Commitment to Sustainable Development

Swedish University of Agricultural Sciences (2019)
Sharing Information on Progress Report for PRME
For further information regarding this report, please contact:
Associate Professor Cecilia Mark-Herbert
Department of Economics
Swedish University of Agricultural Sciences
E-mail: cecilia.mark-herbert@slu.se
Phone: +46-18-67-17 09

Commitment to Sustainable Development

All photographs and illustrations presented within this report are property of SLU’s media bank. Any questions regarding images should be directed to Jenny Svennäs-Gillner, picture editor, at jenny.svennas-gillner@slu.se.
Table of Contents

Message from the Vice-Chancellor 1
Progress since 2017 2
SLU: An Introduction 5
What is PRME 7
Principle 1 Purpose 8
Principle 2 Values 14
Principle 3 Method 17
Principle 4 Research 20
Principle 5 Collaboration 23
Principle 6 Dialogue 26
Assessment of Progress and New Objectives 28
Appendix. PRME Relevant Publications 32
Message from the Vice-Chancellor

SLU’s commitment to PRME

Sustainable development is key in all of our degree programmes. At bachelor’s and master’s level, SLU has objectives relating to high-quality teaching and learning, development of relevant skills, long-term perspectives, equal opportunities and an integrated learning environment between undergraduate and graduate levels. At the doctoral level, SLU contributes to knowledge development in international and national collaboration with graduate schools, the business community and the public sector. Sustainable development is embraced at SLU with an awareness of challenges relating to a growing population, public health, wealth distribution, diminishing resources, environmental impact and economic viability.

Students in our business administration programmes are offered courses focused on sustainable development within an international perspective, which highlight the interdisciplinary needs present in addressing many current and future challenges. In addition to social science courses, students may also take courses in science fields, both at SLU and other universities through various exchange programmes. CEMUS, a joint centre with Uppsala University for sustainable development, also offers courses that specifically address biobased circular economy, the need for triple bottom line business models and a revised understanding of institutional conditions for sustainable development.

“All of SLU educational efforts are aimed at offering attractive programmes in lifelong learning where sustainable development is key.”

Karin Holmgren, Vice-Chancellor
Swedish University of Agricultural Sciences
Progress since 2017
SLU’s PRME Representative

Societal needs regarding education for sustainable development are manifested in Agenda 2030’s 17 Sustainable Development Goals (SDGs). These goals universally apply to all and hold ambitions to end all forms of poverty, fight inequalities and tackle climate change. They point to challenges to ensure the sustainability of our planet, requiring active participation from private industry and state organizations, as well as non-governmental organizations alike. Working for shared global goals such as these calls for mobilization of educational and research efforts, a key role for universities.

The Swedish University of Agricultural Sciences (SLU) is a prime example of a university making strides towards combining education and sustainable development. SLU holds a special role within the Swedish education system that facilitates this; it resides under the Ministry of Enterprise and Innovation, which is responsible for various matters pertinent to sustainable development such as housing and urban development, state-owned enterprises, digital policy, enterprise and industrial policy, rural affairs, regional growth, and post issues and infrastructure. A result of this unique arrangement is a special commission entrusted to SLU aiming to develop the understanding and sustainable use and management of biological natural resources, fueling SLU’s ambitions to be a world-class university in the fields of life and environmental sciences. This commission is achieved through research, education and environmental monitoring and assessment, in collaboration with the surrounding community.

Since SLU’s last PRME-report in 2017, we have initiated processes that will increase our outreach and further support SLU’s approaches to sustainable development. This includes student enrollment, research opportunities, and international collaboration. Ambitions to double the number of students by 2027 (SLU’s 50th anniversary) is set based on the understanding of societal needs for students with an educational background in programmes that offer interdisciplinary approaches to sustainable development. These interdisciplinary programmes are based on revised courses that SLU currently offers, joint educational programmes with other universities and new programmes and courses that are being developed.

As a research-intensive university, integration of research and education is put in practice at various levels and programmes. Research projects with connected student theses, top-notch researchers taking an active role in teaching and advisory services as well as external lecturers, representing a wide set of stakeholders’ perspectives in courses – all serving as ways to integrate sustainable development practices in our programmes. Continued efforts are also made to encourage international collaboration: international students being part of our programmes, our students taking part in international experiences, and university collaboration in
courses and programmes at all levels (bachelor, master and PhD).

SLU continues to commit to the 17 SDGs with ambitions to ensure that our graduates are well prepared to take on responsible and sustainable leadership roles in the future. While we face many challenges still, we are heartened by our accomplishments and the willingness put forth by the SLU community to meet our current and future goals. While the size of our contributions may fluctuate from large leaps to small steps, we are committed and engaged in the creation of a sustainable future and responsible management education.

Associate Professor Cecilia Mark-Herbert & Daniela Garcia-Caro Briceño
Department of Forest Economics
Department of Economics
Swedish University of Agricultural Sciences
SLU: An Introduction
Science and Education for Sustainable Life

SLU’s aim is simple - developing knowledge on best practices for sustainable management of our natural resources, current and future. This is made possible through the pursuit of education, research and environmental monitoring and assessment at some thirty locations all over the country. We seek solutions to critical real-world problems, in theory and in practice, that affect all life on planet Earth.

SLU’s largest campuses are located at Alnarp [3], Umeå [4], and Uppsala [1], the University’s main campus. The university’s research focuses on a variety of topics ranging from landscape architecture, horticulture, plant production, agriculture and silviculture in Southern Sweden; veterinary medicine and Animal Science; to forest and natural resources and agricultural sciences.

**SLU FACTS & FIGURES**

<table>
<thead>
<tr>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,847 employees (total)</td>
</tr>
<tr>
<td>204 professors, 124 senior lecturers, 180 career positions, and 710 adjunct lecturers and other teaching staff</td>
</tr>
<tr>
<td>578 administrative staff</td>
</tr>
<tr>
<td>37 library staff</td>
</tr>
<tr>
<td>707 technical staff</td>
</tr>
<tr>
<td>42 temporary staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,492 bachelor students</td>
</tr>
<tr>
<td>1,205 masters students</td>
</tr>
<tr>
<td>563 PhD students in over 30 subjects</td>
</tr>
<tr>
<td>221 incoming international exchange students (2016)</td>
</tr>
<tr>
<td>100 outgoing international exchange students (2016)</td>
</tr>
<tr>
<td>24 minor field studies (MFS) international exchange students</td>
</tr>
</tbody>
</table>

**Educational Portfolio**

4 Faculties
- Forest Sciences
- Natural Resources and Agricultural Sciences
- Veterinary Medicine and Animal Sciences
- Landscape architecture, Horticulture and Crop Production Sciences

24 bachelors programmes
21 masters programmes

**Research**

4 Research platforms
- Future Forests
- Future Food
- Urban Futures
- Future Animals, Nature and Health
Responsible Management Education
What is PRME

Principles for Responsible Management Education

In 2007 the UN Global Compact Leaders’ Summit launched the Principles for Responsible Management Education (PRME). The mission was to transform management education and research towards sustainable development in line with the United Nations’ Sustainable Development Goals. PRME’s six principles are based on the United Nations’ Global Compact’s principles for advancing social responsibility through incorporating universal values into curricula and research. The continuous improvements among academic institutions of management education is manifested in the PRME certification which is communicated in this report (SIP, Sharing Information on Progress). It is structured in accordance with the six principles below, as a declaration of the current status and the commitment to continued sustainable development efforts.

Principle 1 | Purpose: We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

Principle 2 | Values: We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

Principle 3 | Method: We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

Principle 4 | Research: We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

Principle 5 | Partnership: We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

Principle 6 | Dialogue: We will facilitate and support dialog and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.¹

Principle 1 | Purpose

SLU will work continuously to foster and develop conditions for innovative and excellent research-based education that prepares students to work for and in a sustainable and biobased global economy.

SLU: Principles and Purpose

SLU’s fundamental principles function as the basis for developing a positive and progressive administrative culture and public administration. These principles, which include democracy; legality; objectivity, factuality, and equal treatment; free formation of opinions; respect; and efficiency and service, inspire a unique environment that champions citizens as our main clients, democratic ideals, our responsibility to comply with the rule of law, freedom of expression and opinion, confidentiality, and respect for people's equal value, dignity, and freedom. Both our values and principles act as a torch for SLU’s vision and strategy, leading the way forward in many of its pursuits aimed at forming a more sustainable planet.

SLU contributes to the global goals

In 2016, some eighty government authorities were commissioned by the Swedish Government to investigate and report on how their activities contribute to Sweden's efforts to achieve the global objectives of sustainable development. In support of this commission, SLU submitted a report to the Swedish Ministry of Foreign Affairs relating to its national and international impacts in relation to the UN Sustainable Development Goals (SDGs). The findings were that SLU's activities, through education, research and environmental monitoring and assessment, have a major impact on about half of the UN targets - both at national and international level.

On the international level, SLU Global works with expanding the university's engagement in global development and low-income country collaboration. SLU has also appointed a new Pro-Vice Chancellor for Internationalization to further develop already strong relations and activities on the international level. In regard to the preparatory work needed for integrating with SDGs, SLU is currently involved in projects and activities relevant to 14 of the 17 SDGs, and is partnered with development assisted countries (OECD DAC list) in 20 % of the published peer reviewed research publications (equals 270 in 2015).
SLU is also active nationally in extensive cooperation networks in line with the SDGs. Additional partnerships include other government agencies, SIANI (Swedish International Agricultural Network Initiative), and key partners within Europe, such as Agrinatura and other targeted programmes.

The knowledge developed within SLU’s educational programmes can be seen as relevant for the work towards all 17 of the SDGs. SLU works hard to incorporate sustainability within education, research, and other endeavors. As a first step to increase awareness among students, a manual for international career possibilities has been produced in cooperation between SLU Global and SIANI, however, for many of the goals SLU aspires to do more.

SLU’s Strategy

While SLU is a young university, founded in 1977, its goals are lofty. The university’s strategy for 2017–2020 is founded on the understanding and sustainable use of biological natural resources and human management. By creating and integrating knowledge about production processes, the environment, animal and human health, and quality of life, SLU has firmly established its unique profile in Sweden.

Mission

SLU develops the understanding and sustainable use and management of biological natural resources. Research, education and environmental monitoring and assessment, in collaboration with the surrounding community, achieve this.

Vision

SLU is a world-class university in the fields of life and environmental sciences.

Values

SLU values express the organization’s common core values. These provide guidance in everyday life by describing what the starting point for our activities are, in contacts with the outside world, and how we behave towards each other and others. All SLU employees come under the scope of these values.

Responsible Management Education

SLU’s main approach to sustainable management education involves supporting its principles within the education we provide and our own administrative framework. Since sustainability influences all aspects of our institution, our definition of responsible management education is closely tied with our own institutional goals and brand:

Putting science to the test
We dare to question established knowledge through critical thinking and an open, inquiring perspective. Our university produces world-class research.

Solving real problems
We seek solutions to critical problems, in theory and in practice. Our focus is on the real world and concrete problems, and on finding solutions for all life on our planet.

For a thriving world
We ask the big questions about nature, animals and life itself. Our knowledge forms the foundation of a sustainable, thriving and better world.

At SLU, our aim is to enhance student understanding of the complicated interrelationships between our actions and ecological and social challenges. To become future generators of sustainable value for business and society at large, students must be prepared to reflect on their role within global systems and understand the kinds of tools and schools of thought that enable social responsibility within management capacities.
The Department of Economics at SLU is responsible for PRME certification and the implementation of other PRME related activities. Located within the Faculty of Natural Resources and Agricultural Sciences, SLU’s economics department prepares students to become economists and business administrators with specific expertise in natural resources and agriculture. In addition to more than 70 courses offered on various educational levels, the economics department offers two undergraduate programmes: a bachelor’s in economics or the agronomist programme, that are provided in Swedish. Two master’s programmes are also offered: Agricultural Economics and Management and Environmental Economics and Management. Our research focuses on Economics and Business studies, more specifically in relation to the management of natural resources and the agricultural sector. PRME is not only supported by the Economics Department, but also by the SLU community.

Faculty Perspectives

Pär Forslund, Deputy Dean at the Faculty of Natural Resources and Agricultural Sciences

The Faculty of Natural Resources and Agricultural Sciences develops the understanding and sustainable management and use of biological natural resources. In education and research, we integrate the natural sciences, the humanities and social sciences.

We believe that the success of introducing a sustainable use of natural resources is dependent on contributions from the areas of business management, economics and environmental communication. Therefore, our strategy is not only to support interdisciplinary research and education, but also to emphasize transdisciplinary activities. Among many things, we want to contribute to sustainable production and consumption, improve agricultural practices through relevant research, deepen the knowledge about secure and sustainable food systems, highlight environmental effects of human activities, suggest solutions to a diversity of problems, and translate new knowledge into innovations whenever possible. Most of these challenges are connected to the 17 sustainability goals of Agenda 2030.

One of the most important ways to extend our achievements to society is through responsible management education. The faculty therefore offers multiple degree programmes, such as two professional programmes in agricultural science with focus on economics and rural development respectively, a bachelor’s programme in management and economics, and four Master’s programmes in environmental economics, agricultural economics, rural development and sustainable development. A large number of students are attracted to these programmes, and our vision is that these students will become leaders of the development of the many aspects of the sustainable society. To this end, we strive to develop our programmes and courses to follow scientific knowledge, emerging societal challenges and human needs.
Faculty Perspectives

*Johanna Sennmark, Environmental manager at SLU*

SLU has undertaken a big challenge and certified the whole university against the environmental standard ISO 14001 (2016). One of the big challenges with this work is to integrate not only energy consumption, waste and purchasing, and other ‘traditional’ environmental issues, but also how to educate and train our students in sustainability. We believe this is very much a priority issue in our environmental management system, perhaps even the most important aspect where we can make a big difference. Our students will have impact on our society, and they must be capable of handling the complexity of sustainable development.

SLU’s climate fund, or Klimatfonden, is responsible for funding SLU’s first ever PRME certification. The climate fund consists of taxes collected on SLU employee air travels, and functions as a pool for SLU’s sustainability-oriented projects. This SIP report marks a year since our first PRME certification was awarded, and documents our early attempts of disseminating, collecting, and tracking information on PRME-related activities. We have yet to create structured pathways for collecting PRME related information, and still have much to work on and improve; our focus during the time period of 2017-2019 involved the introduction of PRME principles into existing SLU processes and frameworks. As with other processes aiming to create institutional change, we are aware that these are time intensive processes and chose to reflect this in our SIP goals. A huge part of our strategy to incorporate PRME within our business management education involved the incorporation of students and faculty: changing course syllabi to include sustainable development content; ensuring teachers and course coordinators receive the support and preparation needed to participate in PRME; encouraging students to take management courses with greater focus on leadership and sustainable development; and creating a positive work and learning environment for a diverse SLU community. We also focused on incorporating PRME into our research infrastructure and external collaborations. More on our previous and current goals on page 28.
‘Our vision is to be a high-quality provider in the scientific knowledge and human resources needed to solve the big global challenges and shape a sustainable society.’

- Pär Forslund
Deputy Dean at the Faculty of Natural Resources and Agricultural Sciences
Principle 2  Values

The values of global social responsibility, as portrayed in international initiatives such as the United Nations Global Compact, will serve as SLU’s guiding principles for continued education and research in business management.

Scientific approach, creativity, openness, and responsibility together form SLU’s fundamental values, which guide its way as a top tier education and research institution. We make sure to keep these values at heart when we take on any endeavors, stressing scientific integrity and good research practice in our search for knowledge; encouraging a creative work environment through openness, freedom within a clear framework, playfulness and diversity; supporting a curiosity and openness in our cooperation with internal and external contacts at national and international levels, and being a part of a community; and keeping ourselves and the SLU community accountable and responsible for the quality of our work environment.

These values function as a code of conduct for SLU, allowing us to prioritize quality education, fruitful collaborations, and the creation of a positive, healthy work place and learning environment for our employees and students. Additionally, our progressive views allow for implementation of change processes resulting from wider societal discussions and movements. Most recently, the me-too movement highlighted a need to address gender inequalities in order to support dialogue supporting and ensuring equal opportunities. As a result, the forestry faculty developed a mandatory course for all teachers and main PhD advisors in response to these needs and set a goal of 100% attendance.

Student Perspectives

Carolina Berg Rustas, Master’s student in Forestry Economics

To handle the complex global challenges we are facing today, decision makers need to have a deep understanding of both economic, environmental and social aspects of a matter. At SLU we are, as students, given the opportunity to develop our knowledge about all these aspects, so that we in the future can become wise decision makers with the ability and courage enough to create a sustainable work.
Global social responsibility has its foundation in local work on an everyday basis at our many campuses across Sweden, as well as being a part of strategic collaboration with long-term sustainability objectives (Figure 1). The local work can be described in terms of equal opportunities. SLU aims for the university to be characterized by an open attitude and respect for people’s differences and equal value. The basis is the Swedish Discrimination Act that stipulates that no individual may be discriminated against based on:

- gender
- ethnicity
- religion or other belief
- sexual orientation (homosexuality, bisexuality or heterosexuality) or
- functional impairment.

Values serve as a basis upon which SLU contributes to sustainable development in different arenas, with short and long-term expectations in outcomes (Figure 1).

![Figure 1. SLU’s understanding of its contribution towards sustainable development.](image-url)
These roles and objectives hold the university accountable for creating value and acting responsibly. The notion of responsibility refers to engaging in continuous stakeholder dialogues and new ways to evaluate performance (financially, socially and environmentally).

A next step for us would include exploring further the issues most important to SLU, possibly by collecting the insights of the school board, as well as continuing to disseminate PRME’s mission and role within SLU. While much of SLU’s mission, values, and principles are already aligned with PRME and PRME-related topics, there is still much to be done in terms of integrating PRME across the institution. These shortcomings are addressed in the goals we have chosen for ourselves, and we hope the more time we have to work with PRME, the better integrated it will become.

Faculty Perspectives

**Lena Ekelund Axelson**, Deputy Dean at the Faculty of Landscape Architecture, Horticulture and Crop Production Science (LTV)

Research and education at the Department of Work Science, Business Economics and Environmental Psychology (in Alnarp) focus on people and environment. Individual choices and attitudes by consumers, farmers, growers and other actors in the value chain are crucial to the environment. Our projects and courses deal with all aspects of sustainable consumption and production of food and plants. This is done in close collaboration with the agricultural and horticultural industry, for the joint benefit of farmers and students on the road to sustainability.
Principle 3 | Method

SLU will continue to develop academic contexts, pedagogical understandings, materials and processes that enable learning about responsible leadership.

PRME Programmes and Personnel

As a university with its roots in the soil, so to speak, SLU has never been questioned as a contributor of applied research and management. There is a sincere willingness to be part of societal development in rural and urban settings concerning the use of land and marine resources for value creation. It may concern food, forest, energy and services or a combination of them. These discussions on how to attain sustainable development within value production in biobased systems are reflected in teaching, research and outreach activities.

SLU has the ambition to contribute the knowledge that society needs to use natural resources in a way that is sustainable in all respects – ecologically, economically, socially and ethically. For a better understanding of the interaction between human and natural resources in the broad sense, a greater element of humanities and social sciences is needed. SLU therefore strives to increase the integration between the humanities, social sciences and natural sciences, i.e. to promote multidisciplinary and interdisciplinary science.

The MBA programmes and personnel located at the Department of Economics (NJ Faculty) are responsible for teaching on PRME related topics. These programmes include: Agricultural Economics and Management; Agricultural, Food and Environmental Policy Analysis, Environmental Economics and Management; Sustainable Development (joint programme with Uppsala university); and Sustainable Food Systems. Each programme targets relevant and pressing societal challenges that pose current and future threats on our ability to thrive on earth. Our programmes aim to increase competencies in various fields related to business management and sustainability, with potential opportunity for collaboration with other universities. As a student, you can develop your understanding and skills of business administration or economics around the contexts of your choosing: agriculture; agricultural and trade policy, environmental and natural resource policy and rural development policy; natural resource management; and sustainability.
Our bachelor’s and master’s programmes are developed with an understanding of resource use in a biobased economy. The triple bottom line (Elkington, 1999) recognizes value production in financial, social and environmental dimensions with an awareness of ethical aspects in each of these dimensions. A decision of principle has been made by the principal vice-chancellor decision has been made to include sustainable development in all the degree programmes at SLU (DNR: SLU ua 2014-1.1.3-5223).

Since PRME objectives are still young, these tasks for developing PRME-relate course content falls to the respective programme coordinators, and their implementation at the individual level; professors and course coordinators decide how they want to cater their courses to PRME initiatives. Upon assessment of our MBA programmes and their courses, we have found many of them to be of relevance to PRME. These courses include:

- Marketing, responsibility and ethics
- Production economics
- Value chains and networks in the bio-economy
- Research methods - master level
- Cooperatives and other agri-food systems
- Innovation and sustainability
- Sustainable natural resource management
- 20th century agricultural economy and politics
- Quantitative finance - theory and applications
- Leadership and sustainability
- Experimental methods for economics and business studies
- Independent project in business administration

Faculty Perspectives
Peter Aspengren, Educational Development Officer at SLU

SLU has undergone a gradual shift in areas of expertise; from a focus on production of primary agricultural output to sustainable development in the value chain. A focus that started solely looking at environmental sustainability has widened to also include social and economic sustainability. This shift has been supported by a shift in teaching methods towards student-centered and active learning, otherwise known as Education for Sustainable Development (ESD).

The transformation has been supported by a staff of dedicated educational developers with aims to support new ways of teaching, of evaluating performances and of taking on new roles in a learning process. Interdisciplinary collaboration is encouraged and facilitated in technical support, advisory services, mentorship and in-service training programme.

---

Since our initial certification, some of our MBA programmes have undergone development focused on increasing content and education related to sustainable development. While the old programme content is still available for students, programme focus has shifted toward offering more courses specializing in business and sustainability as the first-hand choice. The most notable improvement is the availability of a Sustainability and Financial Reporting course, offered for the first time in the 2019-2020 academic year. Moreover, other courses have revised their content due to sustainability issues playing a larger role within bachelor’s level programmes and courses.

Additional changes are expected to take place as we finish syllabi revisions, continue to encourage teaching staff to attend workshops on education for sustainable development, and receive feedback as a result of follow-up measures from our students and staff. These follow-up measures take the form of mandatory course evaluations, which are also undergoing revision to include questions that will ask students to assess their capability to be future generators of sustainable value within an inclusive and sustainable global economy.

Teachers are offered pedagogical workshops and classes to extend their understanding of methods for including sustainable development in their subjects, pedagogical conduct, other course objectives, and examinations. Student-activating techniques, such as case studies and ‘sharp projects’ that reflect a social constructivist understanding of learning. It also means embracing interdisciplinary dialogues and commissioned thesis projects, for example. Some thesis projects have paved the way for development of teaching cases, book chapters and articles – all contributing to the dialogue of sustainable development. A list of recent thesis projects is offered in the appendix.

International experience is seen as a cornerstone for sustainable development, and a number of students from SLU are encouraged to participate in exchange programmes. We also welcome exchange students as a part of creating an international arena in our Masters’ and doctoral courses.

Faculty Perspectives

Karin Bennmarker, International Exchange Coordinator at SLU

SLU has a number of partnerships with other universities. We work actively to promote exchange experiences as part of our programmes. Current examples are Erasmus, Nordplus, Linneaus-Palme, and university collaborations with, for example, Cranfield and Cornell. This collaboration offers access to expertise in various fields of study related to sustainable development.
SLU has a longstanding engagement in research that has a bearing on sustainable development. The strength that lies in our research, combining production, the environment, health and quality of life, must be safeguarded. In order to develop the knowledge needed in both the short and long term, SLU needs to have a full range of projects, from specialized and subject-oriented to system-oriented and applied research. SLU’s research also plays an important role in areas such as ecosystem management and ecosystem services, food security, animal husbandry, rural development, as well as the design and management of urban environments. SLU has the ambition to contribute the knowledge that society needs to use natural resources in a way that is sustainable in all respects – ecologically, economically, socially and ethically. For a better understanding of the interaction between human and natural resources in the broad sense, a greater element of humanities and social sciences is needed. SLU therefore strives to increase the integration between the humanities, social sciences and natural sciences, i.e. to promote multidisciplinary and interdisciplinary science.

Faculty Perspectives

**Carl Johan Lagerkvist, Head of Economics Department at SLU**

Rapid changes are taking place in global food distribution, processing, and services, with strong impacts on food production systems, input markets, employment, environmental sustainability, and on food security and nutrition. Expanding and modernizing food sectors, bring enormous opportunities for job creation, dietary diversification, and greater food safety. This, together with climate change and natural resource issues such as energy, land and water usage bring daunting challenges to society at large. A new generation of student needs to be prepared to tackle these challenges.

At the Department of Economics we embrace the vision of SLU to develop the knowledge about how to use natural, biological land and water resources in a sustainable manner. We contribute to develop the capabilities of students to be future generators of sustainable value for business and society. In doing so, we engage in dialogue with businesses and organization, on local, domestic as well as on an international basis, to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.
SLU manages this through collaboration with research centers, such as CEMUS, and through its four research platforms: Future Forests; Future Food; Urban Futures; and Future Animals, Nature and Health. The research platforms ("Future model" link below) are developed using an approach that aims to handle the broad, complex issues in different thematic areas. The model is based on a dialogue with stakeholders, where their knowledge needs are identified, and the university contributes scientifically-based documentation in the form of syntheses and analyses. A multidisciplinary or interdisciplinary approach is often necessary.

The new platform strategy covers the period 2017-2020 and is characterized by inter- and multidisciplinary working methods with focus on the future. The work spans across faculties and is to take place in collaboration with relevant stakeholders in society. Using this approach to tackle complex scientific issues is something that makes the Future platforms unique.

The platforms are intended to be a living, interactive interface between academy and society, and aims to:
- identify needs for knowledge, through projects based on synthesis and analysis, and generate scientifically based decision support for issues relevant to society;
- identify and develop, through collaboration with relevant actors in society, new questions for research to support solutions to future challenges;
- develop interdisciplinary working methods by coordinating cooperation across disciplinary boundaries.

Partner Perspectives

**Alexis Engström, CEMUS Director of Studies**

The Centre for Environment and Development Studies (CEMUS) is a student-initiated, transdisciplinary centre at Uppsala University and the Swedish University of Agricultural Sciences, with the explicit ambition to contribute to a more just and sustainable world. Approaching education as not only knowledge, but a habit of being, student-faculty and community collaboration weaves a golden thread through the history and organization of all activities at the centre. Since its inception in the early 1990s, CEMUS has strived to expand the space for transdisciplinary student-led higher education as well as research and collaboration that transcend traditional academic disciplines and boundaries between academia and society at large.
SLU’s four faculties are mainly responsible for research and educational specialization. Each faculty will identify priority areas within its remit in its strategy. Areas of an interfaculty nature should be treated at university level to secure a holistic approach and avoid any important area being overlooked. During the period 2017–2020, SLU intends to focus on the following university-wide domains:

**Bio-based materials.** This area is becoming increasingly important in the context of society’s transition from a fossil-based to a bio-based economy. SLU has an important niche in the value chain from the primary production of agriculture and forestry to the properties of biomaterials. SLU intends to coordinate and reinforce research in the area and be an attractive partner for the technical universities.

**Sustainable and secure food supply.** SLU intends to contribute actively to the national food strategy through research, ranging from primary production conditions to food quality, safety and health aspects. In collaboration with the sector, SLU intends to develop application-oriented research and to take a leading role in a new research and innovation programme, characterized by a holistic approach to the food system and where the skills of various Swedish actors are combined.

**The significance of experiencing nature and of companion animals on human health and well-being.** The significance of experiencing nature and of companion animals on human health and well-being. For many people in today’s urbanized society, contact with animals, growing their own plants, visiting nature or green spaces in urban environments, etc., is of crucial importance to their quality of life. Research in this area is in line with SLU’s concept of mission and requires multidisciplinary and interdisciplinary approaches.

**Management and economics.** There is a clear wish for SLU to conduct strong research in the area, e.g. concerning marketing and business analysis, entrepreneurship in agriculture and forestry, animals for sports and companionship SLU needs good teacher competence in the subject that corresponds to the needs of courses and programmes. A strengthening of the subject is also an important step towards greater multidisciplinary and interdisciplinary science.

While many of the research topics are directly related to PRME, much exploration, data collection and analysis remains regarding SLU’s current and future research endeavors and PRME related information. Information relating to student involvement in PRME-related research; interdisciplinary research projects and their current or potential impact; sponsorship, funding and partnerships for PRME-related research; promotion and dissemination of PRME-related research and their impact needs to be gathered still in order to gauge overall success.
Society is facing major challenges linked to globalization, urbanization, migration, sustainability and climate change. These challenges mean new requirements and expectations on universities as knowledge developers and collaboration partners. Many of the UN’s Sustainable Development Goals (Agenda 2030) concern the management of biological natural resources. To meet the needs of food, energy, etc., a transition to a bio-based socio-economy (‘bioeconomy’) is necessary, with sustainable production systems, access to clean water, safeguarding biodiversity, reducing poverty, sustainable food consumption, health and a good local environment. In recent years, other universities have started to profile parts of their activities so that they overlap, and to some extent compete, with SLU’s activities. This applies in areas that are central to SLU, such as forestry, natural resource management, the environment and food. This trend may motivate increased collaboration in certain areas and stronger specializations.

Collaboration in research where universities co-create value, for example knowledge and practices, with for-profit organizations (businesses) and non-profit organizations (NGOs and governmental agencies) is seen as imperative. Institutional support is offered within the framework of “Agenda 2030” where SLU and other Swedish governmental agencies declare their intents for national and international participation in collaboration for sustainable development (vice chancellor’s decisions SLU ID: SLU ua.2017.2.6-636 with the contract as an appendix).

Stakeholder Perspectives

Jan Wintzell, Senior Vice President Business Development & Innovation at Sveaskog

Sveaskog manages the state forests of Sweden and is the largest forest owner in Europe. Sustainability is central to our business and operations where human resources play a pivotal part in achieving our goals. Consequently, we welcome the initiative taken by SLU to certify according to PRME and thus allowing for sustainability to form a basis for its operations from education to research and in collaboration between academia and business.
SLU and KSLA Case Challenge 2018

How should we get future generations to understand the many values of the forest for our society?

This challenge was given to the participants in the fourth edition of KSLA’s case challenge, in which a SLU team participated, which was arranged on October 26-28, 2018 by The Royal Academy of Forestry and Agriculture. The purpose of the weekend was to create meetings between different perspectives and experiences and to cross-link competencies. The challenge attracted 14 committed doctoral students, at the end of their university studies or at the beginning of their professional life in the green industries and involved developing a communication concept that could increase our understanding of the forest’s various benefits, linked to the UN’s global sustainability.

SLU’s team, comprised of Joakim Swahn, Tomas Axelsson, Angelica Jörnling, Isabella Hallberg Srame, answered the challenge with the concept “Take the forest to the city.” This idea involved setting up a pop-up restaurant, permeated by forests, for a limited period of time in different cities around Sweden that aimed to increase interest and awareness of the natural world within urban dwellers. (Images taken from KSLA webpage3)

A part of the stakeholder engagement and partnerships can be attributed to the ‘Future’ research platforms (see Principle 4). These inter- and multidisciplinary platforms encourage collaboration between faculties, universities, and relevant stakeholders in society. As a result of this unique approach between academia and society, SLU forms a part of over 60 different collaborative research centers, major interdisciplinary research projects, programmes, networks, platforms and portals, all of which collaborate with external

partners. The subject of these collaborations can be grouped around six major fields of interest, which include animals, nature, society, forests, water, and plants.

The Centre for Environmental and Resource Economics in Umeå, or CERE, was founded in 2009 when two professors at SLU and Umeå University considered the possibility to strengthen collaboration between environmental- and natural resource economists at the Umeå Campus. CERE constitutes a platform for creative and strong research within the field of environmental and resource economics and management and is a strong example of one of SLU’s PRME related endeavors.

Stakeholder Perspectives

Victoria Bondesson, Expert Education and Research at The Federation of Swedish Farmers (LRF)

The Federation of Swedish Farmers (LRF) has a long relationship with SLU. To us, it is of high importance to have good relations with academia if we want to continue having the most sustainable agricultural system in the world: To keep up with the competition and stay innovative, we need relevant and new knowledge which meets the needs of our sector. In a way, LRF and SLU exist in symbiosis – we define needs in the form of knowledge gaps, SLU finds answers to our questions and we try to put the new knowledge to work. The most accessible ambassadors of knowledge from SLU are often the students who every year join the agriculture and forestry sector.

While SLU has yet to get involved in additional PRME networks, its involvement with other universities in PRME related projects is flourishing. Examples of this include continued joint participation in CEMUS with Uppsala University, and contributions to PhD education and courses offered at a range of universities like NOVA, a platform inspired by university cooperation aimed at supporting the understanding of major global challenges in a Nordic context.
**Principle 6  |  Dialogue**

*SLU will be part of and facilitate channels for dialogue about sustainable development and stakeholder responsibilities in these efforts.*

Communication plays an important role in the facilitation of sustainable management of natural resources. One of the important roles of any university is to serve as a platform for dialogue in various forms. SLU commits especially to the dialogue amongst stakeholders with an interest in sustainable bioeconomy. The dialogue among students, representatives of educators, businesses, government agencies, NGOs, and civil society in general is facilitated in various ways. Some examples are open seminars, lectures, events, courses, programmes, and conferences.

Communications refers to a wide set of activities, including verbal dialogues, images and actions. SLU commits to communicating sustainable development in management in courses, programmes, collaboration with other universities in exchange programmes, shared courses, programmes and centers, such as CEMUS, verbalizing research and in creating platforms for all of these.

Transparency is a guiding principle in internal communication. Internal communication is also guided by a solid commitment to equal opportunities. It means that all staff and students feel welcome and be given equal opportunities regardless of sex, sexual orientation, transgender identity or expression, disability, ethnic origin, religion, other belief or age. Equal opportunities work includes active measures in the workplace and in teaching under the Swedish Discrimination Act (SFS 2008:567) and measures for improved accessibility in accordance with SFS 2001:256.
Faculty Perspectives

Erik Fahlbeck, SLU Pro Vice-Chancellor, External Collaboration

SLU’s education and research is essential to much of the needed societal transition to a more sustainable development. Much of our collaboration with external partners is therefore directly linked to sustainable development. I am convinced that our students will contribute to future work in companies, agencies and organizations, that can strengthen their respective ambitions for a more sustainable future.

For external dialogue, SLU has a principle of making research findings available in open source journals or through parallel publishing. All thesis projects are communicated in an open source database (Epsilon) where researchers also are encouraged to post their research reports, feature articles and course materials such as case studies. Examples of thesis projects, many of them commissioned projects (from 2015 and 2016) are listed in the appendix. Students are also encouraged to communicate their thesis in academic dialogue, such as a conference presentation, book chapters or articles.

Fostering dialogue across SLU and to the wider public is made possible through the ‘Future’ research platforms (see Principle 4), which serve as ground for both internal and external communications. Students are represented in all relevant bodies at SLU. Their activities are organized through the student union, which fills a large number of roles related to quality assurance, of programme and curriculum development and festive celebrations of achievements (graduation, scholarship awards etc.).

SLU in the News

In attempts to bridge the gap between academia and society, SLU faculty were featured in the local newspaper, Upsala Nya Tidning (UNT) on February 28th, 2019 engaging the public in dialogue concerning urban densification. The individuals included Per Berg, Tuula Eriksson, and Fredrik Eriksson. (Screenshot of UNT webpage taken by Daniela Garcia-Caro)
Assessment of Progress and New Objectives

In the following table, SLU’s major objectives related to sustainable development in responsible management education are expressed in terms of PRME principles and what the expected actions and outcomes will be.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses in the management programme will be reviewed to identify ways in which the syllabus may clarify how sustainable development is included in the subject interpretations of key concepts. Altering course syllabuses takes time – a review is conducted and suggestions for changes are made – which may be seen the following academic year in altered courses. The goal is that all course syllabuses where the sustainable development content can be made clearer should have been revised by 2020.</td>
<td>The courses in the MBA programmes have been revised and four courses have altered their curriculum to embrace sustainable development and resilience.</td>
<td>The remaining course syllabi for courses in the Business programmes have been revised for the inclusion of sustainable development in the content. A follow-up measure in the general part of the course evaluation will ask students to assess their capability in relation to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.</td>
<td></td>
</tr>
</tbody>
</table>
### PRME Principle 2: Values

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers and course coordinators are offered and encouraged to participate in an educational initiative that focuses on how sustainable development can be included in the teaching (pedagogics and content). The goal is that 75% of the individuals with programme responsibility have participated in one of these workshops by 2020.</td>
<td>Some 11 teachers (60% of course leaders) have taken a pedagogical course in teaching for Sustainable Development.</td>
<td>The goal is for 75% of our teaching staff to have participated in the workshop on educating sustainable development organized by the Educational Development Unit. A proposal submitted and a pedagogical project with a case study approach will be initiated with the aim to improve critical thinking capacity within context on sustainable development. Examination of critical thinking capacity in all courses with sustainable development goals.</td>
</tr>
</tbody>
</table>

### PRME Principle 3: Method

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s and master’s students are offered to take courses in management with a focus on leadership. Sustainable development will be given a clearer role in these courses (marketing and organizational studies). Principles for advisory services for doctoral students will be given more recognition with regards to grounds for discrimination.</td>
<td>Courses in management “Leadership and sustainability” and “Innovation and Sustainability” have been revised to include responsible leadership training. New courses for the MBA students, Project leadership and “Governance of natural resources” are added as elective courses.</td>
<td>The courses “Leadership and sustainability” and “Innovation and Sustainability” will include a tailored case study on responsible leadership.</td>
</tr>
</tbody>
</table>
### PRME Principle 4: Research

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SLU collaborates with Uppsala University in a joint academic institution, CEMUS. All of CEMUS’s courses are founded on sustainable development and students will be encouraged to participate in these courses.</td>
<td>SLU continues the collaboration with Uppsala university in the student driven unit, CEMUS. Three additional courses have been developed that serve as elective courses for SLU’s MBA programme.</td>
<td>We will take account of the number of research grant applications with a sustainable development content. The new senior lectureship in bioeconomy and innovation will actively work to establish research collaborations with other SLU Departments on projects with sustainable development-content. The aim is to have at least one multidisciplinary sustainable development-oriented funding proposal per year. Two research (open) seminars with externally invited guests with prominence in the sustainable development field will be organized annually.</td>
</tr>
</tbody>
</table>

### PRME Principle 5: Partnership

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambitions for international partnership is seen in a 20% objective of students that are part of international exchange programmes. Public-private partnerships in research are also encouraged with an objective to increase the proportion of research projects that are based on partnerships between academia and business.</td>
<td>Advisory boards on externally funded projects</td>
<td>Collaboration between Uppsala University and the Swedish University of Agricultural Sciences in CEMUS continues. All new grant applications are encouraged to actively include industry managers as part of the reference group or as co-applicants. Students are invited to seminars and workshops with industry managers are organized by the research groups to identify priority research topics and funding strategies.</td>
</tr>
</tbody>
</table>
### PRME Principle 6: Dialogue

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The web pages of the Department of Economics will provide easily accessible updates on what has been published that is openly available. Researchers will be encouraged to publish their research findings as last author copy in the open access library (Epsilon). The goal is that all researchers should be aware of the open access opportunity through Epsilon by year 2020, and that the number of research papers published in Epsilon should have doubled by the year 2020.</td>
<td>Researchers and teachers are communicating their research output. A list of thesis reports with sustainable development perspectives is available in the appendix. All of these thesis reports are available open source (in Epsilon) Researchers have contributed in societal dialogues for example in TV-programmes concerning the drought 2018 and in political dialogues at “Almedalsveckan”.</td>
<td>The alumni network: an annual survey will be sent out to examine how alumni perceive to what degree SLU is oriented towards sustainable development. Ideas and suggestions collected will support future focus and ideas for improvement. All new grant applications should include sustainable development-implications in the communication plan. All ongoing externally funded projects will be encouraged to engage in public and/or stakeholder dialogue and debate with respect to the sustainable development implications of the project.</td>
</tr>
</tbody>
</table>
Appendix. PRME Relevant Publications


Berg, Ellinor and Larsson, Lovisa and Svensson, Karolina, 2018. Cirkulär ekonomi integrerad i affärsmodellen : en fallstudie av industriföretaget Dustcontrol AB. https://www.uppsatser.se/om/Cirkul%C3%A4r+ekonomi+integrerad+i+aff%C3%A4rsmodellen+%C3%A4n+fallstudie+av+industri%C3%B6retag+Dustcontrol+AB/


Johansson, Cristopher 2017 Hållbarhetskommunikation. Hur marknadsförs värdet av hållbarhet? http://www.uppsatser.se/uppsats/7b131aca0b/

Johansson, Cristopher 2018 Barriers to FSC certification for small forest owners in Sweden https://stud.epsilon.slu.se/13485/11/johansson_c_1800701.pdf


Olsson, Magdalena 2017. *Analyse of the early effects on the Ukrainian forestry sector as a result of the Log Export ban : an interview study with economic analyses, including theories about trade and export*. [https://stud.epsilon.slu.se/13077/](https://stud.epsilon.slu.se/13077/)


Sjöström, Fredrik 2017 *Hållbar stadsutveckling genom public-private partnership. Samverkan för ökad byggnation i trä*. [https://stud.epsilon.slu.se/12857/](https://stud.epsilon.slu.se/12857/)

Tunstig, Herman 2017 *Marketing of fast moving consumer goods. A study of viral videos with forest-related products*. [https://stud.epsilon.slu.se/10646/](https://stud.epsilon.slu.se/10646/)
