

Sveriges lantbruksuniversitet Swedish University of Agricultural Sciences

SLU Global







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SLU Global Annual Report 2017

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The United Nation's Sustainable Development Goals of the Agenda 2030 at the SLU campus Ultuna.

Photo: Staffan Lund

Far left: Ylva Hillbur *Pro Vice-Chancellor for International relations at SLU* Far right: Anna Kroutilova *Secretary General for Agrinatura*

Staff at SLU Global 2018, from left: Anders Malmer, Elisabeth Lindahl Rajala, Kostas Karantininis, Natalie Jellinek, Ulf Magnusson, Teun Dekker, Johanna Bergman Lodin, Margarita Cuadra, Emelie Zonabend König, Malin Planting, Carolyn Glynn, Ioannis Dimitriou and Abraham Joel. Missing in the picture: Kristina Marquart, Ewa Wredle and Gert Nyberg.

SLU Global 2017

SLU Global supports and develops SLU's engagement to improve poor people's situation in low-income countries, based on the UN sustainable development goals. We are doing this through sharing and promoting SLU's science based knowledge to national and international stakeholders. We are also facilitating global cooperation with partners in education and capacity development.

In 2017, SLU Global hosted meetings on agricultural research and education for development on the national (see p. 18) and the European levels (see p. 20). In the next four years, SLU will have a more central roll for Agrinatura, the European alliance of universities and institutes engaged in knowledge for global development, thanks to Carolyn Glynn's appointment as chair at the organisation's annual meeting held at SLU in April.

SLU Global's long-term activities to promote the use of scientific evidence as a basis for policy decisions, to stimulate and broker strategic public-private partnerships, and to participate in the global development discourse have established the unit as an entry point to SLU's expertise. This is reflected in several commissions of trust being given to SLU Global in 2017. Most notably, the Swedish International Development Agency (Sida) and the United Nations Development Programme (UNDP) in Ethiopia requested the unit to coordinate Swedish expert advice to the forest sector for the Ethiopian ministry (see p. 21). In addition, the Food and Agriculture Organisation of the United Nations (FAO) has requested SLU's advice and support on issues related to methods to reduce the use of antibiotics in animal husbandry (see p. 16).

With the appointment of Ylva Hillbur as Pro Vice-Chancellor for International relations, 2017 has been a year of positive renewal. SLU Global was assigned a number of new tasks for global development, which will start during 2018. If you are curious, please go to the section "SLU Global in the near future" on page 30.

We welcome you to experience some of the

highlights of the past year in these pages, and to discuss with us how we can jointly develop and improve in the years ahead.

Anders Malmer
Director

Ioannis Dimitriou
Deputy Director



Thematic work at SLU Global

Promoting multidisciplinarity and policy development based on SLU's research and innovation are among the main tasks for SLU Global. SLU Global's four themes are led by researchers, theme leaders, to promote broader and multidisciplinary research cooperation within SLU and with external partners.

SLU Global's scientific themes

A number of researchers with part-time appointments as theme leaders are responsible for SLU Global's multidisciplinary themes. The objective, as part of SLU Global's strategic work, is to stimulate research, capacity development and education in broader constellations for complex global challenges and to make SLU's expertise more viable in to present some of the highlights from their themes. the context of major international cooperation. The

theme leaders are based at their home departments. In this way one part of SLU Global's objective to distribute efforts and discussion within SLU can be fulfilled. Since 2016, each theme is represented by one theme leader and one assistant theme leader.

In this chapter we have asked the theme leaders

SLU Global themes and theme leaders in 2017

Climate adaptation for biobased development

Urban and peri-urban farming



Flooding in Cochabamba, Bolivia, due to the intensive construction taking place on arable land. Shows how vulnerable society is.

Photo: Abraham Joel

SLU Global theme

Climate adaptation for bio-based development

The natural resource base in agriculture has undergone degradation over a long time and continues to be under threat from various pressures such as unsustainable practices and erratic climate conditions. Strategies and actions for climate adaptation and bio-based development are central to achieving food security, poverty alleviation and economic growth. Adaptation will require a transformation of agricultural systems to be more productive, improve the use of natural resources, be less vulnerable, result in reduced greenhouse gas emission and function as a carbon sink.

The theme accommodates multidisciplinary research in three main focus areas:

- 1. Contribution to fill the knowledge gaps in assessing vulnerability of agriculture to climate change and adaptation needs.
- 2. Sustainable management of land, water and biodiversity potential and limitation for adapting production systems.
- 3. How to put in place conditions for adaptation and dissemination of the acquired knowledge.

The theme is directly related to the Sustainable Development Goals (SDGs) number 2 – Zero Hunger, number 13 – Climate Action, and number 15 – Life on Land; additionally having many crosscutting areas with SDG goals number 1 – No poverty, and number 6 – Clean Water and Sanitation.

Theme workshop

A workshop was held in Uppsala with the aim to bring together researchers involved in research and capacity building in low-income countries in order to find synergies, to stimulate collaborations and deepen our understanding about climate adaptation for bio-based development and to identify potential thematic areas for joint cooperation. Several colleagues from various faculties and departments at SLU expressed their interest in joining this network.

The workshop highlighted that research and capacity building activities need to strengthen the resilience of the production systems in general. Workshop participants thought that this could be achieved by stressing five areas: i) sustainable agricultural intensification, ii) studies on synergies and trade-offs among ecosystem services, iii) soil health and water management improvement, iv) bio-based development and v) improved human well-being, opportunities and equality. From the above potential areas of collaboration, the theme leaders developed concept notes that will be suggested to the network.

The activities in the theme relate to several of the Sustainable Development Goals within the Agenda 2030, primarily these goals:















Early morning in the village Nuevo Lamas, San Martín, Peru.

Photo: Kristina Marguardt

"Strategies

climate adaptation and

bio-based development are

central to achieving food

security, poverty allevi-

ation and economic

growth."

Capacity development for government agencies

During 2017, the theme represented SLU in a working group that developed the programme Strengthened Institutions for a Sustainable Climate

- a Global Capacity Development Programme, where SLU is part of the sub-programme Supporting the Implementation of Transparency Systems in the Paris Agreement on Climate. Five government agencies in Sweden (including SLU), have joined this effort that will be collaborating with five countries in Africa; the final selection of the countries will be carried out under the insertion phase at the beginning of 2018. The aim of the programme is to contribute to strengthening the institutional capacity of government agencies and institutions, with focus on their national transparency systems and National Determined Contributions under the Paris Agreement based on good governance. The programme also aims at contributing to better official statistics on emissions and the removal of greenhouse gases in the countries.

Target groups for the programme are relevant administrations (e.g. environmental, water meteorological, climatological, land planning, agriculture, disaster management, energy, statistics and gender) and institutions with designated responsibility for the national reporting under United

Nations Framework Convention on Climate Change (UNFCCC). The programme will be based on the specific needs, driving and actions for forces and context of partner countries.

It is our expectation that several colleagues at SLU will contribute with their expertise in different phases of the programme, gain experience in this theme and also identify other potential areas of research and capacity building that need further development.

Research collaboration with partner uni-

During 2017, we continued developing research cooperation/projects with the focus on climate change and adaptation with the University of Rwanda (UR) and the University Major San Simon (UMSS) in Bolivia. The focus areas are local capacity for climate adaptation through sustainable agriculture intensification, planning for resilient land use systems and peri-urban development.

For more information, please visit our theme's webpage www. slu.se/slu-global/theme-climate-adaptation

Abraham Joel Theme leader

Libère Nkurunziza Assistant theme leader



In August 2017, SLU visited Uganda to explore possible educational and research collaborations between SLU and partners in Uganda (Makerere University, Gulu University, and Uganda Martyr's University) and institutions (RUFORUM, RUCID, FAO). This precipitated in an Accelerate incubator workshop in which students and teachers from Sweden and Uganda collaboratively developed agribusiness ideas.

Photo: Malin Planting

SLU Global theme

Efficiency in farming systems

With roughly a decade left to reach our Sustainable Development Goals (SDGs) of Agenda 2030, we are hard-pressed to find solutions for the challenging global needs. This has proven to be not so straightforward. The SDG keyword 'sustainability' traditionally competes with the short-term, pressing needs in many goals. In terms of agrifood, the acute need for food and livelihoods is at odds with sustainable production. Concerted knowledge-driven efforts and innovative minds are needed to find novel multifaceted approaches that can harmonise the two: increased AND sustainable production. In the theme *Efficiency in Farming Systems* we aim to facilitate the dialogue across disciplines and stakeholders to identify knowledge and technology gaps, drivers for innovation, and opportunities that can be bolstered in transformational change in agrifood

The theme Efficiency in farming systems focuses on agrifood from primary production to value chains and societal innovation, and aims at inspiring colleagues and brokering knowledge and partnerships, with a focus on the Global South. Partners include our 'next door' teachers, researchers and students at SLU, Swedish organisations involved with SLU, and national and international actors. Our activities in 2017 included numerous teaching events, guest seminars and workshops at national and international level, participation in conferences and delegations across the globe, as well as a multitude of individual meetings with various stakeholders.

Youth demographic dividend for sustainable change in agrifood

Our 2017 activities largely pivoted around the primarily these goals:

theme Youth in agriculture and are grafted onto the global momentum this theme has created in the last few years. The youth theme aims to instil an appreciation among young people, particularly the educated youth, for the opportunities agrifood offers in terms of gainful employment. It cuts across many of the SDGs that deal with food security, sustainable production, jobs and gender equality, and innovation and education. As a research and educational institution, SLU has a strong commitment to anchor this crosscutting theme in science and education, and infuse science-based innovative and sustainability thinking in the process of engaging youth in agriculture.

We collaboratively organised three workshops around this theme, one locally with international

The activities in the theme relate to several of the Sustainable Development Goals within the Agenda 2030, primarily these goals:

















Brian Ndyaguma (left) in his restaurant in Kampala together with students from SLU, Gustav Weidman and Hjalmar Tindberg (right), tasting and smelling some of the spices grown for use in the restaurant. In the background: Samuel Nyanzi, Executive Director of RUCID (Rural Community in Development), an organic agricultural training college in Mityana, Uganda.

Photo: Malin Planting

participants at SLU (in January), another at national level in collaboration with SIANI and SIDA (in May), and one in Kampala, Uganda through Accelerate (in August), an emerging multi-stakeholder partnership (MSP) on youth in innovation and agribusinesses with a global sustainability perspective. Each workshop had a different focus, from globally interlinking teachers and students in agrifood programmes, to discussions around drivers for youth in agribusiness, to inspirational seminars and hands-on hackathons (a semi-structured co-design event) on agribusiness, with youth from Sweden and East Africa. Our efforts provide a global sustainability horizon in SLU's educational programmes through interlinking educational programmes (including using e-resources) and fostering exchange of teachers and students, the latter supported through several grant applications that written in 2017. In addition, the activities provide an ideal opportunity to conduct research on the back of these youth initiatives, and provide the knowledge base on which to build further interventions. These activities will continue in 2018 with teaching, workshops, partner meetings and stakeholder activities.

Merging knowledge-driven sustainable innovation and entrepreneurship in agrifood

In December 2017, we invited a young entrepreneur, Brian Ndyaguma (RANlab and Makerere University), from "The activi-Kampala, Uganda, to give a seminar on sustainable agrifood ties provide an ideal development. Brian provided opportunity to conduct an inspirational lunch seminar that highlighted how research on the back of constraints in quality food access in urban settings can be these youth initiatives." drivers for sustainable business and value chain development. Brian also participated in discussions on sustainable agrifood and anonymous production and premium prices in

For more information, please visit our theme's webpage www. slu.se/slu-global/theme-farming-systems or contact us.

a Swedish food systems context.

Teun Dekker Theme leader Kostas Karantininis Assistant theme leader



Planning for the multidisciplinary project, an outcome of TripleL, about the relationship between land tenure and capacity for climate adaptation in four semi-arid, pastoralist regions in Kenya. From left: Göran Bostedt (SLU), Per Knutsson (University of Gothenburg), Gert Nyberg (SLU), Stephen Mureithi (University of Nairobi) and Ewa Wredle (SLU).

Photo: Malin Planting

SLU Global theme

Restoration of degraded rural landscapes

During 2017 SLU landed a cooperation with Universidad Eduardo Mondlane (UEM) in a Sida funded capacity development programme, where three PhD students will be engaged at SLU in a sandwich* model with SLU supervisors, and SLU will further support with co-supervision for PhD students based at UEM. The programme, Forestry and Agroforestry for Poverty Reduction in Rural Mozambique, has a focus on restoration of Miombo** woodlands and will include the development of a MSc programme at UEM. Peter Ruvuga is doing his PhD in a similar programme between SLU and University of Dar Es Salaam, also in Miombo woodlands. Read an interview with Peter and about activities in our theme on the next pages.

New multidisciplinary research project

A new research project was approved by the Swedish Research Council and will run for three years. The project group consists of: Assoc. Prof. Göran Bostedt (economics, SLU), Dr. Per Knutsson (social science, Univ. of Gothenburg), Dr. Gert Nyberg (soil science, SLU), Assoc. Prof. Ewa Wredle (animal science, SLU) and Dr. Stephen Mureithi (rangelands management, Univ. of Nairobi). The project is an outcome of long-standing, interdisciplinary collaboration within the Triple L (Land, Livestock and Livelihood) initiative (www.TripleL.se). The aim of the project, starting in January 2018, is to study the relationship between land tenure and capacity for climate adaptation in four semi-arid, pastor-

alist regions in Kenya and to contribute with new insights on how pastoralist land tenure can be designed in order to enable effective climate adaptation strategies.

Restoration project on Borneo

Dr. Navinder Singh (SLU) and his master student Laia Crespo Mingueza (SLU) performed a pilot project in Borneo to monitor the presence and the activity of Borneo elephants to evaluate the potential role of this reforested area in Borneo for conservation. The theme supported this project on elephant diversity and other biodiversity issues,

The activities in the theme relate to several of the Sustainable Development Goals within the Agenda 2030, primarily these goals:













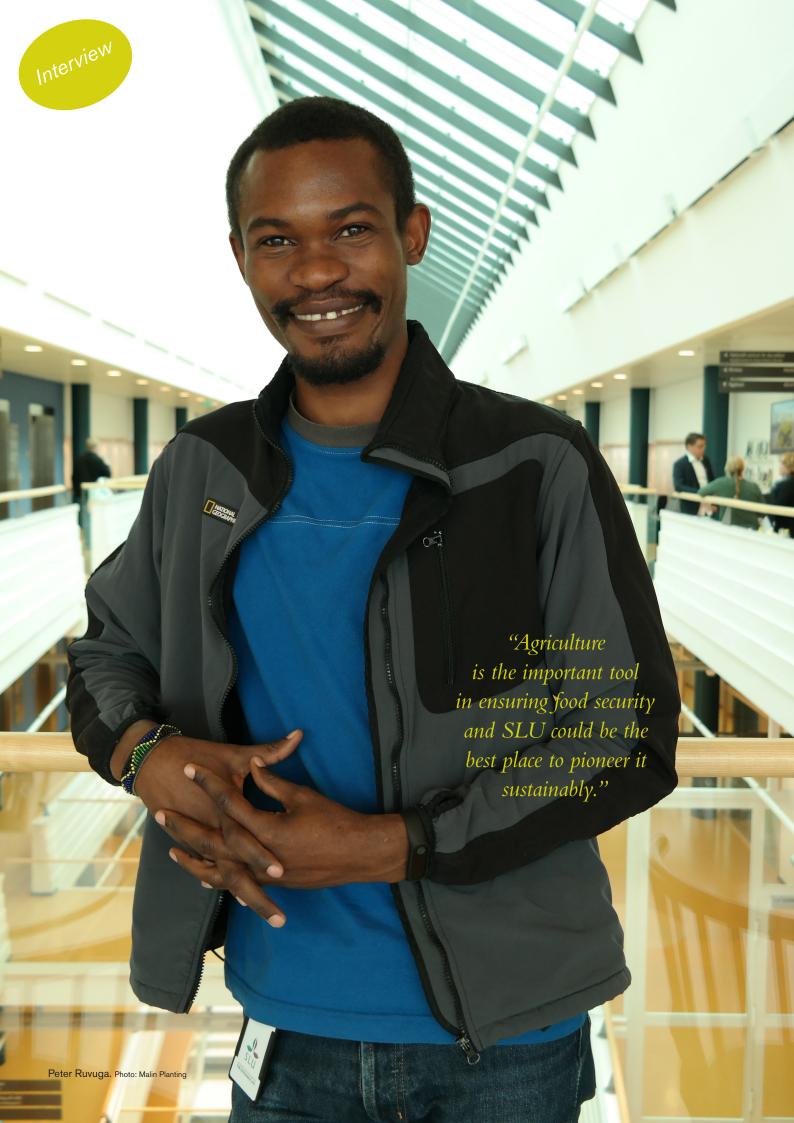






^{*}Studies where the student spend part of their time at SLU and the rest at their home university.

^{**}The Miombo woodland is a vast African dryland forest ecosystem covering close to 2.7 million km² across southern Africa. Large areas of the woodlands are degraded and in direct need of restoration.



Peter Ruvuga, Tanzania

I am a PhD student working in the sandwich programme between SLU - University of Dar es Salaam (UDSM), Tanzania. I'm working in a Sida funded food security programme addressing food insecurity and poverty in Sub-Saharan rural areas.

What are the most important reflections from your doctoral project so far?

In my first study I learned that livestock plays a great role in rural communities' livelihood. I also found livestock keepers are perceived as competition by other land users since most of them do nothing to improve the productivity of their grazing areas.

How do you find it being supervised by both UDSM/ SUA* and SLU scholars? Is there an added value in your opinion?

As there is a wide difference in livestock and grazing land management between Tanzanian and Swedish livestock keepers, I think that having supervisors from both sides is important in addressing these differences and they assist me in identifying the most relevant research questions

Would you like to share any unexpected experience?

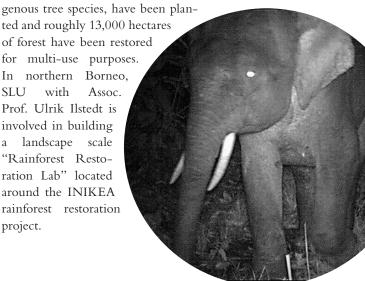
Yes, the work together with academic merits working in this project has helped me to raise environmental awareness among livestock keepers. Experiencing rural life first hand was quite a thrill, also seeing various aspects of livestock production and knowing that my work is part of the solution was rewarding.

If you can send a message to a prospective SLU PhD student, what would that message be?

My message would be that as the coming generation of scientists we need to find the solution to the pending problems that will face our societies. Agriculture is the important tool in ensuring food security and SLU could be the best place to pioneer it sustainably.

which have never been systematically recorded before in the area of the INIKEA restoration project. The INIKEA project is a cooperation between the Sabah Foundation and IKEA (the Swedish furniture company) and it is one of the largest and most successful projects of its kind. Since the start of the project, in 1998, more than two million seedlings, consisting of approx. 80 different indi-

ted and roughly 13,000 hectares of forest have been restored for multi-use purposes. In northern Borneo, SLU with Assoc. Prof. Ulrik Ilstedt is involved in building a landscape scale "Rainforest Restoration Lab" located around the INIKEA rainforest restoration project.



Small male specimen of the endemic specimen of the Bornean elephant (also known as pygme elephant). Picture captured from one of the 24 camera stations in the INIKEA project.

Dr. Lars Laestadius, SLU alumnus, gave seminars at SLU both in Umeå and in Uppsala on landscape restoration on a global scale. He explained that there are 2 billion hectares of degraded land globally (land area of Sweden is 45 million hectares) out of which > 700 million hectares are in Africa. So there are significant needs for restoration. There are several large national and international initiatives and commitments to address this. Instead of seeing restoration as an obstacle or a problem, it can be viewed as an opportunity to improve land use and increase value production (food and fibre) and to increase ecological services in landscapes. However, more and new knowledge is needed and SLU research can contribute significantly.

For more information, please visit our theme's webpage www.slu.se/slu-global/theme-restoration or contact us.

Ewa Wredle

Gert Nyberg

Theme leader

Assistant theme leader

^{*}Sokoine University of Agriculture (SUA)



Veterinarian Ulrika König (SLU) discusses autopsy findings with Ethiopian colleagues during a training course in Addis Ababa.

SLU Global theme

Urban and peri-urban farming

The Urban and peri-urban farming theme has during 2017 continued to position SLU as an important international player in the field of antimicrobial resistance in livestock. A position that was acknowledged in the end of the year by FAO. Also, the tight cooperation with the CGIAR system in the research programme CRP Livestock has been a main task for the theme. At the end of the year an assistant theme leader with background in social science was recruited.

SLU Global in the midst of the fight against antimicrobial resistance

In early 2017, SLU Global, together with the Global Agenda for Sustainable Livestock (GASL), arranged a scoping workshop about how to mitigate the emergence of antimicrobial resistance in the global livestock sector. The workshop gathered livestock farmers, United Nations (UN) officials and veterinarians from 15 countries from all over the world. The use of antimicrobials in livestock farming is increasing in many parts of the world, as both cure and prevention. The increase of antimicrobial resistance (AMR) threatens both human and animal health. During the meeting in Uppsala, a practical plan was developed for farmers across the world on how to use fewer antibiotics with maintained productivity: Livestock antimicrobial partnership (LAMP) - addressing antimicrobial resistance by supporting healthy and productive livestock.

At the large multi-stakeholder platform me-

eting of GASL in Addis Ababa, the LAMP was endorsed as an action network and SLU Global was commissioned to host the LAMP network. The network complements the overarching international normative and regulatory initiatives by governments and international organisations, by promoting best practises at farm level.

"A practical plan was developed for farmers in the world on how to use fewer antibiotics with maintained productivity."

The activities in the theme relate to several of the Sustainable Development Goals within the Agenda 2030, primarily these goals:















Photo: Gunilla Ström

In many parts of the world, farmers can buy and use antibiotics without consulting qualified veterinary experts. This contributes to the development of resistance to antibiotics.

In autumn, SLU Global representatives were invited to the Swedish multi-stakeholder meeting "Antibiotika forum" and the International Dairy Federation Summit as keynote speakers to talk about antimicrobial use and resistance in the livestock sector in low-income countries.

At the end of the year, SLU Global was approached by the Food and Agricultural Organisation of the United Nations (FAO) regarding practical means to reduce the use of antimicrobials in animal husbandry. FAO assigned SLU Global to develop a practical manual on how to use antimicrobials in a prudent and effective way in animal husbandry and how to run workshops for colleagues from Eastern Europe, Caucasus and Central Asia.

SLU Global leads the *Animal Health* flagship in the CGIAR research programme on livestock

In the 11 multidisciplinary CGIAR* research programmes, there are just a few universities involved as strategic partners, such as the London School of Tropical Hygiene and Medicine, Wageningen University and SLU. In the livestock programme, SLU is the only university that is a core partner The assignment to lead the animal health activities is an acknowledgement of SLU's high com-

petence in livestock health and long experience in working with low-income countries, as well as an acknowledgement of SLU Global's administrative capacity. Besides leading the animal health flagship, colleagues from SLU are also contributing to the feed and forage, and genetics activities within this research programme. SLU Global has, for instance, been running training courses in Addis Ababa for veterinarians on how to conduct post mortem examinations on sheep and goats in the field.

For more information, please visit our theme's webpage www.slu.se/slu-global/theme-urban-and-peri-urban-farming or contact us.

Ulf Magnusson

Theme leader

SLU continues useful cooperation into SIANI's third phase



Participants in the Agri4D 2017 conference.

Photo: Emelie Zonabend König

SIANI

Swedish International Agricultural Network Initiative (SIANI) is a multi-sectorial network offering an open and interactive platform for exchange on global issues around food security, poverty reduction and environmental sustainability. Members are actors from government, civil society, private sector and academia. SLU staff is among the largest single groups out of more than 1700 members. Since 2014, SLU Global has assisted the network to coordinate activities relating to SLU's broad knowledge about the sector.

The year 2017 was the first year of a third phase and funding period (from Sida) for SIANI. From a modest start in 2009, SIANI is now an appreciated partner among all stakeholders in the agricultural development sector, which is reasonable as the challenges ahead for the SDG's demand cross-societal understanding and cooperation. Primary expected outcomes from SIANI include creating an enabling environment for evidence-based, multi-sector and interdisciplinary dialogues, and to make knowledge generated through the network available for informed decision-making in local, national and international arenas.

SIANI is also appreciated internationally. One example of internationally staged cooperation was a panel discussion arranged, jointly with the Swedish government's FAO committee and SLU among others, as a side event at the large FAO "Committee for Food Security" (CFS) conference in October 2017. In line with Swedish foreign policy, the scope of the panel was "Feminism, Forests and Food Security". One of the panellists was Camilla Widmark, a forest economist from SLU, who was also one of the authors of the conference main report from the "High Level Panel of Experts".

Agriculture for Development Conference

On 20-21 September 2017, SLU and SIANI hosted the international biannual conference Agriculture for Development Conference (Agri4D) at SLU's campus in Uppsala. This was SLU's largest effort jointly with SIANI in 2017. The central theme of the conference was Rural Transformation and Urbanisation as keys to reaching the goals of Agenda 2030. The conference included seven international keynote speakers and was attended by more than 250 participants, mainly active in Sweden, but representing 32 different countries.

Participants were students, researchers, teachers and practitioners who joined the seven different thematic and poster sessions as well as the two plenary sessions with keynote speakers. The event was especially well-appreciated by students and young professionals who found inspiration and ideas for research, as well as network and contacts for future work.

www.siani.se/theme-groups/sustainable-agricultural-production-and-food-security

Margarita Cuadra

Communicator SIANI-SLU Global theme



Interviews with young researchers at Agri4D 2017



Sunil Abeyasekera

I am a Master's student in rural development and natural resource management at SLU, and the Swedish representative for YPARD (Young Professionals for Agricultural Development). I led the poster session at Agri4D and also presented a poster on youth in agriculture, youth unemployment and climate change.

- Agri4D is a good opportunity to see what research is being conducted at the moment and to formulate ideas before doing my thesis research later in the year.
- I think that Agri4D is a really important event, with researchers from across the world discussing important issues regarding agriculture, especially in low-income countries, and especially interesting to see all the different dynamics for how that is going to be achieved.
- My take-home message is understanding how much research still needs to be done and how much is happening at the moment, like trying to engage youth in that research as well, trying to get them involved in research. I am hoping that the next conference will be just as important.



- At the next Agri4D I would like to see more research on issues like small island development states, and on the issue of climate change refugees. Sunil thinks there is a growing concern on climate change and including more about climate change refugees could be quite important.

Deborah Muricho

I am a Master's student from University of Nairobi, Kenya. I attended Agri4D to present a paper on pastoralism under the sub-theme of Land under dynamic changes. The paper is part of the research I did in West Pokot County in Kenya.



- Agriculture is actually very important, especially for developing countries since the economies of developing countries are agricultural-based. In my own country Kenya, agriculture employs over 70 % of the population. To develop as a country, we need to develop agriculture. Those two can't be separated, agriculture and development go hand in hand.
- My take-home message is that we can learn a lot on partnerships. Usually we say three P's (Public Private Partnerships) but in this conference, I learned about the fourth partnership as being people. Our indigenous people, the farmers, the grassroot community levels also have to be brought on board as we discuss the development agenda. That will help in formulating people's specific projects and development ideas, which will lead to more sustainable projects and more sustainable development.
- For the next Agri4D conference I would like to see how we can focus our efforts on how we can bring out the people's aspects, what people actually need for development. So we can have like a people movement for sustainable development in agriculture.

SLU leads European university alliance for global sustainable agriculture



Flags from all participating nations in the Agrinatura General Assembly, April 2017.

Photo: Malin Planting

Agrinatura

In April 2017, via SLU Global, Sweden took on the leadership for Agrinatura, the alliance of the major research and education stakeholders in Europe that work with knowledge for global development in the green sector, for the next four years.

 $A_{
m grinatura's}$ General Assembly was held on the Ultuna campus of SLU 26 -28 April 2017. Over one hundred guests from thirty-five countries attended discussions on Mutual Prosperity - why the South and North need each other. SLU Global's Carolyn Glynn serves during the coming four years as the President of the Association of Universities and of the business section of the European Economic Interest Group (EEIG). The alliance works within the framework of Agenda 2030 for the United Nations Sustainable De-

About Agrinatura

velopment Goals.

Agrinatura's 30 member universities and research organisations bring collective resources to work in partnership with international collaborators, mainly in Africa and Asia. The activities are geared towards attaining scientific excellence through joint research,

and through educational and training programmes.

In this manner, Agrinatura continually works to help improve the evidence base by generating knowledge used for policy decisions related to agriculture for food security. Agrinatura partners with international organisations on national, regional and global levels, in collaboration with the European Commission, DG DEVCO (the Commission, DG DEVCO (the Com-

was held on the Ultuna mission, DG DEVCO (the Commission, DG DEVCO) (the Commission, DG DEVCO) (the Commission's Directorate-General for International Cooperation and Development), FAO (The Food and Agriculture Organisation of the United Nations), FARA (Forum for Agricultural Research in Africa), as well as with the sister organisation of the university communities in Africa – RU-FORUM (Regional Universities Forum for Capacity Building in Agriculture) and in Asia – SEARCA (Southeast Asian Regional Centre for Graduate Study

and Research in Agriculture).

http://agrinatura-eu.eu

Carolyn Glynn Senior Advisor



Sweden in dialogue with Ethiopia on forest sector development



Their Exellencies Ministers Gemedo Dalle and Kebede Yimam discussing FSC certification and high environmental standards with Karin Fällman (right) and Fredrik Klang from Sveaskog in a beach forest in Omberg, Sweden.

Photo: Anders Malmer

SLU Global coordinates many Swedish actors

The Ethiopian Ministry for Environment Forests and Climate Change and Sida in Ethiopia have requested SLU Global to coordinate a bilateral dialogue for an Ethiopia National Forest Sector Development Plan and a support programme. The dialogue started during 2017 and aims to develop a bilateral programme where SLU is targeted as the major Swedish partner and coordinator. An inception phase during 2018 will engage many Swedish experts.

During 15-19 May 2017, a delegation led by HE Minister Gemedo Dalle and HE State Minister Kebede Yimam visited Sweden as a starting point for the dialogue. SLU Global organised the tour that involved field visits as well as interactions with representatives from more than 15 Swedish actors from the forestry sector, including Stockholm International Water Institute, Vi Agroforestry, Swedish Forest Owner Associations, Stora Enso Ltd, Swedish Forest Agency and the SIANI network. A Swedish delegation made a return visit to Ethiopia in December, with the objective to interact with Ethiopian partners, get an overview of the target institutions and regions for the forest development plan, and draft a proposal for a support programme together with the Ethiopian colleagues. Tentatively activities may start in 2018 with "training of trainers" and gap analysis of some aspects of forest sector development like gender and ecosystem services.

Anders Malmer

Director



In parts of the Amhara region there is spontaneous development of increasing forest cover on smallholder land driven by market demand for building material. Amhara Environment Forest and Wildlife Authoroty Director Dr. Belayneh Ayele (right) is explaining for the delegates and Ethiopian colleges. From left: HE State Minister Kebede Yimam, Dr. Erik Karltun (SLU), Elmi Nure (Sida Programme Officer at the Swedish Embassy in Ethiopia) and Amhara Forest Enterprise General Manager Yekunuamlak Yilma.

Capacity development

Capacity development - developing skills but also SLU itself!

By capacity development, we mean processes through which individuals "Thank and organisations obtain and you to all colleastrengthen capabilities to set and achieve their own devegues and friends from lopment objectives over time. different parts of the SLU is involved in several capacity development activiworld that contribute to ties in low and middle-income SLU's and our own countries enhancing the scientific know-how of individuals development!" but also supporting institutions to develop their research and education capacity. Such activities are mainly financed by national funding organisations including Sida and the Swedish Research Council, but also by international funding sources such as the European Union, the CGIAR institutes, and others.

For many years, SLU has been supporting PhD students from other parts of the world to develop skills that in the end will lead to economic growth and prosperity in their countries of origin; for example, by educating students from Bolivia, Ethiopia, Mozambique, Rwanda, Tanzania, Uganda and Vietnam, countries that have large Sida-funded bilateral programmes with Sweden, but also from countries using other funding sources. These students carry out a large part of their studies here at SLU, with the same opportunities as any other student to fulfil their studies, thus also participating in courses and other student activities that do not only develop scientific skills, but also other skills useful for their personal development. Some experiences and thoughts from such SLU students from different parts of the world can be found in the following part of this report.

SLU also has a long tradition of supporting colleagues at sister universities in developing structural components that are useful to improve capacity, delivering themselves high quality postgraduate programmes and research, by for, example organising courses in supervision skills and training the future trainers in these universities. An example from UDSM presented below is indicative of several SLU supported activities in other parts of the world.

Last but certainly not least, I wish to mention one thing that is a very important benefit from SLU's involvement in such activities: the capacity development achieved at/for SLU after collabora-

tion with individual and institutions from other parts of the world! Working with global issues in a changing environment with challenging preconditions really gives a perspective of our own work here at home, helping to develop our own personal skills that would probably never have been developed if dealing with "domestic" issues. Thank you to all colleagues and friends from different parts of the world that contribute to SLU's development and our own development, working together with you on global challenges!

> Ioannis Dimitriou Deputy Director

Training for teaching and supervision in Tanzania

As part of the Swedish capacity development initiative with the University of Dar Es Salaam (UDSM), the Unit for Educational Development and SLU Global at SLU organised a collaborative workshop on *Teaching and Supervision in Higher Education* on 15–17 May 2017.

This three-day workshop was developed with both teaching and supervisory responsibilities in mind. Yet, given that the capacity development agreement aims at the development of research education, the main focus was on the PhD – supervisor relationship. The aims were two-fold: 1) to improve the teaching and learning skills of participants, with a focus on curriculum design; and 2) to enhance supervision practices as a measure towards quality assurance.

The evaluations from the 50 or so participants revealed that the workshop proved to be very useful and offered important insights for current and future supervisors at UDSM.

Natalie Jellinek

International higher education advisor



Voices from research students at SLU



Florence Uwamahoro, Rwanda

I am a PhD Student at SLU under the UR-Sida Bilateral programme.

What are the most important reflections from your doctoral project so far?

Potato and banana are important food and cash crops in Rwanda. Despite their importance, these crops face several constraints including pests and diseases. Potato bacterial wilt and banana *xanthomonas* wilt are major diseases as they can cause crop losses up to 100%.

- Potato bacterial wilt and banana *xanthomonas* wilt are widespread in all the studied areas of Rwanda.
- Factors like high altitude, low planting density, avoidance of sharing farm tools, crop rotation and intercropping potatoes were associated with low potato bacterial wilt occurrence. On the contrary, Impala agro ecological zone, intercropping bananas, brewing banana types, dense spacing and indigenous banana cultivars were important factors associated with high banana *xanthomonas* wilt incidence and severity.
- There is insufficient knowledge about the detection, spread and management of these diseases among farmers in our study, resulting in improper management practices. These are attributed to limited extension services since the majority of farmers received the information about these diseases from other farmers or their relatives and this shared information are sometimes wrong.

How do you find it being supervised by both UR and SLU scholars? Is there an added value in your opinion?

I really appreciate the supervision I get from both sides and it makes my PhD journey easier. Especially when I have some issues to handle from one end, there is always someone in my supervision team ready to help.

Would you like to share any unexpected experience?

I had about four unexpected experiences along my PhD journey so far, (1) spending about 6 months waiting for greenhouses to start my fieldwork due to financial formalities that were outside of my control, (2) getting to know that the samples I worked on for several months were contaminated and we had to discard the project because we had no time to go back for sampling, (3) having a serious sickness when you have plenty of lab and coursework, and (4) having a baby along this PhD journey. But I believe that when you are determined, nothing can stop you from reaching your goal. I am thankful to my supervisors for their encouragements. For instance, when we heard that our samples were contaminated, I was discouraged but my supervisor said "this is a single piece among several pieces you have to make a thesis". This was really comforting.

If you can send a message to a prospective SLU PhD student, what would that message be?

I have found mothers, fathers, sisters and an amazing guidance, in my working team and in my department in general and I wish that it was the same for all the departments at SLU, for that reason, I would encourage soon-to-be SLU PhD students that SLU is a friendly environment not only to get knowledge and a degree but also to learn humanity. Everyone here is humble and ready to help in case someone is in need.

....voices from research students at SLU

Dil Katri, Nepal

I am an industrial PhD student and I have spent about 28 months in Sweden of my total PhD time. I am employed by the research-oriented non-governmental organisation Forest Action in Kathmandu, Nepal, doing my PhD in rural development at the Department of Urban and Rural Development (SOL). I plan to defend my thesis in September 2018.

Department of Urban and Rural Development and got



Photo: Malin Planting

Has any new skill, method or way of thinking or doing things emerged from your PhD training so far?

I am a forester by background who took my Master's in development studies from the International Institute of Social Studies in The Hague, and now my PhD is in rural development at SLU. That transition of academic field has forced me to learn a lot of new things but also to de-learn some things. I needed new conceptual and theoretical lenses to become a policy researcher, something I feel I have gained during my PhD training. I have had to enhance my analytical skills, learn how to engage with literature more critically, construct sharper questions and make use of diverse research methods. I have also learned to use new software to analyse qualitative data.

What are your most personal and professional reflections from the time at SLU?

It took me more than six months to get acquainted with the rights and responsibilities I have as a PhD student, despite good support from supervisors and colleagues from the department. I feel a need for some sort of initial orientation for international PhD students who have no idea about the Swedish education system and roles and responsibilities during a PhD. However, I found colleagues at SOL very supportive. I felt like being part of the research team within the Division of Rural Development and SOL and believe I could also contribute to the research environment based on my experience as a locally engaged researcher. As I have been part of an ongoing research project

with colleagues at SOL, I felt myself more as a team member rather than an individual PhD student.

It took me about a year to understand windows of opportunities from the research school and the faculty to participate in courses outside SLU and to access resources to attend conferences for example. This also signifies the need for having some well--thought-out orientation.

Personally, I felt I have benefited a lot with regard to getting acquainted with the Swedish culture as I stayed with a Swedish family during my time here.

Would you like to share any unexpected experience?

I have tried several new things here in Sweden, like ice-skating which was something I had never thought I would do. However, it ended up with falling many times and breaking my arm, so never again...

Professionally, I felt welcomed as part of the staff at SOL and got the opportunity to engage in intellectual discussions. It was more than I expected and I think more than being a PhD student in other universities.

Mesia Ilomo, Tanzania

I am one of three PhD students in the Engendering Agribusiness Entrepreneurship (ENGAGE) programme, funded by Sida and carried out in collaboration between the University of Dar es Salaam Business School (UDBS) and the Department of Urban and Rural Development (SOL) at SLU. The focus of my PhD project is on 'Gender and Functional upgrading in the rice value chain in Tanzania.' I am carrying out my fieldwork in Kyela district, Mbeya region, in the southern highlands of Tanzania.

"I benefit from
the interactions with
supervisors from the two institutions (SLU and UDBS),
who happen to differ in areas
of expertise."



Photo: Mesia Ilomo

What are your most important reflections on participating in the ENGAGE programme that is led by UDBS and SLU?

I benefit from the interactions with supervisors from the two institutions (SLU and UDBS), who happen to differ in areas of expertise. I have been exposed to the academic world through academic courses and seminars (mostly at SLU) including the opportunity to attend a PhD defence, which is uncommon for PhD students in Tanzania. I am connected to the PhD group at the Department of Urban and Rural Development (SOL), which makes my life in Sweden more comfortable but also provides an opportunity for potential global-south cooperation.

How do you find it being supervised by both UDBS and SLU scholars? Is there an added value in your opinion? If so, please elaborate.

It is very helpful to have supervisors from both UDBS and SLU. My SLU supervisors are more informed on gender issues while my UDBS supervisors have more business knowledge and may also challenge any aspect on the context of the study, which may not be so easy for my SLU supervisors. My SLU supervisors are interested in exploring and understanding local norms and practices as well as the life experiences of the research participants, thus they prefer a qualitative approach while many supervisors at UDBS are inclined to quantitative approaches. I see a difference in the way I conducted research prior to this programme (mostly applying quantitative approaches) and now where I am carrying out my qualitative research.

What has been the most significant change in your academic life coming about from your participation in the ENGAGE programme so far? This might relate to e.g. new skills, methods, ways of thinking or doing things.

Through a series of academic seminars, I now know what it means to review a scholarly article – I initially read and reported what was written without any critique. It was therefore difficult to identify gaps and any lessons from the article. I have learnt to interactively and gradually work with supervisors in academic work. In the past, I used to focus on perfectionism rather than sharing the progress. SOL PhD group retreats were useful in connecting PhD students, socially and academically. I wish to emphasise the same at our university.

If you can send a message to a prospective SLU PhD student, what would that message be?

SLU is a perfect place to be for PhD studies. It is located in a cool area, people like to interact which provides an opportunity to sharpen your research ideas, there are several academic seminars, and you have access to most literature. It is important to note that you have an opportunity to attend and comment on others' PhD thesis defences, something that is uncommon in low-income countries such as Tanzania.

Of all the countries that I have visited in Europe, Sweden is the friendliest country where one can always get assistance in case of challenges to cope with the environment.

Communication

www.slu.se/slu-global

Newsletter

Our newsletter is issued four times per year, with additional issues when extra focus to our activities is necessary. The newsletter keeps you updated on major events and activities at our university, visits by our international partners, new publications and upcoming funding opportunities, all in the area of global development in agriculture. Be sure not to miss any of the information by subscribing!

Social media

From autumn 2017, SLU Global is present in social media.

Instagram

Are you interested in knowing what we are up to when we are out and about? We welcome you to follow SLU Global on Instagram! @slu.global

YouTube

Our own YouTube-channel publishes films from events and interviews with interesting collaborators. Be sure not to miss any new films by subscribing! Search for *SLU Global Sweden* on YouTube.

Our website

At SLU Global's website, www.slu.se/slu-global, you can find information about global development related to agriculture. We highlight some of the information here:

SLU Global themes

Our scientific themes, led by theme leaders, work to promote broader and multidisciplinary research and educational cooperation within SLU and with external partners. Read about our themes and their priorities within Agenda 2030 at our website!

External funding

Find funding opportunities and information about upcoming calls related to the global agenda and for cooperation with low- and middle-income countries. Would you like continuous updates about calls? Please sign up to our newsletter by sending an email to global@slu.se.

News and Calendar

Our news and calendar streams inform about global and local events and activities.

Most liked Instagram-post



Crossing the Equator in Uganda, on the Accelerate learning journey with representatives from Makerere University, Open Sustainability Institute, RUCID; and students and teachers from SLU.

Most watched YouTube clip



Deborah Muricho, Univ. of Nairobi, Kenya, talking about *people* in Private Public People Partnerships at Agri4D 2017.

Most visited webpage



The Agri4D 2017 web page (except for the SLU Global start page which was the most visited).

International visits

During 2017,
SLU, through SLU
Global, hosted many international visits with relevance for global development. Here is a selection. Find all the stories on our website
www.slu.se/slu-global



Dr. Nteranya Sanginga, Director General from the International Institute for Tropical Agriculture (IITA) met with SLU:s management and researchers about further cooperation. SLU's Vice-Chancellor Peter Högberg to the right.



HE the Ambassador of the Republic of Kazakhstan to the Kingdom of Sweden, *Dr. Dastan Yeleukenov* visited SLU in Uppsala on 15 September 2017 and met with SLU:s Deputy Vice-Chancellor *Karin Holmgren* and researchers from SLU, to explore possibilities for further collaboration between the Republic of Kazakhstan and SLU. SLU researchers Assoc. Prof. *Galia Zamaratskaia* (left) and Assoc. Prof. *Gulaim Seisenbaeva* participated in the meeting.

A delegation from the University of Rwanda visited SLU during their weeklong visit to Sweden for discussions on the next phase of the joint multidisciplinary collaboration programme within Sida's Research Training Partnership Programme. Dr. Laetitia Nyinaawamwisa; Principal UR-CAVM (left) and Ambassador Dr. Charles Murigande (right), Deputy Vice Chancellor for Institutional Advancement University of Rwanda.

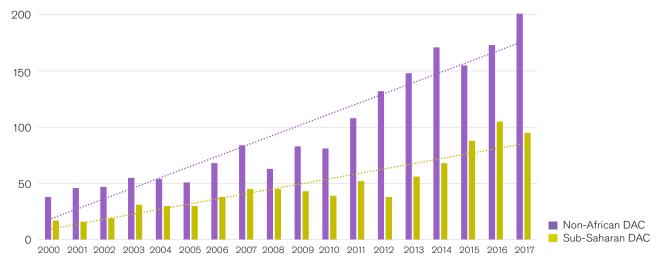


An Ethiopian delegation spent a week in Sweden, coordinated by SLU Global, to study the Swedish forest sector. SLU:s Vice-Chancellor *Peter Högberg* receiving a gift from the Ethiopian Minister for Environment, Forests and Climate HE Dr. *Gemedo Dalle* (left). SLU Global's Director Anders Malmer in the background.

A delegation from the Royal University of Phnom Penh, Cambodia, visited SLU to gain insight in research connected to urban environmental pollution. Dr. Cheam Eliyan to the right.



Research publications show globalisation trend at SLU



Total number of SLU publications per year jointly with authors from Sub-Saharan Africa (green) and with authors from other low- and middle-income countries (as defined by the OECD DAC list of countries eligible for official development support) (purple). (ISI Web of Science by SLU Library **)

Burkina Faso and

Tanzania."

 $oxed{1}$ he graph (above) showing the joint publications by SLU researchers and colleagues in countries in Sub-Saharan Africa (SSA) and other low- and middle-income countries (LMIC) has now been updated and reappears for the third time

in our annual report. For each

250

year the main trend is more distinct; co-publication with countries on the OECD DAC list* is increasing strongly, as an un-broken Ethiopia, Kenya, Uganda, trend for the last eight years (2010 - 2017). The co-publications with SSA have just about doubled during this period. We can see the same trend for other other LMIC, outside SSA. This growth is much higher than the total number of all SLU researcher-authored publications, which has increased by 45 % in the

same time. In 2017 the share of SLU publications relevant to development in LMIC was 23 %, in contrast to 16 % in 2010. In real numbers, these 23 % consist of 349 reviewed publications, which corresponds to approximately one publication per day for one year.

Thus, the increase in absolute numbers and its relative proportion of SLU's publications may signal a trend of globalisation as a result of growing partnerships with DAC countries, added to dominating partnerships with the strongest research-nations. If so, who are the main DAC partners in the 3209 publications during 2010 - 2017 behind the figure? Outstandingly in the

lead are coauthors from China. For SSA the dominating countries are (in falling order) Ethiopia, Kenya, Uganda, Burkina Faso and Tanzania, reflecting longevity of cooperation. Among the

other DAC countries, Brazil and South

Africa are those at the top. Some middle-income countries like

Brazil, India, Mexico and Nigeria show an upward trend (last three years compared to the full period), while for some low-income countries like Vietnam and Ethiopia, where Swedish cooperation is reduced, the same comparison shows a distinct downward trend.

Our careful readers may notice the small decrease in SSA co-publications from 105 in 2016 to 95 in 2017 (close to a 10% decrease). Of course, it is still not possible to say if this is the start of a levelling off or just a temporary variation. One partial explanation could be that, during 2010 - 2014, SLU had substantial extra funds from the Swedish Ministry for Foreign Affairs with added value to the ongoing and growing cooperation with SSA. This might have resulted in some extra boost to the trend with an expected peak in 3-4 years (the time it may take to publish all results).

> **Anders Malmer** Director

^{*}The Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD).

^{**}Source: Web of Science (Clarivate Analytics). Analysis carried out by the SLU Library March 2018.

SLU Global in the near future



Wooden canoes are used for transportation across the Lake Bunyonyi in southwestern Uganda.

Photo: Malin Planting

During 2017, a extensive discussions and preparations for new activities and the new organisational form of SLU Global took place, as described in the introduction in this annual report. Much of what is new relates to increased internal activity at SLU in order to vitalise interaction and dialogue around global development. During the upcoming year we are planning to increase our visibility in both media and social media, by, for example writing more debate articles and by starting a global blog.

Another activity for 2018 will be to establish a PhD student network. It will focus on and connect those involved in global development, across faculties and scientific borders. Activities may include seminars and workshops on how to increase multidisciplinary efforts for global challenges, to raise intercultural competences and to support international cooperation and career opportunities.

We will continue to participate in the external discourse about global development and Swedish efforts to support international development along the UN's Sustainable Development Goals. SLU supplies knowledge for sustainable development not only at home, but also to poorer countries that have fewer resources to tackle challenges such as food security, climate adaptation and rural-urban transformation. In many cases the Swedish contribution

may not only be knowledge for sustainable development and academic capacity development, but also in combination with other components such as democratic and transparent legislation, governance and support for local people's benefit from economically, socially and ecologically sustainable production in the green sector. Thus, we also increasingly cooperate with other actors in the sector towards global development.

Read more about SLU Global in 2018 at www.slu.se/slu-global

Finally, we sincerely hope that many of you will enjoy contributing to international visits to SLU, seminars, workshops and other events.

We welcome you to collaborate with us in 2018 and ahead!

> **Anders Malmer** Director





SLU Global Annual Report

Welcome to share with us glimpses of the past year at SLU Global

SLU Global is a unit at the Vice-Chancellor's Office that supports and develops SLU's commitment to improve the situation for people in low-income countries based on the United Nation's Sustainable Development Goals (SDGs) of the Agenda 2030. In this annual report you can read about our activities and achievements in 2017. Apart from highlighting some of SLU Globals actions from the past year, we also give you glimpses of SLU's broad efforts working towards the SDGs.

SLU is in the nexus of development for a fossil-free and bio-based economy and for many of the United Nation's Sustainable Development Goals. At SLU, we have been working with capacity development for education and research for natural resources management in low-income countries for more than 60 years. Today this is an integrated activity in all faculties and departments. Our university publishes close to one peer-reviewed research report every day of the year, with relevance for sustainable development in the green sector of the global south.

www.slu.se/slu-global

