

Agenda 2030 as a framework for collaboration

experiences and recommendations from eight Swedish universities



GOTHENBURG CENTRE FOR SUSTAINABLE DEVELOPMENT (GMV)







About the report

This report has been written by Eddi Omrcen (University of Gothenburg), Ylva Hillbur (Swedish University of Agricultural Sciences), Anders Ahlbäck (Chalmers University of Technology), Catrin Johansson (Mid Sweden University), Maria Djupström (Chalmers University of Technology), Karin Larsdotter (KTH Royal Institute of Technology), Ingemar Jönsson (Kristianstad University), Lisa Pouliot (Luleå University of Technology), Johanna Carlsson (Luleå University of Technology), Paula Wennberg (Luleå University of Technology), Tor Nilsson (Mälardalen University) and Marnie Hancke (Swedish University of Agricultural Sciences). It was produced as part of the project AGERA - Agenda 2030 as a framework for collaboration, led by University of Gothenburg (GU) and the Swedish University of Agricultural Sciences (SLU) and coordinated by Gothenburg Centre for Sustainable Development (GMV). We welcome comments and suggestions that can help us further improve our understanding of Agenda 2030 as a framework for collaboration. Comments can be sent to eddi.omrcen@gu.se

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Björn Brorström, professor of business administration, is acknowledged for reading and commenting the text and final draft of the guide.

^{1.} In Vinnova's K3 program (knowledge triangle), several initiatives to strengthen the collaborative capacity of Swedish higher education institutions have been launched.

Foreword

As the President of the *International Association of Universities (IAU)*, I strongly believe that open and inclusive collaboration, built on trust and respect, among different stakeholders and actors in society is of key importance to achieve the UN Sustainable Development Goals (SDGs). Universities and other Higher Education Institutions (in short HEIs) have a very important role to play in addressing the challenges identified in *the UN 2030 Agenda for Sustainable Development: Transforming our world*. Since the early 90s, the IAU, the global network and voice of higher education, has been actively engaged in promoting and advocating higher education for sustainable development. In 2018, IAU launched a Global Cluster of universities from all continents to work on achieving the global goals; the aim of the global cluster is to further support and strengthen universities in their activities in contributing to the realization of Agenda 2030 and in reaching the 17 SDGs.

Universities can (and many do) engage in research and education to meet local, regional and global needs for a sustainable future. They also do so in their community engagement activities. There are multiple ways for universities and other HEIs to engage with the SDGs. How they choose to act will depend on their size, context, research focus and educational strengths, funding availability, priorities and the needs of the communities they serve.

At HEIs, a number of activities take place in collaboration with society: research, education, strategic initiatives, campus development, center formations, partnerships. These collaborations involve different types of actors, have different objectives and different resource allocations. HEIs can support and encourage these collaborative activities through, e.g., visions, collaborative strategies and incentive structures.

This report outlines general concepts and practical cases and examples highlighting the nexus between collaboration and SDG-related work at HEIs based on activities and experiences from the Vinnova funded AGERA-project. I believe that the report has great potential to contribute and inspire other universities as well as other stakeholders to strengthen their collaborative capacity to contribute to Agenda 2030.



Dr. Pam Fredman President of International Association of Universities (IAU). 2016 - 2022

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1. Introduction

Higher Education Institutions (HEIs) have an important role to create and share knowledge that enhance a sustainable development and can play a key role in supporting society during the implementation of the Sustainable Development Goals (SDGs). Conversely, the SDGs can support and inspire HEIs to explore the concept of sustainable development through the development of new methods and models for collaboration. In the AGERA project -- Agenda 2030 as a framework for collaboration, we have explored both these perspectives (Figure 1).



Figure 1. Two key questions of AGERA project.

Through a range of cases covering research, education and strategic cooperation, this report shares experiences and reflections on how the SDGs may be used to mobilize action and guide collaboration. We hope that the content will stimulate and inspire other HEIs to develop and explore new collaboration models, using Agenda 2030 as a framework.

The opening chapters (1-2) introduce the Agenda 2030 framework, the AGERA project and the SDG Impact Assessment Tool that has been used to evaluate how some of the collaboration activities (cases) contribute to the SDGs. The following chapter (3) presents the individual cases in detail and the final chapter (4) provides an overall synthesis, concluding remarks and our thoughts regarding the way forward.

1.1 Agenda 2030 and the role of universities

The UN 2030 Agenda for Sustainable Development outlines the pathway to sustainable global development in three dimensions – social, economic and environmental sustainability. At national level, governments have the ultimate responsibility for implementing the agenda and for achieving the sustainable development goals, the SDGs. The universal, transformative and integrated nature of the agenda, however, requires engagement and collaboration across geographies – globally, regionally and locally – and between different actors and sectors in society, such as the public and private sector, civil society and academia. SDG 17 -Strengthen the means of implementation and revitalize the global partnership for sustainable development- is in itself a proof of the importance and need for partnership and collaboration to achieve the SDGs.

Through research, education and collaboration, Higher Education Institutions (HEIs) contribute to the implementation of Agenda 2030 by generating and conveying knowledge that can contribute to solutions to societal challenges, by identifying knowledge gaps, goal conflicts, synergies and trade-offs, and, last but not least, by critically evaluating the SDGs and their implementation. As independent, autonomous institutions, HEIs provide an open arena for collaboration and co-innovation with actors across society. For such collaborations to generate solutions that are socially, environmentally and economically sustainable, emphasis must be on multi-disciplinary approaches that bring together relevant academic expertise and key actors and stakeholders in society. The Agenda 2030 framework and the SDGs provide mutual ground for these collaborations as they offer a common framework and language for sustainability that is useful for problem definition, framing and identification of relevant perspectives.

Box. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. https://sdgs.un.org/goals



- experiences and recommendations from eight Swedish universities

1.2 The AGERA project

The project "Agenda 2030 and the global goals for sustainable development as a framework for collaboration" (AGERA), funded by Vinnova (2018-2021)², brought together eight Swedish HEIs³ with the aim to strengthen collaborative capacity in support of Agenda 2030 and the SDGs. The project took its starting point in a set of collaboration activities – cases – ranging from internal organizational processes, through strategy development and educational portfolios, to large external collaborative projects – all with impact on sustainability. By selecting cases relevant to our respective organizational contexts, we explored how Agenda 2030 may be used as a framework to stimulate and integrate sustainability in the universities' core operations: education, research and collaboration, with particular emphasis on the latter.

Throughout the project, we regularly shared knowledge, experiences and insights with the purpose to increase our awareness and understanding linked to a set of targets:

- Develop knowledge on how to strengthen contribution to Agenda 2030 and the SDGs through collaboration
- Develop methods or approaches for how HEIs can use Agenda 2030 and the SDGs as a framework for collaboration
- Evaluate impact positive and negative from collaboration activities on the SDGs

1.3 The SDG Impact Assessment Tool

In the AGERA-project, the SDG Impact Assessment Tool was used to identify, discuss and evaluate impact from our case activities on the SDGs. The tool provided a framework for communicating and visualizing Agenda 2030 in several of the cases. At the same time, the cases allowed us to test the applicability of the tool in different contexts, which in turn provided input to its development.

The SDG Impact Assessment tool⁴ is a free online tool that allows users, through a self-assessment approach, to identify and map an organization's, a project's or an initiative's positive or negative impacts, knowledge gaps or potential partnership gaps in relation to the SDGs (Figure 2). It's of importance to stress that the process is qualitative and reflective.

The method provides an opportunity for a systematic approach to how i.e. the research project, study program, other initiative and solution relates to the SDGs, ensuring that all aspects of sustainability are covered and discussed. As indicated in Figure 2, the method is iterative, reflecting that sustainable development is an ongoing, continuous process. Hence, reassessing solutions in face of new knowledge might yield new outcomes.

 $[\]textbf{2.} \ AGERA \ is \ funded \ by \ Vinnova \ - The \ Swedish \ Innovation \ Agency, and \ part \ of \ the \ "K3-knowledge \ triangle \ program", with \ the \ objective \ to \ strengthen \ the \ collaborative \ capacity \ of \ Swedish \ HEIs.$

Chalmers University of Technology, Kristianstad University, KTH Royal Institute of Technology, Luleå University of Technology, Mid Sweden University, Mälardalen University, Swedish University of Agricultural Sciences & University of Gothenburg

^{4.} https://sdgimpactassessmenttool.org/



Figure 2. The five steps of the SDG impact assessment approach.

The SDG impact assessment approach is based on the five steps:

- 1. Gather your forces. The 17 SDGs span across a wide range of topics. Ideally an SDG impact assessment will be conducted in a small group with a facilitator to inspire open and reflective conversations. Together the group seeks to challenge themselves in the complexity of sustainable development, explore different perspectives and gain new insights.
- **2. Define, refine and draw the line.** As in all studies and analyzes, agreeing on how to frame the object for assessment is crucial. In what setting and context is it relevant to discuss 'impact'?
- **3. Sort the SDGs.** Going through the assessment in order from SDG 1 to 17 might not be the best option. It might be more efficient to start out by sorting the SDGs based on their perceived order of relevance as "Relevant", "Not relevant" and "I don't know". This step triggers reflection and can help establish an order of assessment.
- **4. Assess your impact.** Following the sorting, the assessment is made for each SDG in order of relevance. The tool provides a short introduction to each SDG and its corresponding targets. Given that the SDGs are formulated on a global level, it might be necessary to put them in a national or local scale. The objective is to formulate one summarized assessment to each SDG either 'Direct positive', 'Indirect positive', 'No impact', 'Direct negative', 'Indirect negative' or 'More knowledge needed'.
- **5. Choose your strategy forward.** Based on the result, actions are formulated to mitigate trade-offs, support further synergies and potential benefits and/or to address knowledge gaps with focus on immediate action and additional partners or competencies.

2. Experiences and recommendations

2.1 Experiences from the project

A key objective of the AGERA-project was to provide an arena for reflection, knowledge-sharing and co-learning (Figure 3). Throughout the project we met regularly in workshops, project meetings and seminars to share ideas and experiences, and to discuss progress and challenges related to the implementation of our respective cases. Each university had the ambition to contribute with two cases to the project.

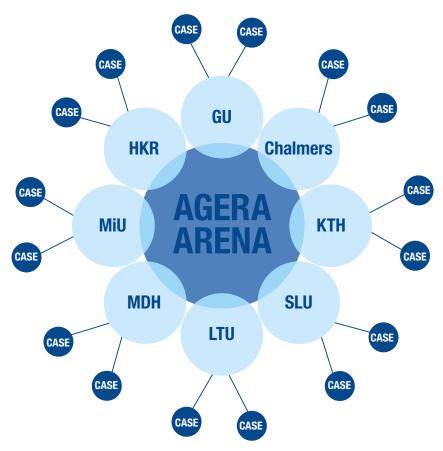


Figure 3. The AGERA Arena – a forum for exchange of knowledge and experiences.

The 13 AGERA cases represent a broad spectrum of activities from research (3.2, 3.3, 3.4, 3.6, 3.12), education (3.5), collaboration (3.7, 3.9, 3.10, 3.13) and innovation (3.11) to high-level strategy development (3.1, 3.8), planning and decision-making⁵. This allowed us to analyze and reflect on the integration of sustainability and Agenda 2030 into HEIs at different levels and from multiple perspectives.

As reflected in several of the cases, a central theme for our conversations was the impact of the institutional context and internal processes – e.g., visions, strategies, incentive structures and leadership support – on the initiation and implementation of activities related to both collaboration and sustainability.

During the implementation of the project, the discourse and engagement with Agenda 2030 evolved in the HEI sector, among our partners and in society at large. We perceived an increasing awareness, understanding and integration of the broad concept of sustainability as well as of Agenda 2030 and the SDGs. It was interesting and helpful to compare the impact of this 'evolution' across our different organizations. In several of the cases it meant that the, sometimes spearheading, work implemented in AGERA got support and was facilitated through the development of strategies, specific steering documents or earmarked resources related to sustainability and collaboration. In other cases, the recognition, resourcing and integration of sustainability is still work in progress.

We also noted a potential risk of the 'integration paradox' – in cases where sustainability has been a separate issue, highlighted in specific plans or policies, integration might lead to a situation where it gets less attention and, consequently, risks losing momentum ⁶.

In conclusion, we feel that the project was timely, as it helped us integrate two important activities in higher education – collaboration and sustainability – and equipped us with knowledge, tools and inspiration to actively engage in and support our universities' capacity to contribute to Agenda 2030.

2.2 Experiences from applying the SDG Impact Assessment Tool

The experience gained from the case studies shows that the SDG Impact Assessment Tool can provide a better understanding of the relevance of the SDGs in specific contexts. Participants in the case studies found it successful to view an SDG impact assessment as a joint learning experience using the SDGs as a framework for qualitative arguments and reflections. Steering assessments towards open-ended discussions, relating to the SDGs as concretizations of sustainable development, proved fruitful for engagement.

In several of the case studies, participants while using the SDG Impact Assessment Tool tended to focus on a project's positive impact on the SDGs, sometimes at the expense of a more unbiased approach. An important lesson learned is to acknowledge potential negative impact of the project and consider it an opportunity to modify the project in order to mitigate or identify risks for negative effects. It is recommended to conduct the SDG impact assessment in a workshop format and, through the help of a facilitator, encourage participants to maintain a holistic perspective and an open mindset.

The SDG Impact Assessment Tool, as used in the AGERA project, provides an opportunity to move from identifying impacts on the SDGs to discussing potential improvements based on new collaborations and partnerships.

In conclusion, the SDG Impact Assessment Tool has been found to have relevant

applications in research, education and other aspects of university operations by viewing collaboration as a means for sustainable development. Based on our experiences, we recommend using the tool to support:

- Research groups to relate their research to the SDGs as a basis for strategy development, identification of new opportunities for collaboration and for development of research questions and research proposals chapters 3.1, 3.2, 3.3, 3.4, 3.6, and 3.12.
- Teachers to relate their curricula to the SDGs as a basis for collaborative efforts in education chapter 3.5.
- University managements to develop strategies for sustainability and to evaluate impact from strategic partnerships chapter 3.8.
- Innovation offices to relate entrepreneurship and innovations to the SDGs chapter 3.11.
- The integration of Agenda 2030 and the concept of sustainability in new and ongoing collaboration activities and partnerships chapters 3.7, 3.9, 3.10 and 3.13.

Box. Suggestions for use of the SDG Impact Assessment Tool:

For teachers: The tool can be used to describe courses and programs in relation to the SDGs and thus identify collaboration opportunities and needs. When students use the tool, they will learn about the SDGs themselves, the complexity of sustainable development, and the opportunities and difficulties of SDG implementation.

<u>For researchers:</u> The tool can be used to broaden the research scope, identify new collaborative opportunities and to show sustainability impacts in research proposals.

<u>For innovation offices</u>: Innovations and business models are rarely evaluated based on how they impact the SDGs. This tool offers an easy way to assess SDG impacts and formulate strategic arguments and plans for future businesses

For management and support functions: The tool can guide organizations to align their strategic plans and decision making towards the SDGs. It can be used to identify relevant sustainability perspectives in the organization's strategic planning or to evaluate SDG impacts from existing strategic plans.



3. Presentation of the AGERA case studies

The following cases form the basis for experiences and results in the AGERA project. We believe that they can serve as inspiration depending on what position or interest you have as a reader. We have tried to give the cases informative titles to show their core content and to guide you as a reader. Every case is presented by an "AGERA coordinator". If you are interested and would like more information about a specific case you, will find contact details to us at the end in this report in chapter 5.

3.1 Linking research collaboration with Agenda 2030 – Area of Advance Transport

Maria Djupström, Sustainability strategist, Chalmers University of Technology (Chalmers)

Introduction

At Chalmers, the "Areas of Advance" are challenge-driven, thematic platforms for strategy and long-term collaboration that address challenges relevant to industry and society. One of the areas of advance is "Transport", that develops new knowledge to meet transport-related challenges.

Together with the Transport research group, we conducted four workshops with the aim of mapping how the research within autonomous transport related to the challenges in Agenda 2030 and how to increase the contribution from applying research results.

We compared how the current research affected the targets in Agenda 2030. We also considered current and planned legislation, national as well as European, and were thus able to identify how the research either strengthened or counteracted the targets. We then conducted a risk analysis of the previous result to prioritize areas where new collaboration and expanded competence could increase the contribution to the SDGs. Based on that we formulated an action plan that focused both on enhancing positive contributions and addressing those with no or negative impact.

Conclusions

The research group got a risk evaluation of their potential to contribute to the SDGs and a pathway to increase collaboration and utilization of research by acting on these risks and possibilities.

In addition, the discussions led to a broader understanding of challenges – an eye opener – related to the implementation of research results in society and how collaboration with other science disciplines could facilitate the contribution to the SDGs.

The quality and usefulness of the results from the SDG impact assessment depends on the efforts made in the analysis and discussions triggered by the tool. The results can be used to:

- identify partners based on competence
- highlight the need for technology development partner
- develop action plan for enhanced contribution to the SDGs
- identify ways to be a valued advisor/knowledge-provider to decision-makers and how to influence the public debate

3.2 SDG impact assessment in research – Can you taste Climate change?

Sam Dupont, Senior lecturer, and Eddi Omrcen, Sustainability strategist, University of Gothenburg (GU)

Introduction

The SDG impact assessment tool was tested within the framework of a project on best practices in science communication and education through the development and evaluation of innovative communication strategies conducted at University of Gothenburg. One case study in the project focuses on communication between academia, citizens and policy makers in the context of global environmental changes linked to carbon dioxide emissions and ocean acidification. Ocean acidification can negatively affect seafood quantity and quality, including taste, within a few decades. The fact that ocean acidification can have a detectable impact on shrimp taste provides a unique opportunity to attract citizens' interest (e.g "Can you taste climate change?"), initiate the discussion about future threats, engage in a discussion on the impact of climate change and the broader marine biodiversity crisis.

Results

Reflections on the SDG Impact Assessment tool were done in cooperation and joint discussions within the project. Our experiences from the completed SDG Impact Assessment are:

- The tool is quite easy to use, although a bit time-consuming, and creates issues/topics for discussion.
- Mapping where you are today is a good as a starting point but it would be more
 useful to examine the correlation between the SDGs in relation to your own
 activities.
- There is discrepancy between the indicators and the targets. If you really want to reach a target you have the indicators as guidelines to work with, but looking at it in detail, the indicators are not relevant to be able to reach the target. This might be an issue if you are trying to show progress/impact based on indicators.
- The scale of the impact needs to be taken into consideration. If you affect poverty for two people, then can you say that you can actually improve target 1 how should you think when you do the self-assessment?
- Finally, and also about scale if you have positive impact on one target what can you say about the impact of the overall goal?

Conclusions

If you use the tool to promote the project you can argue for contribution in all SDGs (not very accurate but helpful for marketing purposes) but you can also use it critically to assess the project – i.e. you can focus on different "stories". With the aim to develop and strengthen the project you should focus on the "*true story*". To other stakeholders/funding/media etc the "*propaganda story*" might be of interest and importance.

What we found to be of interest was a possibility to develop a broader understanding of the "connection mechanism" in relation to the SDG, e.g if a certain activity improves impact on one SDG how does it impact the others? Another possibility is to start with the impact, i.e. to decide what SDG target you want to reach and then go back to what we need to do. What research question do I need to address? What data do I need? Another reflection was that if you plan to do the assessment in different contexts it is important to clarify the goal and purpose of the assessment.

A reflection from Sam Dupont shows the potential of using the SDG Impact Assessment Tool - "I was very skeptical to this approach from the beginning. Now I see more usefulness in the tool."

We finally discussed the possibility upscale and do an SDG Impact Assessment for a whole research centre. The Centre for Collective Action Research (CeCAR)⁷ is a pioneering interdisciplinary research centre focusing on large-scale collective action and SUREAQUA ⁸, Centre for Knowledge and Solutions for Sustainable and Resilient Aquatic Production . With the ambition to include more stakeholders when doing an SDG-Impact Assessment focusing on communication between academia, citizens and policy makers in the context of global environmental changes linked to carbon dioxide emissions.

3.3 SDG impact assessment of a research center – KTH Water Centre

Karin Larsdotter, Project manager for Sustainable Development within research, The Royal Institute of Technology (KTH)

Introduction

WaterCentre@KTH⁹ is a university wide, cross-disciplinary initiative that started in 2017. The purpose of the center is to pool different research initiatives at KTH (The Royal Institute of Technology) with bearing on water, to link these to stakeholders and to enhance internal and external collaboration.

Results

The SDG impact assessment (using the tool) confirmed that a cross- and transdisciplinary center with focus on sustainable solutions for water and sanitation naturally addresses most of the 17 SDGs. This is a consequence of water issues being linked to most other SDGs, although primarily addressed in SDG 6 and 14. The quantity and quality of water is crucial for all societies, industry and health. The assessment also demonstrated that not having access to clean water will affect other sustainability goals negatively and/or severely hamper the possibility of achieving them.

WaterCentre@KTH pools research projects directly related water or with a connection to water from different disciplines at KTH. The center collaborates with stakeholders and different societal actors, but the interactions can be developed further to enhance the implementation and relevance of the research. To reach the global goals, different societal actors need to collaborate and strengthen each other and, in that context, WaterCentre@KTH can be a natural collaboration arena for the water sector in a broad sense. A university is a value neutral place for open, forward-looking and free discussions on societal challenges and solutions. KTH is a technical university with strong track-record in water engineering and to strategically collaborate with other universities with other research profiles, with more stakeholders from industry, policy making and civil society, and to strengthen the global outlook are development areas for the future. Such broadened and deepened collaboration would position WaterCentre@KTH to enhance its contribution to the SDGs.

3.4 International collaboration – Capacity building in Ethiopian forest sector

Marnie Hancke, Faculty research advisor, and Ylva Hillbur, Pro-Vice Chancellor for International relations, Swedish University of Agricultural Sciences (SLU)

Introduction

The case is based on an extensive project aiming at capacity building in the Ethiopian forest sector. The project owner is the Ethiopian Forest and Climate Change Commission (EFCCC)¹⁰ and a Swedish consortium (SLU, Skogsstyrelsen, EcoInnovation Foundation)¹¹ is involved in: (1) support for capacity building at EFCCC, (2) gender aspects in the forest sector, (3) a Training-of-Trainers programme for strengthening forest consultancy, (4) a pilot project with the ambition of introducing small-scale wood industry, (5) research and development on biodiversity in managed forests and (6) knowledge- and capacity building on green infrastructure in Ethiopian cities.

Results

Implementing the SDG impact assessment tool within the Swedish consortium, we found that prior knowledge of the 17 SDG is required and that sorting the goals (Step 3 of the SDG Impact Assessment Tool approach, see figure 5.) is an important step. Discussing the project's impacts on each goal leads to a deep, multifaceted and valuable discussion. There was an underlying tendency to focus on positive effects of the project on the SGDs. Thus, an important lesson learned is to acknowledge potential negative impact of the project and consider it an opportunity to modify the project in order to mitigate or identify risks for negative effects. During the process, it is important to have an open discussion and preferably led by a facilitator/moderator so that all perspectives and aspects are captured. Potential development of the tool was discussed, e.g. to enable a weighting of the impact on the goals as well as a risk assessment.

Conclusions

At an overarching level, the choice to add one or more partners who can contribute with skills that were previously lacking, can lead to a strengthened result. However, this must not necessarily be done by adding a new partner but by using different aspects / departments in a large organization that is already a partner. It would be important to ensure that adding new perspectives of collaboration would not lead to increased tensions or goal conflicts within the project. Specifically, for the Ethiopia project, it would be desirable to include Swedish small-scale, female entrepreneurs in forestry.

3.5 Linking educational programs to the SDGs

Ingemar Jönsson, Professor in theoretical and evolutionary ecology, Kristianstad University (HKR)

Introduction

The SDG Impact Assessment tool was used to assess the connection to (rather than impact on) the SDGs and targets within 12 educational programs at the Faculty of Natural Science, Kristianstad University. The extent to which societal cooperation activities within the programs related to SDGs was also assessed. The assessment was made at a one- to two-hour meeting with the program manager for each program, during which the SDG Impact Assessment form was filled in. The results showed a large variation among the individual programs in their connection to the SDGs, from one program with connection to only four SDGs, to two programs with connections to 12 SDGs (figure 4A). In general, the more specialized and technical programs had least connections to the SDGs. With few exceptions, the connections to the SDGs were indirect (relating to knowledge) rather than direct (relating to more concrete impact).

The extent of collaboration activities related to SDGs showed an even larger variation among programs, with two programs having collaboration activities with notably higher connection to SDGs than the other programs (figure 4B). This pattern probably reflects a generally higher level of collaboration activities within these programs.

There was also a considerable variation among the different SDGs in the extent to which programs included collaboration activities related to the specific goals, from four goals (3, 9, 14, 17) where five programs reported collaboration activities, to four other goals (1, 5, 10, 16) where no programs reported any related collaboration activities.

Results

The assessment illustrated large differences among the programs, both in terms of

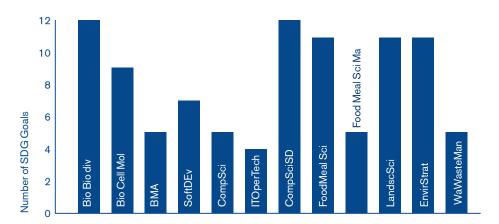


Figure 4A. SDG Impact Assessment of 12 educational programs at the Faculty of Natural Science, Kristianstad University. A. Number of SDGs connecting to the programs.

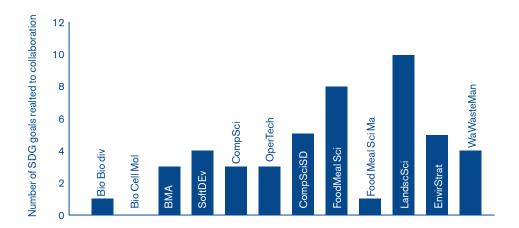


Figure 4B. SDG Impact Assessment of 12 educational programs at the Faculty of Natural Science, Kristianstad University. B. Number of SDGs relating to societal collaboration activities within the programs.

the subject connection to the SDGs and with respect to the SDG-related collaboration activities incorporated within the programs. For the individual programs, the assessment provided a clearer view of, and an opportunity to reflect on, how the educational content connected to the different SDGs, and for which goals there were no connection.

Conclusions

Even though the assessment did not allow for a deep and more detailed evaluation of how the programs connected to the SDGs, it likely resulted in increased knowledge on the global goals and targets, and thereby created improved conditions for continued work with the goals within programs. The assessment also created increased awareness that societal collaboration represents a potential tool for developing the sustainability profiles of programs.

Implementation of the global goals requires increased collaboration and sharing of knowledge among different societal sectors. Collaboration is also an important tool for creating a more society-based understanding of the global goals within academic educations as it provides knowledge on how society is organized, how society approaches and works with different sustainability issues, and the challenges faced in the practical implementation of the global goals.

Consequently, collaboration activities within educational programs give an understanding of the non-academic context where the transformation to a sustainable society has to take place. The collaboration activities within the twelve programs included guest lectures, study visits, work-integrated courses, and different projects carried out in non-academic sectors. These activities provide insights beyond those normally achieved from academic teaching and textbooks, and they will make the students better prepared to work with the global sustainability goals in their future working life. In this way, collaboration will increase the impact of educational programs on the implementation of the global goals in other sectors of society.

Swedish universities

3.6 Linking research collaboration with Agenda 2030 – Gender Contact Point

Paula Wennberg, Project manager, Victoria Mattsson, Unit director Collaboration and Student recruitment, Lisa Pouliot, Project manager, and Johanna Carlsson Project manager, Luleå University of Technology (LTU)

Introduction

Gender Contact Point¹², a platform for resources and collaboration at Luleå University of Technology, is established to enable the region's private sector and other stakeholders to benefit from the results of research, learning and knowledge in gender equality, diversity and innovation. Gender Smart Arena, an ongoing project at the platform, is a collaboration with researchers, ICT companies and municipalities. The project aims to achieve smart, sustainable, and inclusive growth through gender equality and diversity. The project goal is to broaden the perspective on innovation and how new innovative gender-aware business models can strengthen the business and organizational development.

Results

By using the SDG Impact Assessment Tool we were able to approach and assess the global goals in a structured manner and get a deeper understanding of how the Gender Contact Point platform supports and contributes to the goals. Since the methodology involves going through all the SDGs and make an assessment of the impact on each SDG, we noted indirect effects and how different SDGs affect and interact with each other. Such interactions would otherwise have been easy to overlook or omit. The thorough analysis was an opportunity to reflect on both possibilities and risks and consider ways to increase the impact of the platform in relation to the SDGs.

Conclusions

Innovation development through a gender equality and diversity lens, in collaboration with private and public entities and other stakeholders, can generate solutions and answers applicable to challenges in society as a whole. Within the Gender Smart Arena project, we had the opportunity to develop strategies that could enable long-term and sustainable collaboration. The next step is to secure funding that will allow us to extend the partnership and create such collaborative models.

3.7 Strategic partnerships for sustainable development

Karin Larsdotter, Project manager for Sustainable Development within research, The Royal Institute of Technology (KTH)

Introduction

KTH has strategic partnerships with 13 different organizations, including businesses from different technology branches, the City of Stockholm, The Region of Stockholm, and two research institutes (SEI and IVL)¹³. The partnerships are beneficial for KTH because they improve the societal relevance of both research and education. The partner organizations, on the other hand, benefit from research results which can be implemented and from KTH students who are competent and employable.

Having strategic partnerships is a well-established form of collaboration at KTH. Since most of the partners of KTH are large and influential organizations, the collaborations have the possibility to have societal impact and contribute to sustainable development. To steer the collaborations more explicitly towards sustainability challenges may therefore result in valuable positive impact on society and make KTH an even more relevant and important societal actor as a technical university for sustainable development.

The SDGs can be used at three levels in the partnerships:

- 1. Communication: to show how the collaboration projects contribute to meet one or several of the SDGs
- 2. Evaluation: to analyse which of the SDGs a project contributes positively to, and which SDGs the project risk to counteract. The SDG impact assessment tool can be used for such evaluation.
- 3. Steering: to choose collaboration projects that contribute to the SDGs, to avoid projects that risk to counteract the SDGs, and to actively enhance parts of a project that benefit the SDGs and mitigate risks to counteract the SDGs.

What is the motive behind the initiative?

KTH has the ambition to be a leading university within sustainable development as well as within collaboration for societal impact. KTHs development plan is named "A leading technical and international university creating knowledge and competence for a sustainable future". Collaboration and public engagement are central for KTH, and these activities are also pointed out as crucial for reaching the global goals in Agenda 2030. Hence, the strategic partnerships are of key importance for KTH in combining sustainability and collaboration.

Researchers and teachers at KTH are already collaborating with different societal actors, e.g. in research consortia or to enrich the education with societal relevance. On a central level, the strategic partnerships are intended to be long-term, mutually beneficial and contribute to a high quality of research and education. They also add value and new opportunities to already ongoing collaborations. The partnerships address sustainability in the overarching steering documents, but need to be improved in the detailed steering documents and in practice. How can

the SDGs and Agenda 2030 be used for communicating, evaluating and steering towards better contribution to sustainability by the partnerships? Methods for this are developed within KTH's part of the project AGERA.

When it comes to KTH's AGERA case about strategic partnerships, KTH Sustainability Office collaborates with KTH Business Liaison Office. Every strategic partnership has a partner leader working in the central administration, a partner responsible scholar from the faculty, and a corresponding responsible person in the partner organization. Within AGERA, the project leader at KTH Sustainability Office works together with the director of strategic partnerships and the partner leaders in order to develop good practices.

Conclusions

To date, the project has focused on anchoring, capacity building, communication and steering. This was an efficient way to get deeper understanding of challenges and initiatives, create new contacts and new ideas:

- Workshop about the SDGs for partner leaders. The aim was to make the partner leaders ready to work with the SDGs within their respective partnerships. Lessons learned: It is necessary to raise the awareness and knowledge about Sustainable Development among the partner leaders. There is a need for a follow-up with the individual partnerships.
- The conference Sustainability Research Day 2019 had strategic partnerships as a theme. The Deputy President, who has the leading responsibility for the partnerships, had a keynote presentation. Some partnerships participated in the stage programme, others in the exhibition part, and a slideshow about the strategic partnerships was viewed in the exhibition area throughout the conference. The conference was at the *Communication* level (see above). Lessons learned: a good way to show and communicate what is already going on when it comes to sustainable development within the partnerships. During the event, new contacts were also made between the different organizations.
- The Deputy President, the Director Strategic Partnerships and the Vice President for Education have arranged meetings with all strategic partners about future areas of collaboration. One request by the partners was to collaborate around circular economy. A digital seminar was arranged as a response, with presentations by researchers from KTH and by partners, and workshops around common education efforts and research collaboration.
- In the strategic partnerships with Stockholm Environment Institute and IVL Swedish Environmental Research Institute, new Memoranda of Understanding have been signed where Sustainable Development is explicitly described as one of the purposes with the partnerships. The other partnerships in KTHs strategic partnership program are encouraged to include these as well. Lessons learned: it is important to state in the steering documents that sustainability is desirable.
- A match-making event between university teachers and strategic partners with climate and digitalization as a theme has been performed. The purpose is to

give the opportunity for the partners to participate in courses as guest lecturers or as co-supervisors to thesis works. Lessons learned: it is good to have a theme for the event, this makes it easier for teachers and partners to find common interests. Matchmaking is also a relatively low-effort high-benefit activity.

KTH expresses a will and formal steering in high-level steering documents. When it comes to specific steering documents, e.g. Memorandum of Understanding and lists with Key Performance Indicators, sustainability is in most cases not included. This can be improved. Moreover, there is a need for more knowledge about how the SDGs can be used to improve the partnerships. The seminar was one example of how the partners can discuss common interests, network and get new ideas for research collaboration and education; the format can be applied for other sustainability topics as well.

Recommendations and way forward

- The potential to raise the ambitions and intensity of activities and collaboration regarding sustainable development is high, not least due to the increased priority of integrating sustainable development in the core business of the partnerships organizations as well as at KTH. This should be addressed in MoUs and expressed in target documents and key performance indicators.
- Each partnership needs individual coaching in order to integrate the SDGs in the partnerships
- A toolbox for the partnerships on how to integrate sustainability and the SDGs more will be developed.
- Common seminars on different themes relating to the SDGs will be arranged since it is relatively easy to arrange and can generate important outcomes.

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3.8 Vision and Strategy development and Agenda 2030

Eddi Omrcen, Sustainability strategist, University of Gothenburg (GU)

Introduction

In December 2018, the University of Gothenburg's (GU) board commissioned the Vice-Chancellor to develop a new vision that will replace Vision 2020. GU's vision is the university-wide, governing document that shows what the university wants to achieve and what are the most important future issues for the university.

During the work on the new vision, open vision seminars have been arranged and anchoring and discussion has taken place in management councils, the principal's strategy meeting, the education committee, the research committee and in meetings for operational support. This case study describes how the work with vision, strategies and business plans has developed in relation to sustainable development and collaboration. The process with the development and anchoring of the new Vision 2030 has been coordinated by Fredrika Lagergren Wahlin, Deputy Vice Chancellor with responsibility for collaboration. The implementation of the ideas in the AGERA project has been discussed, and to some extent included in the process of a new Vision 2030. As responsible for collaboration Fredrik Lagergren-Wahlin (FLW) says that: Collaboration is a part of research and education, that's how it is. We should not have a separate "silo" for collaboration. For example, there is no need for a special board for collaboration like the existing Research Board and Education Board. FLW is involved in various forums (committees etc.) for research and education to identify collaboration opportunities. According to FLW Collaboration should not be a separate "silo" at the same time as collaboration is a special task, the so-called third task. Therefore, FLW has initiated an "informal forum". According to FLW -If you are a large, broad and decentralized university like GU is, you have to govern and steer in a slightly different and more "loose" way. It is the size that makes the difference for the management and governance of this kind of university. 14

What is the motive behind the initiative?

In the initial stage/phase there were ideas and discussions that the new vision in its entirety would be based on Agenda 2030, but these thoughts were eventually adjusted and transformed into separate objectives and strategies.

On 15 April 2020, the University Board made a decision on the new vision. GU's vision "A university for the world" states that the university's activities rest on the core values formulated in the University's Magna Charta - autonomy, cohesive education and research, academic freedom, striving for universal knowledge.

"A university for the world" shows the direction of the university's development for the period 2021–2030 through three positions:

- Education and research of the highest quality,
- Sustainable and knowledge-based societal development,
- Cohesive organization, Attractive workplace and study environment.

"Sustainable and knowledge-based societal development" highlights that: GU must strengthen its relevance as a societal actor and partner to make an impact on societal development and contribute to the SDGs.

The university will strengthen its contribution to the goals for sustainable development set by the UN General Assembly in Agenda 2030."¹⁵

What preconditions made the initiative possible?

The vision "A university for the world" is the first part of the vision work, which also consists of university-wide strategies (3-year), business plans (1-year) and planning and follow-up process.

GU's vision states the university is striving to be an international university that takes responsibility for societal development and contributes to a sustainable world. The position "Sustainable and knowledge-based societal development" has been broken down and concretized in the university-wide strategies and in business plans. Objectives and strategies for GU for the period 2021 - 2024 are formulated in six focus areas:

- Sustainable Development,
- External relations and collaboration,
- Skills supply,
- Physical and digital environments,
- Sustainable work and study life,
- Governance and organization.

These goals and strategies aim to realize the vision's positions and have crystallized in discussions in university-wide bodies. The following is formulated about the focus area "Sustainable development": "Our goal is that the University of Gothenburg in 2024 has strengthened its position as a leading university in sustainable development."

The strategies for achieving this goal are:

- clarify the university's role in the work for sustainable development,
- strengthen the development of sustainability perspectives in education and research,
- initiate and improve collaboration with organizations and other actors in the outside world, to contribute to sustainable societal development,
- reduce one's own negative environmental impact by continuing to develop longterm systematic sustainability work.

The following is formulated about the focus area "External relations and collaboration": "Our goal is for the University of Gothenburg in 2024 to emerge as a given collaboration partner for a sustainable and knowledge-based societal development."

The strategies for achieving this goal are:

• develop cooperation with other universities and organizations in local, regional, national and international networks that add value to the development of education and research;

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- strengthen the international perspective by increasing and broadening the international exchange for students and staff;
- develop forms of collaboration for meetings between academia and society with a special focus on innovation, lifelong learning and the utilization of knowledge through mutual collaboration and dissemination of research results;
- strengthen the interaction between the university and the outside world and increase visibility towards external parties.

One interesting outcome was that one of the focus areas "Sustainable work and study life", came in at the end of the process. Mainly driven together by the student unions and the trade unions. The targets on reducing stress and wellbeing. During the period 2021–2024, the University of Gothenburg will:

- implement targeted initiatives against stress-related ill health among employees and students and develop proactive work with corporate and student health to promote health,
- strengthen the university's work with equal treatment in terms of the ability to prevent and deal with harassment with a special focus on sexual harassment,
- clarify the support available to staff and students who have been subjected to hatred, threats and violence,
- analyze and strengthen managers' conditions for their assignment and further develop the university's range of forms for internal competence development of employees, leaders and managers.

The strategies that are prepared and established linked to the respective goals has in the next step to be broken down and concretized into an annual Business Plan.

Experiences and outcomes

The work with producing a vision, objectives, strategies and business plans has been developed in strong relation to sustainable development and collaboration. We can conclude that: The SDGs and Agenda 2030 has worked as important framework and set a context for the process; Both Sustainable development and Collaboration are two focus areas with clear targets and strategies; As focus areas they have to be concretized with actions in annual business plans. Both on overall university level as well as the faculty level. Thus, the follow up process will be of great importance to evaluate the results and outcomes. The first step is to develop appropriate indicators (quantitative and qualitative) for that purpose.

Finally, we have also identified some challenges or dilemmas connected to what we can call "the Integration paradox". "That sophisticated integration of sustainable development into all practices often leads to less clarity, visibility and accountability" ¹⁶. The existence of Sustainable Development as a specific focus area is positive. Clarity is given as a separate area, at the same time there is a risk of not being included in the other focus areas. What are the advantages / disadvantages of having a focus area around Sustainable Development, but there are no writings in other focus areas? Alternatively, not to have a focus area at all regarding Sustainable development instead having clear writings in all other focus areas?

Work is ongoing in parallel with the preparation of a new Action Plan for Sustainable Development 2021-2024. During Management's review of the environmental management system, it was decided that an Action Plan for Sustainable Development 2021, would be prepared and adopted in January 2021. It will run in parallel with university-wide goals and strategies during 2021. After that it will be integrated into the objectives and strategies – with a potential risk for "the integration paradox"?

How these challenges will be addressed we are looking forward to see in the forthcoming work with implementing the Vision 2030, including Objectives and strategies as well as annual business plans.

3.9 Biosphere reserves as framework for cooperation on sustainable development and Agenda 2030 in research and education

Ingemar Jönsson, Professor in theoretical and evolutionary ecology, Kristianstad University (HKR)

Introduction

Biosphere Reserves are model areas for sustainable development, designated within the UNESCO *Man and the Biosphere* program. Currently there are 714 such areas worldwide. Collaboration among different sectors in society is a key component in biosphere reserves, which makes them ideal for developing science-society collaboration. Kristianstad University (HKR) is located within the oldest biosphere reserve in Sweden, Kristianstads Vattenrike (KVBR)¹⁷. One of the university's research environments, Man & Biosphere Health (MABH) ¹⁸, has for more than 10 years played the role as academic partner to the KVBR organization, and developed several collaborations. However, HKR as a university has not yet taken advantage of the unique opportunity offered by the biosphere reserve to profile itself within the field of collaboration for sustainability.

What is the motive behind the MABH initiative?

The research environment Man & Biosphere Health (MABH) at HKR was founded in 2009 as part of an initiative to promote research and stimulate collaboration between different researchers at HKR. MABH consists of about 35 researchers and has annual funding from the university for joint activities. From the start, MABH has had a clear interdisciplinary profile focusing on applied environmental research, related to human impact on ecosystems and effects on biodiversity and health. The connection to KVBR is reflected in the name Man & Biosphere Health that is directly linked to the UNESCO program "Man and the Biosphere". In relation to the SDGs and Agenda 2030, biosphere reserves can play a key role as arenas and model areas for intersectoral collaboration as a basis for sustainable societal transformation. The ambition of MABH has been to develop a close collaboration with the Biosphere Reserve Unit and their activities and to be a hub for research related to environment and sustainability.

What preconditions made the initiative possible?

The institutional structure with research environments promoting collaboration between researchers within thematic fields, together with supporting annual grants from the university, played an important role in the formation of MABH and the development of collaboration with the KVBR. The MABH initiative has increased the collaboration with and awareness of biosphere reserves as a resource for collaboration on sustainability, both with local communities and at an international level, for instance through study trips and workshops in collaboration with representatives from the biosphere reserves in Camargue, France, and Coto Doñana, Spain. For KVBR, MABH has also represented an entry point to collaborative opportunities within other research environments at the university. Apart from the above, the development of specific collaborative projects has largely relied on initiatives from individual researchers.

Experiences and outcomes

Over the years, the collaboration between MABH and KVBR has taken significant steps forward. Since 2010 the Biosphere Office Unit has organized an annual "Biosphere conference" in collaboration with HKR/MABH, a number of collaborative research projects have been carried out, regular meetings have been held and many educational projects and periods of work-integrated learning have been carried out by students in biology and landscape science. These activities have sparked an increased interest in research collaboration between KVBR and HKR and collaboration has been extended to researchers and research areas outside MABH.

Despite this successful collaboration with KVBR, there is still a lack of more long-term and formalized collaboration. The formation of such collaboration, e.g. through a strategic partnership model, between HKR and KVBR, would allow the university to tap into an international sustainability initiative as Biosphere Reserves have many prerequisites in place for developing science-policy research related to Agenda 2030. This includes a direct link to an international UNESCO framework and network focusing on sustainability and collaboration, a local societal organization with close contacts with politics, authorities and stakeholder groups, and experience in building collaboration between societal sectors and actors. HKR in particular and Swedish universities in general, can benefit greatly from the opportunities offered by these model areas for sustainable development.

3.10 Agenda 2030 as a framework for policy support

Marnie Hancke, Faculty research advisor, and Ylva Hillbur, Pro-Vice Chancellor for International relations, Swedish University of Agricultural Sciences (SLU)

Introduction

SLU actively participates in a large number of capacity development programs. The program in focus is supporting the Ethiopian state and other actors in the country to develop a sustainable forest sector. The program is led by the Ethiopian authority Environment, Forest and Climate Change Commission. SLU leads a Swedish consortium that provides support for capacity development in certain work packages of the program. More specifically, the Swedish team provides support for policy- and institutional development, small-scale forest industry development, capacity-building for advisory staff in the forest sector, gender mainstreaming, monitoring of biological diversity in managed forests and urban greening.

In addition, SLU's participation in AGERA has led to a broad launch of the SDG impact assessment tool within the university.

What is the motive behind the initiative?

The Ethiopian government has recently drawn up a plan for the development of sustainable forestry in Ethiopia, contributing to the country's need for forest products and in order to create jobs for a rapidly growing young population.

Agenda 2030 guides this collaboration among Swedish partners (SLU, Swedish Forest Agency, Eco-Innovation Foundation) and between Swedish and Ethiopian partners. Developing an entire economic sector affects many of the SDGs. The Ethiopian government's development ambitions for the forest sector are permeated by awareness of the need for a sustainability perspective in the implementation of various initiatives, but the capacity of state and regional authorities to steer development towards the implementation of SDGs while providing space for forestry development is limited. Hence the tool, visualizing the project's impact on the SDGs, seemed an excellent way of evaluating the collaborative activities at the same time as laying the foundation for the development of those.

Relating to the launch of the SDG impact assessment tool at a university level, it is facilitated by the fact that the pro vice-chancellor of international relations also has responsibility for Agenda 2030 at SLU. Furthermore, SLU must report to the government on how the university, in its core business, uses Agenda 2030 as a tool in the transition to a sustainable society. This puts positive pressure on the organization and has led to various units at the university administration, that otherwise do not cooperate, now meet regularly to discuss what this means for the organization and how the reporting should be done.

What preconditions made the initiative possible?

SLU's international commitment extends over more than half a century and is in line with Sweden's policy for global development. The policy for SLU's global contribution to Agenda 2030 prioritizes six areas that reflect the university's mis-

sion and strengths. SLU Global is a unit at the management office that supports the university's collaboration with actors in low-income countries. Furthermore, the strong thematic competence that is found at SLU and in Sweden within forest management, as well as previous collaboration for several decades with Ethiopia are crucial conditions for implementation. The very well-established collaboration between SLU and the Swedish Forest Agency, and also the Eco-Innovation Foundation, is a good basis for providing strong Swedish support for Ethiopian partners in the programme.

SLU's investment in 2011 in appointing so-called senior lecturer collaboration specialists is a clear recognition of the strong collaboration tradition that exists within the organization. A specific collaboration organization has been developed in some SLU campuses. Since 2009, there has been a pro vice-chancellor with responsibility for collaboration at SLU. Issues related to Agenda 2030 fall within the responsibility of the pro vice-chancellor of international relations. A close dialogue between these areas of responsibility is a prerequisite for working with the issues in an integrated manner. In SLU's current strategy (2021), Agenda 2030 has an obvious place as one of three focus areas is "SLU beyond sustainability".

Experiences and outcomes

The Swedish consortium, together with various Ethiopian partners, has carried out a number of gap-studies aiming at identifying weaknesses and bottlenecks in different thematic areas. Those studies have included forest government activities, gender issues in the forest industry, forest advisory activities and conditions for small-scale forest industry activities. At a workshop in August 2019 these studies were presented to a broad group of actors and stakeholders. Study plans have been developed further as well as teaching material for the training of forest advisers in a so-called "Training-of-Trainers" layout. On the forest industry side, equipment for small-scale sawmill operations has been purchased and a demonstration facility is under construction at the Wood Technology and Research Center in Addis Ababa. The first course was completed in January 2020.

Identifying key actors at SLU for dissemination of the SDG impact assessment tool facilitates for broader use and acceptance within the organization. Both Grants Office and SLU Holding were considered key, as both research and innovation funders require descriptions of a project's contribution to the SDGs. Participating in AGERA has set wheels in motion that now need to be orchestrated and spin on their own.

3.11 Agenda 2030 as a framework for innovation – Richer Business

Paula Wennberg, Project manager, Victoria Mattsson, Unit director Collaboration and Student recruitment, Lisa Pouliot, Project manager, and Johanna Carlsson, Project manager, Luleå University of Technology (LTU)

Introduction

Richer Business is a new digital tool for creating livelihood opportunities for all types of business and operational processes. The tool is aimed for companies and organizations that want to create more inclusive value chains and at the same time become more competitive by making use of a greater diversity of competences and driving forces in the development of new products and services. The Richer Business tool has been developed in the Gender Smart Arena project in collaboration with researchers with expertise in business models, design, entrepreneurship, ethics, gender studies, ICT and innovation together with managers and employees from the male-dominated ICT industry and municipalities. The project goal is to broaden the perspective on innovation and how new innovative gender-aware business models can strengthen the business and organizational development. The project is based on previous experiences, results, and knowledge developed at Gender Contact Point, a platform for collaboration and resources at Luleå University of Technology.

What is the motive behind the initiative?

The Richer Business tool aims at achieving more gender equality and better business. The tool allows the users to self-critically scrutinize how their organization acts within different scenarios focused on six areas; customer value, capital, competence, collaboration, communication and culture. Richer Business is based on a norm-critical perspective on business and innovation by challenging established ideas about whose needs, interests, ideas and competences should guide the design of future goods, services and value chains.

It also helps users discover which solutions have a high potential for improving the quality of life and well-being of people. The tool provides users with the conditions necessary to develop solutions which are sustainable from financial, social and environmental perspectives. Richer Business models contribute to fulfilment of the global sustainability goals of Agenda 2030 and deal with society's challenges related to health, work, integration, digitalization, environmental issues etc.

What preconditions made the initiative possible?

The preconditions that had a major impact on effective collaboration were finding the right people and building trust. Taking the time to understand the needs and drivers of the researchers and stakeholders started early in the project design phase. The establishment of win-win relationships to be able to benefit both researchers and stakeholders was both challenging and rewarding and promoted the successful project execution.

The project was managed by Center for Distance-spanning Technology, a center of excellence at Luleå University of Technology. Integrated research, development and innovation projects have been conducted for 25 years at the center in

collaboration with academia, industry and public sector. The center offers an integrated environment of people, infrastructure, tools, processes and services as well as an extensive network of organizations covering a private and public sector, multinational companies, universities and non-profit organizations in Sweden and worldwide. The participating companies and municipalities involved in the Gender Smart Arena project had pre-established relationships with the center in ICT innovation development but few pre-established relationships with the university's gender researchers.

Experience and outcomes

Traditionally, company development and innovation has been centered around a fairly narrow group of people and perspectives, primarily men specializing in technology, engineering and science. This has meant that other groups have not had the same chance to influence the development and availability of future products, services and value chains. It has resulted in missed development opportunities, waste of resources and in solutions not always usable by the target groups or fields for which they were intended. These exclusionary patterns in the field of innovation and company environments are linked to factors such as gender, age, background, level of education, geographical location etc.

From time to time the project had challenges when organising joint meetings and workshops with a project team of 25 people due to the researchers' and stakeholders' busy schedules which caused delays. The project also had difficulties to build gender-balanced project groups due to the fact that gender researchers and experts are more often women than men. Even the male-dominated ICT companies had mainly women as their company representatives in the project meetings. To increase the men's participation in open seminars and interactive workshops the project collaborated with other male-dominated industrial networks and initiatives to reach out to more men. Having said that, the dissemination and communication strategies with tailored methods were very successful and the project gained a lot of external attention. About 500 participants from companies and other organizations joined workshops, seminars and conferences.

The final phase of the Gender Smart Arena project was marked by the covid-19 pandemic that affected and still affects the university and participating companies and municipalities in several different ways. Since then the university employees have been working from home and physical meetings have been replaced with digital meetings. The pandemic has resulted in economic consequences for companies and customers. The municipalities with core operations in school and caregiving are hit hard by the crisis as is the entire society. Consequently, the project had to create new innovative ways to restructure and transform activities to online events for the rest of the project implementation. The project period was extended, and a lunch webinar series was rolled out to allow for an efficient dissemination of the results and benefits. The lunch webinar series turned out to be an effective method as it enabled an easy participation of a wider audience in Sweden and accelerated the dissemination efforts in Europe. The international online launch of the Richer Business tool attracted participants from 14 European countries. The Richer Business tool is available here https://richerbusiness.eu/

3.12 Agenda 2030 as a driver in health and lifestyle related research

Tor Nilsson, Senior lecturer, Mälardalen University (MDH)

Introduction

In the study Neighborhood, Sustainable Lifestyle and Health among Adolescents (NESLA), lifestyle factors as well as elements in the built and social environment that influence the ability of adolescents to establish a healthy life were identified. The result can be used by local decision and policy makers to help young people improve their lifestyle and health.

What is the motive behind the initiative?

The aim of the NESLA study is to study lifestyle factors and health among adole-scents age 16-19 years. NESLA is grounded in the SDGs, in particular goals 3, 11, 13 and 17. The study was funded by The Social Contract, a collaboration between the City of Västerås, City of Eskilstuna, the Regions of Västmanland and Sörmland, respectively, and Mälardalen University. The aim of the Social Contract is to research and co-produce knowledge related to societal challenges.

What preconditions made the initiative possible?

The university has a long tradition of co-producing new knowledge with industry as well as with the welfare sector. The collaboration within The Social Contract has been going on for several years and is considered a strategic collaboration for the Mälardalen region. The partners contribute funding in periods of 4 years, and researchers at the university co-produce new knowledge in collaboration with actors from the partners. This was a prerequisite for conducting the NESLA study.

Experiences and outcomes

One major challenge was to find ways to harmonise the researchers' way of working with those of the representatives from the Social Contract and other officers from the partners – the approach, budget year and what is considered "production of results" differ between research and the public sector. In spite of the challenges, however, the project has been successful and has resulted in a follow-up study called *Actions for sustainable education and health among youth*.

How would new collaboration initiatives strengthen the results?

After we finished the NESLA studies, we initiated a new study called ACTION. Here we co-produced new knowledge together with organizations/actors in Västerås responsible for activities and facilities targeting adolescents after school, including youth centers, library, churches, culture activities etc. We have interviewed 14 staff members from 9 different organizations with the aim to understand how they integrate Agenda 2030 in their work plans and activities. The findings show that different organizations are at different stages in terms of integrating the Agenda 2030 into their policy area plans as well as in preparing their staff members for action. Similarly, individual staff members are informed about the 2030 Agenda to varied degrees. Some of the participants reported less knowledge of Agenda while others knew more about it. Those who had information about the Agenda could cite specific SDGs linked to the activities they offered to adolescents.

3.13 Networking for sustainable development

Catrin Johansson, Professor in organizational communication and Sustainability coordinator, Mid Sweden University (MIUN)

Introduction

The Network for sustainable development at Mid Sweden University was formed during the fall of 2016 after an initiative to assemble members engaged in research and teaching to push issues of sustainable development within the university. The network has since then operated as a source of inspiration and platform for collaboration across borders of subjects and faculties and contributed to issues of sustainability being put on the agenda and driven in a strategic way. Significant results of the network members' work are that sustainable development has become an important part of the overall strategy of Mid Sweden University; funding of a project that proposed goals, organization and activities for sustainable development; recruitment of two sustainability coordinators, and signing of the Climate Framework.

What is the motive behind the initiative?

The network for sustainable development aims to function as a forum to collaborate, inspire employees and drive sustainability issues within Mid Sweden University. Collaboration is clearly linked to the 17 goals within Agenda 2030.

What preconditions made the initiative possible?

The most important prerequisites for the formation of the Network were a number of committed employees from various subjects and departments - Biology, Chemistry, Ecotechnology and Sustainable Building Engineering, Gender Studies, Mathematics, Media and Communication Science, Pedagogy, Political Science, Psychology, Sociology and Quality Technology, to name a few.

At Mid Sweden University, there is no central or formal organization for sustainable development, which contributed to the perceived need to start a network. The annual reporting to the Swedish Environmental Protection Agency is handled by the finance department, as is the handling of business travel, while research and education are the faculties' responsibility. When Mid Sweden University's new strategy was discussed in 2018, an ambitious dialogue process was implemented including a series of meetings and seminars to collect the views of employees on designated themes. Sustainable development was not a pre-designed theme in the seminars, but the importance of including sustainability issues in the strategy was voiced by network members in several of the seminars, which led the university management to include an overall goal of sustainable development in the strategy. Today, the strategic objective of: "Increasing the integration of sustainable development in research and education" is one of the four main objectives in the strategy. In addition, the importance was stressed by a national thematic evaluation by the Swedish Higher Education Authority (UKÄ) of how the higher education institutions implement sustainability issues in their operations. The outcome of this evaluation for Mid Sweden University, like many other higher education institutions, was recommendations to develop the sustainability work further. This led the university management to fund a project on Sustainable Development within

Mid Sweden University, carried out by a group of employees from various parts of the organization: both administration and academia. The team mapped the need for increased management and organization of sustainability issues and produced a report with recommendations and priorities. The report and suggestions in turn led to the first two sustainability coordinators being recruited and employed at the two faculties in the autumn of 2019.

Experiences and outcomes

The network has over the years gradually become more institutionalized and hold informal digital check-in meetings every other week to enable participation from the two campus locations that are physically distant Sundsvall and Östersund. In the network meetings, news, initiatives and examples are conveyed, and the agenda is completely controlled by the participants. Network members also meet in person to discuss important issues and new activities once a year.

The sustainability coordinators have become involved in the network and worked in 2020 to invent and map the activities in research and education on sustainable development and based on that inventory develop the website to communicate both internally and externally. The sustainability coordinators also support new collaboration initiatives, such as:

- "Friday talks" an idea to involve students who arrange a seminar series on themes related to the SDGs.
- A network for students engaged in sustainable development.
- "The Sustainability hunt" a workshop for students in their final year to invent new business ideas related to the 17 sustainability goals within Agenda 2030. The workshop is arranged by the innovation office.
- "Jamtli Living University" the planning and construction of an urban ecovillage in Östersund, where local partners team up with researchers from the university.
- "Education with sustainability" an interdisciplinary conference (online 13 August 2020) that focused on challenges and possibilities in teaching for a sustainable future.
- "Mistra Sport & Outdoors" a program with the objective to create knowledge and solutions for increased sustainability in sports and outdoor life.
- ISDRS 2021, an international conference on sustainable development hosted by Mid Sweden University in July 2021.

The challenges for the network are still the lack of a central organization for sustainability issues, as well as a rather unclear role for the sustainability coordinators. Time and resources are, as always, crucial to be able to develop research applications and training initiatives.

On the agenda for 2021 is that the Vice Chancellor is funding a three-year project that will develop internal training for employees regarding sustainable development. In addition, the new Climate Strategy decided by the Board in December 2020 will be implemented.



4. Discussion and concluding remarks

4.1 Collaboration for sustainability – diversity, integration and context

The AGERA project brought together representatives from eight Swedish HEIs with the aim of developing collaborative capacity with society in order to strengthen the contributions to Agenda 2030 and the SDGs. We also wanted to explore how collaboration for sustainable development can be integrated in research, education, innovation processes and strategic partnerships. Each HEI participated in the project with one or two specific case studies. In the project, we committed ourselves to test new approaches that would encourage, inspire and lead future activities.

We chose to include a **diversity of cases** in order to develop our understanding of the broad, holistic perspectives that are prerequisites when striving to find sustainable solutions to global challenges. This approach connects to the three themes that guide how HEIs manage collaboration,

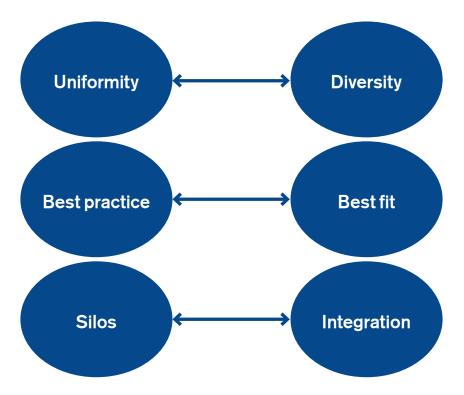


Figure 5. Strategic perspectives considered in the selection of AGERA cases (adapted from Perez Vico ¹⁹).

as presented by Perez Vico ¹⁸ (Figure 5). In AGERA, we strived for diversity when selecting the cases and we considered integration of collaboration in education, research and innovation as crucial in order to avoid 'silos'. Instead of searching for best practice we opted for **best fit**, which stimulated the development of context-specific tools and approaches.

A central theme in the AGERA project has been the importance of understanding the context in which we as well as our stakeholders and partners operate. Different contexts are the reality when we engage in collaboration in education, research, innovation and other outreach activities. The context does not only relate to the representation of stakeholders and partners (e.g., business, academia, government/policy actors or civil society), but also to the physical/geographical space where the collaboration takes place. Is it a local project, where understanding the local community is crucial? Is it focused on a city and/or regional development? Or is it a national or an international arena? Irrespective of partnership constellations or scale, the context needs to be considered when initiating collaborative initiatives and projects (further reading on the concept of 'context management'20,21)

4.2 Insights and challenges using the SDG Impact Assessment Tool

In several of the cases we used the SDG Impact Assessment Tool as a means to visualize, analyze and initiate conversations around the impact of an activity on the SDGs.

Testing the tool across a broad variety of cases gave valuable feedback and prompted discussions on further development of the tool, e.g., to potentially enable a weighting of the impact on the goals as well as risk assessment. These are features that might be added in the future, but at the moment the tool is mainly intended to support a qualitative and reflective process. Our advice is to be transparent and open with how one has handled strategic issues and considerations in the assessment. From that perspective, step 5 in the assessment process – 'to choose strategy forward' - is crucial to do and to clearly motivate, as it lifts the process beyond a mere mapping exercise to strategic adjustment and strengthening of a project/activity.

Some key insights and challenges related to the SDG Impact Assessment Tool that were discussed in the project are presented here:

- It is useful for communication to show how the collaboration projects contribute to meet one or several of the SDGs.
- It is useful for evaluation to analyze which of the SDGs a project contributes positively to, and which SDGs the project risk to counteract.
- It can be used for steering to choose collaboration projects that contribute to the SDGs, to avoid projects that risk to counteract the SDGs, and to actively enhance parts of a project that benefit the SDGs and mitigate risks to counteract the SDGs.
- When applied in education, the connections to the SDGs tend to be indirect (relating to knowledge) rather than direct (relating to more concrete impact).

 $[\]textbf{20.} \ Slunge \ D., Drakenberg \ O., Ekbom \ A., G\"{o}thberg \ M., Knagg\mathring{a}rd \ \mathring{A}. \ and Sahlin \ U. \ 2019. \ Stakeholder \ Interaction \ in \ Research \ Processes-pro$

a Guide for Researchers and Research Groups. University of Gothenburg, Gothenburg.

21. THE SDG PARTNERSHIP GUIDEBOOK: A practical guide to building high-impact multi-stakeholder partnerships for the Sustainable Development Goals, Darian Stibbe and Dave Prescott, The Partnering Initiative and UNDESA 2020.

- An SDG assessment results in increased knowledge on the global goals and targets.
- The assessment creates increased awareness that societal collaboration represents a potential tool for developing the sustainability profiles of educational programs.
- The SDG Impact Assessment tool is easy to use but requires dedicated time as it creates issues/topics for discussion.
- The mapping process helps to start thinking about the SDGs, but the tool is even more useful for highlighting how the SDGs relate to one another.

4.3 The AGERA-model

The AGERA 'ladder' (Figure 6) is an attempt to summarize the experiences from the project. It builds on elements from our respective cases in which we have tried, in different ways and by using different approaches, to tackle the challenge of integrating collaboration and sustainability. We hope that this five-step model will help others to strengthen and develop collaborative capacity with Agenda 2030 as framework. The model might serve as guidance, inspiration and support for researcher, teachers, administrators and management in HEIs.

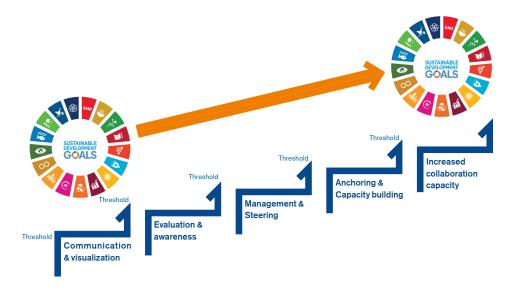


Figure 6. "The AGERA ladder" – a model for increased collaboration capacity with Agenda 2030 as framework.

Communication & visualization: The first step is to engage stakeholders and partners in a discussion on collaboration and impact on the SDGs and Agenda 2030. The SDG Impact Assessment Tool can play an important role in facilitating this step, as it helps demonstrate how collaboration projects contribute to meet one or several of the SDGs. By mapping the connection to the SDGs one can better communicate and visualize impact and contribution to Agenda 2030.

Evaluation & awareness: The second step is to analyze which of the SDGs a project, program or initiative contributes positively to or has a risk to counteract. This step can raise the awareness of connections between SDGs, initiate discus-

sions about possible changes that might have to be implemented. As demonstrated in case 3.1 from Chalmers and case 3.10 from SLU, an important element is to be open to and implement actual change, e.g., to include more stakeholders and partners with relevant competence, to develop action plans for enhanced contribution to the SDGs, or identify ways to influence the public debate etc.

Management & steering: The third step is to engage in integrating sustainability in management processes and steering documents, e.g., in relation to projects, strategic partnerships, research centers, study programs or organizations. This is illustrated by case 3.7, where steering documents highlighting sustainability as a priority for KTH were in place, but the analysis conducted within AGERA revealed a need to include sustainability also in detailed steering documents and in practice through e.g., collaborative partnership agreements and key performance indicators. Case 3.8 describes a high-level strategy development process at University of Gothenburg where both sustainable development and collaboration are integrated as focus areas, with targets and strategies, that have to be concretized with actions in annual business plans.

Anchoring and capacity building: The fourth step is to anchor the concept of sustainability and to strengthen capacity in relation to the SDGs and Agenda 2030, both internally at the university and among partners. These aspects were integral to all cases, but here we highlight cases 3.6 and 3.13. In 3.6, the Gender Smart Arena project, Luleå University of Technology developed strategies to enable long-term and sustainable collaboration integrating SDG5 in innovation processes. The case from Mid Sweden University, 3.13, shows how a bottom-up process, leading to the formation of an internal 'sustainability-network', has sparked several top-down initiatives, such as funding of internal training for employees regarding sustainable development, and development and implementation of a climate strategy.

Increased collaboration capacity: Strengthening the previous steps should pave the road towards increased collaboration capacity for sustainability. Evidently, each step has a number of 'thresholds', related to organizational culture and structures, resource allocation, awareness and expectations, change management etc., but there are also opportunities to overcome them, as demonstrated in the cases presented in chapters 3.1 to 3.13.

4.4 Way forward - integrating quality, impact and sustainability

In parallel with AGERA, also with Vinnova-funding, another group of Swedish HEIs implemented the project 'Collaboration Integrated Quality System for Increased Utilization' (SKÖN)²². The aim of the project was to develop tools to integrate the collaboration perspective in comprehensive quality systems for universities. To also include the sustainability perspective would add an important dimension to such systems ²³, but will require development of, and broader agreement on, relevant methods, tools and indicators. Already existing tools and approaches, such as the SDG Impact Assessment Tool and the framework of the Times Higher Education SDG Impact Ranking, could be useful to consider in the process.

It is our hope that this report, the SDG Impact Assessment Tool, the AGERA 'ladder' and the individual cases, will inspire others and provide support towards the integration of collaboration, sustainability and quality, and strengthen the contribution of HEIs to the SDGs and Agenda 2030. As UN states — this is the decade of action!



Box In recognition of the urgency of the 2030 Agenda, the Decade of Action calls for accelerating sustainable solutions to all the world's biggest challenges – ranging from poverty and gender to climate change, inequality and closing the finance gap.

In September 2019, the UN Secretary-General called on all sectors of society to mobilize for a decade of action on three levels: global action to secure greater leadership, more resources and smarter solutions for the Sustainable Development Goals; local action embedding the needed transitions in the policies, budgets, institutions and regulatory frameworks of governments, cities and local authorities; and people action, including by youth, civil society, the media, the private sector, unions, academia and other stakeholders, to generate an unstoppable movement pushing for the required transformations.

This report aims to support the development of initiatives and partnerships that can contribute to the Decade of Action.

https://www.un.org/sustainabledevelopment/decade-of-action/

A final remark and reflection from us in the AGERA team:

If you work with collaboration for Development you have to be smart!

If you work with collaboration for Sustainable Development then you have to be wise!

Good luck to you all!

Please share your experiences and learnings with us!

5. Contact

Biography/Short presentation

Eddi Omrcen has since year 2004 worked as Environmental manager at the University of Gothenburg. He had the responsibility for developing and implementing the Environmental Management System certified according to ISO 14001. Since 2016 he has the function of Sustainability strategist. With the responsibility for targets concerning integration of sustainable development into research and education. Eddi has done research on change management, environmental management systems, project management, temporary organizations and intrapreneurship. Eddi managed the project AGERA - Agenda 2030 as a framework for the impact description of collaboration and utilization.



Maria Djupström is the Sustainability strategist of Chalmers University of Technology, a technical university in Gothenburg, Sweden. She is responsible to coordinate the Chalmers strategic sustainability plans, the reporting and communication regarding the SDGs (United Nations Sustainability Goals) and the climate strategic plan of Chalmers. Maria has a PhD in Environmental Physics and did research about long distance transported particular air pollutants. She is also a businesswoman, helping companies with their strategic environmental work and ISO 9001 and 14001 management systems. She is also a certified auditor for these standards.



Karin Larsdotter works as a Project manager for Sustainable Development within research at KTH Royal Institute of Technology in Stockholm, Sweden. She holds a PhD in Applied Environmental Microbiology and has formerly worked as a researcher and teacher at KTH. She has extensive experience of research collaboration and communication, as well as Responsible Research and Innovation (RRI).



Anders Ahlbäck works as a Project manager at the Gothenburg Centre for Sustainable Development (GMV) at Chalmers University of Technology and University of Gothenburg. Anders has extensive experience in collaborative perspectives of sustainable development in academia. More specifically, the development of the SDG Impact Assessment Tool and its use in research, teaching and collaboration between universities and societal actors as an approach to pinpoint needs for new collaborative efforts in the implementation of the UN Agenda 2030 framework.



Marnie Hancke is since 2015 a Research advisor at one of the Faculty offices at the Swedish University of Agricultural Sciences. Her focus areas are environmental monitoring and assessment and collaboration. Since 2018 she also has worked for SLU Global with the coordination of international projects which gives her extensive experience in project management. She holds a PhD in zooecology.



Ingemar Jönsson works as Professor in theoretical and evolutionary ecology at Kristianstad University (HKR). He was coordinator of academy – society collaboration in the field of sustainability at HKR in 2017–2021, and leader of the research environment Man & Biosphere Health in 2013 – 2018.: He has extensive experience of transdisciplinary sustainability research in collaboration with municipalities, in particular on mainstreaming of biodiversity and ecosystem services in spatial planning.



Tor Nilsson works as a Senior lecturer in science and technology education research at Mälardalen University. From 2012 to 2020 he worked as head of department, deputy head of school and acting head of school. During that period, he also worked with external collaboration, strategically and more specifically within different teacher education programs. He currently works within a co-creation project concerning technology education in Swedish preschools. He is also the manager of the university's part in the ULF agreement, a national pilot project concerning sustainable collaboration models between academia and the school system.



Swedish universities

Catrin Johansson is Professor in organizational communication at Mid Sweden University, Department of Media and Communication and Sustainable Development Coordinator at Mid Sweden university. She is a recognized expert in communicative leadership and organizational change. She has been leading large research projects on communicative leadership, communication maturity in organizations, crisis leadership/communication and sustainable organizing.



Paula Wennberg is the founder of the Gender Contact Point platform of Luleå University of Technology. The platform supports gender mainstreaming processes in academia, industry and surrounding society. She has a long background of managing projects in gender and equality, inclusive growth and innovation in Sweden an internationally, with a particular focus on innovation in ICT industry.



Lisa Pouliot works at the Luleå University of Technology as a Senior strategist and Project manager within collaboration. Her areas of focus, besides AGERA, are the universities strategic partnerships and collaboration projects aimed at small and medium sized companies in the region. Lisa has experience as a sustainability strategist within the building sector, responsible for environmental certifications, quality and environmental management, and Global Reporting Initiative.



Johanna Carlsson works as a Collaboration coordinator and Project manager at Luleå University of Technology (LTU). She has a broad experience of collaboration between university and surrounding society with a focus on small and medium-sized companies in the region. Johanna has been part of in two of Vinnovas K3-projects; SAFIR and AGERA as well as the regional establishment Forum Social Innovation.



Viktoria Mattson is the Unit director of collaboration and student recruitment at Luleå University of Technology. Viktoria has extensive experience from industry, university, as well as policy making level within the Government Offices and university level within Luleå Technical University. She has expertise within collaboration and innovation, e.g. establishing innovation office, professional education and developing services for researchers.



Ylva Hillbur is Pro vice-chancellor with responsibility for international relations and Agenda 2030, at the Swedish University of Agricultural Sciences, SLU, since 2017. From 2012 to 2017 she held the position of Deputy Director General, research for development, at the International Institute of Tropical Agriculture, IITA. IITA, one of the CGIAR institutes, has its headquarters in Nigeria and implements its research for development agenda through stations in 18 countries across sub-Saharan Africa. Prior to joining IITA, Ylva Hillbur worked for almost 20 years at SLU, where her research on insect chemical ecology was focused primarily on applications in environmentally sustainable plant protection. During 2006-2012 she was heading the Department of Plant protection biology at SLU. She obtained her PhD at SLU in 2001 and was appointed associate professor in 2012 and has also been appointed adjunct associate professor at Addis Ababa University, Ethiopia. She is member of several national and international boards and steering committees.



Erik Fahlbeck has been working both in academia and at governmental level. With a background as a Senior lecturer in agricultural economics and international trade at SLU (The Swedish University of Agricultural Sciences) he served as chief analyst at the former Ministry of Agriculture in 2005 – 2006. During the following three years Erik was acting Deputy Dean for the former Faculty of Natural Resources and Agricultural Sciences. The following years, 2010 – 2016, he was chief analyst at the Ministry of Enterprise and Innovation and as such he also work within the OECD, chairing the committee for industry, innovation and entrepreneurship (CIIE). Erik then took the position as pro vice chancellor for collaboration at the SLU. Today Erik is working as an analyst doing investigations for e.g. universities, often related to collaboration and sometimes to sustainable development.



Sam Dupont is a Senior lecturer in marine eco-physiology at the University of Gothenburg. His main research focus is the effect of global changes—such as ocean acidification and warming—on marine ecosystems. He has published in more than 190 publications in journals including Nature, PNAS and TREE. Sam is also working on the development of innovative science communication and education strategies to tackle global challenges.





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