

Faculty Board

## **Development plan for the Master's programme in Environmental Studies and Sustainability Science (LUMES)**

### **Background**

In spring 2021, the Master's Programme in Environmental Studies and Sustainability Science (LUMES) was evaluated at the Lund University Centre for Sustainability Studies (LUCSUS). The external expert group consisted of John Robinson from the University of Toronto in Canada (chair), Miriam Huitric from the Stockholm Resilience Centre in Sweden and Chris Ives from the University of Nottingham in the UK. The evaluation is based on extensive documentation and a self-evaluation with the aim of guiding the evaluators through the documentation and highlighting self-identified strengths and weaknesses. A site visit was also carried out in connection with the evaluation. Due to the ongoing pandemic, this was conducted digitally.

The evaluation resulted in a written report as well as a feedback meeting with the evaluators, the LUCSUS director of studies and representatives from the Faculty of Social Sciences. The evaluation was generally very positive and noted, among other things:

“The external expert group were unanimously of the view that LUMES is a very strong Master's programme: coherent, relevant, well-designed, and well-managed. There is a strong structure, organised around the seven core courses, eleven electives, and the thesis; excellent communication with students and between colleagues; and a powerful sense of community among the staff and

the students. In many ways it is a model programme of which LUCSUS and the university can be proud.”

The report presented six overarching themes for continued development work on LUMES:

- i. The role of transdisciplinarity in the programme
- ii. Clarity and coherence of the programme
- iii. Missing or underdeveloped content
- iv. Fairness, diversity and inclusion
- v. Maintaining the relevance of the programme
- vi. Relationship with the University as a whole

The remainder of this document will discuss each theme with an emphasis on constructive measures and with a comprehensive timetable. The development plan was discussed with teaching staff in the LUMES programme, written comments were received from both teaching staff and management, and it was adopted by the LUCSUS Board on 21 December 2021.

## Areas of development and implementation plan

### **The role of transdisciplinarity in the programme**

Transdisciplinarity, one of the main elements of LUMES, was in focus throughout the evaluation, both in the written report and during the digital site visit. Here we would like to add a definition of transdisciplinarity as the inclusion of non-academic actors in the research process, e.g. through co-creation processes (co-production), while interdisciplinarity is seen as collaboration between academic fields.

The evaluation considers that the programme has succeeded well in incorporating interdisciplinarity into the programme, but that the role of transdisciplinarity was vague and undefined. Since many of the LUCSUS researchers work transdisciplinarily, including through strong connections and collaborations with societal actors and with action research, the evaluators considered that these elements could be more clearly integrated throughout the programme. The focus on

transdisciplinarity should also reflect the development of sustainability research in general as well as the increased pressure from funding bodies to involve societal actors throughout the research process.

Proposals from the evaluation include embedding practitioner perspectives into the programme, e.g. by having tasks involving so-called 'living labs', as well as changing the order of the method courses so that the action-oriented course comes before the more comprehensive methodological course.

### *Measures*

The LUMES programme is currently undergoing a comprehensive reform that includes the establishment of a new methodology course – Methodology for Sustainability Science, 7.5 credits – in the first semester, as well as an expansion and reform of the current course From Knowledge to Action – with the new name Methods and Tools: from Knowledge to Action – which will serve as the second methodology course and run during semester two. Both courses will have a clearer focus on the role and methods of transdisciplinarity in sustainability research, the first focusing on ontological and epistemological principles and the second on actual methods and implementation. Here, students formulate their own projects, which they often carry out in collaboration with societal actors. This course is simultaneously expanded from 5 credits to 7.5 credits to better reflect the importance we place on transdisciplinary knowledge and practice as well as an overall understanding of transdisciplinary processes. Together, the two methodology courses will give students a more complete picture of (among other things) transdisciplinary approaches and methods in both theory and practice. We do not consider that changing the order of the two methodology courses, so that the action-oriented course precedes the overall methodology course, would benefit either the programme or clarify the role of transdisciplinarity, as the overall course provides the necessary foundations from which to build more practical methods. However, transdisciplinarity will also be addressed in the first course, in this case from an ontological and epistemological perspective, to which it

will be linked again in the second methodology course in the spring semester.

We are also exploring the possibility of developing collaborations with societal actors during thesis writing in the fourth and final semester of the programme. However, careful consideration must be given to the students' independence stance and assurances must be given that the design, issues, methods, analysis and results of the thesis are developed by the students themselves and not as a commissioned work.

We should also review the description of the programme in order to better highlight the role of transdisciplinarity in LUMES.

Finally, these initiatives may require increased resource allocation to communication and the expansion of transdisciplinary collaborations, something LUCSUS is prepared to consider as part of our strategic development.

### ***Timetable***

The reform is currently underway and is being implemented in stages, one semester at a time. The first semester's courses have been completed, including the formulation of the new methodology course. This course will continue to be developed in spring 2022 and run for the first time in autumn 2022 when the reformed programme starts. In the spring of 2022, the second semester's methodology course, *Methods and Tools: from Knowledge to Action*, will also be reformed, and will run in its new form in spring 2023.

The thesis course will be reformed in spring 2023 and will run in its new form in spring 2024.

The process of reviewing how we present the role of transdisciplinarity in LUMES will be ongoing over the coming year.

### **Clarity and coherence of the programme**

This point concerns issues raised by the students during the site visit when several pointed out that there is a gap between the programme they thought they would take, i.e. the perception of the structure and content of the programme, and the programme they actually take.

They particularly emphasise the balance between scientific and social

science elements and feel that the latter predominate. However, they do not feel dissatisfied with the balance, but rather the gap is about how the programme is communicated and perceived.

A related issue concerns the trade-off between breadth and depth. The LUMES programme is characterised by a broad approach to sustainability issues with the idea that it should highlight connections and complexity as well as provide students with an education that opens up many different career opportunities. As a result, depth sometimes takes a back seat to breadth and students instead explore more specific issues through course assignments, through their choice of courses in semester three or in their thesis.

The evaluators identify both of these as communication problems rather than problems of focus and content, and consider that the focus, and non-focus, of the programme should be made clearer both in the written material for the programme and in direct communication with prospective students.

### ***Measures***

In connection with the reform of LUMES, we are also reviewing the communication channels, including all written material that presents the programme, primarily through the website. In addition, we are reviewing the verbal communication with students when they start the programme to reiterate the focus of the programme, including a preponderance of social science approaches and the breadth of the programme. Here it is also important that the motivation behind these decisions is conveyed so that students understand that the design of the programme is based on well-thought-out foundations.

In recent years, we have also developed our cooperation with External Relations, which organises open meetings with prospective students, the so-called subject area week and application week. This year (2021) we have had two such meetings with IIIIEE with the aim of both clarifying our own programme content and distinguishing this from the adjacent programmes provided by IIIIEE.

In terms of the coherence of the programme, we are working to improve communication and cooperation between the programme's courses, which is an important part of the reform work. This includes

planned and recurring meetings for course directors to share information but also to find links between the courses.

### ***Timetable***

This is an ongoing effort that follows the continuous development of the programme over time. However, a number of measures must be put in place immediately to ensure that the communication of the programme provides a clear picture of its content and counteracts misunderstandings. In 2022, we will review the communication provided through our website, which is the main medium for potential students. We will also continue to work on the meetings organised by External Relations in which we clarify the programme's balance between natural and social sciences. Meetings for course directors will begin in spring 2022 and are planned to be a recurring feature starting in autumn 2022.

### **Missing or underdeveloped content**

The main criticism from the evaluation concerns the absence of humanistic approaches in the programme and it argues that this absence does not reflect the development of sustainability science in general. They point out that the humanities are not completely absent from the programme, in particular there are elements in courses such as Social Sciences and Sustainability, Sustainability and Internal Transformation, and Sustainability and Popular Culture. However, the report argues that the humanities perspectives should be incorporated more clearly throughout the programme, possibly through the development of a new core course, which they also acknowledge would require a major restructuring of the programme.

Under this point, they also address the inclusion of leadership in teaching and consider that this too should be given a clearer focus in the programme.

### ***Measures***

This is the only point where our view differs from that of the evaluators. The humanities are central to sustainability issues, but there is a clear limitation on how much can be included in a programme and, given the above discussion of programme breadth

versus programme depth, further development of humanities elements would risk broadening the programme further and also require us to reduce current content to make room for new content. This does not preclude better highlighting of the current humanities elements or developing new elective courses, similar to those mentioned above, which is an ongoing effort. It should also be added that humanities elements are already present in the programme, but are not necessarily singled out as such but rather integrated as part of the interdisciplinary nature of sustainability science. We do not rule out that these elements will be clarified or developed in the future, but this must then be done with the overall development of both the programme and sustainability science in mind.

It should also be added that LUCSUS is in the process of developing a new Master's programme – Climate Change and Society – in which humanities elements will play a greater role. Developing LUMES in this direction would therefore risk removing one of the distinguishing features between the two programmes.

The issue of leadership will be addressed more clearly in the reformed version of the methodology course *Methods and Tools: from Knowledge to Action*, in which students can develop leadership skills through a semester-long group project in collaboration with societal actors.

### ***Timetable***

As we do not see any clear measures here, there is consequently no clear timetable. The work to clarify the programme content is continuous and strengthened with the reform work. The new Master's programme is being developed and it is hoped that this will start in autumn 2024.

### **Fairness, diversity and inclusion**

The evaluation concludes that LUMES has a clear treatment of gender issues, but lacks targeted elements on related fairness issues such as culture, ethnicity, religion and socio-economic issues. This, it considers, is even more important given the international composition and nature of the programme.

### *Measures*

Several of these issues are addressed through the course of the programme, but could be given a clearer focus and better highlighted. The main measure is to review the extent to which they are included in the most relevant courses, in particular the courses Governance of Sustainability and Social Sciences and Sustainability. The first-mentioned course in particular has the potential to develop its content to include a broadened treatment of fairness issues.

We also see that the view and treatment of fairness issues goes beyond individual courses and needs to be addressed throughout the LUMES programme with a focus on their importance for both learning and change processes.

### *Timetable*

The course Social Sciences and Sustainability was reformed in autumn 2021 and will be given in its new form in autumn 2022. Governance of Sustainability will be reformed in spring 2022 and will run in its new form in spring 2023.

### **Maintaining the relevance of the programme**

The sustainability area is under rapid development and has in a relatively short time gone from a niche field to having broad application both inside and outside academia. The evaluation therefore underlines both the need for LUMES to train sustainability practitioners and the need to ensure the programme's own development.

The evaluation identifies the interdisciplinary and transdisciplinary qualities of LUMES as key to maintaining its relevance over time. It proposes that these elements, and associated competences, be better clarified and linked to actual societal change processes.

### *Measures*

This point calls for measures on two levels, both internally in terms of the work we are doing on the reform and externally in terms of how we communicate the programme and the skills it provides. Regarding



the reform related to this point, the course Methods and Tools: from Knowledge to Action is of particular interest, not least in how it provides knowledge and experience of practical sustainability work in consultation with societal actors. As mentioned above, this course is now expanded from 5 credits to 7.5 credits and given a clearer structure. Externally, it is important that we communicate the relevance of the programme with a focus on both content and skills.

### ***Timetable***

The course Methods and Tools: from Knowledge to Action will be reformed in spring 2022 and will run in its new form in spring 2023. External communication is part of the overall reform work that will be carried out until autumn 2023.

### **Relationship with the University as a whole**

Here, the evaluation presents two points: the possibility of opening up LUMES courses to LU students and acting as a leader in sustainability education and placements. Regarding the second point, the evaluation considers that LUMES and LUCSUS have an opportunity to drive sustainability work both in education and in relation to actors both on and off campus, e.g. by developing collaborations between students and societal partners.

### ***Measures***

There are currently no plans to open LUMES courses to applicants from outside the programme, as the application pressure is already high and we have full groups, both for the core year and for the elective courses in semester three. The latter are designed for smaller groups and an expansion would require a completely new pedagogical approach, which we do not see as beneficial to the programme.

The second point, to develop sustainability work both within and outside education, is something we continuously discuss within LUCSUS. With the entry into the Faculty of Social Sciences, our collaborations within the University have expanded and LUCSUS has every intention of continuing on this trajectory. Central to this is the development of a new Master's programme, Climate and Society, as

this is planned to be developed in consultation and collaboration with a number of departments at LU.

LUCSUS also develops collaborations within LU on several levels, both through continuous teaching staff exchanges, in which we both have a lot of staff teaching in other courses and programmes and bring in expertise from other departments to our programme, and through more general development of educational collaborations.

### ***Timetable***

The new Master's programme is under development and has a target start date of 2024. The work to both maintain and develop collaborations within LU is continuous.