



UNITED NATIONS  
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**UNU-LRT**

Land Restoration Training Programme



UNU Land Restoration Training Programme (UNU-LRT)

**Annual Report 2012**

United Nations University Land Restoration  
Training Programme

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## DIRECTOR'S SUMMARY FOR 2012

Dear friends of UNU-LRT,

The year 2012 was another successful year for UNU-LRT. The annual six-month training programme was the year's main milestone, in which ten fellows graduated in early October. The ten graduated fellows came from Ghana (2 fellows), Uganda (2 fellows), Namibia (2 fellows), Mongolia (three fellows) and Uzbekistan (one fellow). The fellows graduated from two specialized courses; Land Degradation and Global Environmental Change, and Sustainable Land Management. This was the third cohort of fellows graduating from the programme since it joined the United Nations University, but since the programme was established in 2007 a total of 41 fellows from ten countries have graduated from the programme.

Gender equality is an integral part of UNU-LRT and is stated in our mission. In 2012 five women and five men participated in and graduated from the programme. Moreover, special attention was placed on introducing a gender focus in the curriculum as well as encouraging the fellows to add a gender focus in their individual project proposals.

The six-month training in 2012 had several highlights. Dr Jeffrey Herrick from the Jornada Research Unit, USDA-ARS, New Mexico, USA, was this year's main international guest lecturer, focusing on giving interactive lectures and outdoor training about land potential and rangeland health assessment. Furthermore, an interdisciplinary workshop on Soils, Governance and Society was held in Iceland in partnership with UNU-LRT. The UNU-LRT fellows participated in the workshop and gave a presentation on natural resource governance in relation to land degradation in Africa and Asia.

A comprehensive evaluation was carried out from the beginning of the 2012 six-month training programme and was continued until its end. Overall, the fellows were very satisfied with the training. The programme met their expectations and they learned a lot from their individual work projects. A more detailed description of the evaluation outcome can be read in the annual report.

UNU-LRT held and participated in several workshops and seminars in 2012. Firstly, the evaluation of the fellows together with the experience, which lecturers and staff have gained throughout the years, were used as fodder in a two day workshop in December held by the UNU-LRT staff, Studies Committee and a few experts. The purpose of the workshop was to revise and improve the curriculum of the six-month training programme. Secondly, UNU-LRT participated in a scoping workshop on establishing a joint research facility between UNU-INWEH and Alexandria University, which was held in Alexandria University in Egypt 12-13 May 2012. Furthermore, UNU-LRT celebrated the World Day to Combat Desertification by holding an open seminar on 18 June about land health condition and how to use both scientific and local knowledge to manage land more sustainably. Lastly, UNU-LRT participated in a seminar on sustainable education, which was hosted by the UN Association of Iceland. The focus of the seminar was to introduce the operation and activities of the UNU training programmes in Iceland.

Four trips to UNU-LRT partner countries were organized this year to strengthen existing partnerships and establish new ones, and to interview candidates for the UNU-LRT six-month training programme.

On 16 February, Professor Jakob Rhyner, Director of the UNU Institute of Environment and Human Security and UNU Vice Rector for Europe, visited the UNU programmes in Iceland. During the visit, Professor Rhyner was given an introduction to the background of UNU-LRT, its mission and activities.

*Hafdis Hanna Aegisdottir*



## ABOUT UNU-LRT

The United Nations University Land Restoration Training Programme (UNU-LRT) was established in early 2010. The mission of UNU-LRT is to train specialists from developing countries to combat land degradation and restore degraded land, and to assist strengthening institutional capacity and gender equality in the field of land restoration and sustainable land management in developing countries. The programme started as a three-year pilot project in 2007, aiming at becoming a UNU training programme by the end of the pilot phase. After a successful mid-term evaluation by an international evaluator, the programme was accepted as a UNU training programme. The programme is implemented jointly by the Agricultural University of Iceland and the Soil Conservation Service of Iceland. UNU-LRT is also supported by a wide range of other Icelandic institutions, UNU programmes, and international institutions.

Since the programme was launched in 2007, 41 fellows have graduated from the programme, 20 women and 21 men. The fellows have come from the following countries in Africa and Central Asia: Egypt (1 fellow), Ethiopia (3), Ghana (5), Namibia (6), Niger (2), Tunisia (1), Uganda (10), Mongolia (10), Uzbekistan (2) and Kyrgyzstan (1).

UNU-LRT is governed by a board of members that are representative of the Agricultural University of Iceland, the Soil Conservation Service of Iceland, United Nations University and an expert nominated by the Ministry for Foreign Affairs. Moreover, a Studies Committee academically governs the programme, chaired by the Programme Director. The Studies Committee consists of members from leading research institutes and universities working in the field of land restoration and sustainable land management.

The main activity of the UNU-LRT programme is an annual six-month training programme in Iceland on land restoration and sustainable land management.



The first 12 weeks of the training focus on course work, practical training and field trips. In the latter 12 weeks of the programme, each fellow works on an individual project, which provides specialization with reference to the academic and practical background and needs of the individual fellow and his/her own workplace.

UNU-LRT has a webpage ([www.unulrt.is](http://www.unulrt.is)) where information about the programme, the latest news and the individual projects of former fellows are accessible. Furthermore, UNU-LRT has a Facebook page ([www.facebook.com/unulrt](http://www.facebook.com/unulrt)).

## PROGRESS REPORT

### SIX-MONTH TRAINING PROGRAMME

The annual six-month training programme of UNU-LRT started on 11 April 2012 and ended with a graduation ceremony on 4 October. This was the third training session held since the programme joined UNU. Ten fellows participated in the programme (five women and five men) from Ghana (2 fellows), Uganda (2), Namibia (2), Mongolia (3) and Uzbekistan (1). Two specialized courses were offered in 2012 at the end of the course period: 1) Land Degradation and Global Environmental Change, and 2) Sustainable Land Management. During the summer the fellows went on two three-day excursions to the West and Northwest of Iceland and to the South and Southeast of Iceland, instead of going on a single week-long excursion around Iceland, as has been practiced in previous years.

This year's main international guest lecturer was Dr Jeffrey Herrick. Dr Herrick is a renowned soil scientist and a leading scientist in rangeland health issues. He works at the Jornada Research Unit, USDA-ARS, New Mexico, USA. Dr Herrick has wide experience doing research, teaching, and conducting monitoring and assessments all over the world. He gave the UNU-LRT fellows interactive lectures in the classroom and training sessions in the field about land potential and how to assess rangeland health.

An interdisciplinary workshop on *Soils, Governance and Society* was held in Iceland in the first week of June. The workshop brought together people from various disciplines including academia, administration and practitioners, as well



as from different regions of the world. The focus of the workshop was to explore how natural resource governance might be radically improved to meet the many challenges to sustainability. The fellows of the UNU-LRT six-month training programme participated in the workshop and gave a presentation on the first day. The title of their presentation was *Land Degradation in Africa and Asia: Natural Resource Governance*. Ms Esther Amoako from Ghana gave the talk on behalf of the UNU-LRT fellows.

The workshop was held by the Soil Conservation Service of Iceland, Penn State University and the University of New England, in partnership with the Global Soil Partnership and the UNU-Land Restoration Training Programme.

#### FELLOWS' PROJECT WORK IN 2012:

**BATBAATAR AMGAA** from the Department of Ecology at the National University of Mongolia compared carbon and nitrogen stocks in grazed and un-grazed areas in West Iceland. His aim was to examine the effects of grazing exclusion on carbon and nitrogen storage in soil, vegetation and sward/litter in a grasslands system. The results showed larger C and N stocks in the vegetation and sward/litter compartments in the area excluded from grazing, but for the soil the results were opposite. More than 90% of C and N were in the soil in both areas. The study did not answer whether the difference observed in soil carbon and nitrogen stocks resulted from the effects of grazing or environmental factors such as soil moisture. Mr Amгаа suggests further research on this topic to gain better understanding of the ecology of the system and enhance sustainability of the grazing management.

**GANTUYA JARGALSAIKHAN** from the Research Institute for Animal Husbandry in Mongolia studied vegetation and seed bank composition at three sites with different grazing pressures in West Iceland. Her aim was to study current successional theories to understand rangeland ecosystem dynamics under grazing and to become familiar with the main methods to analyse current vegetation and the soil seed bank. She found very little similarity in species composition between the seed bank and current vegetation at the study site. Overgrazing is a big challenge in Mongolia and better understanding of the grazed ecosystems is needed to improve management, conservation, and restoration of these systems. Ms Jargalsaikhan believes that studies of the soil seed bank will provide an essential part of understanding the Mongolian rangeland ecosystems.

**JESAYA NAKANYALA** from the Multidisciplinary Research Centre at the University of Namibia studied phosphorus availability following revegetation with Nootka lupine (*Lupinus nootkatensis*) at two contrasting sites in Iceland. He assessed whether Nootka lupine, which is a nitrogen-fixing legume, mobilizes phosphorus in Icelandic Andosols. His results showed significantly higher plant-available phosphorus in sites revegetated with Nootka lupine compared to control sites, which implies that Nootka lupine mobilizes and increases the plant availability of phosphorus. He suggests further studies to assess the ecological significance of this to other plants in the ecosystem.

**JOHNNY KOFI AWOONOR** from the CSIR-Soil Research Institute in Ghana evaluated the effect of land use on soil fertility in the forest savannah transition zone of Ghana. He used soil data from his institution to study soils of three land use types in the Ejura-Sekyedumase district: forest reserve, fallow savannah regrowth, and cultivated land. He observed the highest soil carbon, total nitrogen, pH and base saturation in the forest reserve, followed by the savannah regrowth and then the cultivated land. The conversion from forest to agricultural land had depleted the soil of its nutrients by about half. Mr Awoonor recommends further



and more extensive research on soil organic carbon because of its link with soil fertility and opportunities in carbon sequestration projects. He also suggests the creation of awareness among farmers on the benefits of sustainable practices and socio-economic incentives that support sustainable use of land.

**LAHYA TJILUMBU** from the Gobabeb Training and Research Centre in Namibia analysed vegetation and selected soil properties, and their relationship, in four different habitats in the Hekla forest project area in South Iceland. The goal of the Hekla forest project is to reclaim the native birch and willow woodlands to reduce erosion and stabilize volcanic ash from the active Mt Hekla volcano, and to restore ecosystem function and carbon sequestration in the area. The four habitats studied by Ms Tjilumbu were desert, heathland, grassland, and forest. The results showed that the forest habitat had greater vegetative cover and aboveground biomass than all other habitats. Vegetated habitats which hadn't been eroded in the past had thicker soils and more soil C and N content than habitats affected by erosion. The role of vegetation on soil development was highlighted as vegetation accumulates aeolian materials such as volcanic ash and sand carried by wind and these materials influence the soil development. The results reveal the potential increase in biomass, vegetation diversity and soil carbon and nitrogen content over decades following reclamation of eroded and barren areas.

**MURODJON NASEDJANOV** from the Research Institute of Soil Science and Agrochemistry in Uzbekistan studied the effect of lime on pH values of soils that had received different levels of nitrogen fertilization for over 40 years in South Iceland. The plots of the long term nitrogen fertilization experiment had been used for a new experiment where a different type and amount of lime was applied. Mr Nasedjanov sampled the soil and analysed the soil pH. The results showed that the liming application increased soil pH significantly at 0-5 cm soil depth but the effect of liming was very little at 5-10 cm soil depth. It is well known that certain types of nitrogen fertilizers can lead to soil acidification, resulting in an unfavourable condition for most crop plants. Knowledge of this negative effect is very important to avoid production losses of cultivated plants.

**ESTHER EKUA AMOAKO** from the University of Development Studies in Ghana studied how traditional land and tree tenure arrangements affect tree populations of the African locust bean tree (*Parkia biglobosa*) in three traditional areas in the Northern Region of Ghana and the implications of these arrangements for sustainable land management. *P. biglobosa* is important and an integral component of the peoples' livelihoods in those areas. The benefits of the tree included medicinal, food, environmental and socio-economic benefits. Women, men and children have access to tree products in all three areas and both women and men have rights of access but not control over the trees. Ms Amoako's study shows that differences in tenure systems in the three traditional areas have implications for *P. biglobosa* populations and also for sustainable land management. Traditional tenure systems with some forms of regulation seem to protect the trees from destruction compared to a more open access system.

**WILLIAM NSIMIIRE** from the Masindi District Local Government in Uganda studied how to secure incorporation of environmental and community concerns into the planning and implementation of road projects in Uganda. According to Mr Nsimiire, this will enhance restoration of borrow pits for the benefit of affected communities. His findings show that higher levels of borrow pit restoration were achieved when the planning framework was adhered to and the District Environmental Officers (DEOs) were highly involved in planning and monitoring activities. However, many DEOs are not adequately involved, often because they are not invited to the planning process by the sectors in charge. His study, moreover, revealed a correlation between low involvement of DEOs and low levels of borrow pit restoration. Mr Nsimiire concluded that in order to secure incorporation of environmental and community concerns into road projects, DEOs need to be involved at all phases of planning and implementation in accordance with the established planning guidelines in the local government management and service delivery manual.

**AGNES AWILLI** from the Abim District Local Government in Uganda had the goal of coming up with a plan for forest management for a local forest reserve in Uganda which involves the local community (the resource users) to a greater extent. Ms Awilli reviewed the practice of collaborative forest management to determine whether or not it is suitable for forest management in Uganda and, if so, to use it to devise a basic plan for the area tailored to the specific situation there. Ms Awilli's results indicate that collaborative forest management has a number of pros and cons. Local users can participate actively in decision making, leading to job opportunities and poverty reduction. Local users can, however, also have limited access to the forest and the institutional structures can be too large for the forest managers to run them effectively. Many governments are also still reluctant to give full power to the communities to manage their forests. Her recommendation includes a review of policies on collaborative forest management, incorporating local knowledge in terms of modern science, gender mainstreaming in all activities, and active participation and use of different approaches in collaborative forest management.

**OTGONTUYA LKHAGVAJAV** from the Green Gold Project at the Mongolian Society for Range Management in Mongolia studied *Fescue-forbs* rangelands in Mongolia. Rangelands of mountain forest steppe in Mongolia have degraded due to overgrazing in recent decades. The aim of Ms Lkhagvajav's research was to test the effect of cutting frequency, cutting height and duration of cutting on aboveground biomass and the effect of grazing exclusion on vegetation cover at different degradation level of *Fescue-forbs* rangeland. Her results showed that total biomass was influenced by cutting frequency, cutting height and duration of cutting. The total vegetation cover was higher in un-grazed sites compared with grazed sites for all three degradation levels. This study shows that intensity



of grazing influences biomass production very easily but also that recovery of rangeland can be slow when conditions are unfavourable.

## EVALUATION OF UNU-LRT

### EVALUATION OF SIX-MONTH TRAINING PROGRAMME 2012:

A comprehensive evaluation was carried out from the beginning of the 2012 six-month training programme and was continued until its end. During the course work, in the first three months, the participants evaluated the programme every week. At the end of the programme, on 3 October, an extensive overall evaluation of the six-month training was carried out. In these evaluations the fellows gave feedback, both orally in group discussions and by filling out forms anonymously.

By evaluating the training while the programme is running, it is possible to meet some of the participants' needs and suggestions during their stay in Iceland. Our experience is that such evaluation is very important for the continuous improvement of the UNU-LRT six-month training programme. The outcome of the evaluation is reported to the Board and Studies Committee of UNU-LRT.

Overall, the evaluation shows clearly that the 2012 fellows were very satisfied with the training programme. They all agreed that the programme met their expectations and they were very pleased with the support and guidance from the UNU-LRT staff. The fellows strongly agreed that they learned a lot from the individual project work and that it provides them with many skills such as analytical, organizational and writing skills, as well as how to cite other people's work. The main critique was that classes often lasted too long into the afternoon, and also that more time should be given for reading and individual work. There was also strong agreement that more time is needed for the individual project work during the course weeks, especially for writing the project proposal in May and June.

The specialized line *Land degradation and global climate change* was offered for the first time this year; the other specialized line offered was *Sustainable land management*. Both lines were well received.

The fellows were generally satisfied with the division of time between UNU-LRT headquarters at the Agricultural University of Iceland, located in Keldnaholt,



Reykjavik, and the headquarters of the Soil Conservation Service in Gunnarsholt. There was more diverse opinion on the division of time between lectures, practical training and individual project work, although half of the group voted for the division "as it was" in 2012. The participants would like to get more training in statistics, including more tailor-made help with statistics, more practical training and field trips, more training on EndNote and GIS, and more time on gender subjects. Regarding logistical issues, the fellows were in general satisfied with their working conditions as well as the accommodations provided.

#### REVISION OF THE CURRICULUM OF THE SIX-MONTH TRAINING PROGRAMME:

In early December a successful two day workshop was held to review and revise the curriculum of the UNU-LRT six-month training programme. The workshop was attended by the UNU-LRT staff, Studies Committee and a few others that teach extensively in the programme. Dr Jeffrey Herrick, the UNU-LRT main international guest lecturer in 2012, re-visited Iceland to participate in the workshop. The revision of the curriculum was based on evaluation of the training by former fellows and experience gained by lecturers and staff during the last few years. Dr Herrick shared his experiences and views, which proved valuable in revising and improving the curriculum of the annual six-month training programme.

## SEMINARS AND WORKSHOPS

#### SEMINAR ON LAND HEALTH:

UNU-LRT celebrated the World Day to Combat Desertification on 18 June 2012 by holding an open seminar about the condition of land health and how to use both scientific and local knowledge to manage land more sustainably. The seminar was held in cooperation with the Agricultural University of Iceland (AUI) and the Soil Conservation Service of Iceland (SCSI). Dr Jeffrey Herrick gave a lecture on *Global Sustainable Land Management: Opportunities to Integrate Local and Scientific Knowledge Based on an Understanding of Land Potential*. A lecture on *Rangeland Health Condition in Iceland* was also given at the seminar by Dr Johann Thorsson, specialist at SCSI and Professor Olafur Arnalds at AUI. In the seminar the vital importance of land health issues was highlighted for the well-being of humans as well as ecosystems in the future.

#### SEMINAR ON THE UNU PROGRAMMES IN ICELAND:

On the UN International Day of Peace, 21 September, a seminar on sustainable education was hosted by the United Nations Association of Iceland. The main focus of the seminar was to introduce the operation and activities of the UNU training programmes in Iceland, the Land Restoration, Fisheries and Geothermal programmes, as well as the Gender Equality Studies and Training programme. The seminar was held at the University of Iceland.

One fellow from each programme gave a short speech, reflecting on the possible impact of their studies in Iceland on sustainable development in their home countries. Mr William Nsimiire from Uganda, who works as a District Environmental Officer in the Masindi District, spoke on behalf of UNU-LRT fellows at the seminar.

#### WORKSHOP IN ALEXANDRIA, EGYPT:

In mid-May 2012, the UNU-LRT Director visited Egypt. The purpose of the visit was to participate in the scoping workshop on establishing a joint research facility between UNU-INWEH and Alexandria University, held in Alexandria (Egypt) 12-13 May 2012. The participation of an UNU-LRT representative in the workshop was on the initiative of the UNU-INWEH Director. At the workshop, UNU-LRT was presented in a talk, followed by discussion on collaborative possibilities.

## UNU-LRT SITE VISITS

The candidates for the UNU-LRT programme are carefully selected. They are proposed by institutions that have been identified as playing a significant role in land restoration and sustainable land management in UNU-LRT partner countries in sub-Saharan Africa and Central Asia. The training of the fellows is considered a contribution to capacity building of their institutions. The UNU-LRT staff conducts site visits to the UNU-LRT partner countries and the selected institutions. Personal interviews are conducted with each candidate who is proposed by his/her institution. Each candidate needs to have at least one university degree, one-year experience working in the field of specialization that he/she will pursue at UNU-LRT and have a permanent position at the institute, have good English skills and be under the age of 40.

The UNU-LRT Director and Deputy Director visited four partner countries in 2012; Niger, Malawi, Ethiopia and Kyrgyzstan.

#### NIGER

The UNU-LRT director visited Niger from 16-22 March 2012. This was the second visit of a representative from UNU-LRT to the country. The first visit took place in 2008. Since UNU-LRT draws its attention to dry developing countries facing soil and land degradation, unsustainable land use and increased desertification, the countries in the Sahel zone of West Africa are of special interest. Niger is a landlocked country of 1,267,000 km<sup>2</sup> and the human population is estimated at around 16 million people. Niger's ecosystems are threatened by overgrazing by livestock, unsustainable agricultural practices, clearing of new land for agriculture (which often is marginally suitable) and extended droughts. Wind and water erosion are causing increased land degradation and the Sahel zone is moving further south than before. The annual population growth of around 3% is considered to be directly related to some of these environmental challenges.

The purpose of the visit was to re-visit partner institutions of UNU-LRT in order to strengthen cooperation, and to interview candidates for the six-month training programme of UNU-LRT. The main partner of UNU-LRT in Niger is the General



Directorate of Environment, located in the capital city Niamey. Two specialists from the Directorate have graduated successfully from the six-month training programme in Iceland.

During the visit, three institutions were visited and 22 candidates interviewed. The institutions were: 1) General Directorate of Environment, Ministry of Environment and Drought Control. The main activity of the Directorate is implementation of policies, strategies and action plans related to sustainable management, protection and conservation of land, wildlife and other natural resources. 2) Institut National de la Recherche Agronomique du Niger (INRAN). INRAN is in charge of all applied agricultural research in Niger. It has five departments, among them the department in charge of Natural Resources Management, where activities on land degradation/land restoration are conducted. INRAN was established in 1975. 3) The Faculty of Agronomy at the Abdou Moumouni University. The university is a public university and controlled by the Ministry of Education.

The plateau of Gorou Beri was visited during the stay in Niger. The plateau is located in Niamey and covers an area of more than 400 ha. The area is affected by strong wind and water erosion. The area used to be covered with shrubs and trees but human activities and periods of long drought have caused major forest degradation. A project has been initiated to combat soil erosion and desertification in the area and increase food security. A former UNU-LRT fellow is in charge of the project, which is implemented by the Regional Direction of Environment and Desertification Control of Niamey under the supervision of the Ministry of Water and Environment. Local people in the area take an active part in the project by seeding the area, planting trees, etc.

#### MALAWI

The UNU-LRT Deputy Director visited Malawi from 26-31 March 2012. This was the first visit of a representative from UNU-LRT to the country. Malawi faces many challenges that are within the arena of UNU-LRT such as deforestation due to charcoal production and the ever increasing demand for farmland for crop production, both a result of rapid population growth. Sloping land is increasingly used for cultivation, which leads to a high risk of erosion, and poor farming practices often further aggravate the degradation of the land. The result is loss of native forest cover, land degradation and siltation of water bodies.



The purpose of the visit was to select and visit institutions that work on issues related to sustainable land management, soil conservation and land restoration that could potentially become UNU-LRT partner institutions, and to interview potential candidates proposed by these institutions for the UNU-LRT six-month training programme. The Icelandic International Development Agency (ICEIDA), which has been working in Malawi since 1989, helped with finding the prospective institutions and provided a driver for the UNU-LRT Deputy Director during the visit. The assistance provided by ICEIDA made the visit more productive and efficient.

A meeting was held at ICEIDA headquarters in Lilongwe on the first day of the visit. The meeting was facilitated by the country director of ICEIDA. Representatives from three institutions attended the meeting, from the Department of Mines, the Department of Forestry and the Natural Resource College. In the following days these institutions were visited, in addition to the Bunda College of Agriculture. Candidates were interviewed during the visits to the Natural Resources College and the Department of Mines, six candidates in total, all men.

The Bunda College of Agriculture was established in 1965 and is involved in teaching, research, outreach and consultancies. There are three faculties in the college: the Faculty of Agriculture is the oldest, the Faculty of Environmental Sciences was established in 2002 and the Faculty of Development Studies in 2003. The UNU-LRT Deputy Director gave a presentation about the UNU-LRT programme to staff of the Bunda College who were attending a training course on climate change and ecosystems management on campus. The Natural Resource College is a public trust college and provides training in the fields of environment, land administration, irrigation technologies, agriculture, nutrition, animal health and horticulture. Their students are awarded diplomas after studying for 2.5 years and many of the students join the Ministry's extension staff or related institutions after the training.

The Department of Forestry promotes sustainable forest management for the provision of forest goods and services. It promotes the protection, conservation, management and utilization of forest resources in forest reserves and industrial plantations. The Department of Forestry has three regional offices in the North, South and Centre of the country and district offices under each region. The Department of Mines is mandated to monitor the rehabilitation and restoration

of land due to mining or prospecting. The Department monitors, for example, the reinstatement, levelling, regressing, reforestation and contouring of any part of the prospecting area that is damaged or deleteriously affected by prospecting or mining operations. They have regional offices in the North and South of the country. The Department of Forestry and Department of Mines are both under the Ministry of Natural Resources, Energy and Environment.

In the latter half of the trip, Monkey Bay in the Southern Region of Malawi was visited. The goal was to learn about the ICEIDA projects in the area, especially the water project, and become acquainted with challenges related to land in the region. Mr Levi Graham Soko, Project coordinator at ICEIDA, accounted for the ICEIDA activities and showed and explained some of the projects in the region. The District Forest Office and District Land Resources Conservation Office in Mangochi were visited. The District Forest Office is one of 28 district offices under the Forestry Department. The District Land Resources Conservation Office is under the Ministry of Agriculture and Food Security, and their mandate is on managing land-based resources in a sustainable manner for socio-economic development. HEEED Malawi was also visited as they work towards conservation of natural resources, health and education, environmental and economic development. They have provided training classes to local people on aquaculture and the making of fuel briquettes from organic wastes that can be used for cooking instead of wood fuel.

#### ETHIOPIA

The UNU-LRT Deputy Director visited Ethiopia from 5-16 November 2012. This was the second visit to Ethiopia by a UNU-LRT representative. The purpose of the visit was threefold: to strengthen existing institutional links in Ethiopia, to establish new institutional links, and to interview potential UNU-LRT candidates proposed by these institutions. Ms Tigist Araya Gessesse, a former fellow from 2009, provided much help with organizing the visiting agenda in the Tigray Region of Ethiopia.

Seven institutes were visited and 34 candidates interviewed for the UNU-LRT annual six-month training programme. Only three of the interviewed candidates were women. The institutions visited were: 1) Mekelle University ([www.mu.edu.et](http://www.mu.edu.et)), 2) Bureau of Agriculture and Rural Development (BoARD), 3) Tigray Agricultural Research Institute (TARI), and 4) Axum University, College of Agriculture at Shire Campus in the Tigray Region; 5) Hawassa University ([www.hu.edu.et](http://www.hu.edu.et)), 6) the Natural Resource and Environmental Protection Authority (NREPA) in the Oromia Region, and 7) the Ministry of Agriculture in Addis Ababa. Three of these are new potential partner institutions: Axum University, the Natural Resource and Environmental Protection Authority, and the Ministry of Agriculture.

The Abraha Atsbeha watershed in Tigray was visited during the stay in Mekelle and the success story of the area told and shown. The watershed had become very degraded in the late 1990s because of population growth, deforestation and overgrazing. The degradation was so severe that in 1989 the government had planned to relocate the people, but the option to stay was also given to the locals if they would strictly follow a specific land management plan, which they decided to do. Since then the land of the Abraha Atsbeha watershed has been restored by the local people with help from international donors and the Ministry of Agriculture. The community has built check dams, constructed terraces, stone bunds and percolation trenches to stop the erosion and recharge the groundwater. Trees have been planted and grasses grown to stabilize the surface, to name a few of the land management activities that have been carried out in the area. Now the local people can live from the land but they were repeatedly dependent on food aid before the start of the project.

## KYRGYZSTAN

The UNU-LRT Director visited Kyrgyzstan from 24-30 October 2012. This was the second visit of an LRT/UNU-LRT representative to Kyrgyzstan. The purpose of the visit was to strengthen cooperation between UNU-LRT and local institutions in Kyrgyzstan and to take interviews with suitable candidates for the UNU-LRT annual six-month training course. The Swiss National Centre of Competence in Research (NCCR) North-South assisted with organization of the visit.



Five institutions were visited in addition to the abovementioned NCCR and 11 candidates were interviewed for the annual six-month training programme of UNU-LRT. The following institutions were visited: 1) CAMP Alatoo, whose goal is to contribute to improvement of people's livelihoods in the mountain villages of Kyrgyzstan by encouraging more sustainable use of natural resources. CAMP Alatoo is a non-governmental and non-profit organization, which was founded in 2005. 2) Kyrgyz National Agrarian University (KNAU), established in 1938. KNAU is of the oldest and largest universities in Kyrgyzstan. The university has several faculties, including an Agronomy Faculty. 3) Naryn State University, founded in 1996. The Naryn State University is one of the youngest regional universities in Kyrgyzstan. At the moment, about 3000 student are studying at NSU. The Agrarian Technical Faculty has an experimental field, where the practical and educational part of the study is conducted. At the Faculty lectures are organized about disciplines like soil science, integrated use of water resources, soil and water conservation technologies. 4) University of Central Asia (UCA), founded in 2000. The mission of UCA is to promote the social and economic development of Central Asia, especially in mountain societies.

## PRESENTATION OF UNU-LRT

### Peer-reviewed article:

Arnalds, O., F.O. Gisladdottir & B. Orradottir. 2012. Determination of aeolian transport rates of volcanic soils in Iceland. *Geomorphology* 167-168: 4-12. URL <http://www.sciencedirect.com/science/article/pii/S0169555X11006453>.

### Other articles:

Hafdis Hanna Aegisdottir. 2012. UNU-Land Restoration Training Programme:

Education, International Cooperation and Land Care. In: Borgfirdingabok – 2012 Yearbook of the Historical Society of Borgarfjörður (Ársrit Sögufélags Borgarfjardar 2012), Vol. 13, pp. 239-244. In Icelandic.

**Presentations:**

Hafdis Hanna Aegisdottir. 2012. United Nations University Land Restoration Training Programme. Presentation at the scoping workshop: The Establishment of a Joint Research Facility between UNU-INWEH and the Alexandria University. 12-13 May 2012, Alexandria, Egypt.

Agnes Awilli, Batbaatar Amгаа, Esther Ekua Amoako (presenter), Gantuya Jargalsaikhan, Jesaya Nakanyala, Johnny Kofi Awoonor, Lahya Tjilumbu, Murodjon Nasedjanov, Otgontuya Lkhagvajav, William Nsimiire. 2012. Land degradation in Africa and Asia: Natural resource governance. Presentation at the interdisciplinary workshop Soils, Governance and Society, held in Iceland in the first week of June 2012.

**Media appearance:**

Newspaper coverage on a seminar about land health condition and how to use both scientific and local knowledge to manage land more sustainably, planned by UNU-LRT in cooperation with the AUI and SCSU. The seminar was covered in the newspaper *Morgunbladid*, 19 June 2012 and in the biweekly newspaper *Bændabladid*, 18 June 2012. The coverage in *Morgunbladid* included an interview with UNU-LRT Director Dr Hafdis Hanna Aegisdottir, UNU-LRT guest lecturer Dr Jeffrey Herrick from the Jornada Research Unit, USDA-ARS, New Mexico, and Dr Johann Thorsson, lecturer at the UNU-LRT six-month training programme and specialist at the Soil Conservation Service of Iceland.

**Other:**

UNU-LRT was presented at the Researcher's night held on 28 September 2012 in Reykjavik. The event is held annually by RANNIS – the Icelandic Centre for Research – to introduce science to the public. The 2012 fellows participated in presenting UNU-LRT at this event.

William Nsimiire from Uganda, a UNU-LRT 2012, fellow, spoke on behalf of the UNU-LRT fellows at a seminar on sustainable education hosted by the United Nations Association of Iceland on the UN International Day of Peace, 21 September 2012, at the University of Iceland. He gave a short speech, reflecting on the possible impact of his studies in Iceland on sustainable development in his home country.

## PHOTO CREDITS

Berglind Orradottir  
Hafdis Hanna Aegisdottir  
Johann Thorsson

## LIST OF APPENDICES

- A. List of participants 2012
- B. Programme outline



# Appendices



UNITED NATIONS  
UNIVERSITY

**UNU-LRT**

Land Restoration Training Programme



# Appendix A

## UNU-LRT Participants 2012

Name and degree	Address	E-mail / Phone
Agnes Awilli, BA	Abim District Local Government P.O. Box 1 Abim, Uganda	Chandagolla12@yahoo.com
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William Nsimiire, BSc	Masindi District Local Government P.O. Box 67, Masindi Uganda	nsmrwilliam@yahoo.com



# Appendix B

## UNU-LRT programme 2012

	Day	Date	Topic	Time	Lecturer/instructor*	
	Mon	9-apr				
	Tue	10-apr	Arrival			
<i>Week 1</i>	Wed	11-apr	UNU-LRT welcome and introduction	9:00-10:00	HHÆ, BO, RO	
			Introduction to the Icelandic language	10:00-11:00	RO	
			Computers and software	11:00-12:00	HH	
			Directorate of Immigration	13:00	BO, RO	
			Practicalities & introduction to Reykjavik	afternoon	BO, RO	
	Thu	12-apr	UNU-LRT training preparation	9:00-10:00	HHÆ, BO, RO	
			Library	10:00-11:00	GTh	
			Icelandic history	11:00-12:00	ÁH	
			Icelandic nature: geology	13:00-15:00	OS	
	Fri	13-apr	Ground rules, goal setting and introduction to coaching	9:00-11:00	BB, HHÆ, BO	
Icelandic nature: vegetation			11:00-12:00	HHÆ		
Health control			13:30-16:00	HHÆ, BO		
		14-apr	Cultural activities		HHÆ/BO	
		15-apr				
<i>Week 2</i>	Mon	16-apr	Evaluation of last week's programme	8:30	HHÆ, BO, RO	
			Restoration of degraded land: background & principles	9:00-11:00	ÁLA	
			Introduction to UNU-LRT guidelines for report writing, use of references	11:00-12:00	HHÆ, BO, RO	
			Introduction to UNU-LRT guidelines, cont.	13:00-14:30		
			Visit to the Environment and Natural Resources Studies at the University of Iceland	From 14:30	HHÆ, BO, RO	
	Tue	17-apr	Follow up: ground rules & goal setting	9:00-11:00	BB, HHÆ, BO	
			Group dynamics			
			Presentation techniques	11:00-12:00	HHÆ, BO, RO	
				Health control	13:00-16:00	BO, RO
	Wed	18-apr	SLM and landhealth on Earth - the quest for a sustainable future	8:30-10:30	AA	
Departure to SCSi headquarters			11:00	HHÆ, BO		
History of the SCSi			13:00-14:30	MHJ, SR		
The institution, offices, laboratory, staff			14:30-15:00	MHJ		
Thu	19-apr	First day of summer/Holy Thursday				
Fri	20-apr	Soil erosion processes	9:00-12:00	ÓA		
		Indicators of land degradation	13:00-16:00	ÓA		
		21-apr	Excursion to Gullfoss, Geysir, Thingvellir	all day	HHÆ, BO, RO	
		22-apr				

<i>Week 3</i>	Mon	23-apr	Soil lab at Keldnaholt	8:30-10:00	BB
			Land literacy	10:00-12:00	ÓA
			Land literacy, cont.	13:00-14:00	ÓA
			Excursion	14:00-17:00	ÓA
	Tue	24-apr	Evaluation of last week's programme	8:30	HHÆ, BO, RO
			Plant physiology: the basics	9:00-11:00	BDS
			Departure to AUI headquarters at Hvanneyri	11:10	HHÆ, BO
			AUI: history, university programmes etc.	13:00-14:00	AS, OA
			Wetland centre	14:00-15:30	RS
			Meeting student organization at AUI	15:30	HHÆ, BO
	Wed	25-apr	Sustainable land management: background & principles	9:00-12:00	AA
			General principles of hydrology	13:00-16:00	BO
Thu	26-apr	Water quality	9:00-10:00	BO	
		Work on individual project ideas	10:00-12:00	HHÆ, BO	
		Water management in drylands	13:00-16:00	RT	
Fri	27-apr	Water management in drylands	9:00-12:00	RT	
		Work on individual project ideas	13:00-15:30	HHÆ, BO	
		Evaluation of this week's program	15:30-16:00	HHÆ, BO	
	28-apr				
	29-apr				
Mon	30-apr	Environmental Governance: exploring and understanding the links between human and ecological systems	9:00-16:00	JGP	
Tue	1-May	Holiday			
Wed	2-May	Environmental Governance: institutional issues, policy, policy instruments, levels of governance, resources regimes, participation, local vs. global challenges, stakeholder analysis and the 4 R	9:00-16:00	JGP	
Thu	3-May	Principles of sustainable grazing management	9:00-12:00	JTh, AGTh	
		Sustainable grazing management	13:00-16:00	AGTh	
Fri	4-May	Sustainable grazing management, cont.	9:00-12:00	AGTh	
		Sustainable forest management	13:00-16:00	BDS, HF	
	5-May				
	6-May				
Mon	7-May	Evaluation of last week's programme	8:30	HHÆ, BO, RO	
		Workshop on individual projects	9:00-16:00	HHÆ, BO, RO	
Tue	8-May	SLM planning: introduction to SLM planning, learning, participation, and stakeholder analysis	9:00-17:00	SV	
Wed	9-May	Communication	9:00-14:00	BB	
		Gender and land tenure	14:00-16:00	MJ	
Thu	10-May	Preparation for field trip	9:00-17:00	SV, BB, JGP	
Fri	11-May	Field trip	9:00-17:00	SV, BB, JGP	

		12-May			
		13-May			
<i>Week 6</i>	Mon	14-May	SLM planning: visioning, stakeholder analysis tools, SWOT analysis and problem analysis	9:00-17:00	SV
	Tue	15-May	SLM planning: objective analysis & setting, SMART, strategy development & action plans	9:00-17:00	SV
	Wed	16-May	SLM Planning: monitoring and evaluation	9:00-17:00	SV
	Thu	17-May	Leadership, facilitation, change management, and facilitated reflection on the process	9:00-17:00	BB
	Fri	18-May	Conflict management & weekly evaluation	9:00-17:00	BB, SV, JGP, HHÆ
		19-May			
		20-May			
<i>Week 7</i>	Mon	21-May	Gender mainstreaming and project cycle	9:00-12:00	SV
			Work on individual project/meet supervisors	13:00-16:00	HHÆ, BO, supervisors
	Tue	22-May	Work on individual project/meet supervisors	9:00-11:00	HHÆ, BO, supervisors
			Development and development cooperation	11:00-12:00	SV
			Development and development cooperation	12:30-14:30	SV
			Visit to ICEIDA	From 14:30	SV
	Wed	23-May	Restoration of Ecological function	9:00-12:00	ÁLA
			Restoration needs: seminar	13:00-16:30	ÁLA
	Thu	24-May	Managing Ecological Succession	9:00-12:00	ÁLA
			Readings in Restoration Ecology	13:00-14:30	ÁLA
			Restoration Individual Project, Part 1: introduction and individual work	14:30-16:00	ÁLA
	Fri	25-May	"The restoration toolbox"	9:00-10:00	ÁLA
			Species characteristics - Invasive species	10:00-12:00	KS
		Restoration Individual Project, Part 1: presentation of results and discussions	13:00-16:00	ÁLA	
		26-May			
		27-May			
<i>Week 8</i>	Mon	28-May	Whitmonday		
	Tue	29-May	"The restoration toolbox" cont.: plant propagation	9:00-10:00	ÁLA
			Planning of restoration projects	10:00-12:00	ÁLA
			Planning of restoration projects, cont.	13:00-13:30	
			Restoration Individual Project, Part 2: introduction	13:30-14:00	ÁLA
			Restoration Individual Project, Part 2: fellow's work	14:00-17:00	ÁLA
	Wed	30-May	Restoration Individual Project, Part 2: presentation of results and discussion	9:00-12:00	ÁLA
			Wrap up and general discussion	13:00-16:00	ÁLA
	Thu	31-May	Vegetation sampling and analysis	9:00-12:00	JG, BO, HHÆ
			Statistics: basic principles	13:00-16:00	JG
Fri	1-Jun	Statistics cont.	9:00-12:00	JG	
		Statistics: exercises	13:00-16:00	JG	

		2-Jun			
		3-Jun			
<b>Week 9</b>	Mon	4-Jun	<i>Specialized courses start</i>		
...			...		
			...		
<b>Week 12</b>	Thu	28-Jun	<i>Specialized courses end</i>		
	Fri	29-Jun	Introduction to EndNote & practices	9:00-11:00	JTh
		30-Jun			
		1-Jul			
	Mon	2-Jul	UNU-LRT individual project work		
	Tue	3-Jul	UNU-LRT individual project work		
<b>Week 13</b>	Wed	4-Jul	Field trip to NW part of Iceland	Leave at 8:00	HHÆ, BO
	Thu	5-Jul	Field trip to NW part of Iceland		HHÆ, BO
	Fri	6-Jul	Field trip to NW part of Iceland		HHÆ, BO
		7-Jul			
		8-Jul			
	Mon	9-Jul	GIS: basic principles	9:00-12:00	SB
			Exercises	13:00-16:00	SB
<b>Week 14</b>	Tue	10-Jul	Practical GIS training		9:00-17:00
	Wed	11-Jul	UNU-LRT individual project work		
	Thu	12-Jul	UNU-LRT individual project work		
	Fri	13-Jul	UNU-LRT individual project work		
		14-Jul			
		15-Jul			
<b>Week 15</b>	Mon	16-Jul	Microorganisms, fertilizers and restoration	9:00-12:00	ÚÓ
	Tue	17-Jul	WORK on individual project		

## Specialized line 1: Sustainable land management (SLM)

Combined with specialized line 2

	Day	Date	Topic	Time	Lecturer/instructor*	
<b>Week 9</b>	Mon	4-Jun	Soil Governance and Society workshop	All day in Reykjavik	various	
	Tue	5-Jun	Soil Governance workshop	All day at Hotel Örk	various	
	Wed	6-Jun	Field trip with workshop participants	All day	various	
	Thu	7-Jun	Landcare	9:00-12:00	AA	
			Program to be confirmed	13:00-16:00	NN	
	Fri	8-Jun	Workshop and lectures	Morning	various	
Field trip with workshop participants			Afternoon	various		
		9-Jun 10-Jun				
<b>Week 10</b>	Mon	11-Jun	Project proposal seminar	morning	Fellows	
			UNU-LRT individual work	afternoon	Fellows and supervisors	
	Tue	12-Jun	Project proposal seminar	9:00-12:00	Fellows	
			Linking knowledge, awareness and action	13:00-16:00	AA	
	Wed	13-Jun	Grazing theory and management	all day	AGTh	
	Thu	14-Jun	Farmers heal the land trip	all day	SJ	
	Fri	15-Jun	Participatory property planning	9:00-12:00	GS	
			Presentation participatory planning	13:00-16:00	GS	
			16-Jun 17-Jun			
	<b>Week 11</b>	Mon	18-Jun	Interactive Seminar with Fellows General land use, management and degradation. Specific issues presented by students.	9:00-12:00	JH
OPEN SEMINAR. Rangeland health assessment: concept and methodology.				afternoon		
Tue		19-Jun	How do we define land potential as basis for assessment Applying land potential to assessment.	all day	JH	
Wed		20-Jun	Field trip Soil profile and landscape characterization for defining potential.	all day	JH, fellows and more	
Thu		21-Jun	More applied seminar with fellows about rangeland health assessment	all day	JH	
Fri		22-Jun	Policies, strategies and landcare	9:00-11:00	AA	
			Environmental / Land literacy	11:00-12:00	SJ	
			Presentation knowledge management	13:00-14:30	AA, GS	

**Gunnarsholt:***Week 12*

Tue	26-Jun	Funding for landcare and global change issues, brain teaser	9:00-11:00	JTh, AA
		Funding for landcare and global change issues	11:00-12:00	AA
		Project work	afternoon	SLM Fellows
Wed	27-Jun	Programme to be confirmed	all day	NN
Thu	28-Jun	Wrap-up in Gunnarsholt	morning	AA, fellows

## Specialized line 2: Land Degradation and Global Environmental Change

Combined with specialized line 1

	Day	Date	Topic	Time	Lecturer/instructor*	
<b>Week 9</b>	Mon	4-Jun	Soil Governance and Society workshop	All day in Reykjavik	various	
	Tue	5-Jun	Introduction	9:00-10:00	JTh	
			Global Climate Change	10:00-12:00	HB	
			Seminar/exercise: Local/home country, situation, challenges, mitigations, risks, etc (mind teaser). Presentation; to be formalized.	13:00-16:00	JTh, ISJ	
	Wed	6-Jun	Social-Economic Aspects of Global Climate Change	9:00-12:00	HÖ	
			Impact of climate change on terrestrial ecosystems	13:00-16:00	ISJ	
	Thu	7-Jun	Degradation, processes, global on local	12:00-16:00	JTh	
			Project work	afternoon	GC fellows	
	Fri	8-Jun	International treaties: UNCCD, UNCBD, UNFCCC etc.	9:00-12:00	NN	
			UNU-LRT individual work/meeting supervisors	afternoon	Fellows	
		9-Jun 10-Jun			Fellows	
<b>Week 10</b>	Mon	11-Jun	Project proposal seminar	morning	Fellows	
			UNU-LRT individual work	afternoon	Fellows and supervisors	
	Tue	12-Jun	Project proposal seminar	9:00-12:00	Fellows	
			Seminar/exercise: Local/home country, situation, challenges, mitigations, risks, etc. Presentation, discussion.	13:00-16:00	JTh, fellows	
	Wed	13-Jun	Grazing theory and management	all day	AGTh	
	Thu	14-Jun	Climate change and mitigation issues (policies and ecosystem services)	9:00-12:00	BDS	
	Fri	15-Jun	Carbon & the carbon cycle, links with soils, vegetation and biodiversity.	9:00-12:00	NN	
			UNU-LRT individual work/meeting supervisors	afternoon	Fellows	
			16-Jun 17-Jun			
	Mon	18-Jun	Interactive seminar with Fellows. General land use, management and degradation. Specific issues presented by students. OPEN SEMINAR Rangeland health assessment: concept and methodology.	9:00-12:00  afternoon	JH	
<b>Week 11</b>	Tue	19-Jun	How do we define land potential as basis for assessment Applying land potential to assessment.	all day	JH	
	Wed	20-Jun	Field trip Soil profile and landscape characterization for defining potential.	all day	JH, fellows and more	
	Thu	21-Jun	More applied seminar with fellows about rangeland health assessment	9:00-12:00	JH	

Fri	22-Jun	Monitoring carbon sequestration, Iceland case study	9:00-11:00	JTh
		National carbon budget and inventoring; Iceland	11:00-12:00	JG
		Project work	afternoon	GC fellows

**Gunnarsholt:**

<i>Week 12</i>	Tue	26-Jun	Funding for landcare and global change issues, brain teaser	9:00-11:00	JTh, AA
			Funding for landcare and global change issues	11:00-12:00	AA
			Project work	afternoon	GC fellows
	Wed	27-Jun	Carbon sequestration, field sampling, sample prep, analyzing and calc.; hands on exercise	all day	JTh, AB
	Thu	28-Jun	Wrap-up in Gunnarsholt	morning	JTh

<b>Abbrev. of Lecturer</b>	<b>Name of Lecturer</b>
AA	Andrés Arnalds
AGTh	Anna Guðrún Þórhallsdóttir
AB	Anne Bau
ÁH	Árni Hjartarson
ÁLA	Ása L. Aradóttir
BO	Berglind Orradóttir
BDS	Bjarni Diðrik Sigurðsson
BB	Brita Berglund
GS	Guðrún Schmidt
GTh	Guðrún Þórðardóttir
HHÆ	Hafðís Hanna Ægisdóttir
HB	Halldór Björnsson
HÖ	Helga Ögmundsdóttir
HF	Herdís Friðriksdóttir
HH	Hjörtur Hjartarson
ISJ	Ingibjörg Svala Jónsdóttir
JG	Járngerður Grétarsdóttir
JGP	Jón Geir Pétursson
JH	Jeffrey Herrick
JTh	Jóhann Þórsson
JG	Jón Guðmundsson
KS	Kristín Svavarsdóttir
MJ	Magnfríður Júlíusdóttir
MHJ	Magnús H. Jóhannsson
OS	Oddur Sigurðsson
ÓA	Ólafur Arnalds
RO	Rannveig Ólafsdóttir
RT	Richard Thomas
SB	Sigmundur Brink
SJ	Sigprúður Jónsdóttir
SR	Sveinn Runólfsson
SV	Sjöfn Vilhelmsdóttir
ÚÓ	Úlfur Óskarsson
ThVK	Þorbjörg Valdís Kristjánsdóttir

## Field Excursion to western and northern Iceland 4-6 July 2012

Date	Time	Topic	Guide	Location	Accommodation
4 July	08:00	Departure from Gunnarsholt	HHÆ/BO	Gunnarsholt	
Wednesday		Haukadalur and Haukadalsheiði	ÓA		
	12:00	Lunch /Picnic outside			
		Kaldidalur /Uxahryggir	ÓA		
		Drive to Northwest Iceland	HHÆ/BO		
	Approx. 20	Dinner at Húnavellir			Hotel Húnavellir
5 July	09:00	Departure from Húnavellir	HHÆ/BO		
Thursday	09:30	Sheep farming & sheep grazing	AMJ	Sölvabakki farm near Blönduós	
	12:00	Lunch			
	13:00	Land reclamation vs. land restoration	BM	Eyvindarstaðaheiði	
		Approx. 18	Drive to Skagafjörður	HHÆ/BO	
		Dinner			Hotel Mikligarður
6 July	08:30	Departure from Mikligarður	HHÆ/BO		
Friday		Restoration programs	BM	Skagafjörður	
	11:00	Sightseeing around Hólar area	BM, EBÖ	Hólar University College	
	12:00	Lunch		Hólar	
	13:00	Drive to Gunnarsholt through Kjölur	HHÆ/BO		
	Approx. 20	Arrival in Gunnarsholt		Gunnarsholt	

## **Guides:**

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### Others:

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Erla Björk Örnólfsdóttir ([erlabjork@holar.is](mailto:erlabjork@holar.is)), – EBÖ  
Rector of the Hólar University College

## Field Excursion to South-East Iceland 15-17 August 2012

Date	Time	Topic	Guide	Location	Accommodation
15 August Wednesday	10:00	Departure from Gunnarsholt Drive to Southeast Iceland	HHÆ/RÓ	Gunnarsholt	
	12:00	Lunch/Picnic outside			
	14:00	Visit to Skaftafell National Park	GÖ	Skaftafell	
	Around 17:00	Glacier Lagoon sightseeing	HHÆ/RÓ		
	18:30	Guided tour at Museum of Thorbergur Thordarson	ÞA		
	19:00	Dinner at Þórbergsetur		Hali, Suðursveit	
	21:00	Arrival at Guesthouse Brunnhóll			Guesthouse Brunnhóll
16 August Thursday	09:00	Departure from Brunnhóll			
	9:30- 18:00	Culture, nature and restoration activities in South-eastern Iceland		South-eastern Iceland	
	18:00	BBQ at Mörtunga		Mörtunga	
	20:00	Hike with farmers	BJJ	Mörtunga	
	23:00	Arrival at Guesthouse Klausturhof			Guesthouse Klausturhof
17 August Friday	09:00	Departure from KlausturHof			
	Around 10:00	Skógar sightseeing	HHÆ/RÓ	Skógar	
	11:00	Volcano show		Þorvaldseyri	
	12:30	Lunch		Hvolsvöllur	

## **Guides:**

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### Others:

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Jóna Björk Jónsdóttir ([jona@ml.is](mailto:jona@ml.is)) – JBJ

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