



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

The world needs more SLU students

At SLU, we nourish critical thinking, openness and objectivity, and we produce world-class research. We also give our students the opportunity to make a difference in society. Our knowledge and perspectives are of fundamental importance for sustainable development at all levels.

Close to a billion people worldwide are at the risk of starvation and climate change is progressing rapidly. The globally growing population and the extensive use of natural resources are problems for all of us. At SLU, we want to contribute to solving these problems and our commitment to global development issues is considerable.

Students with an SLU degree are well equipped to face the challenges of today and of the future, locally and globally, and society needs them. SLU, therefore, has the vision to develop the range of degree programmes offered and substantially increase the number of students within a ten-year period: students who ask the big questions about animals, nature and life, and who give us the answers we need in order to build a prosperous world.



SLU wants to develop the programme offering and increase the number of students during a ten-year period.



SCIENCE AND EDUCATION FOR SUSTAINABLE LIFE

Our planet is fantastic. For thousands of years, humans have evolved in tandem with the natural environment and learnt to make use of the resources and sustenance that the planet supplies. Today we are facing completely new challenges – climate change that will lead to global warming and rising sea levels is becoming increasingly apparent. Together we must create the best conditions for a sustainable future.

SLU is a world-class international university focusing on the very foundations of our existence: clean water, a living landscape, sustainable food production, high standards of animal welfare and sustainable cities. We bring together people who have different perspectives, but they all have one and the same goal: to create the best conditions for every living thing on our planet.

In order to succeed, we must have the courage to question and challenge. We must seek out new paths and be open to new solutions. By seeing things nobody has seen before and thinking of ideas nobody has thought of before, we are contributing to real change. Through education, research and environmental assessment we are creating the right conditions for a sustainable, thriving and better world.



SCIENCE AND EDUCATION
FOR SUSTAINABLE LIFE



ABOUT SLU
ASSIGNMENTS • FIGURES • FACTS



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The Swedish University of Agricultural Sciences (SLU) is a world-class international university with research, education and environmental assessment within the sciences for sustainable life.

Its principal sites are in Alnarp, Umeå and Uppsala, but activities are also conducted at research stations, experimental parks and educational establishments throughout Sweden.

We bring together people who have different perspectives, but they all have one and the same goal: to create the best conditions for a sustainable, thriving and better world.

Facts and figures

- 3,900 full-time equivalent students
- 3,500 million in turnover (SEK)
- 3,000 full-time equivalent employees
- 550 doctoral students
- 250 professors
- 40 degree programmes

Organisation

SLU is the only higher education institution that comes under Sweden's Ministry of Enterprise and Innovation.

The university consists of four faculties with around thirty departments. It also has a number of collaborative centres. SLU has the following faculties:

- Landscape Architecture, Horticulture and Crop Production Science
- Natural Resources and Agricultural Sciences
- Forest Sciences
- Veterinary Medicine and Animal Science.

History

SLU, the Swedish University of Agricultural Sciences, was founded in 1977 by merging the Agricultural, Forestry and Veterinary Colleges, the School for Forest Management and the Skara Veterinary Institute.

Certification

All of SLU is certified to the ISO 14001 environmental standard and is registered in EMAS.

Web www.slu.se/about-slu

Facebook www.facebook.com/slu.sweden

We take on fundamental issues that affect all of us



In a world with increasing carbon dioxide levels and a rapidly changing climate, our areas of expertise are more relevant than ever. We focus on the very foundations of our existence: clean water, a living landscape, sustainable food production, high standards of animal welfare, sustainable cities and raw materials that can replace fossil fuels and materials.

SLU is a research-intensive university characterised by excellence in the natural sciences, but our research in the social sciences and in humanities is also strong. We work with a transdisciplinary approach in research domains such as production, environment, health and quality of life.

We have a special responsibility for environmental monitoring and assessment, and we report on the environmental status to both national and international authorities.

New knowledge from SLU is sought-after by companies and decision-makers, and we cooperate with a number of actors, nationally as well as globally.

We are also contributing to the world reaching the UN's Agenda 2030 goals, for instance in the areas *climate change, food security, urban sustainability and global health.*



RESEARCH We are a world-class international university

At SLU, we conduct world-class research in several different areas. Sound basic research sprung from curiosity is combined with practical, application-oriented studies to solve concrete problems, locally and globally.

Our research domains cover the food chain, production systems and natural resources on land and in water as well as rural development and bio raw materials that can replace fossil fuels and materials. We also conduct research on the interaction between urban and rural environments, ecosystems, climate, animals in the service of humans and sustainable urban environments.

We have produced ground-breaking research on artificial spider silk, which could in the future be used for medical purposes. SLU researchers have developed a climate-friendly rice that gives off a minimum of methane gas when cultivated. New findings on chemical signals between animals, plants and microbes are already being used to control pests in apple orchards. Our studies show that stumps can be used for climate-smart energy. These are a handful of examples of our research findings.

SLU is a research-intensive university – 70 per cent of our turnover is dedicated to research and doctoral programmes. Every year, researchers from SLU contribute to around 1,800 scientific articles. More than 75 per cent of them are co-published with universities in other countries. Our publications are among the most frequently cited in their respective fields.

COLLABORATION In dialogue with stakeholders

SLU maintains a continual dialogue with various stakeholders, especially within the agricultural sectors: agriculture, animal husbandry, forestry, horticulture, wildlife management, aquaculture and fisheries.

Stakeholders are also found in the fields of veterinary medicine, natural resources and environment, rural development och landscape architecture. SLU's task as a sector university includes taking on future challenges and contributing our knowledge and skills, in cooperation with industry representatives.

SLU Holding helps researchers translate new knowledge into innovations and commercial

services. Garden therapy to combat burnout, odour traps that lure pest insects and a substance that enhances the effect of a vaccine are a few examples. Our international commitment is deeply rooted in the university. SLU Global supports research and teaching projects for developing agriculture in low-income countries. We cooperate with the best universities in the world on issues related to food security, bioenergy, urban development and climate.

Helena Aronsson is one of SLU's external collaboration specialist. In parallel with her research, she cooperates with stakeholders in her field plant nutrients. Good nutrient management results in efficient crop production but low negative impact on the environment.



Svea is one of the world's most modern ocean-going research vessels.

Advanced research infrastructure

SLU has an extensive infrastructure available to researchers both within and outside the university, ranging from field research facilities for animal and plant research to advanced laboratory equipment, biobanks and databases for environmental data.

We also coordinate the two national research infrastructures *Swedish Lifewatch* and *Swedish Infrastructure for Ecosystem Science (Sites)*. Last but not least, we run the modern *University Animal Hospital* with a number of specialists in veterinary medicine.

In international comparisons, we are assessed as being of a 'very high quality'. The *National Taiwan University Ranking* ranks us 12th in the field Agriculture and in 7th place in the field Plant & Animal Science. QS ranks us as number 3 in the field of Agriculture & Forestry. According to both the *Times Higher Education (THE)* and the *Shanghai* rankings, we are among the 300 best universities in the world, and according to THE the 12th best among the smaller universities.



ENVIRONMENTAL ASSESSMENT Keeping tabs on habitats

Our environmental monitoring and assessment (EMA) staff gather knowledge about ecosystems, and how we use them.

Our data and analyses are used to produce up-to-date and scientifically sound advice. EMA uses data series compiled over several years, from environmental monitoring and from inventories. One example is the *Swedish National Forest Inventory* which is used to follow up forestry, energy and environmental policy. Our experts also contribute their knowledge in matters of fisheries and water.

EMA activities support the national environmental objectives and the global sustainability goals within the following areas: acidification, agricultural, Alpine and Arctic landscapes, biodiversity, built environment, coast and sea, eutrophication, forests, lakes and watercourses, non-toxic environments, climate and wildlife.

Our EMA work is leading in Europe when it comes to designing EMA programmes, and world leader in forest inventory methods. EMA analysts participate in international cooperation projects in the environmental field, for example on climate, biodiversity and fisheries.



The Species Gateway is a web portal where the general public can report their finds and contribute to EMA through 'citizen science'.



The spider Aelurillus v-insignitus is common in Sweden. Find more species at artdatabanken.se



SLU Alnarp is at the forefront of nature-based rehabilitation and care. Research findings from the Alnarp rehabilitation gardens are used by both public and private operations, and several county councils, in charge of healthcare, use the Alnarp garden as a model. Frederik Tauchnitz is part of the care team.

EDUCATION We make the world a better place



Our knowledge creates the right conditions for a sustainable, thriving and better world.

SLU's educational programmes give students the opportunity to work with global challenges in a number of fields with strong connections to the UN sustainability goals.

Our students are in demand on the labour market and often find employment immediately after graduating. Teaching at SLU takes place in close cooperation with research.

We are the only Swedish university offering professional degrees in the following fields:

- agricultural science
- animal science
- forest science
- landscape architecture
- veterinary medicine.

Landscape architect Nima Karimzadeh is happy to have studied at SLU.
www.slu.se/education

The programme offering also includes a number of international Master's programmes, such as *Forest Ecology and Sustainable management, Horticultural Science, Outdoor Environments for Health and Well-being and Sustainable Food Systems.*

More than 40 per cent of our courses are taught in English, and 60 per cent of our Master's students come from countries other than Sweden. At our campuses there are students from around 50 countries.



SLU's four future platforms allow researchers to interact across disciplines. They also provide arenas for dialogue with different stakeholders in society on current issues and future solutions.

- SLU Future Animals, Nature and Health
- SLU Future Food
- SLU Future Forests
- SLU Urban Futures

