



# REGREENING TANZANIA

*A NATIONAL WORKSHOP ON COMBATING DESERTIFICATION AND RESTORING DEGRADED LANDS INTO FOOD BASKETS*

**DODOMA 18-19 JUNE 2016**

## WORKSHOP PROCEEDINGS REPORT



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## EXECUTIVE SUMMARY

A national workshop on Combating Desertification and Restoring Degraded Lands into Food Baskets was held in Dodoma from 18 – 19 June, 2016. The workshop was organized by LEAD Foundation in close collaboration with the office of the Parliament of Tanzania, World Agroforestry Centre/ICRAF, Evergreen Agriculture Partnership and World Vision.

The main goal of the workshop was to promote a National Regreening Movement involving the Tanzania Government, Civil Society Organisations and Development Partners to join forces in combating desertification and turning degraded land into food baskets through simple, rapid, low cost and sustainable methods.

The United Republic of Tanzania with a high and fast growing population faces a severe crisis of desertification and land degradation. The Tanzania State of the Environment report (2014) estimates 61% of the semi-arid regions have been severely degraded. This national workshop was convened with the specific objective of calling the Tanzanian Government, Members of Parliament (MPs) and non-government organisations to join forces to reverse desertification and restore degraded land.

Throughout the workshop various national and international speakers highlighted the situation of deforestation not only in Tanzania, but also throughout Sub-Saharan Africa. They explained that traditional tree planting programmes had had limited success rates. They recommended a more cost effective method of restoring degraded land called Farmer Managed Natural Regeneration (FMNR), popularly known in Tanzania as ‘Kisiki Hai’. This method involves managing natural regeneration of selected tree stumps in a way that agriculture, livestock grazing and trees can be integrated together, as well as improving woodlots and forests. This method improves food and water security and increases resilience to climate change, therefore improving people’s livelihoods.

The presentations were very well received by MPs and senior executives generating a very lively and informative discussion. MPs pledged to urge the Tanzanian Government to endorse national and international initiatives for environmental restoration, particularly of degraded land in Africa.

The Minister for the Environment, Hon. January Makamba, MP, concluded the opening session by endorsing ‘Kisiki Hai’ which will be an important part of the national regreening strategy, mainstreaming it into various departments and school/college curricula. He reminded workshop participants that the environment affects every aspect of society.

Following the screening of the powerful documentary *Ethiopia Rising: Red Terror to Green Revolution* and a practical demonstration of tree pruning, workshop participants discussed ways in which FMNR can be scaled up. Participants concluded that the ‘Farmer to Farmer’ method of scaling up will be the most effective. Workshop participants were then invited to draw up action plans for implementing the ‘Regreening of Tanzania’.

Bishop Chiwanga, Chairman of LEAD Foundation which was the main organiser of the workshop, concluded the workshop by thanking everyone involved in making the workshop such a great success. He urged all participants, government and non-government institutions, to lift high the banner: **“United We Stand, Divided We Fall,”** and to step up their efforts of establishing mechanisms for networking and cooperation at all levels to achieve the goal of reversing desertification and restoring degraded lands in Tanzania. He promised to do all he can to meet

the expectations of TRN founding members in unanimously appointing him as Chair. He also accepted, on behalf of LEAD Foundation, the responsibility of providing secretarial services for the TRN.

## 1.0 INTRODUCTION

### 1.1 Workshop Background

A national workshop on Regreening Tanzania to Combat Desertification and Restore Degraded Lands into Food Baskets was held in Dodoma from 18 – 19 June, 2016. The workshop was organized by LEAD Foundation in close collaboration with the office of the Parliament of Tanzania, World Agroforestry Centre/ICRAF, Evergreen Agriculture Partnership and World Vision.



The main goal of the workshop was to promote a National Regreening Movement involving the Tanzania Government, Civil Society Organisations and Development Partners to join forces in combating desertification and turning degraded land into food baskets through simple, rapid, low cost and sustainable methods.

Environmental degradation in Tanzania is a life and death issue. It should keep every leader, at every level, awake at night! The trend is dire, as “61% of our land is threatened by desertification; Tanzania loses 372,000ha of forests every year...environmental destruction affects every economic sector and peoples’ lives” (Honourable January Y. Makamba, MP – Budget speech, 2016/2017). This situation was earlier reflected by the former country’s President Jakaya Mrisho Kikwete, “If we are not careful and take concrete action to conserve our environment, our life and welfare will be endangered. If we do not do that, we will be heading to a thick darkness of destruction”, (Dr Jakaya M. Kikwete – World Environmental Day Speech, 5<sup>th</sup> June 2012).

### 1.2 Workshop Theme

The workshop theme, “**Combating Desertification and Turning Degraded Lands into Food Baskets**” was an urgent call for committed, passionate and concerted action against a crisis, on the basis of “Hapa Kazi Tu” – the rally call of the President of the United Republic of Tanzania, His Excellency Dr John Pombe Magufuli, for integrity and discipline in all our daily life and work.

The workshop provided a unique and critical opportunity for top policy and decision makers to learn about, and roll out countrywide, a simple, low cost, rapid and sustainable method

of reforestation known as Farmer Managed Natural Regeneration (FMNR), locally referred to as “Kisiki Hai”, with its rally call **“Kisiki Hai – Mkombozi wa Mazingira!”**

The workshop provided an opportunity for discussion on how “Kisiki Hai” can contribute towards the success of the envisaged National Tree Planting Programme, the National EverGreen Agriculture Strategy and Tanzania’s prospective commitment to join the African Forest Landscape Restoration Initiative (AFR100).

## **2.0 DAY ONE – 18 JUNE 2016 - PARLIAMENTARIANS AND SENIOR EXECUTIVES**

### **2.1 Welcome Address**

The Chairperson of the Industry, Trade and Environment Committee of the Parliament of Tanzania, Hon. Dr Dalaly Peter Kafumu (MP), welcomed the participants from all sectors in the Pius Msekwa Hall and, on behalf of participants, thanked the initiative of the workshop organisers for preparing such a historic workshop in the restoration efforts of Tanzania, and for involving Parliamentarians. He underlined two main problems fuelling the issue of environmental degradation: population growth while the much depended natural resources do not increase, and climate change. He cited regions of severe environmental degradation because of deforestation: Tabora, Shinyanga, Dodoma, Singida, Simiyu, Arusha and Morogoro.



He assured the workshop participants that the current Government is seriously committed to environmental restoration, and appealed to all stakeholders to collaborate with the Government in its efforts. He also revealed that for a long time Members of the Parliament have been advocating for the Government to establish a special fund for environment without success, until the current budget session which has approved Tanzania Shillings 2bn as a starter for the establishment of the Environment Fund. He was very optimistic that in the future Parliament sessions the Members of Parliament will continue to advocate for the Government to provide sufficient budget for the Environment Fund.

He appealed to fellow Members of Parliament to value and support the efforts and initiatives shown by the workshop organisers by joining hands with them in promoting FMNR in their constituencies.

He then invited the Guest of Honour to address the participants and officially open the workshop.

## **2.2 Keynote Address**

The Guest of Honour, Hon. Engineer Ramo Makani (MP), the Deputy Minister in the Ministry of Natural Resources and Tourism, expressed his delight to participate and officially open the workshop. He also welcomed participants and resource persons from other countries, in particular facilitators. He assured participants that the current Government under President Dr John Pombe Magufuli places great emphasis on the issue of environmental conservation in Tanzania. He said the issue of environment is inseparable from a person. Therefore, environmental restoration must begin with the liberation of people in their mind-set. In that respect, he said, the President of Tanzania's philosophy of "Hapa Kazi Tu!" aims to emancipate Tanzanians' mind sets so that they become more responsible in everything they do including conserving their own environment.



He pointed out that the Tanzanian environment, especially forest, land and water sources have been highly degraded and the major contributing factor being unsustainable cutting down of trees in farmlands, pasture lands and forestlands. He insisted that it was high time for all Tanzanians in collaboration with other stakeholders from within and outside the country to make sure that every effort is done to improve soil fertility through restoration of trees on farm and forest lands.

He explained a bit about the National Tree Planting Programme and pointed out that many people in Tanzania have been thinking that the only way to restore trees in farmlands and forest lands is through planting of trees. He reiterated the urgent need to review the National Tree Planting Programme before its validation by incorporating inputs from a wide

range of stakeholders. He advised that the name for the National Tree Planting Programme to be revised by searching for a suitable name which will reflect that a new method of “Kisiki Hai” - Farmer Managed Natural Regeneration (FMNR) has been brought on board.

He commended LEAD Foundation for taking the lead on organising the workshop in collaboration with other key stakeholders and for bringing high calibre presenters from United States of America and Australia who are working with renowned international organizations which are in the fore front for sustainable natural resources management worldwide.

He concluded his address by saying it was his high hope that *Kisiki Hai* method (FMNR) will have a positive outcome in the implementation of the National Tree Planting Programme due to the fact that it is the most relevant method as it fits well with the spirit of President Dr John Pombe Magufuli of accomplishing various Government programmes in a most cost effective manner.

Finally, he announced the workshop officially opened and urged all workshop participants to be keen listeners of all the presentations and actively participate during the discussions in order to come up with an impactful workshop declaration at the end of the workshop.

## **2.3 Presentations**

### **2.3.1 Multiple Impacts of Farmer Managed Natural Regeneration (FMNR) - Tony Rinaudo**

Tony Rinaudo began by providing a brief history of FMNR in Niger Republic covering the harsh environmental conditions and the impact of deforestation, land degradation and desertification on social, economic and environmental conditions. Changing climatic conditions were compounded by severe environmental degradation increasing the frequency and severity of drought, giving rise to higher temperatures and wind speeds, severe insect plagues, reduced soil fertility and ground water supplies and increased food insecurity, poverty and out migration.

Tony went on to provide an overview of efforts to address the situation through conventional reforestation approaches which ended in failure. Most tree planting efforts in Niger failed spectacularly. One study revealed that over a 20 year period, at the cost of multiple millions of dollars, some 60 million trees were planted. Today, much less than 20% of these trees have survived and there is no ongoing (sustainable) program of tree planting.

He disclosed how he was led to discover the 'underground' forest and how to manage the shoots from living tree stumps, which came to be called “Farmer Managed Natural Regeneration (FMNR). FMNR is the Systematic regeneration and management of trees and shrubs growing from living tree stumps, roots and seedlings on farmland, rangeland, forestland and even wasteland. FMNR primarily involves the selection, thinning and pruning of stems growing from stumps, roots and seeds and its success depends on agreements on the management of natural resources and threats such as fire, livestock and theft. FMNR spread to 5 million hectares in Niger over a 20 year period resulting in some 200 million more trees in the landscape than in the early 1980's.

Tony shared his experience of multiple impacts of FMNR, including increased availability of firewood and building poles, increases in non-timber forest products such as fodder, honey, traditional medicines, dyes and wild foods. FMNR results in reforestation and the reversal of land degradation and desertification, restoration of soils and increases in biodiversity. Many areas report increases in groundwater availability and rainfall is more effective due to decreased wind speeds and temperatures and increased organic matter in the soil. Subsequently, crop yields, animal productivity and incomes increase. In addition, because diversification and new income streams can be created such as honey production, farmers are more resilient against environmental shocks. When done at scale, FMNR can mitigate against flood and drought. As natural resources increase through FMNR, competition for scarce resources decreases and consequently reduction in conflict has been recorded in a number of intervention sites. Increased food and livelihood security also results in greater economic opportunities and reduced pressure to migrate.

He offered a challenge: FMNR is a proven, no-regrets technology. In over 30 years of promoting FMNR, nobody has ever complained that their farm or business was ruined because of its adoption. Rather, people's lives have been transformed for the better. There is an adage which goes "if you have nothing to lose, and everything to gain, by all means go for it". In other words, if there is no risk and the chances are you will benefit from FMNR in multiple ways, then by all means, give it all you have, support it with all your might. Tanzania faces many economic, social and environmental threats as a consequence of deforestation, land degradation and desertification. Very few interventions have the potential to be as cost effective as FMNR - which in fact, has a very low cost because once an enabling environment is in place, it happens automatically through people power. Its spread can be quite rapid and it is scalable nationwide. "Armed with this knowledge, and given your positions of power as Members of Parliament and Senior Executives, what will you do with FMNR?"





### 2.3.2 AFR100 and Evergreen Agriculture in Tanzania - Dennis Garrity

Dennis Garrity began his presentation by briefly describing **AFR100 and Evergreen Agriculture**.

- (a) **The African Forest & Landscape Restoration Initiative (AFR100) seeks to restore 100 million hectares of agricultural, rangeland and degraded forest land by 2030.**

The **AFR100** was launched in December, 2015 by the Africa Union during COP21 of the Climate Change Convention in Paris. The initial phase of support is also aimed at building up and strengthening the partnership and leveraging additional resources to scale up successful forest landscape restoration practices in landscapes targeted by participating countries.

**Accelerated Forest and Landscape Restoration** can make a major contribution to the Sustainable Development Goals (SDGs). It will assist Tanzania to achieve Land Degradation Neutrality in support of the UN Convention to Combat Desertification, and in achieving its aspirations to mitigate and adapt to climate change in its Intended Nationally-Determined Contribution to the UN Conference on Climate Change. And most important, the successful restoration of more productive landscapes through the AFR100 initiative will help *lift people out of poverty, stabilize food production, protect biodiversity, help African economies grow, and contribute to adapting to and mitigating climate change.*

**Seventeen countries** have already joined the AFR100 Initiative and have made formal restoration commitments. In eastern Africa these include Ethiopia (15mil Ha), Kenya (5.1mil Ha), Uganda (2.5mil Ha) and Rwanda (2mil Ha). About 45 million hectares of domestic commitments have been made so far continent-wide. The Office of the President has initiated discussions about Tanzania joining the Initiative in the near future.

- (b) **The role of agroforestry and evergreen agriculture in Tanzania**

**Tanzania has a long history** of research and development of agroforestry systems to restore degraded land and increase rural welfare, in collaboration with the World Agroforestry Centre. The restoration of about 500,000 hectares in Shinyanga is one outstanding example of success in the expansion of agroforestry systems.

**EverGreen Agriculture** is a form of more intensive farming where trees are integrated directly into crop production systems. It is a type of agroforestry that is emerging as an affordable solution to regenerate the land on small-scale farms and to increase family food production and cash income. The types of evergreen agriculture include farmer-managed natural regeneration (FMNR) of trees on farmland, trees interplanted in conventional tilled cropland, and conservation agriculture with trees. The protection and management of naturally-regenerating trees and shrubs established through roots and seeds present in the soil, known as **Farmer-Managed Natural Regeneration (FMNR)**, has proven to be exceedingly effective as a very low-cost way to restore degraded land. It is usually far more successful than tree planting in the dryland farming and pastoral systems of Africa, at a small fraction of the cost.

**At least 18 African countries** are now either implementing or developing national evergreen agriculture scaling-up initiatives. The African Union, World Bank, IFAD, GEF, FAO, UNEP, UNCCD and other international and regional organizations have endorsed these efforts and are supporting them. Many NGOs are now engaged in implementing this work on the ground.

**The Partnership to Create an EverGreen Agriculture** is supporting the information needs, capacity building, knowledge generation, and investments required to assist the massive scaling-up of these systems. It has been working with the Ministry of Agriculture to develop a Tanzanian National EverGreen Agriculture Strategy that seeks to reach 1 million farmers during the coming years. This Strategy is currently ready for validation followed by implementation.

He presented a comparison of the cost of restoration investment between the two reforestation methods whereby for the tree planting method, the cost was larger than \$1000 per hectare while for the Farmer Managed Natural Regeneration the cost was between \$30 – 50 per hectare.

He also alerted the workshop participants that there is a European Commission Challenge to scale-up Evergreen Agriculture to 50 million farmers in Africa and posed a question to them by asking, “Will Tanzania participate?”

He further revealed that there is also another programme known as “The Billion Dollar Business Plan for 2 million Farm Ponds in Africa” which aims at transforming subsistence to small-scale commercial enterprises. He presented a case from Lare in Kenya whereby subsistence farmers have started to implement it with the highest density of farm ponds per km<sup>2</sup> after installing 5,000 farm ponds. The pond water is used for supplementary irrigation on drought prone farms.

In conclusion, Dennis Garrity gave participants, focusing on Members of Parliament, six recommendations as follows:

- (i) Support Tanzania to become a member of the AFR100 and establish a national target for restoration - **perhaps 10 million Ha by 2030.**
- (ii) Support the rapid validation of the National Evergreen Agriculture Strategy to reach 1 million farmers in next five years.
- (iii) Allocate major new funding to restoration including the national tree seed centre and agroforestry research and scaling up.
- (iv) Support the establishment of an inter-ministerial working group to coordinate restoration of degraded agricultural land, rangelands and degraded forest lands.
- (v) Lead restoration efforts in their constituents.
- (vi) Engage in continuous oversight of the achievement of Tanzania's restoration efforts.

### **2.3.3 How to Quickly Scale up Regreening - Chris Reij**

Chris Reij started his presentation by informing the participants that the presentation will have some features of overlap with preceding presentations, however the theme was based on scaling up. He explained to participants that the main context is increasingly ambitious restoration targets by making reference to the Bonn Challenge for restoring 150 million hectares by 2020, AFR100 for restoring 100 million hectares by 2020, the New York declaration for restoring 350 million hectares and the NCE report for restoring 500 million hectares. He briefly introduced the crucial six steps to success and mentioned four criteria for success which were; to improve smallholder food security, to enhance resilience to drought, to reduce time spent by women in collecting firewood and reduce poverty. He also explained what it meant by stating large scale tree based restoration giving reference of the case of Niger where about 5 million hectares of land having put under agroforestry systems and in Malawi where smallholders have cultivated about 3,237,000 hectares of land by the year 2010.

He elaborated in details six steps to success as follows;

#### **(a) Identify and analyse existing regreening success**

He emphasized the importance of having concrete examples of countries or places whereby the large scale regreening practices has taken place and analysing the factors which have contributed to the success and fit them to a targeted area or country. He also emphasized the importance of having a documented baseline in terms of photographs and satellite pictures for measuring progress and results in future by making comparison.

#### **(b) Build a grassroots movement for regreening**

He insisted that it was very important to make sure majority of people understand the method and procedures to carryout regreening work and sustain it locally through promotion of farmer to farmer study visits, champion farmers or expert to train other farmers, develop village institution for tree management such as village forest scouts or guards for taking patrols in the restored areas and management committees.

#### **(c) Address policy and legal issues to enable conditions for regreening.**

He pointed out the importance of having sound policy and laws and oversight mechanism for their implementation and adherence among community members and their leaders.

#### **(d) Develop and implement a communication strategy**

He highlighted the importance of having an effective communication strategy in place to guide various form of communications to farmers such as the use of radio as one of the most effective channel of communication due to the fact that many radio programs are followed by millions of farmers, he also mentioned the use of relevant websites as a good source of information by giving an example of the Web Alliance for Regreening in Africa and production of documentaries for TV stations.

**(e) Develop or strengthen agroforestry value chains**

He explained that the reliable market outlets and services for farmers products from their restored agricultural, grazing or forest land is fundamental for motivating them to carrying out and sustaining the regreening practices as it provide satisfactory incentives to them from their work done.

**(f) Expand research activities**

It is important to fill gaps in knowledge concerning the multiple impacts of FMNR/restoration, costs and benefits and winners and losers.

**NB:** For pressure of time, the following three presenters could only highlight, in plenary, a few points out of their power point presentations. For the benefit of participants and readers summaries of their full notes of presentations are provided below. Their full power point presentations can be found in LEAD Foundation's website: [www.leadfoundation.or.tz](http://www.leadfoundation.or.tz)

**2.3.4 Current Regreening Success in Tanzania - Jeremias Mowo**

Jeremias Mowo started his presentation by informing the workshop participants that his presentation will give a quick reflection of what the country has learnt from the previous Land restoration efforts. He mentioned programmes and efforts for land and forest restoration which were in place during pre-colonial days as follows:

- (a) The establishment of a soil Erosion Committee in 1929,
- (b) The Sukumaland resettlement Scheme between 1944 – 1958,
- (c) The Destocking and resettlement schemes in Mbulu and Masailand, 1945 – 1960.

He also outlined some of the efforts which have been made in Tanzania during the post-independence era, including Hifadhi Ardhi Dodoma (HADO), Hifadhi Ardhi Shinyanga (HASHI), Iringa (HIMA), Arusha (SCAPA), Tanga and Singida (SECAP), the arid zone afforestation projects and the afforestation campaigns and village afforestation programs. Unfortunately, he said, most of these programs have collapsed due to various reasons including fund limitation, failure to involve the local communities and their local institutions during the planning and implementation of those programs, non-use and appreciation of indigenous knowledge and techniques, lack of comprehensive approaches to solve the problems, lack of inter-sectoral collaboration, absence of an exit strategy for externally funded projects and lack of effective scaling up mechanism.

He concluded his presentation by appealing to Members of the Parliament to be in the forefront on initiating, supporting and managing all land and forest restoration efforts in their respective constituencies.

**2.3.5 How FMNR/Ngitili can Contribute to the National Reforestation Programme - George Kafumu**

George Kafumu started his presentation by briefly explaining about the proposed National Reforestation Programme (2016 – 2021), whose main goal is to plant an average of 280 million trees annually through involvement of the local communities and all environmental conservation stakeholders in order to regreen Tanzania. The specific objectives of the programme are:

- (a) To plant 185,000 hectares of trees annually according to the relevance and suitability of the tree species for every area of the country. This translates to about 280 million trees annually with a focus to reforest the land, to improve soil fertility, to beautify the country and to benefit from various services provided by trees and forests.
- (b) To mobilise financial resources which will be used for planting, managing and conserving trees?
- (c) To promote the involvement of all stakeholders in tree planting and conserving them.
- (d) To strengthen information management systems and dissemination.

He also mentioned the action steps and priorities of the programme as follows:

- (i) To plant trees in open spaces, degraded land and forests including the mangrove forest areas, different institutions and industries, home gardens and individuals' farms, large tree plantations, protected areas and forest reserves, urban areas especially along the streets and in water sources and catchment areas.
- (ii) To raise awareness and increase knowledge about planting trees through the use of mass communication channels such as mass media and traditional media.
- (iii) To mobilise financial resources for the implementation of the programme.
- (iv) To undertake monitoring and evaluation at all levels from National to grassroots.

He pointed out some anticipated challenges for the programme as follows:

- 1) Unsustainable livestock keeping and grazing whereby the programme will ensure preparations for proper land use plans and specific areas for such activities are set aside, building of dams and other infrastructures for harvesting ground water.
- 2) Failure to implement proper productivity plans which takes into consideration environmental conservation. The programme will ensure proper plans for sustainable productivity are in place.
- 3) Frequent bush and forest fire. The programme will cater for fire management systems are implemented in forests and grazing areas.
- 4) Weak governance on managing natural resources. The programme will ensure enforcement of laws and by-laws is adhered to.
- 5) Lack of strategies for monitoring and evaluation. The programme will ensure proper systems are in place and implemented.
- 6) Little or lack of incentives for tree planting and conservation activities. The programme will ensure there is a sustainable system of providing incentives in such activities. (Guideline will be prepared).
- 7) Poor involvement of stakeholders. The programme will make sure all stakeholders are involved by preparing an institutionalised strategy for the tree planting and conservation activities.
- 8) Human activities which are not environmental friendly along the steep slopes, hill sides and other environmental sensitive areas. The programme will make sure human activities are checked and controlled in such areas.
- 9) Planting of unsuitable tree species per area specific. The programme will guide suitable tree species for every area involved and unsuitable ones will be removed.
- 10) Insufficient use of alternative energy. The programme will promote the use of natural gas and briquettes, biomass and waste energy as alternative to charcoal.

Finally, He emphasised the relevance of Ngitili and FMNR methods as being the best alternatives in place where it is difficult or very expensive to raise seedlings from a tree

nursery. He further commented that, these two methods are currently the most reliable capital investment for increasing house hold income from their various services they provide as well as being potential for carbon credit through REDD+ programme.

### 2.3.6 Building a National Regreening Movement - Simon Chiwanga

Bishop Simon Chiwanga began by introducing Lead Foundation and its ethos to inspire and equip stakeholders to be upfront in applying most appropriate and effective principles and practices of servant leadership, environmental conservation and action for community transformation.

The Bishop expressed, on behalf of participants, deep gratitude to:

- Hon. Eng. Ramo Makani, MP, Deputy Minister of Natural Resources and Tourism, for opening the workshop, and for his insightful exposition that because man and environment are inseparable, environment restoration must begin with transforming people's mindsets. His analogy of President Magufuli's "Hapa Kazi!" was most inspiring.
- Hon. January Y. Makamba, MP. Minister of State in the Vice President' Office (Union Affairs and Environment) for both his participation and willingness to close the morning session.
- Parliament Leadership for accepting and supporting the organization of this workshop in the awe inspiring Pius Msekwa Hall.
- Tanzania Government leadership, Members of Parliament and Senior Executives for showing enthusiasm in environment restoration. The attendance at this workshop of 200 Members of Parliament and almost 40 Senior Executives speaks volumes to the success of our vision of regreening Tanzania within the next five years.

Bishop Chiwanga regretted the absence of Hon. Speaker Job Y. Ndugai, MP, due to ill health. He was very keen to participate in this workshop. The Bishop wished him speedy recovery.

To his presentation, Bishop Chiwanga began by elaborating the use of *Kisiki Hai* for FMNR in the Tanzanian context, with its rally call "Kisiki Hai – Mkombozi wa Mazingira" which was unanimously chosen by FMNR national champions at a national workshop held in April 2014 in Dodoma. The name *Kisiki Hai* includes the various sources of natural regeneration. The method was labelled as the revelation to environment restoration because of the glaring advantages of being relatively less costly, easy to implement by everybody, has immediate results and it is sustainable.

The Bishop reminded participants of God's mercies, that despite the extensive destruction of the forests, God preserves the underground forest that can be easily harnessed to restore our environment. Now that we have come to the realization of this treasure, we should all put our efforts to restore the environment for the development sustenance of humankind. He proposed the establishment of "Underground Forest Reserves".

On his main theme: **Building a National Regreening Movement**, Bishop Chiwanga observed how, in Tanzania, issues of the environment are handled by various government ministries, NGOs and religious organizations. In a way this widespread array of players shows how environmental restoration is a crosscutting age issue. On the other hand, it can lead to

sectarianism or pigeonhole approach and duplication of efforts. He emphasized the necessity of having a mechanism which will enable us to do more and to create synergies.

He elaborated four essential qualities of a national movement for solidarity on greening Tanzania to combat desertification and restore degraded land:

- a) Leaders and people own the vision together; all say “we are willing, we have the reason, we are capable, we will accomplish greening Tanzania!” (*Nia tunayo, Sababu tunayo, Uwezo tunao, Tutashinda!*). This calls for effective community mobilisation and participation in decision-making and implementation.
- b) The unifying vision is so compelling that it stands above political/party/ministry divisions. For example, every ministry should see and play its part in the planned National Tree Planting Strategy, and not to be seen as the baby of only the Vice President’s Office and the Ministry of Natural Resources and Tourism. (On this point Bishop Chiwanga appealed to the opposition Members of Parliament not to weaken solidarity by the current protracted boycotting of Parliament sessions).
- c) Everyone is ready to make a sacrificial commitment, without expecting reward.
- d) Leaders and people encourage innovation, risk taking and flexibility for success of greening Tanzania.

In conclusion, Bishop Chiwanga expressed his confidence on the Government of Tanzania to espouse the God-given tool of *Kisiki Hai* to accomplish its desire for fast greening of Tanzania, and the formation of a national multilateral team to spearhead the greening movement. He made a pledge to offer LEAD Foundation’s services as a humble contribution to the national efforts of greening Tanzania now! This, he said, was the Kairos moment for all stakeholders to unite! **“United We Stand, Divided We Fall.”**



## 2.4 Discussions

The following are the major issues which were discussed by the workshop participants;

- (a) Strongly commended the relevance of the workshop to them and thanked all the resource persons for their presentations.
- (b) Law enforcers are not doing enough to curb the problem of deforestation and unsustainable grazing despite of having good policies and laws.
- (c) The Government has not yet put serious consideration on allocating sufficient budget for environmental conservation programmes.
- (d) There is weak governance and accountability for Government leaders and politicians at all levels on managing the country's environment sustainably.
- (e) Tobacco farmers should be educated and supported to initiate alternative environmental friendly livelihood activities.
- (f) There is gross misappropriation of the little funds or budget allocated for environmental conservation activities country wide.
- (g) More efforts should be done by Government to educate people about environmental education at all levels.
- (h) This kind of workshop should trickle down to the grassroots level.
- (i) Members of Parliament should be champions of restoration programs in their respective constituencies.
- (j) All stakeholders, including Members of Parliament, should be resourceful rather wait for aid money to restore their environment.
- (k) After the workshop all Members of Parliament should go back to their constituencies to educate and motivate community members and become champions by conserving at least twenty tree stumps annually.
- (l) Members of Parliament should be given enough relevant educational materials for carrying out similar workshops in their respective constituents.
- (m) The Members of the Parliament should advocate for the Government to take serious consideration and actions to join some beneficial international and regional environmental conservation initiatives, networks, partnerships, programmes and projects such as AFR100 and the European Commission Challenge as there are partners who are ready to provide resources for implementing restoration activities rather than waiting for the National budget allocation which is not always adequate.
- (n) The Government should establish an inter-ministerial working group for issues concerning environmental conservation because it is a cross cutting issue.



## 2.5 Closing: Minister of State, Vice President's Office (Union Affairs and Environment)



The Minister of State in the Vice President's Office responsible for Union Affairs and Environment Hon. January Y. Makamba (MP) expressed his deep appreciation and gratitude to Bishop Simon Chiwanga for his passion and commitment to environmental restoration and for taking the lead to organize this workshop. He stated the Tanzania government's commitment to rescuing our environment, hence the proposed five year national

regreening strategy, which Mr George Kafumu so ably presented to the workshop. He asserted that there is no single sector in the country which can succeed without considering the issue of conserving our environment, such that if we are not going to conserve our environment, even the question of investors coming to invest in our country will not be there due to the fact that the costs for their operations will be detrimental. He appealed to every Tanzanian to be actively involved in the war against desertification and land degradation, using simple and cost effective ways, in particular *Kisiki Hai*.

He assured workshop participants that the new programme took into account past experiences in order to avoid repeating mistakes in its implementation.

In concluding Hon. Minister Makamba:

- (a) Publicly announced government recognition and support of FMNR,
- (b) Promised the formation of a national coordinating body for the regreening of Tanzania, consisting of representatives from the Tanzanian government, civil society and donors.
- (c) Called for immediate mainstreaming of FMNR into relevant government programmes, and to introduce FMNR into school and college curricula at all levels from primary school.

Finally, he assured all stakeholders that his office doors are open to welcome any new ideas and pledge for a continued support and collaboration among all stakeholders. Thereafter he announced the morning workshop session officially closed.

### 3.0 DAY ONE – AFTERNOON SESSION: SENIOR EXECUTIVES



#### 3.1 Group Discussions

The session was facilitated by Bishop Dr Simon Chiwanga who suggested the formation of three groups and participants to self-select their participation in one of them. All the groups received the same guiding questions to lead them during the discussions. The guiding questions were:

- (a) What are the appropriate approaches for scaling up FMNR countrywide?
- (b) What lessons did we learn from the morning session with Parliamentarians?

The group deliberations were reserved for presentation on Day Two Session.



### **3.2 Video Show**

Participants were shown a video titled: ETHIOPIA RISING, Red Terror to Green Revolution produced by Chris Reij.

Chris Reij, associate producer of the film, invited workshop participants to watch the documentary and witness what is possible when communities, government and Civil Society Organisations join hands in transforming the environment.

The documentary had a story of environmental transformation presenting the experience of Aba Hawi, a person who mobilised the entire community to regenerate the surrounding hillsides. The documentary presented stunning images of the landscapes of northern Ethiopia and insights into hardships, challenges and accomplishments of the people of that region. It showed how they overcame drought and conflicts, and mobilised themselves to restore the forests and regenerate the soil and water sources that are the main source of their livelihoods and wellbeing.

## **4.0 DAY TWO SESSION: SENIOR EXECUTIVES**

### **4.1 Opening Remarks**

The LEAD Foundation Chairperson welcomed the participants for the second day of the workshop and took the opportunity to introduce Hon. Jitu Soni (MP) the Chairman of 55 Members of the Parliament Friends of Environment. Honourable Jitu Soni was inspired by the presentations on the first day of the workshop and decided to make a follow-up for the workshop on day two. Bishop Chiwanga thanked Hon. Soni for showing that he was a good FMNR ambassador in the Parliament of Tanzania. He welcomed Tony Rinaudo to demonstrate the practical aspect of FMNR to workshop participants who were not exposed to the method.

### **4.2 Practical FMNR Demonstration by Tony Rinaudo**

For pressure of time, Bishop Chiwanga who was to do the practical FMNR demonstration on Day One, could not do so. He asked Tony Rinaudo to do the demonstration as starter for Day Two.

Tony began by pointing out that pruning tree stumps was the easiest part of FMNR practice. The hardest part 'people pruning,' meaning the priority of changing mindsets. He emphasized that the most compelling challenge is to win peoples' minds and hearts on how they manage their lands. This was due to the fact that in everything they do on the land, it affects on how these trees and tree stumps are going to be. He pointed out some of the activities which affect them - expansion of land for agriculture, the need for fuel wood, grazing and building materials for their own use or for increasing their household income. Tony Rinaudo highlighted that the real struggle is in the minds and hearts of the people who would always begin by asking why they should change their old practices inherited from their forefathers. He said the simple answer was to tell them that, it is just because we want them to have a better future for their children and the best way to do that is to conserve the environment through practicing FMNR.



He started the demonstration of pruning the staged artificial tree stump due to shortage of time to go to the field. While demonstrating the pruning skills, he reiterated the importance of using locally available tools such as sharp knives and pangas rather than procuring complicated and expensive ones like the tree saws and secateurs. The main point was to emphasize the simplicity and cost effectiveness of the method. He also revealed that the main reason for leaving five healthy stems is due to a scientific proof that each shoots from those many stems send chemical messages to the roots each to be fed. He said if many stems are left on a tree stump, the roots will be confused which one to be fed and thus resulting into a competition which discourage their growth. He also said leaving of five healthy stems serves the risk of damage from livestock and enables a farmer to get supply for today's needs such as sticks for firewood while working for the future long term goal of having a full grown tree. Questions and answers were presented during the demonstration.

### **4.3 Presentation of Day 1 Group Discussions**

#### **4.3.1 Presentation by Group 1**

- (a) Approaches for Scaling up FMNR countrywide:
  - (i) Using grass root governments and private institutions including,
    - 1) Schools
    - 2) Government offices
    - 3) Prisons
    - 4) Mosques
    - 5) Churches
  - (ii) Extension and technology delivery
    - 1) Addressing barriers
    - 2) Assessing training needs of relevant stakeholders
    - 3) Capacity building
  - (iii) Understand barriers of adoption focusing on -
    - 1) Various communities
    - 2) Agro ecological zones and farming systems

- 3) Gender based barriers
- (iv) Addressing policy and by laws constraints
  - 1) Contradicting policies and by laws
- (v) Preventing destruction by livestock
  - 1) Involving local leaders i.e. traditional, religious and political leaders to enforce by laws governing environmental conservation
- (vi) Develop land use plans for sustainability
- (vii) Addressing culture and traditions
- (viii) On farm FMNR
  - 1) Mitigate tragedy of common
  - 2) Farmers realize on farm FMNR benefits
- (ix) Cross sector collaboration
- (x) Expose farmers to other sites/areas
- (xi) Using local ministry of Natural Resource staff
- (b) Lessons from the Day One Morning Session
  - (i) Members of parliament feel to be part of environmental destruction problems
    - 1) Environmental conservation activities are not adequately reflected in budgets
    - 2) Some fear losing voters by dealing with environmental destruction in their constituencies
  - (ii) Realize that Tanzania is in bad situation with regard to environmental destruction and land degradation
    - 1) Have realized the knowledge gap in Tanzania societies and are willing to be training agents
    - 2) Tanzania is not fully exploiting opportunities available for environmental conservation
    - 3) Environmental destructions have more impacts on women than men

#### **4.3.2 Presentation by Group 2**

- (a) Approaches for scaling up FMNR country wide
  - (i) Education.
  - (ii) High level of Government political will and commitment.
  - (iii) Get hold with local government at district level.
  - (iv) Make use of parliamentary members who are friends of the environment to champion the FMNR.
  - (v) To set targets and communicate the targets to different actors at different levels.
  - (vi) To communicate “Kisiki Hai” success stories of land restoration at different levels.
  - (vii) Motivation and close follow up of the land restoration projects at local level.

- (b) Lesson from the morning session
  - (i) Strong feeling from members of parliament.
  - (ii) Members of parliament rely too much from the government to champion the FMNR.
  - (iii) Lead foundation should increase lobbying strategies.
  - (iv) Raise awareness for FMNR should be sustainable.

#### 4.4 Preparation of Action Plans

The workshop participants convened in their day one groups to discuss and come up with action plans for implementing FMNR. Guiding questions were:

- (a) What are the reasons for conducting FMNR?
- (b) A template for presenting an Action Plan was provided to all groups to guide them during their discussions.

#### 4.5 Presentation of Action Plans

##### 4.5.1 Presentation by Group 1

- (a) Why FMNR?

Combating desertification and restoring degraded lands.

- (b) Reasons for adopting FMNR

It is cheaper, easier, effective and sustainable.

- (c) Action Plan

What will be done	By who	With Whom	By when	Where	Target area	Supports
Identifying training needs	LEAD Foundation	ICRAF, CBO, FBOs Extension Research & forestry	Aug, 2016	Pilot area Dodoma	Not applicable	Finance, technical expertise
Training packages and materials	LEAD	Extension Research World Vision	Sept, 2016	Dodoma	N/A	Finance, technical support
Capacity building	LEAD	ICRAF WV Research & Extension WRI	Oct, 2016	Pilot area	N/A	Finance, technical support
Implementation in sites	LEAD	Implementing partners	Nov/Dec,2016	Pilot area	1000	Finance, technical support
M&E	LEAD	Universities	Continuous	Pilot area	1000	Finance, technical support
Project management	LEAD	Implementing	Continuous	Pilot area	1000	Finance, technical support

(d) Next meeting?

November 2016.

(e) Who should attend?

All relevant stakeholders.

#### 4.5.2 Presentation by Group 2

(a) Action Plan

What will be done	By Whom	With whom (Beneficiaries)	By when	Where (Location)	Target area (ha)	Support Needed (How-finance, technical, administrative).
Create and sustain FMNR awareness through Media, influential people, education system, religious institutions and workshops	Lead stakeholders (Ministries, Local Governments, Academic institutions and NGOs	Local communities	2016/2017	Semi-arid (Dodoma, Singida, Shinyanga, Manyara, Tabora and Simiyu	Wide	Finances, Media context, Technical expertise
Promote FMNR	Lead institutions	Local communities	2016/17	Semi-arid	To be determined	Finance, volunteers, technical assistance, materials
Legislation – enforcement of existing bylaws and creating new environmental bylaws	Lead institutions, Local Government and Village leaders	Farmers	2016/17	Semi-arid	Semi-arid regions	Finance, commitment of the local government leaders and communities
Create follow mechanism	Lead institutions	Farmers/comm unity	2017/2018	Semi-arid	All project sites	Finance

(b) Next meeting?

November 2016.

(c) Who should attend?

All members of this workshop plus any other interested members on FMNR.

#### 4.6 Way Forward

The workshop participants agreed on the following as the way forward after the closure of the workshop:

- (a) All participants should start to practice FMNR from their homes and farms.
- (b) All participants should be active on promoting and supporting the scale up of FMNR countrywide.
- (c) The Tanzania Regreening Network should be established as soon as possible under the leadership of Bishop Dr Simon Chiwanga and the LEAD Foundation. All workshop participants should be part of the core group of this network which should also work very close with Members of Parliament friends of Environment for Lobbying and Advocacy issues in the Parliament.
- (d) “Charity begins at Home” – To establish a network for regreening Capital Town (Dodoma) and all interested participants should take active role in this network in close collaboration with Capital Development Authority and other regreening stakeholders in Dodoma Capital Town (Municipal).
- (e) To provide inputs in the National Regreening Programme before it is validated ready for its implementation.

#### 4.7 Summary and Closure

Messrs Tony Rinaudo, Dennis Garrity and Chris Reij thanked the Tanzania Government, Members of Parliament and Senior Executives for a well-organized and attended workshop on the most burning issue of environment restoration and preservation of Tanzania and the world at large. They all hoped that the enthusiasm and commitment shown in the workshop will translate into action in order to save this planet.

Bishop Chiwanga, on behalf of the Regreening Tanzania National Workshop organisers (LEAD Foundation, ICRAF, World Vision), concluded the workshop by thanking everyone involved in making the workshop such a great success. He offered particular Thanks to the following:

- The Speaker of the Tanzania Parliament, Hon. Job Y. Ndugai,MP.
- The Katibu wa Bunge and his staff.
- The Minister of State in the Vice President’s Office, Hon. January Makamba,MP.
- The Deputy Minister, Natural Resources and Tourism, Hon. Ramo Makani,MP.
- The Chairman of the Workshop, Hon. Dr. D. Kafumu,MP.
- All participating Members of Parliament and Senior Executives.
- Principal Presenters whose Profiles are in the Annex of this Report.
- The Workshop Secretariat led by Eliya Chiwanga and Frida Alex.
- The Management of St. Gasper Centre.

Bishop Chiwanga urged all participants to lift high the banner: **“United We Stand, Divided We Fall,”** and to step up their efforts of establishing mechanisms for networking and cooperation at all levels to achieve the goal of reversing desertification and restoring degraded lands in Tanzania and beyond. He promised to do all he can to meet the expectations of TRN founding members in unanimously appointing him as Chair. He also accepted, on behalf of LEAD Foundation, the responsibility of providing secretarial services for the TRN.

**To Combat Desertification and to Restore Degraded Lands into Food Baskets in Tanzania?**

**YES, IT CAN BE DONE, PLAY YOUR PART!**



## REGREENING TANZANIA

### A NATIONAL WORKSHOP ON COMBATING DESERTIFICATION AND RESTORING DEGRADED LANDS INTO FOOD BASKETS

DODOMA 18-19 JUNE 2016

#### PRESENTERS' PROFILES

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#### **Simon Eliya Chiwanga**



*Consultant on Leadership Formation and Environmental Conservation.*

*Principal Advisor, LEAD Foundation*

The Rt. Rv. Dr. Simon Eliya Chiwanga is a retired Bishop of the Anglican Church of Tanzania, Diocese of Mpwapwa. He is the Founder Chairman of LEAD Foundation, an NGO that promotes Leadership Formation, Environmental Conservation and Community Transformation, within and outside Tanzania. His ministry in the Church was sandwiched by some years in the Tanzanian Government, including being Founder Director of the National Rural Development Institute (IRDP), Member of Parliament and Minister for Education, under President Julius K. Nyerere. During his term as Bishop he had several national and international roles, including being the Lead Trainer of Bishops, their spouses and senior executives of the Anglican Church of Tanzania, Vice Chairman and Chairman of the worldwide Anglican Consultative Council. His passion for holistic mission helped the Anglican communion raise the profile of development as part of mission and his diocese to make huge progress in environmental conservation, improved agriculture and micro enterprise, as well as evangelism. He is a holder of B.A. (Education) University of Dar es Salaam; M.A. (Sociology) University of Dar es Salaam; M.Th. Kings College, University of London; D.Min. Episcopal Divinity School, Cambridge Mass. USA. He is married to Gladys, and have five children and, so far, seven grandchildren.

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## Tony Rinaudo

After gaining a Bachelor of Rural Science, Tony spent 18 years in Niger Republic as manager of Maradi Integrated Development Project (1981 to 1999). He managed famine relief interventions and a long term agricultural development program promoting organic farming, reforestation, diversified food production systems and community based health. Today Tony is the Principal Natural Resources advisor for World Vision Australia, and gives input into sustainable agriculture, agroforestry and reforestation activities. He is heavily involved in promotion of Farmer Managed Natural Regeneration within and external to World Vision globally through the FMNR Hub and he oversees ongoing research in and promotion of edible seeded acacias.



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## Dennis P. Garrity

*Drylands Ambassador, UN Convention to Combat Desertification and Distinguished Senior Research Fellow, World Agroforestry Centre, Nairobi*



Dr. Garrity is a systems agronomist and research leader whose career has been focused on the development of small-scale farming systems in the tropics. He is currently Drylands Ambassador for the UN Convention to Combat Desertification and Distinguished Senior Research Fellow at the World Agroforestry Centre (ICRAF), Nairobi. He served as Director General of the Centre from 2001 to 2011. He is currently leading an effort on the perennialization of agriculture in the 21st Century, building more productive and environmentally sound farming systems through a global Partnership to Create an EverGreen Agriculture. He also chairs the Steering Committee for Landcare International, a worldwide effort to support grassroots community-based natural resource management. During the 1990s he was based in Indonesia where he served as Regional Coordinator of the Southeast Asia Program of the World Agroforestry Center, Head of the Farming Systems Program at the International Rice Research Institute in the Philippines and as a Professor at the University of the Philippines in the 1980s he advised 47 PhD and MSc students and post-doctoral fellows from Africa, Asia, Europe and the US, and published over 175 journal articles and books. Dr. Garrity has a BSc degree in agriculture from Ohio State University, an MSc in agronomy from the University of the Philippines at Los Baños, and a PhD in crop physiology from the University of Nebraska.

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## Mr George Kafumu

Mr George Kafumu is the Coordinator, since 2014, of the East African Community Desk and representative on the Sustainable Land Management related issues and forestry in the Office of the Vice President, the United Republic of Tanzania.

He is also a member, since 2013 to date, of two important Teams coordinated by the Office of the Vice President:

Team member for the review of the Environment Policy (NEP, 1997), the NEP (2016) Implementation Strategy process; and the establishment of the National Environment Trust Fund (NETF), and also a Member of a team preparing a project on REDD+ readiness phase II (30 months project), and the National Carbon Monitoring Centre (NCMC) under the Vice President's Office and Sokoine University of Agriculture respectively.



His long service with the Government of Tanzania has included being a Member and Co-Chair of the National REDD+ Task Force coordinating the implementation of REDD+ program in Tanzania (readiness phase I). Participated in other REDD+ initiatives, including the Forest Carbon Partnership Facility (FCPF) under the World Bank; UN-REDD under UNDP and Ministry of Natural Resources and Tourism – MNRT, and a National Focal Point for the United Nations Convention to Combat Desertification – UNCCD, responsible for UNCCD Negotiations at international, regional/sub-regional and national levels; overseeing the implementation of the convention and its National Action Program (NAP), implementation of projects and programmes under UNCCD/SLM e.g. Kilimanjaro SLM project (supported by TerrAfrica Initiative) and other partners); SLM Tabora Project and all UNCCD SLM-related projects/programs; Preparation of the Integrated Financing Strategy for SLM.

Earlier on he was Principal Forest Officer (Environment) responsible for: - Implementation of the UNCCD, particularly the National Action Programme to Combat Desertification (NAP), preparation of the National Adaptation Plan of Action (NAPA) under UNFCCC, the New Partnership for Africa's Development (NEPAD) and the development of the Action Plan for the Environment Initiative of NEPAD, East Africa Community – Committee for Natural Resources and Environment and other related duties such as AMCEN, SADC and ACP follow ups. Other assignments on forestry, water resources, tourism, wildlife and land use, land use change and forestry under UNFCCC.



### **Chris Reij**

Chris Reij is a Sustainable Land Management specialist and a Senior Fellow of the World Resources Institute in Washington.

He has worked in Africa since 1978. Although he has maintained a focus on the West African Sahel, Chris Reij has been involved in numerous studies and consultancies in other parts of Africa, Asia, the Caribbean and the Pacific. His main fields of research and writing are related to restoration of degraded land in semi-arid regions, farmer innovation in agriculture, long-term trends in agriculture and environment and analysis of successes in agriculture and land management in Africa. He is the facilitator of "African Re-greening Initiatives", which supports farmers in adapting to climate change and in developing more productive and sustainable farming systems. This initiative was launched to help scale up proven successes in re-greening by individual farmers and communities. It is operational in Burkina Faso and Mali, and is expanding to other African countries. It collaborates with VU University's Network Institute in a Web Alliance for Re-greening Africa.

Chris Reij was honoured by the United Nations Convention to Combat Desertification (UNCCD) as Global Drylands Champion 2013.

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### **Jeremias Mowo**

*East and Southern Africa Regional Coordinator,  
World Agroforestry Centre*

Dr Mowo was appointed to the World Agroforestry Centre in 2007 as Regional Coordinator for the African Highlands Initiative (AHI) – East and Central Africa, and in March 2009 became the Centre's Regional Representative for Eastern Africa. His research interests include integrated natural resource management, farmer participatory research, methods and approaches for technology transfer and soil and water management research. Jeremias is Tanzanian and holds a BSc (Agriculture) (1979) from Dar Es Salaam University and MSc (1983) and PhD (2000) in Soil Science from Wageningen University.

