

Instructions to the expert-review panels for the research evaluation Quality and Impact 2018

INTRODUCTION

The University Board of the Swedish University of Agricultural Sciences (SLU) gave an assignment to the Vice Chancellor to conduct an evaluation of the quality of scientific research, of the societal impact of SLU's research as well as the collaborative capacity of SLU's research groups. This evaluation, Quality and Impact 2018, is the second of its kind, the first being conducted in the year 2009.

There are three components of the Quality and Impact 2018 research evaluation: 1) Quality of research, 2) Societal impact of research and 3) Capacity for collaboration with Society.

The Quality and Impact 2018 evaluation process in short: There are eleven research evaluation panels that will review 61 research groups called Units of Assessment (UoAs). In total, about 2000 SLU scientific staff will participate in the evaluation. Each of the eleven panels has up to ten expert reviewers, up to six of which are scientific reviewers, one or two reviewers who have expertise on societal impact, and one or two reviewers who have expertise in collaboration with society. Reviewers will often have an overlapping expertise in these areas. A Panel Chair will lead the work of each panel.

The ultimate goal of the evaluation Quality and Impact 2018 is to increase the quality of SLU's research and thereby SLU's possibilities to impact society with science-based knowledge. An assessment of how SLU collaborates with society will also be in focus.

Quality and Impact 2018 is an evaluation of SLU's research and the results of research education; SLU's other two mandates: higher education, and environmental assessment and monitoring have separate evaluations and will therefore only be included here with regard to how they are related to research.

The Quality and Impact 2018 evaluation will assess the current status and the future aspirations of each UoA. The current status of the UoA's research will be made visible through scientific output (i.e. bibliometric analyses, funding profiles, and personnel data) and its impact on society (i.e. activities, contributions to policy decisions, innovations, patents, documented utility in society, or stakeholder interactions among other factors) in the most recent years. How the UoA plans to further develop their field of science in the future will be conveyed in the self-assessments that each UoA writes. Review panels will be asked to assess how each UoA works strategically with their strengths, their deficiencies and their plans for improvement.

The results of the evaluation will be made available to the SLU faculty and university leadership in August of 2018 and an analysis of the results will be presented to the University Board by the end of 2018. The results will form the basis for future strategic decisions made by all levels of SLU, but there are no monetary prizes from the university associated a priori

with the results. Instead the focus is on the fact that the evaluation process in itself is a goal. The hope is that it provides opportunity for the creative discussions that are the essence of high-quality science and research impact on society.

UNITS OF ASSESSMENT AND FIELDS OF RESEARCH

Units of Assessment - UoAs

The basic units of the evaluation are strong and functional research groups (units of assessment - UoAs) at SLU. In the early autumn of 2017, Heads of Departments, in collaboration with the Deans of each Faculty decided upon the titles of 61 UoAs and which researchers would be included in each UoA. In some cases these units include an entire department, in other cases they are composed of smaller research groups (see Table 1).

After the 61 UoAs were identified, the Faculties and university leadership aggregated the UoAs into eleven diverse but closely-related research fields. Table 1 below shows the eleven research fields and the attached file '[Panel names and Units of Assessment summary](#)' shows the names of the 61 UoAs.

The research evaluation is designed to highlight SLU employees who are active researchers at present; the brain power of SLU right now. For this reason only persons working with research and are employed by SLU at least 50% during the month of May 2017 are included. All PhD students and post-doctoral researchers, regardless of how they are funded, are included. This means that persons who are employed less than 50% by the university are excluded, their work is included however, if they have joint publications or have research funding together with UoA members. The UoAs have the possibility to mention the contributions of these persons in their self-assessments.

Eleven fields of research - panels

Scientific work conducted at SLU was divided into eleven broad but closely-related fields of research. The UoAs are aggregated into panels that reflect fields of research.

Table 1 Research fields and number of UoA in each Panel in Quality and Impact 2018

Panel number	Research Fields/Panels (number of UoAs in each panel)
1	Agricultural and Horticultural Production (4)
2	Animal Health (5)
3	Animal Sciences (6)
4	Aquatic and Terrestrial Ecology (6)
5	Forest Management (5)
6	Economics, Business and Management, and Statistics (4)
7	Genetics, Molecular Biology and Physiology (6)
8	Molecular Sciences, Biomaterials, and Technology (8)
9	Nature and Society (9)
10	Plant Protection (4)
11	Soil and Environmental Sciences (4)

EXPERT REVIEWERS IN EACH PANEL

Each of these eleven research fields above have a panel of reviewers that includes from 8-10 evaluators with expertise in one of the three aspects of the evaluation: quality of research (six reviewers), impact of research (one or two reviewers), or research collaboration with society (one or two reviewers). Panel members come from the academic community and others from relevant sectors that represent the needs of industry, governmental authorities, civil society, and from society in general. Many of the expert reviewers have expertise in two and some have expertise in three of the evaluation areas. A Panel Chair leads the work of each panel.

In total over 100 expert reviewers will convene at SLU, Ultuna Campus in Uppsala 29 May until 1 June for the Quality and Impact 2018 research evaluation.

MATERIALS UPON WHICH THE EVALUATION IS BASED

The following materials are to be used as a basis for evaluating each UoA:

- 1) Self-assessments written by each UoA that addresses each of the three components of the evaluation (quality, impact and collaboration) and includes facts and figures about the achievements of the UoA, as well as case studies on research impact and research collaboration.
- 2) Bibliometric analyses conducted by the SLU library – see detailed information in the attached file '[About bibliometrics](#)'.
- 3) Staff profiles for each UoA compiled by the Personnel Division.
- 4) Funding profiles for the Departments to which each UoA belongs, compiled by Economy Division.

All of these materials are accessible on the Quality and Impact 2018 Digital Platform (see below). Instructions on how to access this material is found in the attached file '[Instructions for using the digital platform](#)'.

CRITERIA FOR EVALUATION AND SCORING

The evaluation components listed below are those used by the UoAs' for their self-assessments and are those which the expert reviewers will use for their evaluation. The template that the UoAs have used for their self-assessments ('[Self-Assessment Template](#)') and the template that the expert-review panels will use to evaluate the UoAs ('[Panel Report Template](#)') can be found attached to these instructions.

Scoring

Panels are encouraged to use the entire scale of scores in their evaluation. Scores are given for *performance*, meaning that even research that focuses solely on Sweden or Scandinavia can be of world-leading or outstanding if the approach, the methods and the findings are of the highest quality. When possible, the review panels are encouraged to qualify their ratings by comparison with international group and activities.

1. Quality of Research, criteria:

1.1. Scientific Quality

(scores: 6= World-leading; 5= High international; 4= Internationally recognized; 3= Moderate; 2= Inadequate; 1= Poor)

A guide to scoring:

- 6 World-leading - Original research that defines and shapes a research field.
- 5 High international - Original research that substantially influences a research field.
- 4 Internationally recognized - Research of quality that contributes, but not redefines a research field
- 3 Moderate - Research of some quality, but without significant impact on the research field.
- 2 Inadequate – Research with a few strengths but also with major weaknesses
- 1 Poor – Research with few strengths and major weaknesses.

1.2. Scientific Environment and Leadership

(scores: 6= Outstanding ; 5= Excellent ; 4= Good; 3= Moderate; 2= Inadequate; 1= Poor)

A guide to the scoring, based upon the Swedish Research Council's criteria:

- 6 Outstanding – exceptionally strong with negligible weakness,
- 5 Excellent – Very strong with minor weaknesses
- 4 Good – Strong with minor weaknesses,
- 3 Moderate – Some strengths but also with moderate weaknesses,
- 2 Inadequate – A few strengths but also at least one major weakness or several minor weaknesses,
- 1 Poor – Very few strengths and numerous major weaknesses

1.3. Strategy for Scientific Development

(scores: 6= Outstanding; 5= Excellent ; 4= Good; 3= Moderate; 2= Inadequate; 1= Poor)

The same scoring as in section 1.2 above.

In addition to the self-assessment for each UoA, the material provided to the panels for this section are a bibliometric analysis and personnel profile for the UoA as well as a funding profile for the Department to which the UoA belongs. The expert reviewers will give a numeric score for each of the three criteria: scientific quality, environment and leadership, strategy for scientific development as well as answer questions related to the criteria.

2. Societal Impact of Research, criteria:

2.1 Activities and Outputs (scores: 3= Excellent; 2= Good; 1= Inadequate)

2.2 Outcomes (scores: 3= Excellent; 2= Good; 1= Inadequate)

2.3 Impact Strategy (scores: 3= Excellent; 2= Good; 1= Inadequate)

A guide to scoring:

- 3 Excellent - research that has very high societal impact
- 2 Good – research that has societal impact
- 1 Inadequate – research that has no societal impact

In addition to the self-assessment for each UoA, the material provided to the panels for this section are up to three case studies which describe how research within the unit has led to societal impact. The expert reviewers will give each UoA a numeric score for each of the three criteria: activities and outputs, outcomes and impact strategy, as well as answer questions related to the criteria.

3. Capacity for collaboration with Society (no scoring for this section)

In addition to the self-assessment for each UoA, the material provided to the panels for this section are two collaboration case studies, one which describes a successful external collaboration and one that exemplifies a less successful collaboration. The latter is included with the purpose of stimulating reflection on factors important for the collaboration process. No numeric scores are given for this section, instead we ask that the panel to comment on the UoA's approach to collaboration with society and on the UoA's understanding of the collaborative process (factors affecting collaboration, importance of mutuality, dialogue, etc.).

The Panel Report Template gives more information on the evaluation criteria in each of the three sections of the evaluation.

QUALITY AND IMPACT 2018 DIGITAL PLATFORM

All of the information and templates mentioned above are accessible on 19 March 2018 to all panel members via the Quality and Impact 2018 Digital Platform. There you will find a package of information for each UoA in the respective panels. Specific instructions on how to access the digital platform and how the information is organized on the platform are attached ('VPN Connection PC', 'VPN Connection MAC', 'Instructions for using the Digital Plattform'). Each panel member will receive a guest account on the SLU network, and account credentials will be sent by mail.

CONFIDENTIALITY AND TRUST

The work performed by the expert reviewers in each panel must be impartial. Panel chairs and members may not have ongoing or recently concluded (within five years) collaboration with persons of a UoA in their panel, nor should they have more than one or two joint publications with UoA members. In addition, circumstances that could affect impartiality such as friendship or enmity with members of UoAs in their panel are not acceptable. In the same manner there are to be no connections with SLU that could affect the impartiality and outcome of the evaluation process.

No chair person or panel member may use information that has been provided during the evaluation (written or oral) to benefit their own or other colleagues' research. Nor is this information to be used to discredit any person involved in the evaluation. Any conflicts of interest during the evaluation should be made known to the panel chairperson who will decide on how to proceed in conjunction with the Evaluation Management Team. Direct inquiries to kon@slu.se.

Information made available to panels should not be disseminated to anyone without prior contact with the Evaluation Management Team. Direct inquiries to kon@slu.se.

TIME LINE AND DELIVERABLES

6 -7 March 2018 – Meeting in Uppsala for Panel Chairs. See program attached.

19 March 2018 – panel members gain access to the Quality and Impact Digital Platform
Between 19 March and 28 May 2018

Deliverable 1 – Prepare for the evaluation by making a preliminary scoring for UoAs in your panel

- A preliminary scoring of each UoA in your panel is to be made before arrival in Uppsala, this non-binding preliminary scoring serves solely as a preparation for the interviews with UoAs in May and for the discussions with your fellow panel members.
- We ask for three preliminary scores on scientific quality: 1) Scientific Quality, 2) Scientific Environment and Leadership, 3) Strategy for Scientific Development. We also ask you to prepare three scores for the societal impact of the UoA's research: 1) Activities and Outputs, 2) Outcomes, 3) Impact Strategy.
- No scoring is required for the section on capacity for collaboration with society, we do however ask you to read the reflections by the UoAs, and the case studies for this section and be prepared to discuss them with your fellow panel members in May.

28 May 2018 – Arrival of all expert reviewers in Uppsala, Sweden

29 May 2018 – The evaluation officially begins with an introduction for all panel members from 8:30 – lunch. Busses leave the hotel at 8:00 for Ultuna campus.

29 May 2018 – Gala dinner at the Norrland's Nation, within walking distance from the hotel.

29 – 31 May 2018 – Interviews with UoAs

Deliverable 2 – Interviews with representative of each UoA in your panel.

Interviews will be conducted 29-31 May with representatives from each UoA. Panels are assigned a room on campus to which each of the UoAs come for their interviews. A panel host (SLU staff member) who has extensive experience with both research and SLU organization is at the panel's disposal to help with orientations, to answer specific questions and to help with practical matters, they do not however serve as a panel secretary. This function can be rotated among the panel members for various UoAs. The interviews are from one to two hours depending upon the size of the UoA. The number of representative from each UoA that come to the interview is also dependent upon the size of the UoA. A short presentation is made by each UoA for the panel (smallest UoAs get 10 minutes, the largest get 20 minutes for their presentation), the rest of the allotted time is reserved for discussions between the panel and the UoA. [A schedule for the interviews 29 -31 May](#) is attached.

31 May or 1 June 2018 – oral reports to SLU leadership

Deliverable 3 – a short oral summary of the panel's work to the SLU leadership

- All panel members for each panel will meet with the Faculty and SLU leadership for 30 minutes to hear the panel's comments and insights from the evaluation process so far. [A schedule for the oral reports](#) is attached.

Due 1 June 2018 – a well-developed draft of panel reports is due

Deliverable 4 – Complete a draft of the panel report for each UoA

- A well-developed draft in Word format is to be completed and submitted to kon@slu.se before departure on 1 June. See the documentation ‘[Panel Report Template](#)’.

1 June from 9:30 until lunch – strategic discussions with SLU leadership

Deliverable 5 – A morning of strategic discussion with SLU leadership

- Panel members are welcome to meet with the SLU leadership and share their insights gained during the evaluation process. Discussions will be on the topics that the panels raise during the evaluation process. SLU is also interested in hearing the panel members’ comments on SLU’s interdisciplinary research, about SLU’s specific mandate of food sciences, about collaborative capacity and SLU’s potential in general. The specific topics of the strategic workshop will be decided in conjunction with the panel oral reports.

Due 8 June 2018 – the final version of the panel reports due

Deliverable 6 – Final version of the UoA reports

- The final version of the panel report for each UoA are to be submitted to kon@slu.se by 8 June. The Quality and Impact 2018 project group will send them to the UoA coordinators who will get the chance to identify any obvious incorrect information. In the unlikely event of misunderstandings or incorrect information, the Quality and Impact 2018 project group will contact the panel chair for further discussion.

The final version of the panel reports will be made available to all at SLU at latest in August 2018. Analyses will be made of the panel reports during autumn and presented at the SLU University Board meeting in December 2018.

PANEL HOSTS

A Panel host has been assigned to each panel of expert reviewers. All panel hosts are employees at SLU with broad knowledge in university operations and will serve to help the panels with any practical issues that might arise. The hosts will, among other things, support in keeping the time-schedule, prepare for interviews, and make sure the expert reviewers find their way around campus. However, the panel hosts will not act as secretaries for the panel. This responsibility must be designated among the panel members themselves.

All panel hosts are well acquainted with the general scope of the panel research field, and many hosts have themselves a scientific background. However, in the context of the evaluation their role is confined to seeing to that the evaluation process proceeds as planned and must at all times remain impartial, and not take part in the actual assessment. It is expected that the panel hosts participate during all scheduled panel activities, including time allocated for panel discussions, interviews with UoA representatives, and the oral summary report.