
  - c) Better involve governments and others partners.
- Find a partner to play the same role as CADEP-SFM.

#### 4.0 Country Reports

#### 4.1 Combating Desertification to Strengthen Resilience to Climate Change in Djibouti

*Ahmed Mohamed Ali, Tabareck Mohamed Ismail and Abdoufatah Abdourahaman*

##### Introduction

Djibouti covers an area of 23,200 km<sup>2</sup> with an estimated population of 830,000 people. Out of this, 530,000 people reside within Djibouti City. Majority of the people, 94% are Muslims while 6% are Christians. The country gained independence from the France in 1977 and the official languages are French and Arabic. Djibouti occupies a very strategic geographic location at the mouth of the Red Sea. In its efforts to combat desertification, Djibouti has been implementing a desert greening project to commemorate the 100<sup>th</sup> anniversary of the founding of Tokyo University of Agriculture in 1991. The aims of the project include:

- To identify issues on existing agriculture and propose improved methods for sustainable production.
- To establish a system of techniques for promoting the co-existence of forest lands and agriculture.
- To apply regenerating forests in arid region.
- To transfer proposed techniques to other countries.

Most of the inhabitants practice nomadism with overgrazing and deforestation contributing to desertification in most parts.

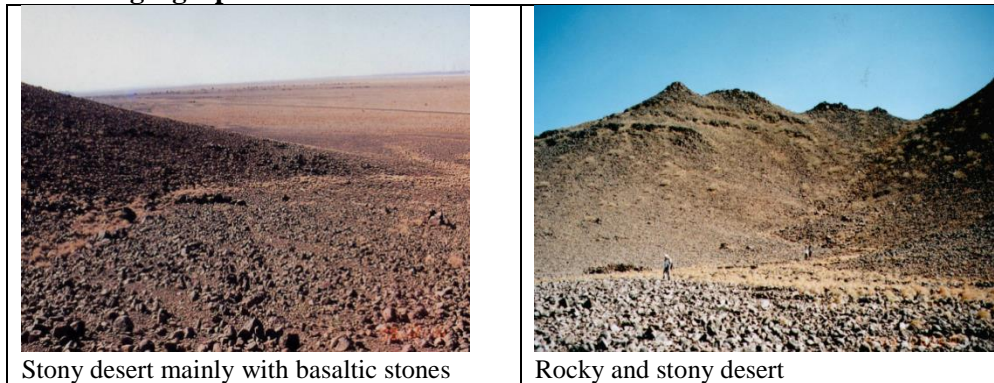
##### Climate and physical features

Djibouti features a varied range of geographical features and climate most of the country is arid and covered by various forms of desert ranging from stony desert where rocks were formed by the solidification of molten magma, rocky and stony desert, sandy and gravel desert as well as clay desert.

Some of the efforts involved in combating desertification include; afforestation along waterways, water harvesting and using the water for irrigation, stone mulching system and double sack method. Wadi agriculture demonstration farm is a good example of a successful project already implemented, which involved a purely integrated agroforestry farm system.

##### Features

###### Classified geographical features







Small Bara desert - Sandy and Gravel desert



Small Bara desert - Clay desert



Traditional houses of nomads in Djibouti



Nomads in Djibouti



Goat is very good at climbing acacia tree.



Overgrazing mainly by goats



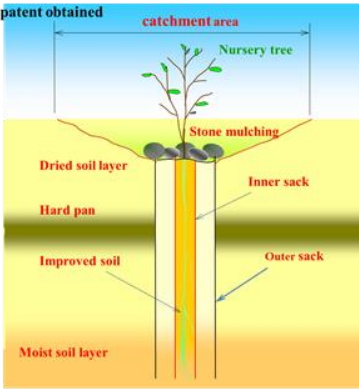
Deforestation by firewood harvesting for sale

**Afforestation techniques**

	
<p>Construction work for water harvesting system</p>	<p>Water harvesting by flood dyke</p>
	
<p>Water harvesting by flood dyke</p>	<p>Natural rain water harvesting (Green belt along waterway)</p>
	
<p>Stone mulching system</p>	<p>Stone mulching system</p>
	
<p>Stone mulching system (2 years later)</p>	<p>Stone mulching system (8 years later)</p>

**Double Sack Method (DSM) Afforestation techniques**

International patent obtained



- ☐ Reduce excess evaporation from soil surface.
- ☐ Protect young trees from drought stress

**Schematic structure on DSM**

Both of inner and outer sack material is used to decomposed plastic bags, carton box, paper bag, soil amendment

Double Sack Method ( Bara desert, Djibouti)



**Drilling by engine auger**



**After auguring**



**Sand excavation by hand**



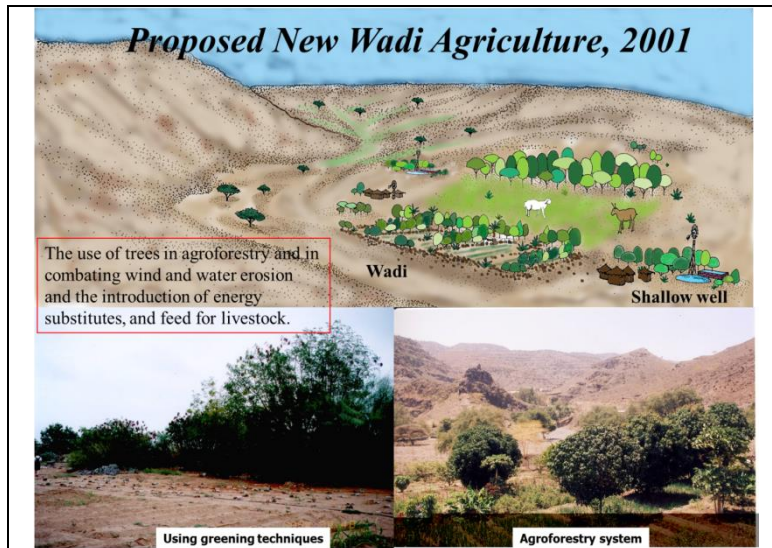
**With stone mulching**



**Root system, 4 months later**



**Planting machine for DSM (Double Sack Method)**



Management of wood resources and reforestation has included numerous FAO field projects implementing the management and use of existing wood resources, the creation of new wood resources and products by individual or communal reforestation.

The promotion of trees in rural lifestyles, the use of trees in agroforestry and in combating wind and water erosion and the introduction of energy substitutes.

Our study team build up a demonstration farm for new Wadi agriculture with experienced farmers using afforestation techniques developed such as Stone mulching system, double sack, and water harvesting methods.



New Wadi Agriculture in Dikile, Djibouti, 2015

## **4.2 Eritrea's Experience in Combating Drought, Land Degradation and Desertification and its Strategies to adapt and mitigate Climate Change**

*Heruy Asghedom, Asrat Haile Tekle and Berhane Frenghi Nugusse*

### **Introduction**

Eritrea covers an area of approximately 125,000 km<sup>2</sup> and has more than 360 islands. The country has a population of over 3.5 million people, nine ethnic groups based on their languages and six administrative regions with the capital at Asmara. Eritrea is bordered by Sudan in the west, Ethiopia in the south and Djibouti in the south east. The Northeastern parts of Eritrea have an extensive coastline of over 1,000 km. The greater parts of the country are either semi-desert or arid.

### **Agriculture Sector**

Agriculture accounts for only 11.6% of the GDP (World Bank, 2012) as compared to 30.6% for industry, and 57.8% for services. About 73% of the population depends on traditional subsistence agriculture, including crop production and livestock husbandry. However, agricultural production is affected by many factors including high rainfall variability with recurrent and long drought periods, continuous land degradation, frequent pest outbreaks and inadequate research and extension services.

### **Eritrean Policy in Climate Change and Combating Strategies**

The fact that Eritrea is Party to three International Environmental Treaties, the UNFCCC, the CBD and the CCD is a testimony of Eritrea's commitment to join hands with the international community in protecting global environment from further degradation. At the national level, a national action plans has been completed for biodiversity conservation and its sustainable use as well as for combating desertification. National Action Plan (NAP) for climate change has also been developed.

### **Eritrea's UNCCD Factsheet**

Eritrea signed the UNCCD in 1994, ratified it in 1996 and holds the objectives of Agenda 21 of the UN.

The Government of Eritrea revised and aligned its NAP with the UNCCD 10-Year Strategy (2008-2018). This ensures the Government's commitments and compliance with the UNCCD's decision (3/COP.8 of 2007) that states affected country parties "to align their action programmes and other relevant implementation activities relating to the Convention.

Eritrea was praised for its commitments in regular report submission, increment of CSOs involvement in the convention processes, NAP alignment, sending allocated budget fully to UNCCD objectives, Capacity building processes.

### **Major Challenges in relation to DLDD**

The major challenges faced by Eritrea in combating desertification include: Overstocking/overgrazing, soil erosion in farmlands and riverbanks, Deforestation for many purposes, e.g. expansion of agricultural land, charcoal making and firewood.

Various adaptation strategies have been put in place, this includes:

- Promoting of soil and water conservation in catchment areas, farmland and along the rivers and streams.
- Strengthening reforestation and afforestation programmes.
- Expanding further the use of closure area system for the regeneration of natural vegetation.
- Strengthening the conservation of natural forest and introduce proper forest management practices, including the establishment of forest reserve areas.
- Introducing the use of energy efficient technologies in the generation of electricity.

- Introduction of energy efficient devices in cooking, cooling and lighting.
- The development and expansion of renewable energy supply technologies.
- The expansion of the use of liquid petroleum gas (LPG) and kerosene.
- Introduction of a regulatory framework that would ban old cars.
- Other initiatives which are specific to agriculture are:
  - Promoting effective soil and water conservation programme.
  - Improvement of water use efficiency by introducing water saving irrigation systems like drip and sprinkler irrigation.
  - Constructing water reservoirs, dams and ponds.
  - Expanding irrigated agriculture, especially spate-irrigated agriculture for crop/livestock production.
  - Promoting good water resource management efficiency and introduction water use regulations.
  - Controlling pests and plant diseases through regular weeding, crop rotation, and planting of appropriate crops.
  - Breed drought-and disease-resistant high-yield crops to maintain and/or improve crop production levels.
  - Increased awareness, education and training for farmers.
  - Implement community-based development and rehabilitation of rangelands in specific areas.
  - Select animal species and breeds capable of coping with climatic variability.
  - Establish dairy production models suitable for specific areas.
  - Reduce overall livestock numbers, while simultaneously improving productivity livestock retained.
  - Encourage afforestation of degraded landscape and watersheds by constructing terraces, micro-basins, and check dams.
  - Plant a mix of drought resistant indigenous and fast growing exotic species through community forestry initiatives;
  - Encourage natural regeneration through enclosures augmented with enrichment planting in biodiversity protected areas.
  - Promote wood energy substitutes (solar, wind, kerosene, liquid petroleum gas, electricity) and wood consumption efficiency (i.e., improved stoves).

Key achievements in the country since 1991 includes;

- Establishment of 105,000 ha of stone bund, 153,000 ha of soil bund, 95,000 ha of bench terrace (land leveling) and 6,205,000 m<sup>3</sup> of check dams.
- Implementation of Land Tenure System Proclamation/1994. To alleviate environmental degradation while improving livelihoods of the farming communities. Piloting of SLM practices was carried out in 28 villages of Zoba Maekel covering about 240,000 ha.
- Construction of strategic dams to adapt to the effects of drought and climate change.
- Improvement of water use efficiency by introducing water saving irrigation systems like drip and sprinkler irrigation.
- Controlling desert pests mainly locusts. Eritrea is one of the hotspots for desert locust breeding.
- Promoting diversification of household incomes through promotion of dairy farming, bee keeping and poultry.
- LPG and Kerosene Distribution to minimize dependence on trees for firewood.
- More than 100 million seedlings have been planted to rehabilitate around 45,000 ha of degraded lands.

- Two types of Closure establishment promoted, namely; National Closure as in National park and Community based enclosure. So far, about 800,000 ha of land has been enclosed in order to regenerate natural vegetation.
- To ensure the existence and development of forests and wildlife, a National Inspectorate of Forest and wildlife was established in 2008. A number of ex-fighters are assigned to work as forest and wildlife inspectors.
- Public awareness targeting rural populations and other stakeholders including religious leaders, schools through the green clubs.
- Involving key policy decision makers in the formulation of policies, e.g. the President.

Major outstanding challenges facing the county include: Deforestation for expansion of agriculture, land tenure system since the land re-distribution cycle is done in short period of time. Such land tenure system does not encourage long-term investment; massive dependency on biomass as more than 70% of Eritreans depend on biomass energy; limited awareness; limited financial and technical capacity; drought due to proximity to the Sahara Desert.

### **Biomass energy**

Biomass sources of energy include fuelwood, charcoal, animal dung agro-residue and biodegradable municipal wastes.

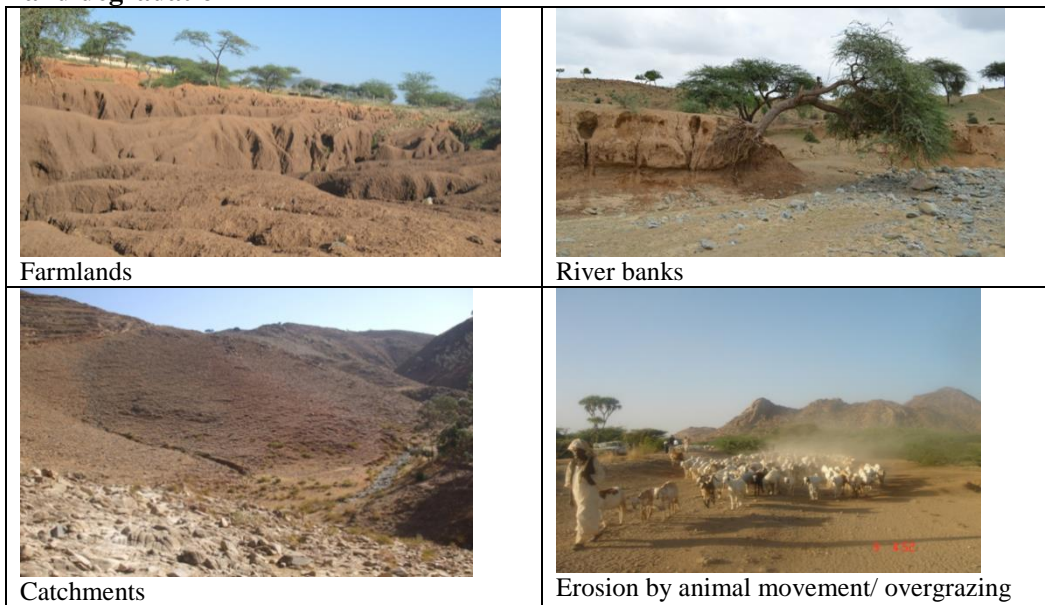
In the Energy Balance of 2009, biomass based energy accounted for more than 69% of the total primary energy supply. A total of 1,200.9 thousand Tons of fuelwood was consumed by both household and commercial sectors in 2009.

Moreover, there was 185,001 tons of fuelwood input for charcoal production. The total kiln production of charcoal at 30% estimated kiln efficiency was 30,833.4 tons. In addition, there was 97.62 thousand Tons of recycled charcoal consumption in both sectors (MoEM, 2009).

### **Drivers of Deforestation in Eritrea**



## Land degradation



The annual net rate of soil loss from the croplands of Eritrea is estimated at 12 tons/ ha. The crop yield is declining at an average rate of about 0.5% per annum owing to soil loss only.

### Major National Strategies

1. Promote soil and water conservation in catchment areas, farmland and along the rivers and streams.
2. Strengthening reforestation/ afforestation programmes.
3. Expand further the use of closure area system for the regeneration of natural vegetation.
4. Strengthen the conservation of natural forest and introduce proper forest management practices, including the establishment of forest reserve areas.
5. The introduction and use of energy efficient technologies in the generation of electricity.
6. Introduction of energy efficient devices in cooking, cooling and lighting.
7. The development and expansion of renewable energy supply technologies.
8. The expansion of the use of liquid petroleum gas (LPG) and kerosene.
9. Introduction of regulatory frames that would ban old cars.
10. The development and expansion of renewable energy supply technologies.
11. The expansion of the use of liquid petroleum gas (LPG) and kerosene.
12. Introduction of regulatory frames that would ban old cars.

### Agriculture-Specific Adaptation Initiatives

- Promoting effective soil and water conservation programmes
- Improvement of water use efficiency by introducing water saving irrigation systems like drip and sprinkler irrigation.
- Constructing water reservoirs, dams and ponds.
- Expanding irrigated agriculture, especially spate-irrigated agriculture for crop/livestock production.
- Promoting good water resource management efficiency and introduction water use regulations.
- Controlling pests and plant diseases through regular weeding, crop rotation, and planting of appropriate crops.



- Breed drought-and disease-resistant high-yield crops to maintain and/or improve crop production levels.
- Increased awareness, education and training for farmers.

### **Livestock**

- Implement community-based development and/or rehabilitation of rangelands in specific areas.
- Select animal species and breeds more able to cope with climatic variability.
- Establish dairy production models suitable for specific areas.
- Reduce overall livestock numbers, while simultaneously improving productivity livestock retained.

### **Forestry**

- Encourage afforestation of degraded landscape/watersheds by constructing terraces, micro basins, and check dams.
- Plant a mix of drought resistant indigenous and fast growing exotic species through community forestry initiatives.
- Encourage natural regeneration through enclosures augmented with enrichment planting in biodiversity protected areas.
- Promote wood energy substitutes (solar, wind, kerosene, liquid petroleum gas, electricity) and wood consumption efficiency (i.e. improved stoves).

### **Achievements 1991 - 2016**

#### Soil and Water Conservation Activities

Since Independence (1991-2016), the common and widely spread soil and water conservation structural measures include:

- 105,000 ha of stone bund.
- 153,000 ha of soil bund.
- 95,000 ha of bench terrace (land leveling).
- 6,205,000 m<sup>3</sup> check dams.



Bench terrace on farm land

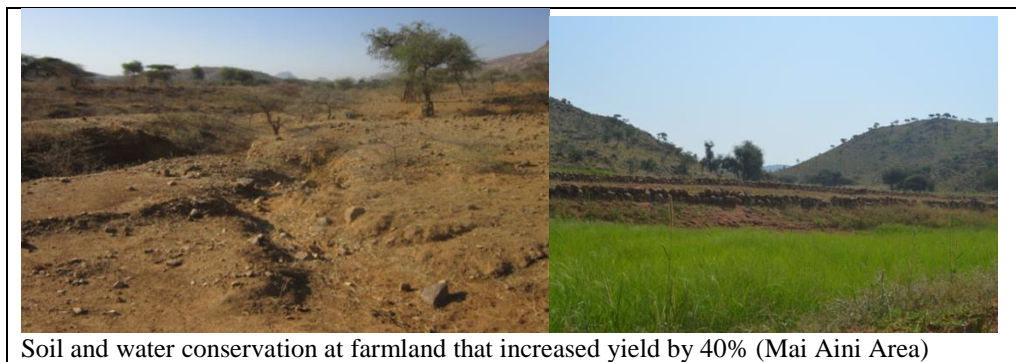


Stone bund terrace on farm land

## Public participation in afforestation and; soil and water conservation activities



## Implementation of Land Tenure System Proclamation/ 1994



To alleviate environmental degradation while improving livelihoods of the farming communities, piloting of SLM practices is being carried out in 28 villages of Zoba Maekel covering about 240,000 ha. It will be scaled up from its lessons. More than 30,000 farmers will benefit directly from the intervention.

The Project interventions are:

- SLM model developed and applied to reduce land degradation.
- Knowledge management systems forms bedrock of SLM.
- Capacities for replicating and adapting SLM models developed and applied to halt land degradation.

Farmers are given land for their lifetime. This is resulting in proper land management through:

- Construction of strategic dams to adapt the effects of drought and climate change.

- Improvement of water use efficiency by introducing water saving irrigation systems like drip and sprinkler irrigation.
- The Government helps farmers in the semi-desert areas by constructing diversion structures. The water that comes from the highlands is diverted before joining the red sea and is used for sorghum production.

**Serious shortage of water tackled by community mobilization**

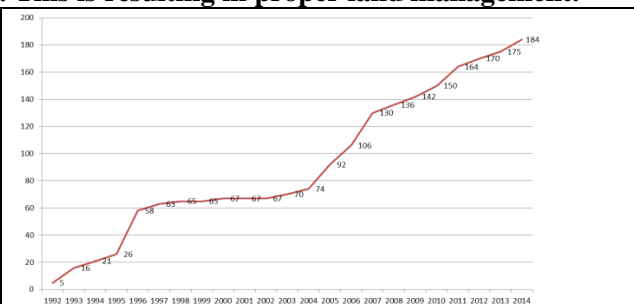
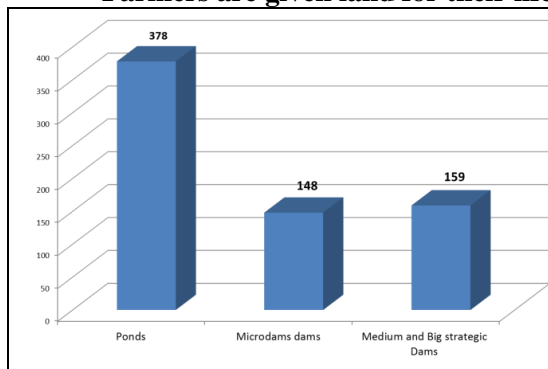


Community efforts to construct check dams and ponds



Livestock resting under protected riverine trees

**Farmers are given land for their lifetime. This is resulting in proper land management.**



This graph shows that the Eritrean government has given the highest priority for construction of water reservoirs.

**Controlling desert pests**

Eritrea is one of the hotspots for desert locust breeding.

The Government of Eritrea deploys full-fledged anti desert-locust facilities to save the farms in the semi-desert areas. This adaptation mechanism is encouraging farmers to promote their sorghum farms.

**Diversifying Household Income**

• **The Minimum Household Integrated Package**

This Pilot programme is helping farmers to earn various commodities simultaneously.

A farmer is given one milking cow on the “pass - on principle”, 2 bee hives, 10 fruit seedlings, 10 other trees (5 for forage and 5 for fire wood), 25 a month old chicks and quarter a hectare of land to integrate all this activities.

However, even if the farmer fails to get adequate crops from his farmland, this “good” adaptation option is already in place.

- **Livelihood adjustments**

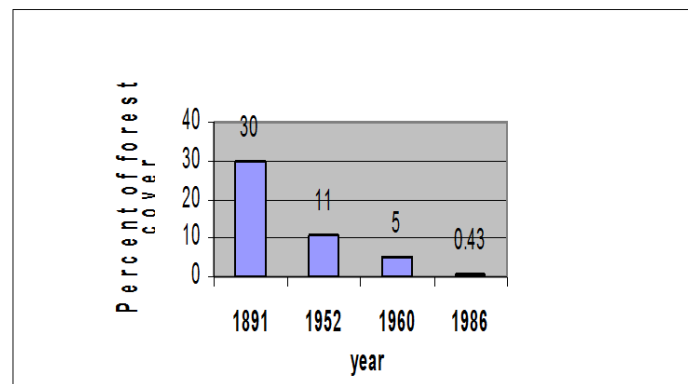
Encourage alternatives for wood in traditional house construction



Transformation from woody buildings into semi-modern houses is flourishing all over the country, including the rural areas. This will obviously minimize deforestation.

- **Trend of Eritrean Forest status**

The forest cover of Eritrea was estimated to be below 2%



### Forestry Interventions

Since 1991, more than 100 million seedlings have been planted to rehabilitate around 45,000 ha of degraded lands. About 21 million seedlings were planted through Summer Students Campaign.

### Main planting areas

These include: catchments, roadsides, schools, religious institutions, government and on-government premises

### Improved stove

- As trees are important energy sources for domestic use, it is common to see that they are cut on a daily basis.
- To minimize the problem, the Government of the State of Eritrea introduced energy saving stoves locally called “*Adhanet*” (saver).
- The advantages of the improved energy saving stove over the traditional stoves are as follows:
  - The improved stove reduces firewood consumption by over 50%.
  - Labour and time of women and children who are responsible to fetch fire wood saved.
  - Family health improved - Smoke goes outside through chimney.



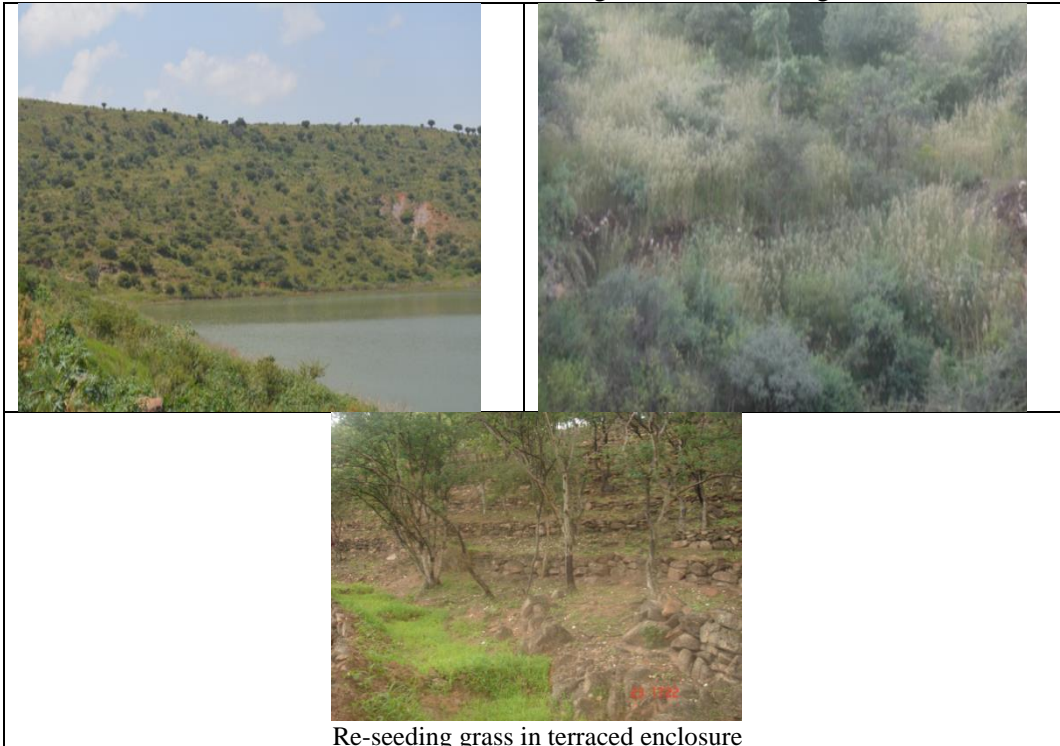
To promote energy saving, more than 150,000 efficient cooking stoves have been installed and are currently in use.

### **Closure establishment**

There are two categories of enclosures promoted in Eritrea, namely;

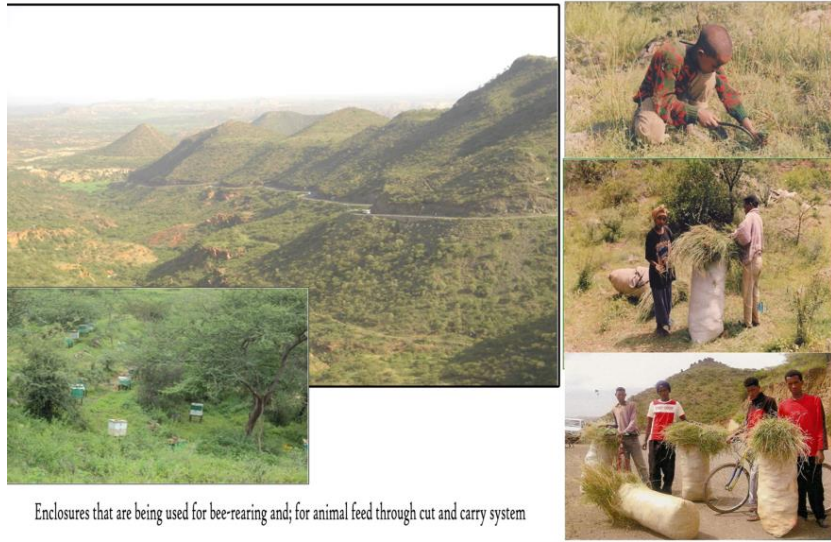
1. National closure (National park).
2. Community based enclosure.

About 800,000 ha of land has been enclosed in order to regenerate natural vegetation;



Re-seeding grass in terraced enclosure

Establishment of enclosures: the main intervention for natural regeneration of trees and grasses.



### **Forest and wildlife protection**

To ensure the existence and development of forest and wildlife, a National Inspectorate of Forest and Wildlife was established in 2008. A number of ex- fighters are assigned to work as forest and wildlife inspectors.

### **Public Awareness**

As most Eritreans live in the rural areas, in one way or the other, they have contributed to the existing land degradation, and they are also affected by the consequences of this land degradation. In order to reverse the issue, a great deal of work will be required to create awareness that will motivate a change in attitude. Religious leaders, students and other community members have been trained and sensitized on the need of land reclamation and environment conservation as a key strategy to proper natural resources management.

### **The Green Clubs**

Objectives:

- Shape the attitude of young children to wards greening and enhancing of the environment.
- Sensitizing school children to establish nurseries and plant seedlings.
- Promoting natural resources management to school children.

### **Establishments:**

So far, 482 green clubs have been established in the country with 63,420 members. This will continue until every school in the country establishes a green club.



Established green clubs managing trees

### **Government reinforces Commitments**

- “All our events should be marked by tree planting.”
- “Tree planting should not be left only to volunteers rather it should be a mandatory with a clear action plan”
- On 15<sup>th</sup> May 2006, a National Conference in which H.E President Isaias Afewerki attended was held. Consequently, May 15<sup>th</sup> is marked as the National Greening Day.

On 15<sup>th</sup> May 2016, H.E President Isaias Afewerki attended the 10 years evaluation of the greening campaign. After observing the 10 years achievement report, He gave important directives to promote the campaign.

### **The National Greening Day**

On the National Greening Day, all stakeholders jointly evaluate the previous year’s performance and agree on a plan for the year to come.

Outstanding regions, individuals, communities, schools, green clubs, religious as well as other government and non-government institutions are rewarded for their best performances on the National Greening Day.

### **Opportunities**

#### **Solar Energy**

The potential for the development of solar energy is great. But the application of solar energy technology has been very limited. The application of these facilities includes lighting of households, rural health centres and refrigeration of medicaments, powering of schools and remote offices, pumping of portable water in rural communities and powering telecom systems.

#### **Expansion of solar powered irrigation systems**

#### **Wind Energy**

The available meteorological stations have enabled Eritrea to identify its wind resource potential. Prior to installing large-scale wind farms, a pilot wind energy project has been implemented by the Ministry of Energy and Mines in partnership with (GEF) and (UNDP) in Assab, Southern Region

#### **Geothermal Energy**

The possibility of the economic exploitation of the geothermal heat for power generation occurs in the Rift area, which is associated with volcanic activity. Alid, which is located in the Danakil Depression part of Eritrea, Nebro, and Dubbi are the main target locations where geothermal activity is known to be intensive. Lower temperature activity also occurs at Mai-Wuui, 30 km west of Massawa.

The Government of Eritrea intends to develop the geothermal power through the installation of a pilot geothermal power plant at Alid and the identification of new prospects for additional geothermal plants in the future.

**OUR Motto**

*“We have not inherited this planet from our ancestors. We have borrowed it from our children”.*

**Remaining challenges**

1. Land use systems:
  - Deforestation for expansion of Agriculture.
  - Land tenure system (the land re-distribution cycle is done in short period of time. Such land tenure system does not encourage long term investment.
2. Massive dependency on biomass.
  - More than 70% of our people depend on biomass energy.
3. Limited awareness.
4. Limited financial and technical capacity.
5. Drought – proximity to the Sahara Desert



### 4.3 Experiences to Restore Degraded Landscape of Ethiopia

*Alganesh Tesema Gellaw*

#### Synopsis

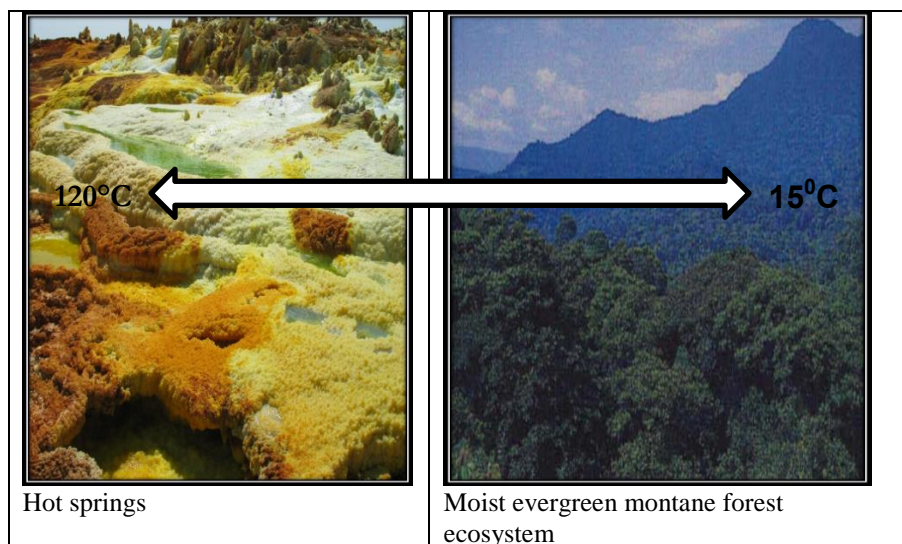
- Introduction.
- Current Initiatives on combating desertification.
- Major achievements and challenges.
- On-going Initiatives.

#### Introduction

Climatic condition

Chain Mountains: 25 mountains more than 3,000 m above sea level, 44% cover

Altitudinal range: 4,620 m above sea level to 120 m above sea level.



#### Ethiopian dry land area coverage

- Dryland constitutes about 60% of the land areas, while other areas are about 40%.

#### Economic background

- In 2016, the population of Ethiopia was about 92.3 million people.
- It is projected that the population will reach 170 Million people by 2050.
- This includes a projected high rate in population growth.

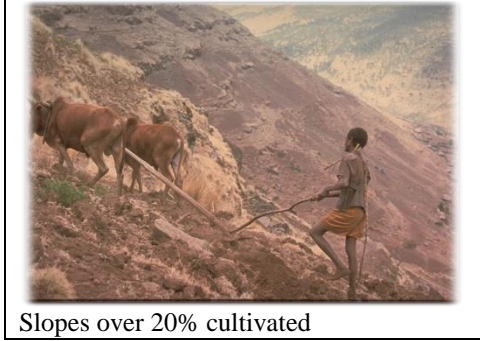
#### Why land is degraded

Main forms of land use generating high level risk of land degradation in Ethiopia include:

- Agricultural expansion.
- Industrial infrastructure.
- Permanent transformation of wetland.
- Over-grazing.
- Erosion

Main agents/factors:

- Water.
- Wind.



Slopes over 20% cultivated

### **How Ethiopia is Tackling Land Degradation**

With the collaboration of UNCCD, Ethiopia has set 9 targets, aligned with NAP and other development programmes.

#### **The best landscape restoration practices in Ethiopia**

- **Exclosures (without interference of human and animal).**  
Exclosures contributed to the change in vegetation cover and millions of ha have been rehabilitated with this practice.
- **Plantation expansion.**  
Plant 4 billion seedlings per year with the survival rate of 50 – 70%.  
The forest coverage of Ethiopia is 15.5%.
- **Participatory Forest Management (PFM)**  
The government and local communities co-manage forests, cooperatives established to manage forests through PFM.  
Mainly involved in production of NTFPs (wild coffee, honey, incense, essential oil).
- **Agroforestry.**  
The integration of trees and shrubs into agriculture has developed during subsequent millennia into a number of indigenous agroforestry systems cover 576,000 ha in SNNPR.

#### **Factors for Ethiopia's success in restoring degraded landscapes**

- **Policies, strategies and directives (Ethiopian Constitution (1995)).**  
The right to ownership of land and other natural resources in the hands of State and people.
- **The national rural development policy and strategy.**  
Recognized agriculture-led economic development and rehabilitating degraded lands and forests is one of the development interventions.
- **The Environmental Policy of Ethiopia.**  
The policy includes: Soil management and sustainable agriculture; forest and tree resource management; biodiversity conservation and management.
- **Forest Development, Conservation and Utilization Policy, 2007**
  - According to Rural Land Administration and Land Use.
  - Proclamation No. 456/2005 restricts farming in hilly areas with slope exceeding 60%.
  - Prohibits free grazing in closed areas and encourage cut and carry system.

- The GTP and CRGE
  - Growth and Transformation Plan (GTP) of 5 years.
  - CRGE of Ethiopia is aimed at addressing issues addressing to the adverse effects of climate change and the green economy.

The strategy for a Green economy is based on four pillars:

- **Agriculture**
  - Reduce deforestation by agricultural intensification and irrigation of degraded land.
  - Use lower emitting techniques.
- **Forestry**
  - Improve forest management.
  - Enhance sustainable ecosystem services.
  - Increase sequestration.
- **Energy**
  - Build renewable power generation capacity.
  - Export renewable power to substitute for fossil fuel power generation abroad.
- **Industry**
  - Transportation and building.
  - Improve industry energy efficiency.
  - Construct electric rail network.
  - Improve waste management.

#### **Other key factors for success**

- Awareness creation: with the motto of *“we don’t want to inherit degraded land”*.
- Local level training.
- Public mobilization: 40 days in a year all farmers contribute in restoration and plantation freely.
- Formulating and scaling up best practices: Best practices identified and enriched with lessons for wider scaling up; and experience sharing visits to policy makers, experts and the community.

#### **Impacts of Restoration Initiatives in Ethiopia**

- Creates additional farming land.
- Contributed to increased income.
- Provided job opportunities for jobless youth and women.
- Source of fodder and fuel.
- Reduced risk of flood:
- Improved access for water
- Improved biodiversity
- Better aesthetic values.

#### **On-going initiatives currently being implemented**

- Sustainable Land Management.
- CRGE targets at rehabilitating 7 million ha of land before 2025 and Ethiopia pledged to restore 15 million ha.
- Forest sector capacity development programme.
- National REDD+.
- An integrated rehabilitation and livelihood initiative is under launching with FAO.
- MEFCC with the collaboration of GIZ biodiversity targeted Initiative.

### The achievements



### Challenges to Restoration:

- Colonization by invasive alien species.
- Shortage of land with increasing population pressure, overgrazing and free grazing.
- Lack of research technologies and knowledge.
- Habitat fragmentation and loss of biodiversity.
- Forest degradation.
- Loss of soil fertility.

#### 4.4 Combating Desertification in Somalia

*Kenadid Mumin Cali, Osman Ahmed Jimale and Ibrahim Abdlnur Yakub*

##### **Introduction**

Somalia has an estimated population of 12.3 million people based on the UNFPA population survey. The total area of land is about 637,657 km<sup>2</sup> or 246,201 miles<sup>2</sup>, with a coastline of approximately 3,333 km.

##### **Geography and climate**

Due to its proximity to the Equator, Somalia has a relatively little variation in its climate, except for periodic irregular heavy rainfall. Somalia experiences hot conditions year long, broken up by the Monsoon and its accompanying winds and rainfall.

Conditions range from arid in the Northeastern and Central regions to semi-arid in the Northwest and South. In the Northeast, annual rainfall is less than 100 mm (4 inches). In the Central plateaus, it is about 200 to 300 mm (8 to 12 inches).

The Northwestern and Southwestern parts of Somalia, however, receive considerably more rain, with an annual average of 510 to 610 mm (20 to 24 inches). Although the coastal regions are hot and humid throughout the year, the hinterland is typically dry and hot. Most of the country receives less than 500 mm (19.7 in) of rain annually, and a large area encompassing the Northeast and much of Northern Somalia receives as little as 50 to 150 mm of rainfall.

The daily mean maximum temperatures range from 30 to 40°C (86 to 104 °F), except at higher elevations and along the Eastern seaboard, where the effects of a cold offshore current can be felt.

Northern Somalia experiences the greatest temperature extremes, with readings ranging from below freezing in the highlands in December to more than 45 °C (113 °F) in July in the Coastal plain skirting the Gulf of Aden. The North's relative humidity ranges from about 40% in mid-afternoon to 85% at night, varying somewhat with the season. During the colder months, December to February, visibility at higher elevations is often restricted by fog.

Temperatures in the south are less extreme, ranging from about 20°C to 40 °C (68 to 104 °F). The hottest months are February through April. Coastal readings are usually 5°C to 10 °C cooler than those inland. The Coastal zone's relative humidity usually remains at about 70% even during the dry seasons.

There are four main seasons around which pastoral and agricultural life revolve. These are dictated by shifts in the wind patterns. December to March is the “*Jilal*”, the harshest dry season of the year. The main rainy season, referred to as the “*Gu*”, lasts from April to June. This period is characterized by the Southwest Monsoons, which rejuvenate the pasture land, especially the central plateau, and briefly transform the desert into lush vegetation.

July to September is the second dry season, the “*Xagaa*” (pronounced "Hagaa"). The “*Dayr*”, which is the shortest rainy season, lasts from October to December. The “*tangambili*” periods that intervene between the two monsoons (October–November and March–May) are hot and humid.

##### **Land use**

- The current reconstruction activities in the country include: the Infrastructure Ministries at Federal and State level. They are operating in a Grey Zone without any up to date legislation.
- The majority of legislation for the land use legal framework dates to a pre-war period and its status is either not clarified or not existing.
- Regional and local governments lack guidance through policies, norms and standards.

### **Forestry status**

- Total forest area: 7,131,000 ha.
- % of land area: 11.4%.

### **Deforestation Rates, 2000-2005**

- Annual change in forest cover - 76,800 ha.
- Annual deforestation rate - 1.0%.
- Change in deforestation rate since 1990s - 10.3%.
- Total forest loss since 1990 - 1,151,000 ha.
- Total forest loss since 1990 - 13.9%.

### **Current Initiatives**

The current level of charcoal demand and consumption are simply unsustainable.

- Initiatives that promote energy efficient stoves are being fast tracked and encouraged whenever possible.
- The support of the exploration to introduce kerosene based alternatives is relatively straightforward. Parallel efforts are taken to include solar alternatives, but unfortunately economic reality prevents this from becoming a priority.
- The illegal charcoal trade, which poses a serious threat to the livelihood of people and undermines the resource base.
- Efforts have been made to strengthen the ban on charcoal transport as they have on charcoal exports abroad.

### **The charcoal – climate change nexus**

#### **Achievements**

- Greater efforts are being placed on awareness raising measures to reach the population and bring them on board. Once these outreach programme have explained the phenomenon of desertification to those most affected by it the introduction of alternative energy solutions comes next.
- Through international partners, local business interest and donations from Diaspora members efforts are in place to assist with the transition from charcoal from LPG (gas) and Solar alternatives.

#### **Challenges**

The source problem in this case is that of deforestation. The charcoal trade in Somalia takes a heavy toll on the acacia forests of southern Somalia, as traders clear-cut entire swaths of forest for shipment to Gulf States. The process of turning cut wood into charcoal is also a rough, dirty process that pollutes the air, albeit in a very local fashion.

The current level of charcoal demand and consumption are unsustainable. They require a broad mandate as well as heavy investment to provide alternatives that are affordable on local levels.

#### **Opportunities**

- Environmental resource policy is vital.
- Addressing the concerns of desertification brings the added benefit of eventual increased food production.
- It encourages further protection of the environment, most beneficial for future coastal resource management.

- Clean energy is the way the world is heading and as a re-emerging state this will pay positive long-term dividends if as much attention as possible is given to solar energy.
- It affords us yet another platform to engage with the world at large and forges fresh ties that will have cement our place in the world.

#### 4.5 Desertification and Current Status of Woodland Resources in South Sudan

*George Tadu, Lutana Musa Lasu and Guadensio Veanasio Monia*

##### Introduction

South Sudan is a landlocked country of approximately 640,000 km<sup>2</sup>. Its climate is tropical with distinct dry and wet seasons. Mean temperatures range from 25°C to 30°C but may go over 40°C in some parts during the dry season parts during the dry season.

South Sudan has a population of about 8.3 million people (2008 census). However, this is currently estimated at 12,937,270 people (United Nation, 2017).



##### Agro-ecological Zones

South Sudan is classified into six agro ecological zones.

1. Green belt.
2. Hills and mountains.
3. Iron stone plateau.
4. Flood plains.
5. Nile and Sobat River Corridor.
6. Semi-arid.

##### Land Use

Arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it.

##### Categories of land use

- Crop farming.
  - Traditional shift-cultivation subsistent farming.
  - Mechanical cultivation.
  - Intensive system.



- Livestock grazing.
- Forest harvesting and tree planting.
- Buildings and roads construction.
- Mining and oil drilling activities.
- Fish harvesting.

### **Land Use Policy and Enabling Framework**

1. Land Use Policy: Aims to strengthen land tenure security for all citizens of South Sudan who hold land or wish to hold land.
2. Guiding Principles
  - Security of Land Rights: citizens and non-citizens shall enjoy security of tenure over their land.
  - Equitable access to land.
  - Roles and Responsibilities: defined government and traditional authorities at all governance levels.
  - Land Institutions, National Government Ministry.
    - South Sudan Land Commission.
    - State Government Ministry.
    - County Land Administration.
    - Traditional Authorities.
    - Payam Land Council.

### **Enabling Legal Frameworks**

- Transitional Constitution and Land Act (2009) classified land as Public, Community and Private.
- Land policy e.g. general principles, ownership, tenure system and protection of land rights are lawful, legally and constitutionally binding.

### **Initiatives to Combat Desertification**

#### **Causes of desertification**

- Overgrazing.
- Deforestations.
- Over-cultivation.
- Poor irrigation.

#### **Primary drivers of forest cover change:**

- Production of timber,
- Charcoal
- Agriculture
- Unmanaged fire.

#### **Secondary drivers:**

- Socio-economic alternatives and capacity gaps particularly in education.

#### **Deforestation**

- Highest was in 2006-2009 and reached 9,500-10,000 ha (95-100 km<sup>2</sup>) per year.

### **Actual status of forest cover and vegetation change in three greater regions**

Region	Forest (ha)	Woodland (ha)	Annual loss (ha)	Percent loss (%)
<b>Bahr ElGhazel</b>	14,048,291	4,829,122	113,958	0.6
<b>Equatoria</b>	14,256,099	3,356,184	87,480	0.5
<b>Upper Nile</b>	15,165,707	6,333,033	76,192	0.35

### **Current Initiatives on Combating Desertification**

1. Investment in a legal framework to support decision-making and governance of forests and forest resources.
2. Sectoral integration of natural resources policy planning and implementation with regard to forest, land and water management.
3. Preparation of State of Environment Report and Outlook.
4. Community-based forest and rangeland management and rehabilitation programme plans.

### **Achievements**

1. Development of legal documents such policies, laws that give clear mandates to different environment related line-ministries in line with their professional roles and rights.
2. Support to local farmers to plant new important economic forestry plantations to diversify sources of forest products and promote livelihoods.
3. Established resolution to develop climate change mitigation and adaptation policies and laws, followed by their implementation and monitoring for, and by the Government of South Sudan.

#### **4.6 Comments and observations on country reports**

*Gilbert Obwoyere, Egerton University, Moderator*

1. The Horn of Africa countries have a common problem of desertification and land degradation.
2. Each country has different means and ways to address the challenges in specific localities.
3. We can learn from each other and adapt technologies and practices that are relevant and applicable to other localities.
4. All countries have legal, institutional and policy framework.
5. The challenge is how to implement and enforce the laws to be successful.
6. There is need for experiential learning.
7. Charcoal is a common commodity in Africa, what drives the industry is it the home or external market.
8. In Kenya, the inter-country market is the driving force with Nairobi being the major driving force for charcoal conversion.
9. There is lack of proper land use planning to cater for technologies such as water harvesting, development of non-timbers forest products as well as tourism and eco-tourism.

## **5.0 Donors Perspectives**

### **5.1 Combating Desertification and Building Resilience in Sahel and the Horn of Africa** *Festus Akinnifesi, FAO*

#### **Outline**

1. Introduction.
2. How FAO Works: Five strategic objectives.
3. The common Vision on Sustainable Food and Agriculture and link to SDGs.
4. Key FAO programmes/interventions on combating desertification and building resilience
  - The Great Green Wall, FLR, SLM.
  - FAO on-the-ground arrangements in support of programme implementation.
  - Partnerships and Relevant Initiatives with similar objectives that FAO is involved.

#### **Introduction**

##### **Desertification and Resilience to Climate change in the Africa Drylands**

- Desertification, climate change and loss of biodiversity are major challenges of the arid regions of Africa, especially the Sahel and the Horn of Africa.
- There is strong political will and on-going partnership in Africa to combat desertification and climate change, to halt and to reverse land degradation.
- This presentation highlights what FAO is doing, in partnership with relevant stakeholders.

**Main focus:** the Great Green Wall, Forest and Landscape Restoration Mechanism, and Sustainable Land Management (including Rangeland).

##### **How FAO addresses these challenges**

The SDGs is top on FAO's global approach to address the challenges relating to Sustainable Food and Agriculture.

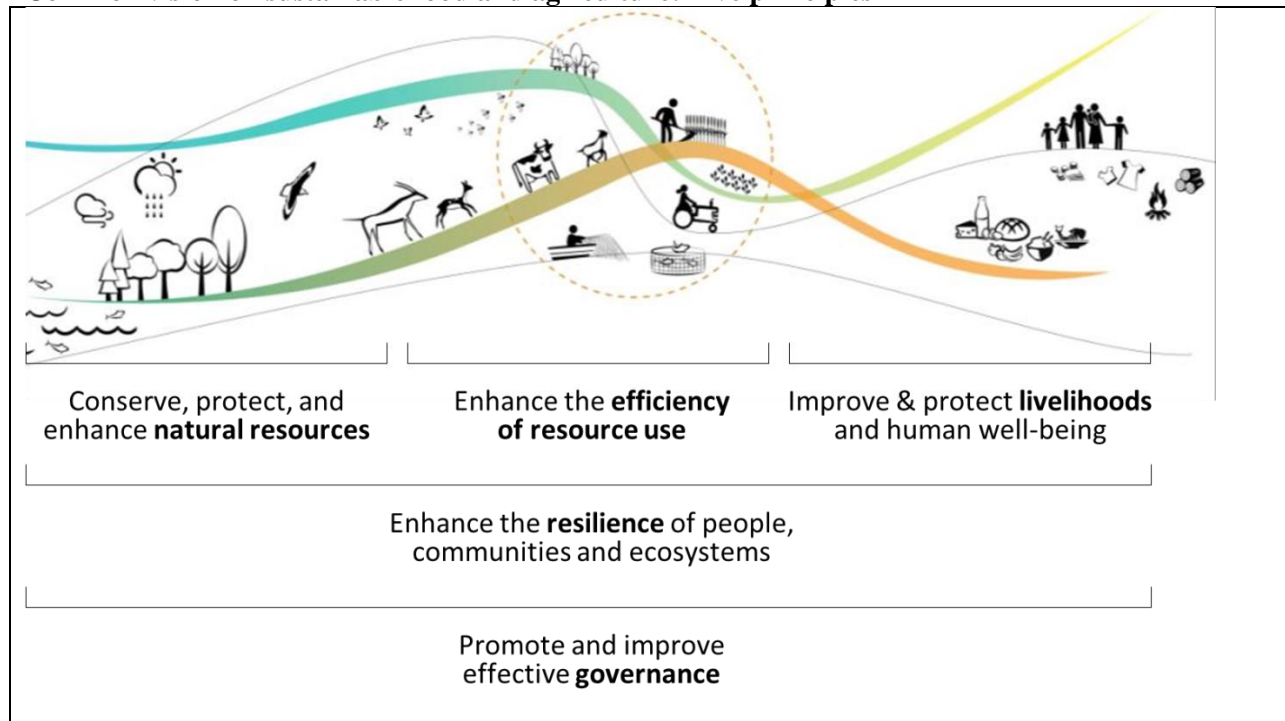
FAO's **five Strategic Objectives**, now transformed into Strategic Programmes, are well aligned with the SDGs:

1. Help eliminate hunger, food insecurity and malnutrition.
2. Make agriculture, forestry and fisheries more productive and sustainable.
3. Reduce rural poverty.
4. Enable inclusive and efficient agricultural and food systems.
5. Increase the resilience of livelihoods to disasters.

##### **Regional Initiatives in Africa**

1. Zero Hunger Challenge.
2. Sustainable Intensification and Value chain.
3. Building Resilience in Africa's Drylands.

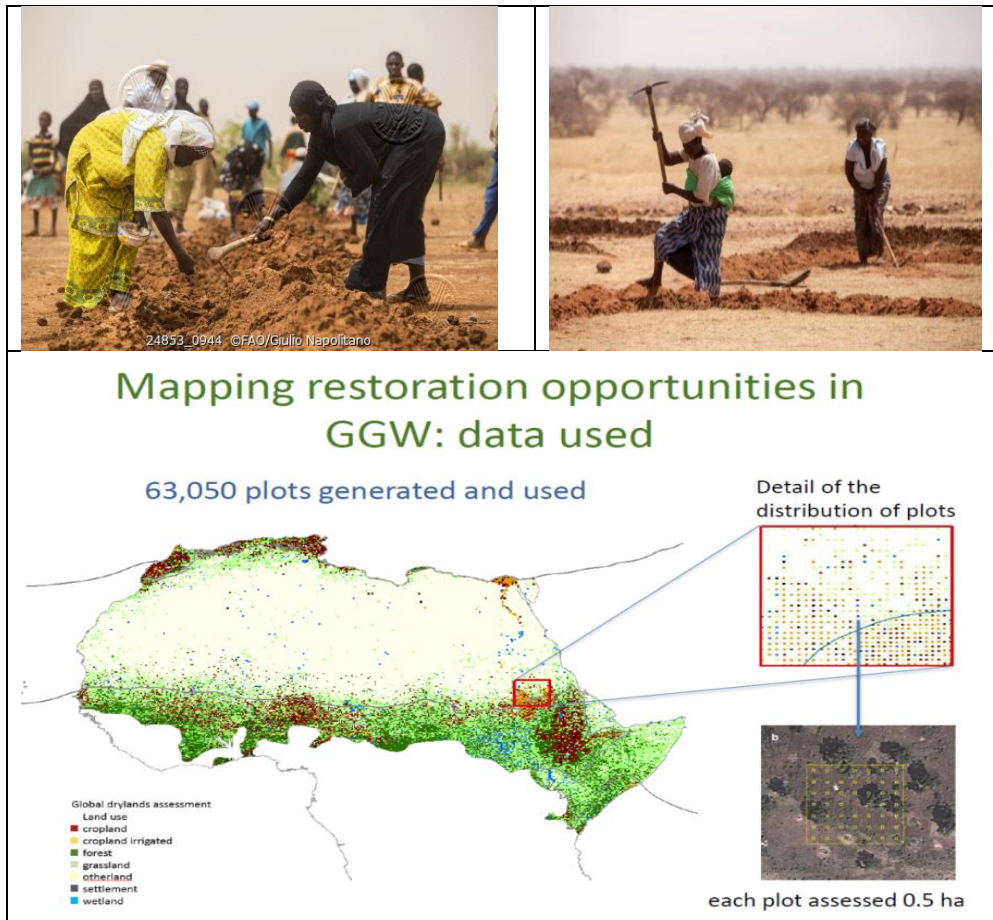
## Common vision on sustainable food and agriculture: Five principles



## Key FAO programmes on combating desertification and building resilience

### 1. Great Green Wall overall goal

- The Great Green Wall (GGW) is Africa's flagship initiative to involving over 20 countries around the Sahara.
- The Great Green Wall is Africa's flagship initiative to build prosperity and resilience in over 20 countries around the Sahara. It was developed by African Head of States and Government and endorsed by African Union in 2007. Aiming at addressing on a long term the increasing challenges across drylands of North Africa, Sahel and the Horn.
- Building a GGW means: creating a great mosaic of green and productive landscapes, it means improving resilience of human and natural systems. Restoration is needed to build resilience, improve productivity and livelihoods. Therefore, countries have made land restoration a priority in the GGW regional harmonised strategy and the related GGW national action plans.
- Address increasing challenges of :
  - Food insecurity, poverty, forced migration.
  - Climate change, desertification, biodiversity loss.
- Improve resilience of human and natural systems.
  - Restoration: Intervention priority as defined by member countries



### Action against desertification programme: FAO's support to the Great Green Wall

- Mosaic of sustainable land management and restoration of degraded lands.
- Resilience to climate change, contributing to food security and poverty alleviation.
- Interventions on the ground, capacity development, knowledge management, South-South Cooperation.
- Total funding: 41 million Euros till 2019.
- Global partners: African Union Commission, ACP Secretariat, European Union, Global Mechanism of the UNCCD, Royal Botanic Gardens of Kew, Walloon region (Belgium).
- Launched in 2014, implemented by FAO in 8 ACP countries (Burkina Faso, Ethiopia, Fiji, the Gambia, Haiti, Niger, Nigeria and Senegal).

FAO is implementing since July 2014, the Action Against Desertification Programme in support of the Great Green Wall for the Sahara and the Sahel Initiative, an African Union Flagship programme, aiming to combat the effects of climate change and desertification and contribute to food security and poverty alleviation.

**Objective of the project:** to improve and restore the productivity of the agrosilvopastoral landscapes and improve people's livelihoods in six African countries.

**Implementing countries:** Burkina Faso, Ethiopia, the Gambia, Niger, Nigeria and Senegal – as well as Fiji and Haiti.

**Funding:** The European Union (20 million Euro) under the framework of the 10<sup>th</sup> European Development Fund (EDF).

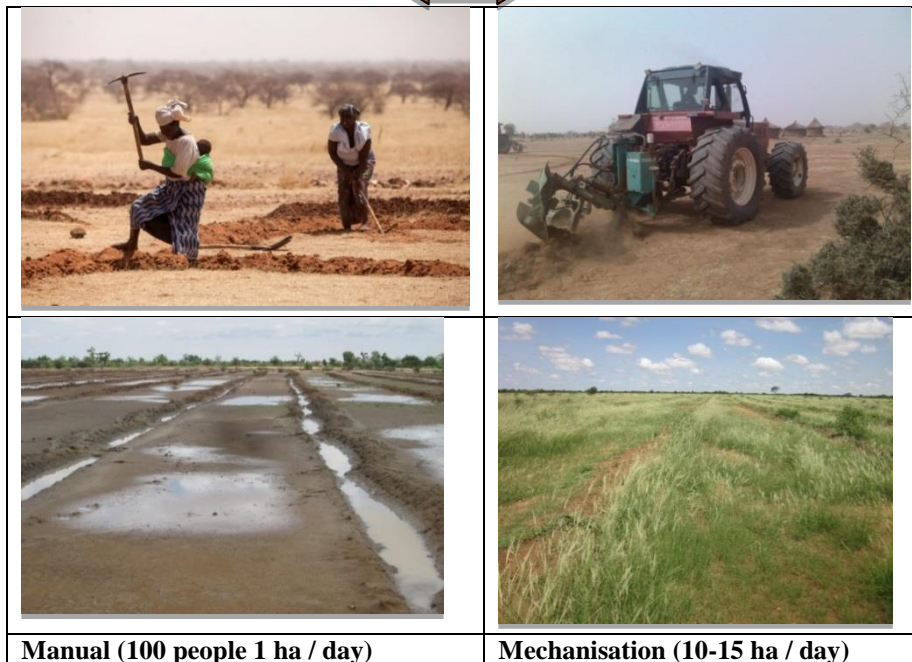
**Co-funding:** additional EUR 21 million co-funding from other partners (in-kind contribution and cash).

**South-South Cooperation** across Africa, Caribbean and Pacific (ACP) is at the heart of the project.

**Partnership:** The project is being implemented in collaboration with the African Union Commission, the ACP Secretariat and other partners.

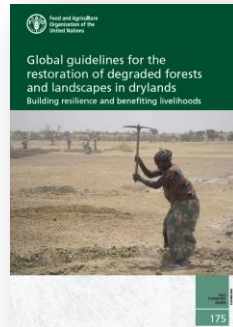


**Improvements in Land Preparation in Burkina Faso**



## Shared understanding of the restoration approach

- 2 Regional technical workshops held in Abuja and in Nairobi (with KEFRI) in Feb 2016.
- Involved about 100 forest seed and restoration technicians and experts from 20 ACP countries.



## Opportunities and synergies

### Synergies with related programmes and initiatives – enhanced funding and support

- Scaling-up because of increased attention to restoration (SDG 15, Bonn Challenge, African Forest and Land Restoration (AFR 100), Land Degradation Neutrality).
- Expressed interest of other GGW countries to extend Action Against Desertification (AAD) technical support (during the 1<sup>st</sup> GGW Conference – *Restoring Africa landscapes, in Dakar, May 2016*).
- AAD offers a good chance to develop and demonstrate a **model for effective South-South Cooperation** and serve to connect related SLM initiatives in each country and in all 3 regions.
- **Prospect for RM:** Green Climate Fund, GEF, ODA, National budgets.



## Implementing FLR

### Achieving Aichi Target 15 Bonn Challenge Pledge

- Private sector investment.
- Resource mobilisation.
- Governance issues.
- (Tenure, local community involvement).
- Technologies and approaches.
- Enabling environment.
- (Policies/regulations/laws).
- Assessment of landscape degradation, deforestation and opportunities.



- Capacity development, extension and dissemination.
- Institutional setting.
- Research needs.

### Current and future support of the FLRM at country level

- Currently providing support in 7 countries: Uganda, Rwanda, Guatemala, Peru, Cambodia, Philippines, Lebanon.
- Expanding to new countries with additional funding: Kenya, Ethiopia, Burkina Faso, Niger, Sudan, Sao Tome and Principe, CAR, DRC, Pakistan, Brazil, Haiti, Fiji, Jordan, Ecuador and Vietnam.
- Kenya: GEF 6 funded project under development – The Restoration initiative:
  - *Restoration of arid and semi-arid lands (ASAL) of Kenya through bio-enterprise development and other incentives (4.5 M USD).*
- Ethiopia: Project under development on The Paris Agreement in action:
  - *Scaling-up Forest and Landscape Restoration (FLR) in the context of the Bonn Challenge to achieve the NDCs by promoting joint mitigation and adaptation approaches in Africa, Pacific Islands and the Mediterranean. (5 M USD).*

### Other Initiatives

- Building capacity for participatory and inclusive processes for land management (e.g. Somalia).
- Rangeland conservation.
- Postharvest management of agricultural residues.



### FAO's support to resilience building to shocks (drought, flooding, conflicts, transboundary pests and diseases)

- FAO's Regional Initiative on "building resilience in Africa's drylands", supports 10 countries in the Sahel and the Horn of Africa in meeting prioritised resilience building needs as well as promoting knowledge, information sharing and learning.
- Supporting the commitments and initiatives by RECs such as IGAD's Drought Resilience and Sustainability Initiative (IDDRSI) and the Global Alliance for the Resilience Initiative (AGIR) in the Sahel, as well as in support on coordination of food security, nutrition and resilience information and analyses to inform policy and investment actions.
- Support on cross-border programming.
- Development of country level resilience building strategies.

## 5.2 Combating Desertification: Global Environment Facility Approach and Programmes

*Mohamed Bakarr, GEF*

### Land Degradation Focal Area

**Mandate:** Finance efforts to arrest and reverse current global trends in land degradation, specifically desertification and deforestation.

**Focus:** Sustainable Land Management (SLM) in production landscapes.

### Impacts

- Flow of ecosystem services increased or maintained.
- Sustained crop, livestock, and forest production (existing areas).
- Sustainable livelihoods (development benefit).

### GEF is a Financial Mechanism of the UNCCD

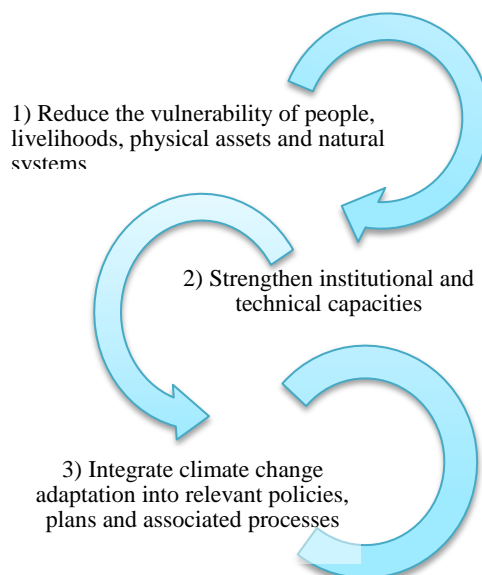
- Land Degradation Focal Area is main GEF financing window for SLM.
- GEF financing leverages resources in agriculture, livestock and forestry for global environmental benefits.
- Investing in SLM supports implementation of the UNCCD by affected country Parties.

### Sustainable Land Management

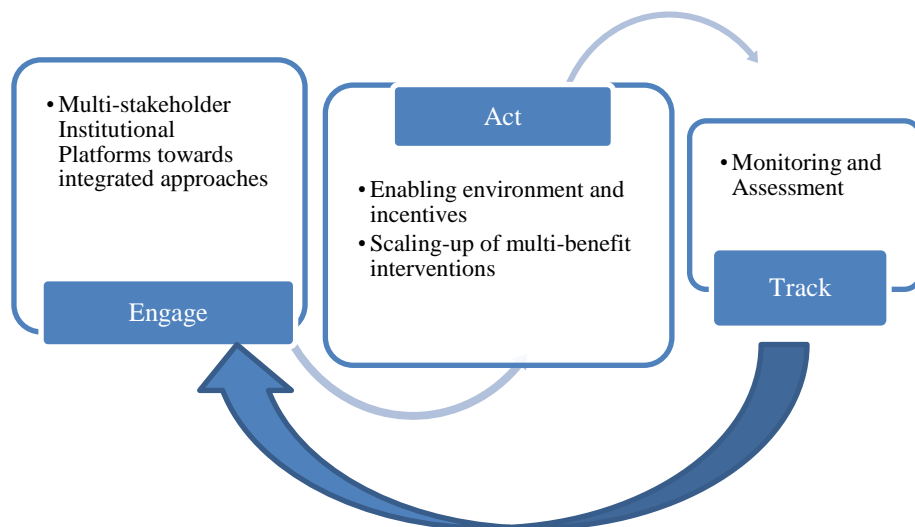
“...a knowledge-based procedure that integrates land, water, biodiversity, and environmental management to meet rising food and fiber demands while sustaining livelihoods and the environment” (World Bank 2006).

### Adaptation Programming Strategy

Aims to “increase resilience to the adverse impacts of climate change in vulnerable developing countries, through both near- and long-term adaptation measures in affected sectors, areas and communities” (GEF/LDCF.SCCF.16/03).



## Theory of Change: Components of all projects



## Key Themes and Concepts

- Drylands – low vegetative cover, livestock, mobility, low density.
- Sustainability (SDGs) – ecosystem service provision + function, socially acceptable, financially viable.
- Resilience – ability of ecosystem and livelihood systems to recover from shocks (weather, pests, market).
- Gender dimensions – differentiation, mainstreaming.
- Applied knowledge management – especially peer learning, including from beyond Africa.
- Scaling-up – 70% of funding, various pathways.
- Integration – spatial (landscape) and value chain approaches.
- Risk aware approaches and decision support – tradeoffs; i.e. between market optimization and risk management.

## TerrAfrica /SIP Programme Strategic Investment Programme for Sub-Saharan Africa (2007-2015)

- GEF 150 million USD leveraged >800 million USD co-financing.
- 36 projects in 26 countries.
- 4 Transboundary river basin / watershed.
- 5 Multi-Country thematic.
- WB, UNDP, IFAD, FAO, UNEP, AfDB.

## GEF-6 Country Allocations Horn of Africa Countries

Country	US \$	US \$
Djibouti	7,828,332	3,090,500
Ethiopia	23,233,680	22,631,000
Eritrea	8,601,165	7,577,932
Kenya	18,954,464	17,448,001
South Sudan	6,000,000	0
Sudan	12,828,035	1,929,300
<b>Totals (US \$)</b>	<b>77,445,676</b>	<b>52,676,733</b>

**Opportunities Looking Forward**

- Better alignment with GEF investments and activities at national and sub-regional level.
- Harmonisation across scales – knowledge sharing and learning.
- Integrated approach – tackling drivers of desertification at scale; managing natural capital (land, soil, water, vegetation, and biodiversity).

### 5.3 Opportunities for Countries in the Horn of Africa to Create Possible Linkage with Related Initiative on Combating Desertification

*Richard Byron-Cox (Dr.) UNCCD*

#### **On Initiative and creating linkages in general**

The word “initiative” is used in the phrase “take the initiative” probably more than in any other way and there is a reason for that. Initiative in this sense means “beginning/ make the start/take the first step.” This is of tremendous importance.

It stems from this that you must be willing to begin and follow through with the enterprise. In other words, “initiative” must be yours! Consequently, whatever was started out there as somebody else’s initiative, you must initiate the link for your benefit.

#### **SLM initiatives galore**

1. **National** e.g. “Devolution and Climate Change Adaptation in Western Kenya (the DaCCA Project)”.
2. **Sub-regional** e.g. IGAD Drought Disaster Resilience and Sustainability Initiative.
3. **Regional** e.g. TERRAFRICA with things like the African Forest Landscape Restoration Initiative, the African Landscapes Action Plan, the Green Wall Initiative, Land Degradation, Biodiversity and Adaptation to Climate Change.
4. **Global** e.g. the UNCCD’s LDN/TSP initiative.

#### **Why initiate links with other initiatives?**

You want and offer something to achieve the common good/objective and wish to:

- Cooperate, compliment, strengthening, reinforcing each other as we are in this together.
- Avoid duplication, self-destructive competition, confusion of focus, wasting of resources
- Enhance mainstreaming, having an integrated approach and the sharing of resources.
- Clarifying existence of these initiatives.
- Compartmentalisation/sectionalisation of a system is dangerous even fatal to the system.

#### **Concrete results from creating links**

- Gather useful experiences and new knowledge.
- Taking advantage of opportunities offered.
- Creation of new opportunities.
- Application of lessons learnt.
- Using existing frames and structures.
- Creation and/or use of services in common.
- Cooperation on the ground which always leads to better delivery of service.
- Greater awareness for both initiatives.
- Broaden the partnership.
- The actual fulfillment of your common mission.

#### **UNCCD Land degradation Neutrality TSP**

##### **Target 15.3 of the SDGs**

Under Land Degradation Neutrality Target Setting Programme participating country Parties will:

- Receive technical guidance to assess and define national baselines related to the indicator frameworks for target 15.3 to achieve LDN by 2030.
- Access to cutting-edge technical expertise.
- Participate in international capacity building and knowledge exchange events.

- Receive direct technical and financial assistance including access to the best data, support for a multi-stakeholder consultation process and mainstreaming LDN.

**Land and achieving the SDGs**

Land is key to the realisation of at least 13 (76% or more than ¾) of the other SDGs including on:

1. Ending poverty	10. Reducing inequality
2. Ending hunger	11. Safe human settlements
3. Health and well-being	12. Consumption/production
5. Gender equality	13. Combating climate change
6. Availability of water	14. Conserve/sustain
8. Sustainable economic growth	15. Sustain terrestrial ecosystems oceans
9. Build resilient infrastructure	16. Peaceful and inclusive societies

**The Capacity Building Marketplace**

- Its mission is capacity building for SLM, exclusively.
- Done by you for you, so you own it.
- Democratizes the capacity building process.
- It really about affecting things on the ground.
- Full of information, opportunities and possibilities.
- Innovative, dynamic and interactive in every way.
- It is absolutely FREE.
- Reaches the whole world 24/7.
- Always seeking partnership especially with CBOs.
- It is fast, easy to use and updated every working day.
- It can help fulfil all 3 of the objectives.

## 6.0 Field Visits

### 6.1 Overview of On-farm Field Visits, Makueni County, Kenya

M. Mukolwe, J. Wanjiku and M. Karanja

#### Background

The field visit is an integral part of the Forum and is meant to give the delegates an opportunity to see, learn, interrogate, appreciate and deliberate investments in sustainable forestry management. KEFRI over the past 30 years has developed various technologies which have been disseminated to farmers. For example, for the drylands of Kenya; two drought tolerant trees namely *Melia volkesii* and *Acacia tortilis* are the key species development for plantation and on-farm establishment. A visit will be made to two farmers in Makueni County.

Makueni County is located in the lowlands of southeastern Kenya. Temperatures within the County range from minimum of between 12°C and a maximum of 28°C. Rainfall ranges from 150 to 650 mm per year.

The livelihood of most Makueni County residents is dependent on rain-fed, small-scale agricultural activities that include; food crop farming, livestock keeping, and tree growing. The County's natural resources that include woodlands, forests, water, and land are under great pressure from, deforestation, overgrazing and climate change. To ensure land productivity for an increasing population, there is need to promote and adopt technologies that would enhance resilience to dryland conditions and improve livelihoods.

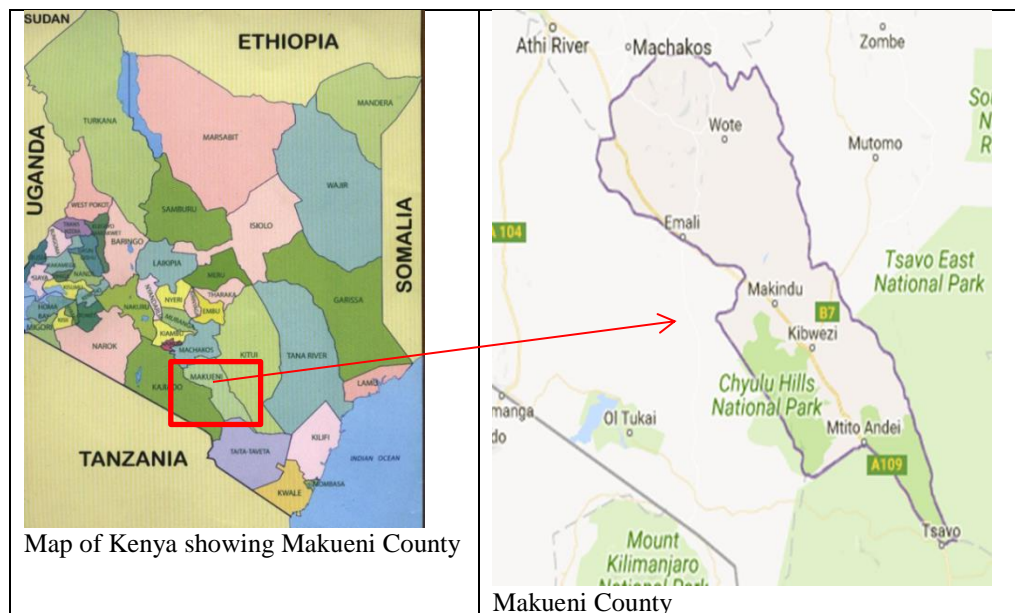
#### Objectives of field visit

To give delegates an opportunity to interact with two farmers on:

- Strategies adopted by farmers to achieve food security, ensure sufficient wood supply and pasture, and improve livelihood.
- Climate change adaptation mechanism for enhanced resilience of communities in drylands of Kenya.
- Strategies for dissemination and scaling up good practices for rehabilitation of degraded drylands.

#### Farmer Case Studies

##### Sites to be visited



## **Case Study 1: Pasture improvement and management in Kavatini village, Makueni County**

### **Introduction**

Mr. Jeremiah Ngaya is a farmer based in Kavatini Village in Makueni County. He is involved in natural grass pasture improvement and management. The grasses selected are adapted to the hot and dry climatic condition of the area. The pasture grasses are used for grazing, making hay and seed production.

### **Specific objective of farm visit**

To expose the delegates to natural pasture improvement and livelihood strategies in arid and semi-arid lands.

### **Other activities**

1. Water harvesting by use of range pits, terraces and roof catchment.
2. Bee keeping.
3. Farming drought tolerant food crops.
4. Livestock production.
5. Leasing grazing land to other pastoralists during dry seasons.
6. Capacity building.

## **Case Study 2: Melia and mango fruit tree production in Kibwezi, Makueni County**

### **Introduction**

Mr. Jonathan Mungala Kituku is a farmer based in Nyayo Village in Kibwezi Sub-County, Makueni County. He started tree farming in 2005. Main trees grown include *Melia volkensii* an indigenous species, and grafted mangoes. The farmer's objective is livelihood improvement from agroforestry, pasture, integrated crop, livestock and tree farming as short, medium and long-term enterprises.

### **Specific objectives of farm visit**

To expose the delegates to livelihood and environmental resilience strategies of:

- Mango tree fruit production and management in dry land ecosystems.
- Domestication of indigenous tree species for on-farm timber/wood production.
- Gains of close researcher-farmer linkages.
- Farmer innovations to address short, medium and long-term household needs.

### **Other activities**

- Hay production.
- Collection, processing and sale of *Melia* seeds.
- Nursery establishment and management.
- Livestock production.
- Training other farmers.



## 6.2 On-farm Field Visit at Makueni County

### 6.2.1 Visit to Mr. Jonathan Kituku Munyala's Farm

#### Farmer background

Mr. Jonathan Kituku is a retired Kenya Power and Lighting Company officer. During his working days in the highlands of Kenya, Mr. Kituku visited many places where trees were being farmed and he admired the activity. Upon retirement, he embarked on crop farming, mainly maize which he farmed for 14 years. However, due to low rainfall experienced in Kibwezi area, crop farming was not economical, which made him shift to tree farming.

Mr. Kituku currently owns an expansive 300 acre farm with a semi-arid area. Through training and advice from KEFRI, the farmer has managed to turn this once low productive land to high productivity through application of the various technologies and adoption of good practices acquired over the past 10 years.

#### Major on-farm activities by Mr Kituku

##### Establishment and management of *Melia volkesii* woodlot

Initially Kenya promoted exotic trees for on-farm planting for their various products and services. However, due to climate change there was need to promote indigenous trees. Mr. Kituku identified *Melia volkesii* an indigenous trees in the drylands of Kenya. The choice species for woodlot establishment as the species is tolerant to low rainfall conditions such those experienced in his area. The farmer has established of over 10,000 *Melia* trees since his first planting in 2005.

The farmer has developed tree planting culture and has made a commitment to plant additional trees every year.



#### Melia seed collection and processing

- The farmer collects seed from his woodlot and selected trees in the wild.
- Healthy seed is collected from healthy trees and branches.
- Though the procedure for breaking *Melia* seed dormancy is complex, the farmer has mastered the art.
- The farmer also trains interested parties, for instance, he once trained eight (8) students and only two (2) managed to master the process after the specific training.
- The farmer extracts only wet seed, since through experience such seed can attain 95% germination, while the dry seed only attains 45%.
- Supplies quality processed seeds to other farmers and companies on order.

#### Tree nursery establishment and management

- The farmer operates a tree nursery where he raises seedlings for sale and on-farm plantation establishment.

- He uses this nursery to train other farmers who come individually or sent by farmer groups and youth groups.
- The farmer has an over 60,000 tree seedling nursery.



### **Pasture farming under Melia woodlot**

Under the young woodlot, planted food crops such as green grams are integrated. However, with time crop production declined inversely i.e 1<sup>st</sup> year yield was 4 bags/acres, 2<sup>nd</sup> year 3 bags, 3<sup>rd</sup> year 2 bags and 4<sup>th</sup> year 1 bag. The land is then left under natural grass, which is harvested for hay. One acre now produces 60 bales of hay but in high rainfall season the land can produce 100 bales. Each bale is sold at Ksh 300 (US\$ 3).

The farmer harvests natural grass, bales, stores and sells to other farmers during the dry season. Much of the grass is harvested under the Melia plantations. The farmer ensures the hay is well stored until the next dry season and has therefore built a warehouse for this purpose. The warehouse can accommodate about 3,400 bales of hay.



### **On-farm mango orchard development**

- The total number of improved grafted mango trees planted stands at about 1,336 trees. The trees started producing fruit at the age of about three (3) years.
- Ministry of Agriculture is involved in the orchard development through giving advice on pest and disease management, and pruning strategies. Melia leaves are being used to repel termites around mango trees, which is Indigenous Technical Knowledge (ITK). One wheelbarrow is applied under one mango tree. Melia ash is also used as pesticide.

- Intensified pruning is currently embraced to promote production of at least 40 good fruit pieces per tree. At a farm-gate price of Ksh 25 (US\$ 0.25) per piece the farmer hopes to get at least Ksh 2 million (US\$ 20,000) per harvest.
- The mango trees are of different varieties with the main variety being Apple, a variety favoured for export market. Mango growing constitutes part of the mid-term enterprise.



### Diversified livelihood sources

- Farmer innovations to address short-term, medium-term and long-term household needs.
- Livestock keeping; the farmer rears goats, cattle, poultry and donkey. Livestock farming form part of the short term enterprise for the farmer as well as maize and green gram farming.
- Mango farming from medium-term while tree farming constitutes the long-term enterprise.
- Soil and water conservation.
- Rainwater harvesting.

Such integrated farming ensures food security and income generation for the farmer.

### Information dissemination

- Knowledge by farmer is gained from various ministries, institutions, groups and persons who visit the farmer.
- The farm is used for:
  - Demonstration to people from different parts of the country.
  - Field days are also held in the farm.
  - Institutions also learn from this farm.
  - Farmers also teach the youth through attachments conducted for 6 - 12 months.
- Attributes of contact farmer: willingness to interact and share with other stakeholders and farmers.
- Research by KEFRI is farmer-driven, however, other trees can be monitored for research purposes.
- Due to his efforts in tree growing, an activity that also helps climate change adaptation, Mr. Kituku received a Presidential Award.



### **Comments by Delegates During Visit**

- The farmer could grow maize by applying conservation agriculture to improve production.
- The maize in the field was doing poorly maybe due to moisture or nutrient deficiencies. Nutrients can be improved through introduction of nitrogen fixing legumes. Soil fertility can also be improved through use of chicken droppings and other animal manure, or green/plant manure.
- The farmers could consider making compost fertilizers from the leaves from the many trees on his farm.
- Livestock can be improved through cross breeding to boost milk and meat production.
- Water harvesting is important in the drylands
- Mango crop productivity can be improved through maximizing within the rows by reducing spacing but only if soil moisture is improved through water harvesting.
- Indigenous Technical Knowledge currently with the farmer could be harnessed and published for wide use but ensuring the farmer is part of the authorship.
- The farmer can explore use of drip irrigation technique to minimize water use.
- It is commendable that the farmer is mentoring his son to take over the farming activities once the farmer retires. The farmer has enrolled the son in a forestry college and such succession planning will ensure sustainability.
- The neighbours are also taking keen interest in tree farming, which is an advantage as this will improve bargaining power in the market, therefore, avoiding exploitation by middlemen especially in the sale of timber.
- The farmer has mapped his retirement plan and hopes to concentrate only on tree farming and hay making 5 years from now leaving the strenuous activities to the younger family members.

## 6.2.2 Visit to Mr. Jeremiah Ngaya's Farm

### Farmer Background

Mr. Jeremiah Ngaya, a farmer in Makindu, Makueni County. He owns about 109 acres of land but located in separate adjacent areas of which 76 acres was inherited family land. Half of the inherited land (38 acres) is under natural pasture management, while the rest is under crop farming mainly beans, green grams, maize and cowpeas. The farmer, through support from various organizations has much effort on pasture farming of local indigenous grass farming for pasture and seeds. The livestock kept are mainly cattle, goats, sheep, poultry and bee. The farmer has also integrated trees such as Neem, *Balanites aegyptica* and *Acacia tortilis* for bee forage. The farmer has formed a beekeeping group called Makindu beekeepers and members have been trained for quality honey production.

The Farmer has received training on:

- Natural pasture improvement on hay making, seed collection testing and viability.
- Beekeeping.
- Soil and water conservation.
- Weather forecasting where information is sourced from Meteorological Department.
- Livestock management including pasture and disease management.
- Risk management.
- Poultry keeping.
- Natural resource management - forest management, drought and desertification, biodiversity conservation and use, financial and human resource management.

### Improved natural grass development

Makindu area is dry but due to climate changes fodder for livestock has continued to be inadequate. Original grasses were also destroyed by fire and overgrazing. The farmer embarked on re-introduction of four natural indigenous pasture grasses on his farm after training. The main grasses grown include; *Chloris roxburghiana*, *Cenchrus ciliaris*, *Eragrostis superba* and *Enteropogon macrostachyus*. The species are adapted to the hot and dry climatic condition of Makindu and used for grazing livestock, making hay and pasture seed production.

The quality pasture has led to healthy animals, which in turn produce good beef. The pasture also provides ground cover and checking soil erosion. Pasture farming is also a low labour activity, less tasking and can tolerate low rainfall of 100 – 150 mm per year.

The farmer has brought theory into practice as he practices much of the knowledge he has acquired through the various trainings. However, he is currently concentrating on pasture farming, the question is would diversification provide shock absorbers?

### Beekeeping

Many of the hives are the traditional log hives, which are of various sizes. However, the farmer harvests about 20 kg of honey per hive from the modern Langstroth hives. Harvesting is carried out three times per year. The farmer has left many indigenous trees such as acacia on his farm, which provides enough foraging areas for the bees. The areas around the hives are set to have little agricultural activities, which could interfere with honey production. To ensure that bees do not abscond, the farmer provides them with water during the dry season and pollen grain.

**Poultry farming**

Initially, the farmer used to rear hybrid chicken, however, the market did not like the type of enterprise. He therefore, shifted to rearing cross-bred chicken, which is resistance to diseases and can feed on many food types.



Mr. J. Ngaya explains to the Forum delegates about natural pasture management



Mr. J. Ngaya explains how pasture grasses are established and managed



Mr. J. Ngaya demonstrates seed harvesting from various pasture grasses



Mr. J. Ngaya explains advantages of conserving indigenous trees on the farm

## 6.5 Comments and lessons learnt by delegates from the field visit

- There is an opportunity to combat desertification in the drylands through use of innovative technologies. This includes, selection and screening of drought tolerant indigenous trees in this case (*Melia volkensii*), others such as *Acacia tortilis* and *Acacia senegal*.
- The integrated indigenous pasture is doing well and is providing alternative income. In this case, the farmer is maximizing his income through integration of pasture and food crops.
- For success, farmers need to have a strategic plan that encompasses:
  - iv. Short-term plan - growing of drought tolerant crops such as legumes and cereals.
  - v. Medium term plan – growing of perennial crops such as mangoes and livestock keeping.
  - vi. Long-term – tree growing.
- The farmer-to-farmer extension model works and should be supported and replicated in other areas.
- For success, there is need for a multifaceted approach and collaboration among key experts for the benefit of the farmer. This includes forestry, livestock and crop experts.
- Farmers in ASAL areas can adapt to changing climate through use of local solutions and knowledge such as indigenous pasture and traditional log hives.
- Research is key to development and promotion of good practices. For instance, KEFRI gave information on how to collect and process local germplasm of high quality as well as how to establish and manage *Melia* trees.
- There is need to develop innovative ways on how to transfer the good practices from one farmer to another.
- It is important to monitor what happens beyond documentation of the good practices, preferably through monitoring and evaluation.
- For farmers in the ASALs soil fertility practices were noted to be lacking especially for the fodder farming. To improve soil fertility under the pasture grass, the farmer could consider integrating grass with nitrogen fixing plants.
- Farmers should consider harvesting more rain water from runoff to increase available water for irrigating the mango crop rather than being rain-fed dependent.

## **7.0 Tabulated Action Plans**

### **7.1 Introduction**

Delegates developed initial action plans for their country, identifying activities that can be achieved in short-term (up to 1 year), medium-term (2-3 years) and long-term (over 3 years).

Issues discussed included;

- How we could maintain and extend network.
- How we could collect good practices / lesson learns.
- How we could share knowledge to wider stakeholders.
- How we could improve access to finance of partner countries.
- How we could approach higher and political level.



## 7.2 Action plan for Djibouti

Modèle pour le plan d'action du Pays pour l'Initiative Africain

Output/Issue	Discussion Point	Shortterm within 1 year	Medium term within 2-3 years	Long term within 3-5years
<b>1. Knowledge sharing</b>	How can we collect good practices/lessons learnt?	Collecter les bonnes pratiques modernes et les connaissances indigènes	Disséminer ces bonnes pratiques/ Connaissance aux autres bénéficiaires	Diffusion à grande échelle
	How can we share knowledge to wider stakeholder?	Les mass media, rencontre et échange	continue	Continue
<b>2. Networking</b>	How can we develop, maintain and extended network?	Installer le réseau, réseau participative et inclusive	Dynamiser le réseau en alimentant régulièrement avec les informations récentes	Consolider et pérenniser le réseau
<b>3. Access to finance</b>	How can we improve access to finance of partner countries?	Identifier les bailleurs de fond et faire le lobbying pour l'initiative	Accompagnement des bénéficiaires auprès des institutions financières	Suivi et évaluation des fonds mis en place
<b>4. Political Will</b>	How can we approach higher and political level?	Plaidoyer Et prise en contact de l'initiative dans les programmes nationaux	Plaidoyer	Plaidoyer

### 7.3 Action plans Eritrea

<b>Output/Issue</b>	<b>Discussion point</b>	<b>Short term (1 year)</b>	<b>Medium Term (2-3 years)</b>	<b>Long term (3-5 years)</b>
<b>1. Knowledge sharing</b>	How can we collect good practices/lesson learnt?	<ul style="list-style-type: none"> <li>Collect from exemplary farmers related to DLDD Photo graph before and after action in a quantitative way.</li> <li>Appoint and equip experts with necessary equipment's.</li> </ul>	<ul style="list-style-type: none"> <li>Updating the best practice and collect new achievements</li> </ul>	<ul style="list-style-type: none"> <li>Aqua ring best practices increased in number.</li> <li>Indigenous knowledge and innovations by the experts raised, livelihood of the community developed and environmental restoration raised.</li> </ul>
	How can we share knowledge to wider stakeholders?	<ul style="list-style-type: none"> <li>Training to farmers and concerned experts</li> <li>Model farmers share their knowledge, to other stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>Disseminate best practice by different media through audio visual, newspaper</li> <li>FFS</li> </ul>	<ul style="list-style-type: none"> <li>New technology is included in the system.</li> <li>May 15 greening campaign evaluation day</li> </ul>
<b>2. Networking</b>	How can we develop, maintain and extended networks?	<ul style="list-style-type: none"> <li>Improve our networking communication system through JAICA</li> </ul>	<ul style="list-style-type: none"> <li>We start proper and timely communication with the relevant stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Our communication system developed to and fro implementers and other stakeholders</li> </ul>
<b>3. Access to Finance</b>	How can we improve access to finance of partner countries?	<ul style="list-style-type: none"> <li>Identify potential partners</li> </ul>	<ul style="list-style-type: none"> <li>Prepare bankable projects</li> <li>Train experts to prepare appropriate projects.</li> <li>Approach the partners</li> </ul>	<ul style="list-style-type: none"> <li>Approaching and the progress information to the partners continue.</li> </ul>
<b>4. Political Will</b>	How can we approach higher and political level?	<ul style="list-style-type: none"> <li>Feed information about the African DLDD initiative</li> <li>Expect their interaction</li> </ul>		

#### 7.4 Action plan for Ethiopia

Outputs	Activity Description	January 2017 – December 2021				
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
<b>1. Knowledge sharing</b>	1.1. Identify stakeholders Conduct workshop, review the objective of the initiatives and Establish task force	√				
	1.2. Identify, adopt and develop the information sharing mechanism	√				
	1.3. In place the information sharing mechanism	√				
	1.4. Practices acquiesce from all to all relevant stakeholders by conducting consultative workshops	√				
	1.5. Data disseminate to wide stakeholders		√	√	√	√
<b>2. Networking</b>	2.1. Networking system learn from UNCCD –LDN & others		√			
	2.2. Create plat forms and raise awareness to key stakeholders and establish networking National and Regional	√	√			
<b>3. Access to finance</b>	3.1. Prepare proposal and submit to Donor Organization (GEF, FAO, UNCCD, World Bank and GIZ)	√	√			
	Co- financed by the Country in- kind)	√	√	√	√	√

## **7.5 Action plan for Kenya**

### **Knowledge sharing**

- Key stakeholders consultation-on what they have and what they have to share.
- Build on existing database.
- Collect and document good practices which could be outside the established institutions.

### **How to share knowledge**

- Open days.
- Farmers field schools.
- Pamphlets.
- Leaflets.
- Print media.
- Blogs.
- Social media.
- TV/radio.

### **Networking**

- Enhance existing networks-MOUs.
- Data and information sharing policy.
- Website and website links.

### **Access to finance**

- Resource mobilization strategy: develop research project proposals to tap donor funding including GEF, and public - private partnerships.
- Training on how to access global environmental financing mechanism.
- Mainstreaming issues of desertification land degradation and drought in sector plans.

### **Political Will**

- Use the existing legal and policy instruments from policy makers-constitution, vision 2030, SDGs.
- Convening high level policy dialogue.
- Linkages with on-going regional and international initiatives.

## 7.6 Action plan for Somalia

<b>Output/Issue</b>	<b>Discussion Point</b>	<b>Short-term (1 year)</b>	<b>Medium -term (2-3 years)</b>	<b>Long -term (3-5 years)</b>
<b>1. Knowledge Sharing</b>	How can we collect good practices/lesson learnt?	Collect knowledge from model farmers and indigenous	Bring Somali farmers to Kenya so that they can also learn from the model farmers	The farmers that were brought to learn in Kenya extend the knowledge to the local community
	How can we share knowledge to wider stakeholders?	Through the mass media e.g. Radio, videos	Visiting the field and practicing what they have learnt	Sustainability of lessons learnt.
<b>2. Networking</b>	How can we develop, maintain and extend networks?	Through collaboration and coordination	-	-
<b>3. Access to finance</b>	How can we improve access to finance of partner countries?	Submitting subject proposals to donors	Implementation of proposed projects	Monitoring and evaluation
<b>4. Political will</b>	How can we approach higher and political level?	Advocacy and information sharing	Bring the government officials on board through the Ministry	Monitoring, evaluating and appreciating work done

## 7.7 Action Plan for South Sudan

Output/Issue	Discussion Point	Short -term (1 Year)	Medium-term (2-3 Years)	Long-term (3-5 Years)
<b>1. Knowledge Sharing</b>	How can we collect good practices/lessons learned?	<ul style="list-style-type: none"> <li>• Desk top study/literature and field visit</li> <li>• Use of related websites</li> </ul>	<ul style="list-style-type: none"> <li>• Collect traditional good practices</li> <li>• Workshop presentations and documentations of traditional good practices</li> <li>• Create database</li> </ul>	<ul style="list-style-type: none"> <li>• Validation of local good practices and knowledge</li> <li>• Generation of new practices through researching</li> <li>• Monitor and evaluate the existing project</li> <li>• Develop new proposals</li> </ul>
	How can we share knowledge to wider stakeholders?	<ul style="list-style-type: none"> <li>• Organize Workshops for stakeholders</li> <li>• Share Report of the field with stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Update the knowledge and share with stakeholders at national, state levels and other stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Publication of the good practices available</li> <li>• Update and improve means of knowledge sharing</li> </ul>
<b>2.Networking</b>	How can we develop, maintain and extend networks?	<ul style="list-style-type: none"> <li>• Create working teams of combating desertification at national , state, county levels, NGOs, CBO and private sector</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen linkages between the working teams in the country</li> <li>• Empower the working groups/teams to create resilience to the climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Sharing the knowledge amongst the stakeholders</li> <li>• Improve networking and collaboration</li> <li>• Continue publication of available knowledge</li> </ul>
<b>3.Access to Financing</b>	How can we improve access to finance of partner countries?	<ul style="list-style-type: none"> <li>• Development of concepts for combating desertification</li> <li>• Use of UNCCD marketplace website</li> <li>• Informing the development partners for support national initiative on addressing desertification</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and submit concrete proposal to funding agencies</li> <li>• Develop project management oriented capacities</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation and monitoring the project implementation</li> <li>• Work for sustainability of the projects or programmes</li> </ul>
<b>4.Political Will</b>	How can we approach higher and political levels?	<ul style="list-style-type: none"> <li>• Organise high level meeting to create awareness on risks of the desertification to the natural resources sustainability</li> <li>• Lobby for tabling the initiative to deliberate at national and state assemblies for support and create favourable political will at various levels of authorities.</li> <li>• Share the country on the initiative with heads of the sending ministries.</li> </ul>	<ul style="list-style-type: none"> <li>• Mobilise civil society organisations to create favourable political will for domestication and implementation of the initiative</li> <li>• Form a coordinating body form the line ministries to oversee implementation of the initiative</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidation and endorsement of the documents developed</li> </ul>

## 7.8 Action Plan for Sudan

Output/Issue	Short term (1 year)	Medium Term (2-3 year)	Long Term (3-5 years)
<b>1. Knowledge Sharing</b>	<ul style="list-style-type: none"> <li>Establishing National Technical Committee (Water - Energy - Forest - Agriculture - Land - Environment - Decentralized Federal Authority Government - Media - Finance - livestock wildlife) (Feb - March 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Establishing the states committees and link them with the local stockholders Feb 2018</li> </ul>	<ul style="list-style-type: none"> <li>Collection and sharing of the good practices from different thematic sectors through the national and states committees (March 2019 - Sep 2021)</li> </ul>
	<ul style="list-style-type: none"> <li>Share the initiative, term of reference and toll for collection good practices (March - May 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Collection and sharing of the good practices from different thematic sectors through the national and states committees )March 2018 - Sep 2019)</li> </ul>	
	<ul style="list-style-type: none"> <li>Establish coordination mechanism with the all other relative initiative (IDRISI - GGWI - CADEP - ... etc) June - August 2017</li> </ul>		
	<ul style="list-style-type: none"> <li>Establish M&amp;E system October 2017</li> </ul>	<ul style="list-style-type: none"> <li>Reporting Jun - Dec every year</li> </ul>	
<b>2. Networking</b>	<ul style="list-style-type: none"> <li>Establishing National Technical Committee (Water - Energy - Forest - Agriculture - Land - Environment - Decentralized Federal Authority Government - Media - Finance - livestock wildlife) (Feb - March 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Establishing the states committees and link them with the local stockholders Feb 2018</li> </ul>	<ul style="list-style-type: none"> <li>Strengthening and scaling up the states committees and link them with the local stockholders Feb 2018</li> </ul>
	<ul style="list-style-type: none"> <li>Establish M&amp;E system October 2017</li> </ul>	<ul style="list-style-type: none"> <li>Reporting Jun - Dec every year</li> </ul>	<ul style="list-style-type: none"> <li>Reporting Jun - Dec every year</li> </ul>
<b>3. Access to Finance</b>	<ul style="list-style-type: none"> <li>Identifying gaps and needs by the Technical Committee (June 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Preparing the projects documents (Jan 2018 - Dec 2019)</li> </ul>	<ul style="list-style-type: none"> <li>Preparing the projects documents (Jan 2019 - Dec 2021)</li> </ul>
	<ul style="list-style-type: none"> <li>Identifying the possible donors (June 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Training for the national stockholders to be access to donors (November 2018)</li> </ul>	<ul style="list-style-type: none"> <li>Training for the national stockholders to be access to donors (November 2018)</li> </ul>
	<ul style="list-style-type: none"> <li>Training for the national stockholders to be access to donors (November 2018)</li> </ul>		<ul style="list-style-type: none"> <li></li> </ul>
	<ul style="list-style-type: none"> <li>Establish M&amp;E system October 2017</li> </ul>	<ul style="list-style-type: none"> <li>Reporting Jun - Dec every year</li> </ul>	<ul style="list-style-type: none"> <li>Reporting Jun - Dec every year</li> </ul>
<b>4. Political Will</b>	<ul style="list-style-type: none"> <li>Meetings - Forums for the decision makers and political parties in National, state and local levels</li> </ul>	<ul style="list-style-type: none"> <li>To be cont.</li> </ul>	<ul style="list-style-type: none"> <li>To be cont.</li> </ul>
	<ul style="list-style-type: none"> <li>Meetings and forum for the civil society and religious leaders</li> </ul>	<ul style="list-style-type: none"> <li>To be cont.</li> </ul>	<ul style="list-style-type: none"> <li>To be cont.</li> </ul>

## **8.0 Discussions and Way forward**

### **8.1 Panel Discussions Output**

- There is need for wide consultation before the tabled draft Terms of Reference (ToRs) is adopted. This is to enable relevant stakeholders to familiarize, critically analyze, discuss and provide feedback on ToRs.
- Countries within Horn of Africa have different climatic, social and political conditions. Due to these differences, all good practices for combating desertification in various countries may not be wholly adoptable in all countries. There is therefore need to form common interest working groups based on countries with similar ecological, political and economic conditions and challenges, who then can work towards adopting good practices relevant to their countries.
- There is need to critically analyze reasons for collecting and sharing good practices. If one practice is good in one country what are the challenges of applying/adopting the same in another country.
- Since universities are key institutions in knowledge sharing, there is need to incorporate them as stakeholders in the African Initiative.
- Indigenous technical knowledge (ITK) is a key element in combating desertification and such knowledge should also be considered for collection as good practices.
- Conflict over natural resources is a common problem in the Horn of Africa. Conflict management strategy is a key element, which should be documented as good practice on how communities are solving disputes and conflicts arising from their activities, for example, livestock herders and crop farmers. The African Initiative should focus on impacts of conflict on degradation and desertification and enhancing peace.
- For the African Initiative to succeed, there is need to learn from, and collaborate with other similar Initiatives in Africa. This can be achieved through links to UNCCD website, holding joint meetings with other partners and forming networks. However, members need to have tools to help maintain networks. Partners who have working tools should share the same with member countries.
- There is need for harmonized tools for data collection with other tools already in use. For instance, the WOCAT good practice collection tool could be consulted.
- On networking, a website should be developed and hosted by partner organizations, and tools for interaction such as wikis, blogs are availed where the members can interact.
- Repository of information should not only be in the website as many local communities who are the end users of good practices may not have access to the same. Simple to read dissemination materials such as manuals, leaflets and guidelines should therefore be developed for grassroot usage.
- There is need for partner countries to provide additional support to the African Initiative
- There is need to monitor the impacts of scaling up the good practices, to establish if the African Initiative objective of combating desertification and making nations and communities resilient to climate change has been achieved.
- The African Initiative should be country-driven.
- Development partners such as JICA and UNCCD are committed to collecting good practice and upgrading the KEFRI website through which this information will be shared.
- Delegates should make use of the UNCCD capacity building market place.



- Delegates were informed that during the upcoming COP 13 event that will be held in China, a Side Event can be organized where the stakeholders can engage.
- Countries should initiate and prepare concepts and proposals to tap on the funding opportunities presented during the Forum.
- Countries with communication challenges should consider partnering with other countries to enhance capacity building.

## **8.2 Interactive Discussion on Opportunities for the Horn of Africa to Combat Desertification** *Richard Mwendandu*

### **Issues and concerns**

1. Desertification and land degradation are closely interlinked and transboundary.
2. To succeed in land restoration, the cause of degradation must be identified and halted.
3. There is need to have a common joint initiative among neighbouring countries.
4. Past experience has shown that the process of land degradation is perpetual, if the root causes such as deforestation and overgrazing are not addressed land degradation cannot be halted.
5. Land degradation is an international issue, and countries need to learn how other countries are addressing it.
6. Secondary implication of land degradation will be food insecurity, where the land produces less resulting in farmers opening more land and therefore, exposing more land to desertification.
7. Desertification leads to social insecurity and migration of populations.

### **Opportunities**

1. International support: There are opportunities for funding from international communities, provided countries develop bankable proposals that can address issues of desertification.
2. The Global Environment Facility (GEF) has set aside funds for combating land degradation and desertification and countries should make use of their allocation and put effort in securing funding from GEF. GEF is also supporting conventions such as UNCCD and UNFCCC.
3. Regional planning and integration.
4. National planning by mainstreaming ownership and management of resources.
5. Education awareness and protection of natural resources.
6. Efforts presented by Djibouti such as afforestation along waterways, water harvesting and use for irrigation, stone mulching system and double sack method can address the issues of water shortage.
7. Piloting – to gain farmers confidence once there is output as technologies being promoted will be seen to be working.
8. There is need to continually improve the already developed tools to maintain network either through the social media.
9. The African Initiative should work closely and share with FAO's Great Green Wall Initiative either through linking in websites or other tools.
10. Joint projects in neighbouring countries to combat land degradation and desertification.

### **8.3 Commitments and Proposed Way forward**

1. Each country to:
  - a) Hold briefing to policy and major stakeholders.
  - b) Refine the Country Action Plans.
  - c) Initiate resource mobilization activities for implementation of the Country workplan for African Initiative.
  - d) Nominate and submit names of three (3) Technical persons to participate in the Technical Meeting to be held in September 2017.
  - e) Confirm names of African Initiative Focal Points and submit in writing to KEFRI within 6 weeks.
  - f) Review the ToR and submit comments within 6 weeks.
  
2. CADEP-SFM to:
  - a) Prepare and circulate proceedings of this Forum to all participants by 28<sup>th</sup> February 2017.
  - b) Hold 2<sup>nd</sup> Follow-up Regional Forum within three 3 years.

## Annexes

### Annex 1: List of delegates to the 1<sup>st</sup> Regional Forum for Horn of Africa

Country	Name	Institution	Title	Email Address	Phone No.
Djibouti	Mr. Ahmed Mohamed Ali *	Ministry of Agriculture , Water, Fisheries, Livestock and Aquatic Resources	Director of Agriculture (National Focal Point)	<a href="mailto:mohamedag11770@yahoo.com">mohamedag11770@yahoo.com</a> <a href="mailto:saf@intranet.dj">saf@intranet.dj</a>	+253-77-81-6-98 +25321341774
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Ethiopia	Dr. Alganesh Tesema Gellaw *	Ministry of Environment , Forest and Climate Change Forest Sector	Director General (Focal Point for African Initiative)	<a href="mailto:alganeshgellaw@yahoo.com">alganeshgellaw@yahoo.com</a>	+251 11 5580849/ +251-91-0320-276
Somalia	Mr. Kenadid Mumin Cali *	Federal Government of Somalia	Deputy Director, State Minister for Environment Affairs	<a href="mailto:kenadid.env.opm@gmail.com">kenadid.env.opm@gmail.com</a>	00252016998516
	Mr. Osman Ahmed Jimale	Ministry of Agriculture	Director of Plant Protection	<a href="mailto:osmjimale@hotmail.com">osmjimale@hotmail.com</a> <a href="mailto:voice781@gmail.com">voice781@gmail.com</a>	+252615867314
	Mr. Ibrahim Abdlnur Yakub	Ministry of Livestock, Forestry and Range	Deputy Director	<a href="mailto:yaaq06hotmail.com">yaaq06hotmail.com</a> / <a href="mailto:yaaq06@gmail.com">yaaq06@gmail.com</a> <a href="mailto:hashimi2hotmail.com">hashimi2hotmail.com</a>	+252615475908
Sudan	Dr. Salaheldien Sharief Tambel	Ministry of Agriculture and Forests	Vice General Manager, Natural Resources and Sustainable Development Directorate	<a href="mailto:tambelsalah@hotmail.com">tambelsalah@hotmail.com</a>	+249-183-770059
	Mr. Fadul Beshir Alghag Babikir		Director General of Natural Resources Department	<a href="mailto:fadulbeshir10@hotmail.com">fadulbeshir10@hotmail.com</a> <a href="mailto:naturalresources@gmail.com">naturalresources@gmail.com</a>	+249 (0)909205443/ +249 (0) 126723136
	Dr. Mona AdbElhafeez Ahmed	Ministry of Environment	Director of the Department of Environment Control and Nature Conservation (Focal Point Desertification)	<a href="mailto:munaabdelhafeez@hotmail.com">munaabdelhafeez@hotmail.com</a>	+249 (0)912909177
South Sudan	Dr. George Louise T. Tadu *	Ministry of Agriculture and Food Security “MAFS”	Directorate of Research and Training	<a href="mailto:georgetokp@yahoo.com">georgetokp@yahoo.com</a> / <a href="mailto:georgetadu57@gmail.com">georgetadu57@gmail.com</a>	+211-956 180 388/ +211 912 549 022
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		Forestry	change and Meteorology	musalasuu@gmail.com	
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	Mr. John Mutua	KEFRI	Security Officer		
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## **Annex 2: Country Report Format**

The Focal Points will share country reports with other participants during the Forum. The country report should include the following:

1. Country background to include; Land area, Population, Climatic and Ecological conditions
2. Land use and land use policies and enabling legal frameworks
3. Present status of forestry and woodland resources in the country
4. Current Initiatives on combating desertification
5. Major achievements and challenges in combating desertification
6. Opportunities for linking on-going Initiatives on combating desertification to African Initiative



## Annex 3: Statement TICAD VI Side Event



### STATEMENT

#### TICAD VI: Side Event

#### **“African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa“**

We, as co-organizers of the **“African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa“** together with representatives of African countries, international and regional organizations, development partners, the private sector and civil society met in Nairobi on 27<sup>th</sup> August 2016 to launch the **“African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa“** (hereinafter referred to as ‘the Initiative’);

Building on the side event at UNCCD COP 12 held in Ankara, Turkey on 19<sup>th</sup> October 2015, and the Preparatory Meeting for the Initiative in Nairobi on 11<sup>th</sup> to 13<sup>th</sup> July 2016, we share a common view that we need to accelerate our efforts to combat desertification to strengthen resilience to climate change in the Sahel and Horn of Africa through the Initiative, by promoting networking, knowledge-sharing, and improving access to finance. Now therefore, we, agree to work together under the framework of the Initiative as described below. We believe that these efforts are indispensable for achieving the Sustainable Development Goals in the Sahel and Horn of Africa, contributing to mitigating poverty, and to greater peace and stability in the region and the world at large.

#### **1. Objective**

The Initiative seeks to strengthen nations’ and communities’ resilience to climate change by promoting measures for combating desertification in the Sahel and Horn of Africa.

#### **2. Expected Outputs**

- (1) Establish a network: A robust network among participating countries and development partners is built for combating desertification and strengthening resilience to climate change in the Sahel and Horn of Africa, and contributing to raising global awareness of desertification
- (2) Knowledge-sharing: Knowledge and experiences on combating desertification are shared to enhance the effectiveness development efforts in the region
- (3) Improving access to finance: Access to available international development finance

is improved to promote measures for combating desertification in the region

### **3. Activities (tentative)**

- (1) Annual workshops in the Sahel and Horn of Africa
- (2) High-level events / meetings on the occasion of international conferences such as TICAD, UNCCD/COPs
- (3) Development of tools and promotion of the use of existing tools to support networking, knowledge-sharing, and access to finance
- (4) Other activities

\* Any activities under the Initiative can be implemented jointly or harmonized with other related initiatives by international / regional organizations

**4. Duration** Six (6) years: August 2016 (TICAD VI) to 2022 (until the expected TICAD VIII)

### **5. Target countries and partners organizations of the Initiative**

**\* Co-organizers**

#### **<Target countries>**

Burkina Faso	Cameroon	Chad	Djibouti
Eritrea	Ethiopia	<b>Kenya *</b>	Mali
Mauritania	Niger	Nigeria	<b>Senegal *</b>
Somalia	South Sudan	Sudan	

#### **<Partner Organizations>**

**Japan International Cooperation Agency (JICA)\***

**United Nations Convention to Combat Desertification (UNCCD) \***

Food and Agriculture Organization of the United Nations (FAO)

Global Environment Facility (GEF)

Permanent Interstates Committee for Drought Control in the Sahel (CILSS)

Intergovernmental Authority on Development (IGAD) (TBC)

African Union (TBC)

\* As of 27 August, 2016. Any country and organization that wish to contribute to the Initiative are welcomed.

#### **<Secretariat>**

Japan International Cooperation Agency (JICA)\*

Attachment 1: Concept note of the Initiative

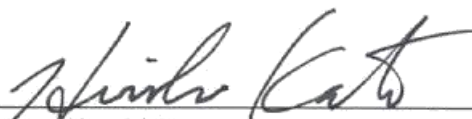
Attachment 2: On-going related initiatives by development partners

27 August 2016, Nairobi



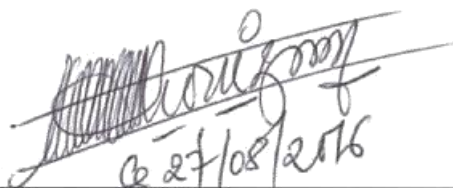
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Prof. Judi Wakhungu  
Cabinet Secretary  
Ministry of Environment and Natural  
Resources, Republic of Kenya



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Mr. Hiroshi Kato  
Vice President  
Japan International Cooperation  
Agency



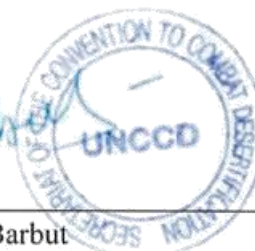
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Mr. Mohamed Ali alias Segha Camara  
Executive Secretary  
National Food Security Council,  
Senegal



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Ms. Monique Barbut  
Executive Secretary  
United Nations Convention to Combat  
Desertification



## *Attachment 1: Concept note of the Initiative*

### **African Initiative for Combating Desertification to Strengthen Resilience to Climate Change in the Sahel and Horn of Africa**

Sub-Saharan African countries, particularly in the Sahel and the Horn of Africa region, face mounting development challenges. Environmental deterioration has made the situation worse. The 2030 Agenda for Sustainable Development pledge that no one will be left behind cannot be achieved without the sustainable growth of the region.

The major part of the region is desert or drylands and most of it is estimated to be degraded. The region has also been affected by frequent and severe droughts in recent years. The increase in climate change is likely to make desertification even worse. As people of the region depend heavily on the use of natural resources, persistent drought has further worsened their livelihood condition. The poverty in the region could further exacerbate insecurity and the increase of refugees. Addressing desertification properly and strengthening resilience to climate change are keys to making nations of the region achieve sustainable development while contributing to peace and stability in the region and globally.

Acknowledging that the issues of droughts and desertification have not been given sufficient international attention despite their importance and urgency, and that adequate finance for addressing mounting development challenges of the region has not been mobilized, the Government of Kenya, the Government of Senegal, Japan International Cooperation Agency (JICA) and the United Nations Convention to Combat Desertification (UNCCD) proposed to launch a new initiative to combat desertification to strengthen resilience to climate change at the TICAD VI. The initiative aims to promote measures for combating desertification by the countries in the region, and supports for the efforts of development partners mainly through networking, knowledge-sharing, and improving access to finance. This initiative will also seek to harmonize with ongoing efforts by partner countries and partner organizations for effectively addressing the mounting challenges the region faces.

**Attachment 2: On-going related initiatives by partners (As of 27 August, 2016)**

**Japan International Cooperation Agency (JICA)**

Title	Contents	Duration / Implementing Agencies
Capacity Development Project for Sustainable Forest Management in the Republic of Kenya	1) Collect good practice for strengthening the resilience to climate change and drought and establish a database on KEFRI's website 2) Share the good practice in the region mainly on sustainable forest management * In component 5: Regional cooperation Regional cooperation: to be discussed	May, 2016 – May, 2021 Kenya Forestry Research Institute (KEFRI) and Ministry of Environment and Natural Resources
Project for Reinforcement of Resilience in Senegal	Enhance participants' capacity for formulating policy to combat desertification through acquiring necessary knowledge from lectures and discussions	2017-2022 (TBC) Executive Secretariat of National Council for Food Security (SECNSA) of Senegal
Training Course in Japan: Combating Desertification to Strengthen Resilience to Climate Change in Sub-Saharan Africa		2017-2019 Global Environment Forum

**United Nations Convention to Combat Desertification (UNCCD)**

Title	Contents	Duration / Implementing Agencies
Offering a very wide range of capacity building opportunities to all the countries through is Capacity Building Marketplace (CBM)	1) Provide easy access via the CBM to all information on existing training and other education opportunities to enhance capacity building in the region 2) Development and offering of e-learning course, MOOC and Webinars on the combat of desertification in the region	On-going to May 2021 The UNCCD Capacity Building Marketplace
Development of a tool kit and/or providing easy access to existing basic methodology to be used in identification of vulnerable populations and areas to drought	1) A tool kit outlining the basic methodology 2) Development of webinars explaining the use of the methodology	June 2017 The UNCCD Capacity Building Marketplace

Encouraging the use of best practices and techniques for combating desertification	Providing easy access to all best practices via the CBM	December 2016 and on-going The UNCCD Capacity Building Marketplace
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### Food and Agriculture Organization of the United Nations (FAO)

Title	Contents	Duration / Implementing Agencies
Building Resilience in Africa's Dryland	<p>Strengthen the resilience of livelihoods with a focus on:</p> <ul style="list-style-type: none"> <li>• Resilience policy and strategy development and implementation;</li> <li>• Vulnerability analysis and resilience measurement;</li> <li>• Vulnerability reduction at community and household level;</li> <li>• Preparedness, coordination and response to crises.</li> <li>• Support and facilitate exchange of resilience good practices and knowledge.</li> </ul>	Over 2014-2017
Action Against Desertification in Support of the Implementation of the Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI) and South-South Cooperation in Africa Caribbean and Pacific countries (ACP)	<p>RESULT 1: Enhanced enabling environment and capacities in support of sustainable land/forest management and restoration efforts at the landscape level.</p> <p>RESULT 2: Adoption and use of improved sustainable land/forest management practices and technologies.</p> <p>RESULT 3: Knowledge and awareness regarding causes and appropriate measures for combating desertification and land degradation and improving resilience to climate change, while promoting sustainable livelihoods.</p>	August 2014- February 2019 African Union Commission, ACP-Secretariat, The Global Mechanism of the UNCCD, Royal Botanic Gardens, Kew, Walloon Region Burkina Faso, Ethiopia, Niger, Nigeria, the Gambia and Senegal

### Global Environment Facility (GEF)

Title	Contents	Duration / Implementing Agencies
Sahel and West Africa Program in Support of the Great Green Wall Initiative	<p>Together with 12 countries in West Africa and the Sahel region, the GEF and World Bank joined forces with a wide range of partners to launch the program with a total GEF Grant of \$ 100.7 million and co-financing of nearly \$ 1.8 billion.</p> <p>This program is supporting the implementation of a country-driven vision for integrated natural resource management for sustainable and climate-resilient development in the Sahel and broader West Africa region. As a result of these investments, more than 2 million hectares of production land will be protected from risks of desertification and drought, directly impacting food security for</p>	5 years (2014 – 2018) The World Bank

<p>Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa</p>	<p>thousands of farmers and pastoralist communities. The program is designed to support countries in the dryland regions of Sub-Saharan Africa tackle threats to food security from environmental degradation and climate change. With GEF financing of US\$ 120 million, 12 countries in the Sahel, Horn of Africa and Southern Africa will build on existing agricultural development investments to promote good practices for long-term sustainability and resilience of food production, focusing on smallholder farmer who account for nearly 70% of food produced across the continent.</p>	<p>5 years (2016-2021) IFAD (Lead Agency), FAO, Conservation International, UNDP, UNEP, UNIDO</p>
<p>Regional Program for the Conservation and Sustainable Use of Natural Resources and Energy Efficiency</p>	<p>In the Lake Chad Basin, together with the African Development Bank, engaged five countries in developing a, with a GEF grant of US\$ 20.5 million, and co-financing of US\$ 172.5 million. As the life line for more than 20 million people, the program will be invaluable for securing Lake Chad and its natural resources, including fisheries, surface water, and groundwater resources. Under the program, each of the five of the basin countries will take actions safeguard the lake water resources in the context of context of food security and energy use.</p>	<p>5 years (2014 – 2018) African Development Bank</p>

## Annex 4: Programme for 1<sup>st</sup> Regional Forum in the Horn of Africa

1<sup>st</sup> to 3<sup>rd</sup> February 2017, Nairobi, Kenya

Time	Activity	Presenter(s)/Facilitator(s)
<b>Tuesday 31/1/2017</b>	<b>International Arrivals</b>	<b>JICA/KEFRI</b>
<b>Day 1: Wednesday 1/2/2017</b>		
8.00 am – 9.00 am	Registration	KEFRI
<b>Session I: Introductory Remarks and Keynote Speech: Chair: Dr. B.E.N. Chikamai: Rapporteurs: J. Kiprop and E. Manyeki</b>		
9.00 am – 9.30 am	<ul style="list-style-type: none"> <li>Welcome remarks/Introduction</li> <li>Forum objectives and programme overview</li> </ul>	Dr. B.E.N. Chikamai Dr. E. Chagala-Odera
9.30 am – 9.45 am	<b>Keynote paper:</b> Strategies/opportunities for Combating Desertification in Horn of Africa: UNCCD Experiences in Kenya	Mr. R. Mwendandu UNCCD Focal Point-Kenya:
9.45 am - 10.20 am	African Initiative and CADEP-SFM Project: <ul style="list-style-type: none"> <li>Overview and Background of African Initiative</li> <li>CADEP-SFM Project: <ul style="list-style-type: none"> <li>Overview of the project</li> <li>Component 5: Regional Cooperation</li> </ul> </li> </ul>	Ms. M. Miura JICA HQ  Mr. K. Takano  Dr. E. Chagala-Odera
10.20 am–10.30 am	Introduction of Terms of Reference (ToR) for African Initiative in the Horn of Africa	Dr. E. Chagala-Odera
10.30 am–10.40 am	Discussion	
<b>10.40 am – 11.00 am</b>	<b>Tea Break</b>	
<b>Session II: Presentation of Country Reports on Combating Desertification in Horn of Africa: Facilitator: Dr. G. Obwoyere Rapporteurs: J. Wanjiku and E. Manyeki</b>		
11.00 am – 11.10 am	Djibouti Country Report	County Focal Point Persons
11.10 am– 11.20 am	Eritrea Country Report	
11.20am – 11.30 am	Ethiopia Country Report	
11.30 am – 11.40 am	Somalia Country Report	
11.40 am – 11.50 am	South Sudan Country Report	
11.50 am – 12.00 pm	Sudan Country Report	
12.00 pm – 12.15 pm	Discussion	
<b>Session III: Official Opening: Chair: Dr. B.E.N. Chikamai</b>		
12.15 pm – 1.15 pm	<b>Official Opening Ceremony of the Forum</b>	<b>MENR Embassy of Japan JICA Kenya Office</b>
<b>1.15 pm – 2.15 pm</b>	<b>Luncheon</b>	KEFRI
<b>Session IV: Collecting and Sharing Good Practices : Chair: Delegate: Rapporteurs: M. Karanja and J. Kiprop</b>		
2.15 pm- 3.00 pm	<ul style="list-style-type: none"> <li>Tools for collecting and sharing good practices for combating Desertification in Horn of Africa</li> <li>CADEP-SFM Knowledge Management System</li> <li>Discussion</li> </ul>	Ms. J. Wanjiku  Ms. E. Manyeki
3.00 pm – 3.30 pm	Brief on field visit	Dr. M. Mukolwe
3.30 pm – 7. 00 pm	Travel to Makindu	Ms. M. Karanja/ Dr. M. Mukolwe



<b>Day 2: Thursday 2/2/2017</b>		
<b>Session V: Field Visit: Chair: Dr. E. Chagala -Odera; Rapporteurs: J. Kiprop, M. Karanja and R. Okello</b>		
8.00 am – 3.00 pm	Visit selected farmers within Makueni County	Farmers/KEFRI
3.00 pm – 7.00 pm	Travel to Nairobi/ KEFRI, Muguga	Ms. M. Karanja/ Dr. M. Mukolwe
<b>Day 3: Friday 3/2/2017</b>		
<b>Session VI: Opportunities for Collaboration and Linkages. Chair: Mr. R. Mwendandu; Rapporteurs: J. Wanjiku and J. Kiprop</b>		
8.30 am - 9.00 am	Discussion on field visit	Dr. E. Chagala-Odera
9.00 am - 10.00 am	Opportunities for Horn of Africa countries to create possible linkage with related initiative on combating desertification: <ul style="list-style-type: none"> <li>• UNCCD Perspective:</li> <li>• FAO Perspective:</li> <li>• GEF Perspective:</li> <li>• Proposed plan under African Initiative in the Sahel and 3S Initiative</li> </ul>	Dr. Richard Byron-Cox  Mr. Festus Akinnifesi  Dr. Mohamed I. Bakarr  Mr. Baidy Ba
10.00 am – 10. 15 am	Discussion	
<b>10.15 am -10.35 am</b>	<b>Tea Break</b>	
<b>Session VII: Commitments and Way Forward. Chair: Mr. G. Gathaara; Rapporteurs: Dr. M. Mukolwe and E. Manyeki</b>		
10.35 am – 11.20 am	Adoption of ToR	Mr. G. Gathaara
11.20 am- 12.20 pm	Country Group discussions: Country specific commitments for African Initiative	
12.20 pm – 1.20 pm	Country group presentations on commitments for African Initiative	
1.20 pm – 1.35 pm	Discussion	
<b>1.35 pm – 2.15 pm</b>	<b>Lunch Break</b>	
2.15pm – 3.30 pm	<ul style="list-style-type: none"> <li>• Plenary: Wrap-up and way forward</li> <li>• Closing ceremony</li> </ul>	MENR/KEFRI/JICA
<b>Saturday 4/2/2017</b>	<b>International Departures</b>	
<b>Sunday 5/2/2017</b>	<b>International Departures</b>	

**Annex 5: Scanned Confirmation of Attendance**


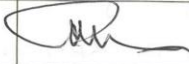

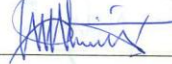






"AFRICAN INITIATIVE FOR COMBATING DESERTIFICATION TO STRENGTHEN  
1ST - 3RD FEBRUARY 2017"

Date	Name	Company - Address	Comments
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	Francis TAPSOBA	FAO sub regional office for Eastern Africa Addis Ababa	
	Festus AKinnifesi	FAO, ROME, ITALY	
	Alqanesh Tsema Gelaw	Ethiopian Ministry of Environment, Forests & Climate Change	
	Kazuhiko Tambaya	JICA	
	Dr. G. Obwoyere	Egerton University	
	Mr. Ibrahim Abdi - now	Somalia	
	Osman Ahmed Jimale	Somalia Mogadishu -	
	Heruy Asghedom	MOA Eritrea	
	George L. T. Tadu	MAFS, South Sudan	
	Asnat Haale	MOA ERITREA	

"RESILIENCE TO CLIMATE CHANGE IN THE SAHEL AND HORN OF AFRICA"

Date	Name	Company - Address	Comments
	Berhane Firezgh	MOA eritrea	
<del>1/2/17</del> 1/2/17	Lutane Musa	Ministry of Environ	S Sudan
<del>1/2/17</del> 1/2/17	Gaudensie Veauvau	Min. Agriculture, Food	in Sudan
1/2/2017	JONAH KIPROP	KEFRI - HQTS	
1/2/17	RICHARD BYRON-COX	UNCCD	International Organisations
1/2/17	K. Mumin cali	UNCCD (Somalia)	
1/2/17	Baidy RA	Ministry Environment SENEGAL	
1/2/17	Salah Tumbal	Sudan Ministry of Agri-	
1/2/17	Fadul Beshir	Ministry of Agriculture	
2/01/17	Nasmi Matsue	CADER SFM	
1/2/17	Michael Mukelwe	KEFRI HQTS	

Date	Name	Company - Address	Comments
	Yuko Kawauchi	UNDP	
	Anne Juepner	UNDP	
	A. Abdourahman	Member Director Great Green walls	
	MARI MIURA	JICA HQs	
	Ahmed Mohamed Ali	Director Agriculture and Forestry Jobs Ministry of Env	
	Mona A. Ahmed	SUDAN	
	Miyuki Iiyaga	SERAF-JICA	
	Francisco Carranza	FAO	
	Miriam Funckau	JICA Kenya	
	Sebastian Odongo	JICA Kenya	
	Maiwara Takahashi	JICA Kenya	

Date	Name	Company - Address	Comments
	John N. Njau	JICA Kenya	
	Ebby Chagala-Otieno	KEFRI	
	GORDON SIGLE	MEWA	
	GRACE KEMUNTO	CADEP-SFM	
	Stephen Gitonga	ICEFRI	
	Ben Chikamai	KEFRI	
	GABRIEL MUTHURI	KEFRI	
	J-Wanjiku	ICEFRI	
	K. Takano	JICA-CADEP	
	Simon Kamunde	KEFRI	
	Charles Mwangi	KEFRI	

Date	Name	Company - Address	Comments
11/2/17	Nelson Oraino	<del>PRMO</del> Dept. of natural resources	KEFRI workshop
11/2/17	Betty Pissy M	PRMO KEFRI	Great opportunity to network.
11/2/17	MARIAM KARISA	KEFRI	<del>FF</del>
"	Francis Inganga	NFEMA	Good work
"	Peter Ndumu	KFS	Great work <del>FF</del>
"	Richard Mwendu	MENR	Keep up the good work.
	Dan K. Moraga	menr	4
	Georgina Mwendu	MENR	<del>FF</del>
	Dr Monicah Kimutia	Mic. Dev't & Planning DASALs	TCC
	Yui Takashina	Embassy of Japan	only
	MARTIN MASINDU	KBC TV (Nairobi Nairobi County)	→

Date	Name	Company - Address	Comments
11/2/17	Warata Ichawa	Medica Nairobi	<del>FF</del>
03/02/17	Mohamed Bakarr	GGF Secretariat	Delighted to see her!
03/07/17	Yuki HONJO	CADED - SFM	FF (FF) FF