GUARDIANS OF PRODUCTIVE LANDSCAPES (GPL)

Project outline

by Feleke Woldeyes, Guenther Schlee, Ivo Strecker (10. October 2017)

(1) Events leading up to the project

Initial ideas concerning the 'Guardians of Productive Landscapes' developed after 2014 when responsibility for the South Omo Research Center (SORC) had been moved from the Institute of Ethiopian Studies (Addis Ababa) to Arba Minch University. Dr. Feleke Woldeyes – then President of Arba Minch University (AMU) – had begun a project in the nearby Dorze Highlands devoted to the preservation and upgrading of an endangered crop species: 'Ensete' (Ensete ventricosum). When Prof. Ivo Strecker – recently engaged to teach at AMU - asked whether anyone had already documented this venture by means of film the answer was "no".

Upon this a discussion followed in which also Yohannes Yitbarek (MA) – then Head of the Department of Anthropology at AMU – took part. The result was that **Dr. Feleke endorsed the plan for a major film series focusing on indigenous crops in Ethiopia**. Such filming would be of national interest, both as a means for teaching and research and for creating awareness of the high productivity and nutritional value of these – often undervalued – indigenous crops.

This first brainstorm was followed by Dr. Feleke's and Ato Yohannes' journey to Germany in February 2016, especially their visit to the Max Planck Institute for Social Anthropology in Halle/Saale. Here they met Prof. Guenther Schlee – Director of the MPI – and made plans for future cooperation. Ivo Strecker and Jean Lydall (both being experienced ethnographic filmmakers) were also present and emphasized the need to further develop the use of film in Ethiopian studies. Film had been an important tool for qualitative research when they were at SORC (see the films "Bury the spear" and "Duka's dilemma", and the essay "Men and Women in front and behind of the camera"). Strecker and Lydall argued that this methodological approach to the study of cultural heritage should continue, particularly as it offered great opportunities for the upcoming generation of anthropologists in Ethiopia. **Prof. Schlee agreed and subsequently ordered the acquisition of new - high quality - film equipment by the MPI to be used to document agri-cultural heritage in both northern and southern Ethiopia.**

On 26th of March 2016 a workshop addressing the problems of "Equitable Development" took place at SORC (Jinka, South Omo) where Dr. Feleke Woldeyes – meanwhile Deputy Director General of the Ethiopian Bio-Diversity Institute – gave the opening address while Prof. Schlee and Prof. Strecker followed with lectures addressing questions of 'equitable' or 'inclusive' development. They presented 'synergetic models' that combine foreign know-how and local cultural heritage. Ato Alemayehu, Chief Administrator of South Omo Zone provided the closing speech in which he supported the developmental policies advocated by the speakers.

Subsequent to the workshop Schlee and Strecker travelled to Tigray, and after talks with students and staff of Mekelle University they spent several days in the highlands of northern Ethiopia. As they reflected on the age-old small-scale organic farming in the region they simultaneously developed first ideas for the "Guardians of productive landscapes" project as outlined in the next paragraph. When coining this title for the project they were not yet aware of how the Global Environment Facility (GEF) had already used the notion of "productive landscapes and seascapes" in its call for biodiverse production. Nor had they read ETFERN News Vol. 56 entitled: "Towards productive landscapes". This happened only later.

(2) 'Guardians of productive landscapes': The main idea

Today, there still exist millions of small-hold farmers worldwide who cultivate their crops without polluting the land and the atmosphere. Although in some respects 'backward' - because people use only hand tools and animal power – these 'primitive' modes of production are in other respects 'progressive' because they do no contribute to the climate change that is threatening our planet. If anything, organic farmers help mitigate the global carbon problem as well as the danger of soil and water pollution.

The Rights and Resources Initiative has recently released a report entitled, "Towards a global baseline of carbon storage in collective lands". The authors say that the results of their study reinforce the urgent need to make collective tenure security a critical part of national emission reduction strategies. While the focus is on forest peoples the RRI call for action applies equally well to small-scale farmers and pastoralists whose "historical role as stewards of the environment is not only essential for stabilizing Earth's climate, it is also necessary to achieve global goals of sustainable development, food security, and poverty alleviation" (2016: p.1).

Just like climatologists, conservationists have also begun to see small-scale, traditional and indigenous communities in a new light. Calling them "guardians of biodiversity" ethno-biologists and anthropologists have pointed out that these peoples care for and protect the biological resources on which they depend and in this way do a great service to mother Earth.

As Mulder and Coppolillo have put it, the positive role of indigenous peoples "provides both a practical and moral foundation for new policy initiatives that treat local people as partners and allies in conservation efforts" (2005: p. ?).

The Guardians of productive landscapes project builds on these findings. But it also takes note of the frailty and vulnerability of those whom they recognize as 'stewards', 'custodians' or 'guardians' of particular habitats. Many of these guardians already face the effects of climate change with ever-recurring drought and/or flash floods, as well as the loss of crucial land and water resources to large-scale industrial farms, and increasing pressures on their land due to rapid population growth. As a consequence they are repeatedly unable to make ends meet and have to beg for, and rely on, national and international relief programs.

In the light of their valuable contribution to climate security, it seems fair – internationally even mandatory – that both small-scale, organic farmers and pastoralists who neither pollute the air nor the land - should be offered a seasonal income instead of their having to beg for food relief. The present project aims to develop the knowledge – both empirical and theoretical – needed to implement a program of support for these *Guardians of Productive Landscapes*. For contingent reasons, Ethiopia provides the point of departure, but eventually the program should extend globally.

Up to now, aid has come to Ethiopia from various sources of which the multilateral donors who operate globally seem to be most pertinent, especially the World Food Program, and the FAO who already have implemented a wide range of measures to improve the food security of Ethiopia. The present project will explore how these agencies may eventually include the *Guardians of productive landscapes* in their programmes.

(3) Backup voices I: Parvis Koohaftan and Miguel A. Altieri, FAO (2011)

- "Agricultural heritage systems. A legacy for the future" is a report and concept paper by Parvis Koohaftan and Miguel A. Altieri. It contains a paragraph, entitled "Custodians of Our Agricultural Heritage", which seems to us ideally suited to back up the "Guardians of productive landscapes" project. Here we quote the most pertinent passages:
- 1) Many of the remarkable agricultural systems and associated landscapes, too heterogeneous for intensive agriculture, are managed by an estimated 1.4 billion people, mostly family farmers, peasants and indigenous communities. They harbour ancestral and local varieties of plant species and animal races through their own knowledge systems and with little access to external inputs, capital, or modern agricultural technologies. They produce between 30-50% of the domestic food consumed in the developing world, thereby contributing substantially to food security at local, national and regional levels.
- 2) Many of these traditional systems have stood the test of time testifying to successful and resilient indigenous agricultural strategies, representing models of sustainability. They promote biodiversity, thrive without agrochemicals, and sustain year-round yields in the midst of socioeconomic upheavals and environmental variability.
- 3) In fact, many scientists acknowledge that traditional agro-ecosystems have the potential to provide solutions to the unforeseeable changes and transformations facing humanity in an era of climate change, energy and financial crisis.
- 4) Challenges and issues such as the lack of promotion of diversified and environmentally friendly farming and integrated management practices, as well as the neglect of research and development and rural services for the indigenous and ingenious agricultural systems, threatens the foundation of agricultural "culture" and associated biodiversity.
- 5) Other challenges and threats that need to be addressed include erosion of rural values closely linked with out-migration and loss of youth, overexploitation of resources and declining productivity, and imports of exotic domesticated cultivars leading to severe genetic erosion and loss of local knowledge systems.
- 6) All of these threats and issues contribute to the risk of loss of unique and globally significant agricultural biodiversity and associated knowledge, land degradation, poverty, and thereby threats to the livelihood security and food sovereignty of many rural and traditional farming communities.
- 7) As poverty alleviation and food security remain elusive for nearly a billion of the world's population, and with climate change threatening major disruptions with particularly strong effects on the poorest and most marginalized, it is clear humanity will need new models of agriculture in the immediate future that should include forms of farming that are more *biodiverse*, *local*, *resilient*, *sustainable* and *socially just*. Inevitably, modern farming will have to be rooted in the ecological rationale of traditional farming systems since the future of the world's population will undoubtedly depend on key components of biodiversity and ecosystem services that are still found in these cradles of agricultural diversity. Promising pathways shaped on traditional farming systems can help increasing on-farm food production and improve rural livelihoods thus substantially contributing to the combating of hunger and poverty by simultaneously assuring environmental sustainability. This is at the heart of the global development agenda.

(4) Backup voices II: Frederic Mousseau, Oakland Institute (2016)

As we write this project description Echi Gabbert (Max Planck initiative 'Lands of the future', www.eth.mpg.de/pubs/wps/pdf/mpi-eth-working-paper-0154.pdf) sends us the report "Agroecology in Africa: Mitigation the Old New Way" published by Frederic Mousseau, Policy director of the Oakland Institute (http://www.ipsnews.net/2016/01/agroecology) which begins by saying, "Millions of African farmers don't need to adapt to climate change. They have done that already." We quote here several passages that strongly back up our "Guardians of productive landscapes" project:

- 1. Although African indigenous systems are often perceived as backward by central governments, they have a lot of learning to offer to the rest of the world when contemplating the challenges of climate change and food insecurity. Often building on such indigenous knowledge, farmers all over the African continent have assembled a tremendous mass of successful experiences and innovations in agriculture. These efforts have steadily been developed over the past few decades following the droughts that impacted many countries in the 1970s and 1980s.
- 2) In Kenya, the system of biointensive agriculture has been designed over the past thirty years to help smallholders grow the most food on the least land and with the least water. 200,000 Kenyan farmers, feeding over one million people, have now switched to biointensive agriculture, which allows them to use up to 90 per cent less water than in conventional agriculture and 50 to 100 per cent fewer purchased fertilizers, thanks to a set of agroecological practices.
- 3) Mousseau provides further examples and then goes on to say, that these success stories are "just a sample of what Africans are already doing to adapt to climate variations while preserving their natural resources, improving their livelihoods and their food supply. One thing they have in common is that they have farmers, including many women farmers, in the driver's seat of their own development. Millions of farmers who practice agroecology across the continent are local innovators who experiment to find the best solutions in relation to water availability, soil characteristics, landscapes, cultures, food habits, and biodiversity."
- 4) Evidence is there, with irrefutable facts and figures, that millions of Africans have already designed their own solutions, for their own benefits. They have successfully adapted to both the unsustainable agricultural systems inherited from the colonial times, and to the present challenges of climate change and environmental degradation. Unfortunately, a majority of African governments, with encouragement from donor countries, focus most of their efforts and resources to subsidize and encourage a model of agriculture, largely reliant on the expensive commercial agricultural inputs, in particular synthetic fertilizers mainly sold by a handful of Western corporations.
- 5) The good news is that an agroecological transition is affordable for African governments. They spend billions of dollars every year to subsidize fertilizers and pesticides for their farmers. In Malawi, the government's subsidies to agricultural inputs, mostly fertilizers, amount to close to 10 percent of the national budget every year. The evidence that exists, based on the experience of millions of farmers, should prompt African governments to make the only reasonable choice: to give the continent a leading role in the way out of world hunger and corporate exploitation and move to a sustainable and climate-friendly way to produce food for all.

(5) Creating 'productive landscapes' in Ethiopia I: Lessons from Abreha we-Atsbeha

We provide here two examples of dedicated rehabilitation and conservation of particular landscapes as described in a recent booklet by Hailu Araya, Yohannes Gebremichael and Sue Edwards ($$) entitled, "Some examples of best practices by smallholder farmers in Ethiopia." They concern the by now world-famous work in the valley of Abreha we-Atsbeha and the less well-known farmer Araya Welde Aregay in the higlands of Tigray, northern Ethiopia. The texts are shortened and slightly edited. The following passages are found on pp. 12-17, and pp. 22-25.

In the early 1990s, after the fall of the Military government (*Derg*), the Abreha we-Atsbeha area was so badly degraded that the local people asked the new government to find them a place where they could go and live. But then the community came together to discuss and find solutions for themselves. They said: "We are born and grew up here; our fathers and mothers lived, died and are buried here. Leaving this place does not mean it is like selling or changing a house. It is like betraying our country, culture and religion".

The whole community agreed that the problem was land degradation and water scarcity. They decided to heal their land through working to stop gullies and reclaim hillsides. They got some of the ideas for this through cross visits with other communities working with ISD, Mekelle University and the wereda administration. After one year they saw that the places with combined physical and biological soil and water conservation work held more moisture than the physical structures alone. This has encouraged them to try and reclaim more land every year. Now this Kebele is a model in the whole of Tigray for its exemplary restoration and conservation work. In June 2012, Abreha we-Atsbeha received The Equator Prize at the Rio+20 World Summit on Sustainable Development in Rio de Janeiro....

All the improved practices in Abreha we-Atsbeha Wereda are based on the principle of **Building** the Community's Assets. It is result based work with an impact on improved food security for the whole community. It started with the community members making different types of soil and water conservation structures in the catchment areas on the sloping sides of the valley starting from the top of the slopes and working towards the bottom of the hills. Now, there is no erosion or violent run off in the whole valley. Water is retained by the physical structures so that it seeps into the ground and recharges the sub-surface ground water. There are even permanent streams and pools of water....

The main activities implemented by the communities throughout the valley and the significant changes they have seen, are as follows:

- 1) They start by convincing the members of the community about the importance of the conservation work. All members of the community invest their labor and time for the development without any payment. And there is no one assigned as a guard in any of the watershed catchments and protected areas.
- 2) The working principle is the proper assignment of a limited number of people to work in a given activity, so that all members of the community can contribute effectively.
- 3) The community accepted to change from their previous free range grazing culture into the new controlled and 'cut and carry' animal feeding system... This is because with free range grazing, the animals trample on and destroy many plants so that those that grow from the soil seed bank cannot establish. Now the fields have many young *momona* trees growing up without being planted.
- 4) The Abreha we-Atsbeha Kebele is very wide so that the conservation work is still expanding. In the first half of 2012, eleven check dams were constructed in one community and by October they were full of water.
- 5) All levels of the conservation work are linked to improved food security and income generating activities. The local town of Wuqro gets a steady supply of fruits and vegetables from the farmers of Abreha we-Atsbeha who have established micro-irrigation from hand dug wells.

(6) Creating 'productive landscapes' in Ethiopia II: Lessons from soil-maker Araya Welde Aregay

Farmer Araya Welde Aregay is a 58-year old farmer. He lives in Mai Siye Kebele of the Tahtai Maichew Wereda that is 20 km west of Aksum in the north central part of Tigray Region. Like many parts of the Region, this district has many rocky hillsides with very little vegetation. Farmers use any small area of land with soil to grow crops. But this farmer took up the challenge of building fields of soil on the rocky slope. Farmer Araya is married living with his children and grandchildren who give him company and some little support. Every year he plants his fields with different crops and never rests them to restore some soil fertility even for a single year. Instead he makes and uses compost.

During the 1980s when the Tigray People's Liberation Front (TPLF) controlled most of Tigray, they re-distributed the land amongst the farmers and tried to share out both better more fertile land with poorer areas. But some of the farmers like Araya received only poor land. His was a steeply sloping rocky plot in a valley surrounded by a rocky landscape. This is the story of how he started to make his fields in this area and expand his cultivated area for his family to become food secure....

Farmer Araya started to build terraces using the big and hard rocks. Then he needed to crush rocks to start making the soil. The rocks are very ancient sandstone and hard to crush. However, he never gave up when faced with this challenge from nature. Every day he dug the rock and crushed the boulders to make soil. After many years of struggle he now has fields in wide strips where he can plough by oxen; he digs the narrower strips with a hand tool. Some of the fields have been built on terraces that are taller than him, and he is nearly two meters tall! After the fields are harvested, Farmer Araya continues building more terraces for more fields. He does this using the following steps that include incorporating organic matter into the soil:

- 1) First, he completes building each terrace with large rocks along the contour and then he crushes the smaller rocks to make the soil;
- 2) Second, he cuts leafy branches from the local bushes and lays these down along the base of each terrace.
- 3) Third, he covers the leaves and branches with the crushed rocks mixed with some fertile soil. Sometimes he also adds some animal manure.
- 4) Fourth, if there is no rain he waters the new soil to help the leaves and branches break down into organic matter in the soil.
- 5) He plants these small fields with a variety of crops. In 2011 he planted seven types of field crop including maize, teff, wheat, barley, and linseed. The crops looked good when the study group visited him in October 2012.
- 6) He never uses chemical fertilizer because if the rain stops early he knows that the chemical fertilizer would
- cause his crops to dry up quickly.
- 7) The natural vegetation is also being restored around his fields so that he now has three modern beehives. He gets honey and earns some money from this every year...

Farmer Araya said that if he continues to be healthy, he will build small dams to collect water in the river below his farm. Then, he will buy a water-pump to bring the water up to his farm. This will give him the opportunity to grow fruits and vegetables during the dry season as well as his field crops during the main rains. He says: "If man creates a friendly relationship with nature, the land can always be made fertile; i.e. it is our responsibility to [care for it] and make it fertile".

(7) Tuning in with other institutions, agencies and programs: I The Ethiopian Biodiversity Institute

"Guardians of productive landscapes" aims to tune in with dozens, perhaps hundreds, of smaller and larger projects and programs in Ethiopia and beyond that currently aim to conserve what there is left of nature and simultaneously help battle the threat of climate change. Here – for the time being - we describe the 'tuning in' with only one of them:

As detailed in the "Events leading up to the project" (see first paragraph above), in 2014 Dr. Feleke Woldeyes, then president of Arba Minch University, - and one of the authors of this project proposal - began to plan a major film series (see below) that focuses on indigenous crops and their habitats in Ethiopia. Meanwhile Dr. Feleke has become Deputy Director General of the **Ethiopian Biodiversity Institute**, and this is why we here mention the **EBI** first.

There are several ways in which "Guardians of productive landscapes" fits in with the Ethiopian *National Biodiversity Strategy and Action Plan* (2005) and can in fact provide valuable support to its aims. We mention here only the most important points:

- (1) One of the major goals of the NBSAP is to **conserve the rich agro-biodiversity of Ethiopia** through a mix of *in situ* and *ex-situ* programs (p. X). Here the *Ethiopian crops* film and study project inspired and supported by Dr. Feleke will make an important contribution by exploring and documenting the great variety of locally adapted and carefully cultivated crops in Ethiopia. The benefits in terms of productivity, nutritional value, drought and disease resistance, and support of cultural identity are so evident that here they don't need any further explication (see also the paragraph on the *Guardians of productive landscapes* film series below).
- (2) The NBSAP emphasizes the need for an **integrated use of incentives** as a "powerful means of promoting conservation and sustainable utilization, and is accorded increasing attention by many governments". But then the authors of the NBSAP add: "Ethiopia, however, has made relatively little use of the incentives approach to date" (p. 48). Here the *Guardians of productive landscapes* project is of great relevance, because it **focuses precisely on the strategic use of incentives,** arguing that once people's public self-image begins to turn from 'relief dependent beggars' to 'guardians of valuable habitats', small-hold farmers and pastoralists not only in Ethiopia but the whole world over will try to keep and improve their traditional fields and pastures rather than abandon them.
- (3) A further mandate of the IBC is to **undertake public education and awareness raising** (p.X). This is further explicated in the NBSAP:
- a) Firstly by referring to local contexts, arguing that, "helping communities to document their knowledge raises community awareness of the importance and values of biodiversity" (p. 49).
- b) Secondly by pointing out the need for international exchange of information saying, "The knowledge and experience about environmental problems and their solutions are unequally and poorly distributed around the globe". In particular, there is an information gap between developed and developing countries, which must be bridged (p.50).

The *Guardians of productive landscapes* studies and film series is devised to contribute exactly to this task of generating and exchanging knowledge for local, national and international purposes (see the paragraphs on film production and on work shops below).

(8) Tuning in with other projects and programs: II Institutions, agencies and interest groups

In this paragraph we list only a few of those 'comrades in arms' who currently struggle to conserve nature and simultaneously battle the threat of climate change. A more complete stocktaking of relevant partners, and a discussion of mutual interests and cooperation is left to the *Guardians of productive landscapes* workshops that are planned for the future (see below).

The Association for Research and Conservation of Culture (ARCC), which aims to "promote research and conservation of the history, cultures and cultural landscapes of the South and South Western peoples of Ethiopia", and has produced a documentary film entitled "The Konso Cultural Landscape".

The Institute for Sustainable Development (ISD), which has been devoted to the "enhancement of local knowledge and smallholder practices since 1996. See the descriptions of "Best practices of small-hold farmers" provided above.

The Environmental Economics Policy Forum for Ethiopia (EEPFE) based at the Ethiopian Development Research Institute (EDRI) is one of six EfD (Environment for Development) Centers located in six countries. EFD has "the main objective of supporting sustainable development and poverty reduction through increased use of environmental economics in policy making processes in Ethiopia.

The Food and Agriculture Organisation (FAO) of the United Nations, will be crucially relevant for the *Guardians of productive landscapes* project and eventual program. Most important to mention is **Globally Important Agricultural Heritage Systems** (**GIAHS**), a program which promotes public understanding and national and international recognition of Agricultural Heritage Systems throughout the world.

The Rights and Resources Initiative (RRI) supports "local communities and indigenous peoples' struggles against poverty and marginalization by promoting greater global commitment and action towards policy, market and legal reforms that secure their rights to own, control and benefit from natural resources, especially land and forests". We have quoted already the very pertinent RRI report "Towards a global baseline of carbon storage in collective lands".

The Oakland Institute focuses on land, agriculture, and food policy as well as communities' access and control over land and natural resources. Policy Director at the Oakland Institute is Frédéric Mousseau whom we have already quoted extensively above (paragraph 4). Mousseau coordinates the Institute's research and advocacy activities on land investment, food security and agriculture.

In addition we would need to mention – but cannot do this here – numerous national and international aid agencies that are engaged in conservation and climate mitigation activities. Dedicated searchers will find them in the exotic jungle of acronyms such as CSE, CBO, EARO, EHNRI, EIA, FCCC, EPA, EWCO, GEF, GIZ, ILRI, IUCN, REPA, NORAD, UKAID, SIDA, SAD and others.

Finally, there are many university departments and research institutes from around the world whom we may expect to take an interest. In fact – as explained in paragraph (1) - *Guardians of productive landscapes* is the brainchild of academics and so far has been mainly supported by the **Max Planck Institute (MPI) of Social Anthropology,** Halle/Saale, Germany.

(9) Guardians of productive landscapes: Film series

Like the Ethiopian National Biodiversity Strategy and Action Plan (2005), the Guardians of productive landscapes project aims to undertake public education and awareness raising. As explicated in the NBSAP, helping communities to document their knowledge raises community awareness of the importance and values of biodiversity. Furthermore, because the knowledge and experience about environmental problems and their solutions are unequally and poorly distributed around the globe, there is a need to bridge the information gap between developed and developing countries. The Guardians of productive landscapes film series is devised to contribute exactly to this task of generating and exchanging knowledge for local, national and international purposes.

With equipment and financial support provided by the MPI (Prof. G. Schlee) two films in the Guardians of productive landscapes series are in the making:

- (1) Abraham and Sarah. Creators of a productive landscape, by Ivo Strecker.
- (2) Dancing Grass. Harvesting Teff in the Tigrean Highlands, by Mitiku Gabrehiwot
 - Research for the third film has already begun. It's title is:
- (3) To live with Ensete, by Eyob Defersha

Further details about the Guardians of productive landscapes film series will be provided in due course.

(10) Guardians of productive landscapes: Symposium and Workshops

Four workshops are planned to fully develop the *Guardians of productive landscapes* project, firstly in Mekelle, secondly in Arba Minch, thirdly in Addis Ababa, and fourthly in Halle, Germany.

(i) Preliminary Symposium: 12 – 13 August 2017

As part of the preparations for the four major workshops in the GPL project, Dr. Marco Bassi and Mitiku Gabrehiwot visited the Max Planck Institute for Social Anthropology in Halle/Saale in August 2017, and took part in a 'Preliminary Symposium' entitled, "Modelling the Guardians of Productive Landscapes Program".

The presentations were as follows:

Ivo Strecker: Components of a model for the "Guardians" project.

Günther Schlee: The "Guardians" as part of the MPI research agenda.

Echi Gabbert: The "Guardians" within the "Lands of the Future" initiative.

Mitiku Gebrehiwot: The relevance of the "Guardians" for Tigray, Northern Ethiopia.

Valeri Liebs: The "Guardians" and related research agendas in Africa.

Nikolaus Scharaira: Conservation and the role of local knowledge in the "Guardians" project.

Marco Bassi: The "Guardians" in the context of international organisations and aid flow.

(ii) Guardians of productive landscapes: Workshop I

Workshop at Mekelle University: 10 – 11 January 2018.

Mitiku Gabrehiwot, Assistant Professor and Postgraduate Coordinator at Mekelle University will convene this workshop in order to introduce the *Guardians of productive landscapes* project to the scientific community of Mekelle University. The discussion will focus on the region of Tigray, northern Ethiopia, and it is hoped that an **interdisciplinary action group** will be formed to further develop the *Guardians of productive landscapes* project, particularly as it pertains to Tigray.

Two new films will serve to substantiate the realities that underlie the *Guardians of productive landscapes* project:

- (1) Abraham and Sarah. Creators of a productive landscape, by Ivo Strecker.
- (2) Dancing Grass. Harvesting Teff in the Tigrean Highlands, by Mitiku Gabrehiwot

High on the agenda are also the most relevant publications on conservation, rehabilitation, ecological knowledge, sustainable land management, climate change etc. in Tigray, which will be reviewed and discussed.

Selected list of publications:

- Abbebe Kifleyesus (2007) Food Familiarity and Novelty in a Condition of Socio-economic Transformation in North-Central Ethiopia, Journal of Eastern African Studies, 1:3, 449-465, DOI: 10.1080/17531050701625417
- Aerts, R., M. Haile, B. Muys, J. Deckers, M. Hermy, and J. Moeyersons. 2001. Forest rehabilitation and water conservation in the Tigray highlands, northern Ethiopia. European Tropical Forestry Research Network News 33:29–31.
- Hachoofwe, Emelda Miyanda. "Local ecological knowledge of trees on farms, constraints and opportunities for further integration in Tigray Region, northern Ethiopia: A case study of smallholder farmers in Abreha Wa Atsbeha and Adigudom." PhD diss., Bangor University, 2012.
- Hailu Araya, Yohannes Gebremichael and Sue Edwards (2015), "Some examples of best practices by smallholder farmers in Ethiopia"; available at www.prolinnova.net/sites/default/files/.../2bp_booklet_front.pdf
- Jabbar, Mohammad Abdul, John Pender, and Simeon Ehui, eds. Policies for Sustainable Land Management
 in the Highlands of Ethiopia: Summary of Papers and Proceedings of a Seminar Held at the International
 Livestock Research Institute, Addis Ababa, Ethiopia, 22-23 May 2000. No. 30. ILRI (aka ILCA and
 ILRAD), 2000.
- Shiferaw, T., G. Lamond, A. Gebrekirstos, K. Meles, E. Aynekulu, E. M. Hachoofwe, J. Mowo, D. Garrity, and F. Sinclair. "Recognizing local agro-ecological knowledge in sustainable intensification of tree-crop-livestock farming systems." (2013).
- Tagel Gabrehiwot & Anne van der Veen (2013) Climate change vulnerability in Ethiopia: disaggregation of Tigray Region, Journal of Eastern African Studies, 7:4, 607-629, DOI:10.1080/17531055.2013.817162

(iii) Guardians of productive landscapes: Workshop II

Workshop at Arba Minch University: 5 – 6 March 2018.

Eyob Defersha (MA) will convene this workshop in order to introduce the *Guardians of productive landscapes* project to the scientific community of Arba Minch University. The discussion will focus on the Gamo highlands and other *enset* growing regions in southern Ethiopia. One of the aims is to initiate an **interdisciplinary action group, which** will further develop the *Guardians of productive landscapes* project, particularly as it pertains to the *enset* complex in southern Ethiopia.

Three new films in the Guardians of productive landscapes series will be screened:

- 1. "Abraham and Sarah. Creators of a productive landscape", by Ivo Strecker.
- 2. "Dancing Grass. Harvesting Teff in the Tigrean Highlands", by Mitiku Gabrehiwot
- 3. "To live with enset," by Eyob Defersha

As in the previous workshop, the most relevant publications on conservation, rehabilitation, ecological knowledge, sustainable land management, climate change etc. in the Gamo Highlands and beyond will be reviewed and discussed.

- Almaz Negash and Anke Niehat (2003): The significance of enset culture and biodiversity for rural house hold food and livelihood security in south western Ethiopia; Agriculture and human values 21: 61-71, 2004; 2004 Kluwer Academic Publishers printed in the Netherland
- Almaz Negash (2001): Diversity and Conservation of Enset (Ensete Ventricosum Welw. Cheesman) and Its Relation to Household Food and Livelihood Security in South-western Ethiopia. PhD thesis Wageningen University and Research Centre, The Netherlands.
- Brandt, A. S., et.al. (1997): The "Tree against Hunger." Enset- Based Agricultural Systems in Ethiopia.
 New York: American Association for the Advancement of Science.
- Emmenegger Rony, Sibilo Keno & Tobias Hagmann (2011) Decentralization to the household: expansion and limits of state power in rural Oromiya, Journal of Eastern African Studies, 5:4, 733-754, DOI: 10.1080/17531055.2011.642530
- Freeman, Dena Gail (1999): Transforming traditions: the dynamics of cultural variation in the Gamo highlands, southwest Ethiopia. Published by ProQuest LLC 2014
- Graciela Gil-Romera, David Turton & Miguel Sevilla-Callejo (2011) Landscape change in the lower Omo
 valley, southwestern Ethiopia: burning patterns and woody encroachment in the savanna, Journal of
 Eastern African Studies, 5:1, 108-128, DOI: 10.1080/17531055.2011.544550
- Rahmato, D. (1996). "Resilience and Vulnerability: Enset Agriculture in southern Ethiopia." pp. 83-106 in Tsedeke Abate, Clifton Hiebsch, Steven A. Brandt, & Seifu
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(iv) Guardians of productive landscapes: Workshop III

Workshop in Addis Ababa: 3 – 4 December 2018.

Dr. Marco Bassi, Mitiku Gabrehiwot M.A., Yohannes Yitbarek M.A. and presently Ph.D. candidate at the Max Planck Institute for Social Anthropology, Halle/Saale, Germany, will convene this workshop in order to introduce the *Guardians of productive landscapes* project to the scientific community and other interested individuals and institutions in Addis Ababa. At this workshop the focus of discussion will widen and include all regions of Ethiopia. Also, a number of more technical, administrative and logistical issues will be discussed, among them the mapping of guardian terrains and existing modalities of aid flow that pertain to the *Guardians of productive landscapes* project.

As before, the new films in the *Guardians of productive landscapes* series will be screened, as well as a selection of other films from Ethiopia that are pertinent, like for example the film "The cultural landscape of Konso". More than in the preceding workshops the literature review will have a national as well as a global dimension. Some of the most salient titles are:

- Data Dea & Ian Scoones (2003) Networks of knowledge: how farmers and scientists understand soils and their fertility. a case study from Ethiopia, Oxford Development Studies, 31:4, 461-478, DOI: 10.1080/1360081032000146636
- Dercon, Stefan, John Hoddinott & Tassew Woldehanna (2012): Growth and Chronic Poverty: Evidence from Rural Communities in Ethiopia, Journal of Development Studies, 48:2, 238-253
- Deressa, T., R. M. Hassan, and C. Ringler. Measuring Ethiopian Farmers' Vulnerability to Climate Change across Regional States. Washington, DC: International Food Policy Research Institute, 2008Mousseau Frederic 2016: Agroecology in Africa Mitigation the Old New Way. Oakland Institute; available at: http://www.ipsnews.net/2016/01/agroecology-in-africa-mitigation
- Fouad Makki (2012): Power and property: commercialization, enclosures, and the transformation of agrarian relations in Ethiopia, Journal
- Institute of Biodiversity Action Plan (Pdf), available at: https://www.cbd.int/doc/world/et/et-nbsap-01-en.pdf
- Koohaftan, Parvis and Miguel A. Altieri (2011) "Agricultural heritage systems. A legacy for the future".
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- Lavers, Tom (2013). Food security and social protection in highland Ethiopia: linking the Productive Safety Net to the land question. The Journal of Modern African Studies, 51, pp 459-485 doi:10.1017/S0022278X13000402
- Lefort, René (2012). Free market economy, 'developmental state' and partystate hegemony in Ethiopia: the case of the 'model farmers'. The Journal of Modern African Studies, 50, pp 681706 doi:10.1017/S0022278X12000389
- Mulugeta Gabrehiwot (ed. 2014): A delicate balance. Land use, minority rights, and social stability in the Horn of Africa. Institute for Peace and Security Studies, Addis Ababa University
- Okbazghi Yohannes (2009) Hydro-politics in the Nile basin: in search of theory beyond realism and neo-liberalism, Journal of Eastern African Studies, 3:1, 74-93, DOI: 10.1080/17531050802682788
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- Rights and Resources Initiative. 2016. Community Rights and Tenure in Country Emission Reduction Programs: Status and Risks for the FCPF Carbon Fund. RRI: Washington, DC. Available at http://rightsandresources.org/wp-content/
- Stevens, C., Winterbottom, R., Springer, J. and Reytar, K. 2014. Securing Rights, Combating Climate Change: How Strengthening Community Forest Rights Mitigates Climate Change. World Resources Institute: Washington, DC.
- Tsegaye, D., Moe, S.R., Vedeld, P. and Aynekulu, E. (2010b) Land-use/cover dynamics in Northern Afar rangelands, Ethiopia. Agriculture, Ecosystems and Environment 139, 174-180.
- United Nations Framework Convention on Climate Change. 2015. Adoption of the Paris Agreement, 21st Conference of the Parties. United Nations: Paris. Available at https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf.

(v) Guardians of productive landscapes: Workshop IV

Workshop at the MPI, Halle/Saale, Germany: 20 - 21 June 2019.

Under the auspices of Prof. Guenther Schlee and Dr. Echi Gabbert (Lands of the Future Initiative), Mitiku Gabrehiwot, Eyob Defersha, Yohannes Yitbarek and Marco Bassi will convene this workshop in order to explore the global applicability of the *Guardians of productive landscapes* 0 and organisations will be invited to contribute their know-how.

The mapping of guardian terrains, the modalities of aid flow and other technical questions will remain on the agenda, as well as a review and debate of the pertinent literature as indicated below.

- Bachram, Heidi (2004) Climate fraud and carbon colonialism: the new trade in greenhouse gases, Capitalism Nature Socialism, 15:4, 5-20, DOI: 10.1080/1045575042000287299
- Bassi, Marco (2011) Primary identities in the lower Omo valley: migration, cataclysm, conflict and amalgamation, 1750–1910, Journal of Eastern African Studies, 5:1, 129-157,DOI: 10.1080/17531055.2011.552280
- Bernard, H. Russell and Clarence C. Gravlee (eds.) 2015: Handbook of Methods in
- Borgerhoff, Mulder and Peter Coppolillo 2004: Conservation. Linking ecology, economics and culture. Princeton University Press; Princeton
- Broad Robin (2004) The Washington consensus meets the global backlash: shifting debates and policies, Globalizations, 1:2, 129-154, DOI: 10.1080/1474773042000308523
- Cammack, Paul (2004) What the World Bank means by poverty reduction, and why it matters, New Political Economy, 9:2, 189-211
- Hewitt, Vernon (2006): A Cautionary Tale: Colonial and post-colonial conceptions of good government and democratisation in Africa, Commonwealth & Comparative Politics, 44:1, 41-61
- Keefer, Philip and Knack, Stephen. 2002. Polarization, politics and property rights: Links between inequality and growth. Public choice, 111(1-2), pp.127-154.
- Lazarus, Joel (2008): Participation in Poverty Reduction Strategy Papers: reviewing the past, assessing the present and predicting the future, Third World Quarterly, 29:6, 1205-1221
- Lund, Christian and Catherine Boone (2013). Introduction: land politics in Africa constituting authority over territory, property and persons. Africa, 83, pp 113
- Richard, Black and Elizabeth Watson (206). Local community, legitimacy, and cultural authenticity in postconflict natural resource management: Ethiopia and Mozambique, Environment and Planning D: Society and Space 2006, volume 24, , pp,263 -282 doi:10.1068/d0703
- Richards, Paul (1983) Ecological Change and the Politics of African Land Use, African Studies Review, Vol. 26, No. 2, Social Science and Humanistic Research on Africa: An Assessment, pp. 1-72, African Studies Association Stable
- RRI report 2016: Toward a Global Baseline of Carbon Storage in Collective Lands. An updated analysis of indigenous peoples' and local communities' contributions to climate change mitigation. available at rightsandresources.org/.../global-baseline-carbon-storage-collecti.
- Tandon, Yash (2011): Kleptocratic Capitalism, Climate Finance, and the Green Economy in Africa, Capitalism Nature Socialism, 22:4, 136-144
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- Zebrowski, Chris (2013) The nature of resilience, Resilience: International Policies, Practices and Discourses, 1:3, 159-173, DOI: 10.1080/21693293.2013.804672

11. Current GPL personnel

The current personnel of the "Guardians of Productive Landscapes" project is as follows:

Project co-directors:

- Dr. Feleke Woldeyes, Deputy Director General, Ethiopian Biodiversity Institute (EBI)
- Prof. Dr. Guenther Schlee, Director, Max Planck Institute for Social Anthropology, Halle/Saale (MPI)
- Ivo Strecker, Professor Emeritus, Johannes Gutenberg University, Mainz

Project coordinator.

Dr. Marco Bassi, Freelance anthropologist, Rome

Workshop convenors:

- Mitiku Gabrehiwot, Assistant Prof. Mekelle University, Department of Anthropology
- Yohannes Yetbarek, PhD candidate at MPI, Arba Minch University
- Eyob Defersa, MA, Arba Minch University

Cooperation partners:

- Dr. Christina Gabbert, Institut für Ethnologie, Georg-August-Universität Göttingen
- Prof. Dr. Nikolaus Schareika, Institut für Ethnologie, Universität Göttingen
- Dr. Valerie Liebs, Institut für Ethnologie, Universität Göttingen
- Jean Lydall, Freelance anthropologist, Melle

Advisors (some of them still prospective, others soon to be added):

- Prof. Mitiku Haile, Soil Scientist, Mekelle University
- Dr. Yechale Kebede, Vice President for Academic Affairs, Arba Minch University
- Antonella Cordone, Technical Advisor, Coordinator for Indigenous and Tribal Issues, IFAD
- Prof. Claudia Carr, Department of Environmental Science, Policy, & Management, UC Berkeley
- Prof. Miguel A. Altieri, Department of Environmental Science, Policy, & Management, UC Berkeley
- Prof. Dr. Thomas Bierschenk, Institute of anthropology and African studies , Johannes Gutenberg University
- Dr. Parviz Koohafkan, President, World Agricultural Heritage Foundation; Senior Honorary Research Fellow, GIAHS, FAO
- Prof. Paul Sillitoe, Durham University, Dept. of Anthropology
- Anuradha Mittal, Executive Director, Oakland Institute
- Johannes Schillling, GIZ, Ethiopia
- Prof.Dr. Pierluigi Bozzi, International University Network Cultural and Biological Diversity (IUNCBD)

12. Contacts

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Dr. Ivo Strecker, Professor Emeritus at Johannes Gutenberg University, Mainz, Germany. Currently visiting professor at Arba Minch University: istreck@uni-mainz.de