INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI 2005–2010

RC-Specific Evaluation of VITRI – Viikki Tropical Resources Institute

Seppo Saari & Antti Moilanen (Eds.)
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Researcher Community (RC) was a new concept of the participating unit in the evaluation. Participation in the evaluation was voluntary and the RCs had to choose one of the five characteristic categories to participate.

Evaluation of the Researcher Community was based on the answers to the evaluation questions. In addition a list of publications and other activities were provided by the TUHAT system. The CWTS/Leiden University conducted analyses for 80 RCs and the Helsinki University Library for 66 RCs. Panellists, 49 and two special experts in five panels evaluated all the evaluation material as a whole and discussed the feedback for RC-specific reports in the panel meetings in Helsinki. The main part of this report is consisted of the feedback which is published as such in the report.

Chapters in the report:
1. Background for the evaluation
2. Evaluation feedback for the Researcher Community
3. List of publications
4. List of activities
5. Bibliometric analyses

The level of the RCs' success can be concluded from the written feedback together with the numeric evaluation of four evaluation questions and the category fitness. More conclusions of the success can be drawn based on the University-level report.

RC-specific information:

Main scientific field of research: Biological, Agricultural and Veterinary Sciences

RC-specific keywords: tropical forests, agroforestry, rural development, biodiversity, land-use policy, participatory research, development studies

Participation category:
1. Research of the participating community represents the international cutting edge in its field

RC's responsible person: Luukkanen, Olavi

Keywords: Research Evaluation, Meta-evaluation, Doctoral Training, Bibliometric Analyses, Researcher Community

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Foreword

The evaluation of research and doctoral training is being carried out in the years 2010–2012 and will end in 2012. The steering group appointed by the Rector in January 2010 set the conditions for participating in the evaluation and prepared the Terms of Reference to present the evaluation procedure and criteria. The publications and other scientific activities included in the evaluation covered the years 2005–2010.

The participating unit in the evaluation was defined as a Researcher Community (RC). To obtain a critical mass with university-level impact, the number of members was set to range from 20 to 120. The RCs were required to contain researchers in all stages of their research career, from doctoral students to principal investigators (Pis). All in all, 136 Researcher Communities participated in this voluntary evaluation, 5857 persons in total, of whom 1131 were principal investigators. PIs were allowed to participate in two communities in certain cases, and 72 of them used this opportunity and participated in two RCs.

This evaluation enabled researchers to define RCs from the “bottom up” and across disciplines. The aim of the evaluation was not to assess individual performance but a community with shared aims and researcher-training activities. The RCs were able to choose among five different categories that characterised the status and main aims of their research. The steering group considered the process of applying to participate in the evaluation to be important, which lead to the establishment of these categories. In addition, providing a service for the RCs to enable them to benchmark their research at the global level was a main goal of the evaluation.

The data for the evaluation consisted of the RCs’ answers to evaluation questions on supplied e-forms and a compilation extracted from the TUHAT – Research Information System (RIS) on 12 April 2011. The compilation covered scientific and other publications as well as certain areas of scientific activities. During the process, the RCs were asked to check the list of publications and other scientific activities and make corrections if needed. These TUHAT compilations are public and available on the evaluation project sites of each RC in the TUHAT-RIS.

In addition to the e-form and TUHAT compilation, University of Leiden (CWTS) carried out bibliometric analyses from the articles included in the Web of Science (WoS). This was done on University and RC levels. In cases where the publication forums of the RC were clearly not represented by the WoS data, the Library of the University of Helsinki conducted a separate analysis of the publications. This was done for 66 RCs representing the humanities and social sciences.

The evaluation office also carried out an enquiry targeted to the supervisors and PhD candidates about the organisation of doctoral studies at the University of Helsinki. This and other documents describing the University and the Finnish higher education system were provided to the panellists.

The panel feedback for each RC is unique and presented as an entity. The first collective evaluation reports available for the whole panel were prepared in July–August 2011. The reports were accessible to all panel members via the electronic evaluation platform in August. Scoring from 1 to 5 was used to complement written feedback in association with evaluation questions 1–4 (scientific focus and quality, doctoral training, societal impact, cooperation) and in addition to the category evaluating the fitness for participation in the evaluation. Panellists used the international level as a point of comparison in the evaluation. Scoring was not expected to go along with a preset deviation.

Each of the draft reports were discussed and dealt with by the panel in meetings in Helsinki (from 11 September to 13 September or from 18 September to 20 September 2011). In these meetings the panels also examined the deviations among the scores and finalised the draft reports together.

The current RC-specific report deals shortly with the background of the evaluation and the terms of participation. The main evaluation feedback is provided in the evaluation report, organised according to the evaluation questions. The original material provided by the RCs for the panellists has been attached to these documents.
On behalf of the evaluation steering group and office, I sincerely wish to thank you warmly for your participation in this evaluation. The effort you made in submitting the data to TUHAT-RIS is gratefully acknowledged by the University. We wish that you find this panel feedback useful in many ways. The bibliometric profiles may open a new view on your publication forums and provide a perspective for discussion on your choice of forums. We especially hope that this evaluation report will help you in setting the future goals of your research.

Johanna Björkroth
Vice-Rector
Chair of the Steering Group of the Evaluation

Steering Group of the evaluation
Steering group, nominated by the Rector of the University, was responsible for the planning of the evaluation and its implementation having altogether 22 meetings between February 2010 and March 2012.

Chair
Vice-Rector, professor Johanna Björkroth

Vice-Chair
Professor Marja Airaksinen
Chief Information Specialist, Dr Maria Forsman
Professor Arto Mustajoki
University Lecturer, Dr Kirsi Pyhältö
Director of Strategic Planning and Development, Dr Ossi Tuomi
Doctoral candidate, MSocSc Jussi Vauhkonen
Panel members

CHAIR
Professor Ary A. Hoffman
Ecological genetics, evolutionary biology, biodiversity conservation, zoology
University of Melbourne, Australia

VICE-CHAIR
Professor Barbara Koch
Forest Sciences, remote sensing
University of Freiburg, Germany

Professor Per-Anders Hansson
Agricultural engineering, modeling, life cycle analysis, bioenergy
Swedish University of Agricultural Sciences

Professor Danny Huylebroeck
Developmental biology
Katholieke Universiteit Leuven, Belgium

Professor Jonathan King
Virus assembly, protein folding
Massachusetts Institute of Technology MIT, USA

Professor Hannu J.T. Korhonen
Functional foods, dairy technology, milk hygiene
MTT Agrifood Research Finland

Professor Kristilna Kruus
Microbiological biotechnology, microbiological enzymes, applied microbiology
VTT Technical Research Centre of Finland

Professor Joakim Lundeberg
Biochemistry, biotechnology, sequencing, genomics
KTH Royal Institute of Technology, Sweden

Professor Dominiek Maes
Veterinary medicine
Ghent University, Belgium

Professor Olli Saastamoinen
Forest economics and policy
University of Eastern Finland

Professor Kai Simons
Biochemistry, molecular biology, cell biology
Max-Planck-Institute of Molecular Cell Biology and Genetics, Germany

The panel, independently, evaluated all the submitted material and was responsible for the feedback of the RC-specific reports. The panel members were asked to confirm whether they had any conflict of interests with the RCs. If this was the case, the panel members disqualified themselves in discussion and report writing.

Added expertise to the evaluation was contributed by the members from the other panels and by one evaluator outside the panels.
External Expert
Professor Anders Linde
Oral biochemistry
Faculty of Odontology
Göteborg University
Sweden

Experts from the Other Panels
Professor Caitlin Buck, from the Panel of Natural Sciences
Professor Ritske Huismans, from the Panel of Natural Sciences
Professor Johanna Ivaska, from the Panel of Medicine, biomedicine and health sciences
Professor Lea Kauppi, from the Panel of Natural Sciences
Professor Holger Stark, from the Panel of Natural Sciences
Professor Peter York, from the Panel of Medicine, biomedicine and health sciences

EVALUATION OFFICE
Dr Seppo Saari, Doc., Senior Adviser in Evaluation, was responsible for the entire evaluation, its planning and implementation and acted as an Editor-in-chief of the reports.
Dr Eeva Sievi, Doc., Adviser, was responsible for the registration and evaluation material compilations for the panellists. She worked in the evaluation office from August 2010 to July 2011.
MSocSc Paula Ranne, Planning Officer, was responsible for organising the panel meetings and all the other practical issues like agreements and fees and editing a part the RC-specific reports. She worked in the evaluation office from March 2011 to January 2012.
Mr Antti Moilanen, Project Secretary, was responsible for editing the reports. He worked in the evaluation office from January 2012 to April 2012.

TUHAT OFFICE
Provision of the publication and other scientific activity data
Mrs Aija Kaitera, Project Manager of TUHAT-RIS served the project ex officio providing the evaluation project with the updated information from TUHAT-RIS. The TUHAT office assisted in mapping the publications with CWTS/University of Leiden.
MA Liisa Ekebom, Assisting Officer, served in TUHAT-RIS updating the publications for the evaluation. She also assisted the UH/Library analyses.
BA Liisa Jäppinen, Assisting Officer, served in TUHAT-RIS updating the publications for the evaluation.

HELSINKI UNIVERSITY LIBRARY
Provision of the publication analyses
Dr Maria Forsman, Chief Information Specialist in the Helsinki University Library, managed with her 10 colleagues the bibliometric analyses in humanities, social sciences and in other fields of sciences where CWTS analyses were not applicable.
Acronyms and abbreviations applied in the report

External competitive funding
AF – Academy of Finland
TEKES - Finnish Funding Agency for Technology and Innovation
EU - European Union
ERC - European Research Council
International and national foundations
FP7/6 etc. /Framework Programmes/Funding of European Commission

Evaluation marks
Outstanding (5)
Excellent (4)
Very Good (3)
Good (2)
Sufficient (1)

Abbreviations of Bibliometric Indicators
P - Number of publications
TCS – Total number of citations
MCS - Number of citations per publication, excluding self-citations
PNC - Percentage of uncited publications
MNCS - Field-normalized number of citations per publication
MNJS - Field-normalized average journal impact
THCP10 - Field-normalized proportion highly cited publications (top 10%)
INT_COV - Internal coverage, the average amount of references covered by the WoS
WoS – Thomson Reuters Web of Science Databases

Participation category
Category 1. The research of the participating community represents the international cutting edge in its field.
Category 2. The research of the participating community is of high quality, but the community in its present composition has yet to achieve strong international recognition or a clear break-through.
Category 3. The research of the participating community is distinct from mainstream research, and the special features of the research tradition in the field must be considered in the evaluation.
Category 4. The research of the participating community represents an innovative opening.
Category 5. The research of the participating community has a highly significant societal impact.

Research focus areas of the University of Helsinki
Focus area 1: The basic structure, materials and natural resources of the physical world
Focus area 2: The basic structure of life
Focus area 3: The changing environment – clean water
Focus area 4: The thinking and learning human being
Focus area 5: Welfare and safety
Focus area 6: Clinical research
Focus area 7: Precise reasoning
Focus area 8: Language and culture
Focus area 9: Social justice
Focus area 10: Globalisation and social change
1 Introduction to the Evaluation

1.1 RC-specific evaluation reports

The participants in the evaluation of research and doctoral training were Researcher Communities (hereafter referred to as the RC). The RC refers to the group of researchers who registered together in the evaluation of their research and doctoral training. Preconditions in forming RCs were stated in the Guidelines for the Participating Researcher Communities. The RCs defined themselves whether their compositions should be considered well-established or new.

It is essential to emphasise that the evaluation combines both meta-evaluation\(^1\) and traditional research assessment exercise and its focus is both on the research outcomes and procedures associated with research and doctoral training. The approach to the evaluation is enhancement-led where self-evaluation constituted the main information. The answers to the evaluation questions formed together with the information of publications and other scientific activities an entity that was to be reviewed as a whole.

The present evaluation recognizes and justifies the diversity of research practices and publication traditions. Traditional Research Assessment Exercises do not necessarily value high quality research with low volumes or research distinct from mainstream research. It is challenging to expose the diversity of research to fair comparison. To understand the essence of different research practices and to do justice to their diversity was one of the main challenges of the present evaluation method. Understanding the divergent starting points of the RCs demanded sensitivity from the evaluators.

1.2 Aims and objectives in the evaluation

The aims of the evaluation are as follows:

- to improve the level of research and doctoral training at the University of Helsinki and to raise their international profile in accordance with the University’s strategic policies. The improvement of doctoral training should be compared to the University’s policy.\(^2\)
- to enhance the research conducted at the University by taking into account the diversity, originality, multidisciplinary nature, success and field-specificity,
- to recognize the conditions and prerequisites under which excellent, original and high-impact research is carried out,
- to offer the academic community the opportunity to receive topical and versatile international peer feedback,
- to better recognize the University’s research potential.
- to exploit the University’s TUHAT research information system to enable transparency of publishing activities and in the production of reliable, comparable data.

1.3 Evaluation method

The evaluation can be considered as an enhancement-led evaluation. Instead of ranking, the main aim is to provide useful information for the enhancement of research and doctoral training of the participating RCs. The comparison should take into account each field of science and acknowledge their special character.

\(^1\) The panellists did not read research reports or abstracts but instead, they evaluated answers to the evaluation questions, tables and compilations of publications, other scientific activities, bibliometrics or comparable analyses.

\(^2\) Policies on doctoral degrees and other postgraduate degrees at the University of Helsinki.
The comparison produced information about the present status and factors that have lead to success. Also challenges in the operations and outcomes were recognized.

The evaluation approach has been designed to recognize better the significance and specific nature of researcher communities and research areas in the multidisciplinary top-level university. Furthermore, one of the aims of the evaluation is to bring to light those evaluation aspects that differ from the prevalent ones. Thus the views of various fields of research can be described and research arising from various starting points understood better. The doctoral training is integrated into the evaluation as a natural component related to research. Operational processes of doctoral training are being examined in the evaluation.

Five stages of the evaluation method were:
1. Registration – Stage 1
2. Self-evaluation – Stage 2
3. TUHAT\(^3\) compilations on publications and other scientific activities\(^4\)
4. External evaluation
5. Public reporting

1.4 Implementation of the external evaluation

Five Evaluation Panels
Five evaluation panels consisted of independent, renowned and highly respected experts. The main domains of the panels are:
1. biological, agricultural and veterinary sciences
2. medicine, biomedicine and health sciences
3. natural sciences
4. humanities
5. social sciences

The University invited 10 renowned scientists to act as chairs or vice-chairs of the five panels based on the suggestions of faculties and independent institutes. Besides leading the work of the panel, an additional role of the chairs was to discuss with other panel chairs in order to adopt a broadly similar approach. The panel chairs and vice-chairs had a pre-meeting on 27 May 2011 in Amsterdam.

The panel compositions were nominated by the Rector of the University 27 April 2011. The participating RCs suggested the panel members. The total number of panel members was 50. The reason for a smaller number of panelists as compared to the previous evaluations was the character of the evaluation as a meta-evaluation. The panelists did not read research reports or abstracts but instead, they evaluated answers to the evaluation questions, tables and compilations of publications, other scientific activities, bibliometrics and comparable analyses.

The panel meetings were held in Helsinki:
- On 11–13 September 2011: (1) biological, agricultural and veterinary sciences, (2) medicine, biomedicine and health sciences and (3) natural sciences.
- On 18–20 September 2011: (4) humanities and (5) social sciences.

\(^3\) TUHAT (acronym) of Research Information System (RIS) of the University of Helsinki
\(^4\) Supervision of thesis, prizes and awards, editorial work and peer reviews, participation in committees, boards and networks and public appearances.
1.5 Evaluation material

The main material in the evaluation was the RCs’ self-evaluations that were qualitative in character and allowed the RCs to choose what was important to mention or emphasise and what was left unmentioned.

The present evaluation is exceptional at least in the Finnish context because it is based on both the evaluation documentation (self-evaluation questions, publications and other scientific activities) and the bibliometric reports. All documents were delivered to the panellists for examination.

Traditional bibliometrics can be reasonably done mainly in medicine, biosciences and natural sciences when using the Web of Science database, for example. Bibliometrics, provided by CWTS/The Centre for Science and Technology Studies, University of Leiden, cover only the publications that include WoS identification in the TUHAT-RIS.

Traditional bibliometrics are seldom relevant in humanities and social sciences because the international comparable databases do not store every type of high quality research publications, such as books and monographs and scientific journals in other languages than English. The Helsinki University Library has done analysis to the RCs, if their publications were not well represented in the Web of Science databases (RCs should have at least 50 publications and internal coverage of publications more than 40%) – it meant 58 RCs. The bibliometric material for the evaluation panels was available in June 2011. The RC-specific bibliometric reports are attached at the end of each report.

The panels were provided with the evaluation material and all other necessary background information, such as the basic information about the University of Helsinki and the Finnish higher education system.

Evaluation material
1. Registration documents of the RCs for the background information
2. Self evaluation material – answers to the evaluation questions
3. Publications and other scientific activities based on the TUHAT RIS:
   3.1. statistics of publications
   3.2. list of publications
   3.3. statistics of other scientific activities
   3.4. list of other scientific activities
4. Bibliometrics and comparable analyses:
   4.1. Analyses of publications based on the verification of TUHAT-RIS publications with the Web of Science publications (CWTS/University of Leiden)
   4.2. Publication statistics analysed by the Helsinki University Library - mainly for humanities and social sciences
5. University level survey on doctoral training (August 2011)
6. University level analysis on publications 2005–2010 (August 2011) provided by CWTS/University of Leiden

Background material

University of Helsinki
- Basic information about the University of the Helsinki
- The structure of doctoral training at the University of Helsinki
- Previous evaluations of research at the University of Helsinki – links to the reports: 1998 and 2005

The Finnish Universities/Research Institutes
- Finnish University system
- Evaluation of the Finnish National Innovation System
- The State and Quality of Scientific Research in Finland, Publication of the Academy of Finland 9/09.

The evaluation panels were provided also with other relevant material on request before the meetings in Helsinki.
1.6 Evaluation questions and material

The participating RCs answered the following evaluation questions which are presented according to the evaluation form. In addition, TUHAT RIS was used to provide the additional material as explained. For giving the feedback to the RCs, the panellists received the evaluation feedback form constructed in line with the evaluation questions:

1. Focus and quality of the RC’s research
   - Description of
     - the RC’s research focus.
     - the quality of the RC’s research (incl. key research questions and results)
     - the scientific significance of the RC’s research in the research field(s)
   - Identification of the ways to strengthen the focus and improve the quality of the RC’s research

The additional material: TUHAT compilation of the RC’s publications, analysis of the RC’s publications data (provided by University of Leiden and the Helsinki University Library)
A written feedback from the aspects of: scientific quality, scientific significance, societal impact, innovativeness
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

Numeric evaluation: OUTSTANDING (5), EXCELLENT (4), VERY GOOD (3), GOOD (2), SUFFICIENT (1)

2. Practises and quality of doctoral training
   - Organising of the doctoral training in the RC. Description of the RC’s principles for:
     - recruitment and selection of doctoral candidates
     - supervision of doctoral candidates
     - collaboration with faculties, departments/institutes, and potential graduate schools/doctoral programmes
     - good practises and quality assurance in doctoral training
     - assuring of good career perspectives for the doctoral candidates/fresh doctorates
   - Identification of the RC’s strengths and challenges related to the practises and quality of doctoral training, and the actions planned for their development.

The additional material: TUHAT compilation of the RC’s other scientific activities/supervision of doctoral dissertations
A written feedback from the aspects of: processes and good practices related to leadership and management
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

Numeric evaluation: OUTSTANDING (5), EXCELLENT (4), VERY GOOD (3), GOOD (2), SUFFICIENT (1)

3. The societal impact of research and doctoral training
   - Description on how the RC interacts with and contributes to the society (collaboration with public, private and/or 3rd sector).
   - Identification of the ways to strengthen the societal impact of the RC’s research and doctoral training.

The additional material: TUHAT compilation of the RC’s other scientific activities.
A written feedback from the aspects of: societal impact, national and international collaboration, innovativeness
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

Numeric evaluation: OUTSTANDING (5), EXCELLENT (4), VERY GOOD (3), GOOD (2), SUFFICIENT (1)
4. International and national (incl. intersectoral) research collaboration and researcher mobility
   - Description of
     - the RC's research collaborations and joint doctoral training activities
     - how the RC has promoted researcher mobility
   - Identification of the RC's strengths and challenges related to research collaboration and researcher mobility, and the actions planned for their development.

A written feedback from the aspects of: scientific quality, national and international collaboration
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

Numeric evaluation: OUTSTANDING (5), EXCELLENT (4), VERY GOOD (3), GOOD (2), SUFFICIENT (1)

5. Operational conditions
   - Description of the operational conditions in the RC's research environment (e.g. research infrastructure, balance between research and teaching duties).
   - Identification of the RC's strengths and challenges related to operational conditions, and the actions planned for their development.

A written feedback from the aspects of: processes and good practices related to leadership and management
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

6. Leadership and management in the researcher community
   - Description of
     - the execution and processes of leadership in the RC
     - how the management-related responsibilities and roles are distributed in the RC
     - how the leadership- and management-related processes support
       - high quality research
       - collaboration between principal investigators and other researchers in the RC
       - the RC's research focus
       - strengthening of the RC's know-how
     - Identification of the RC's strengths and challenges related to leadership and management, and the actions planned for developing the processes

7. External competitive funding of the RC
   - The RCs were asked to provide information of such external competitive funding, where:
     - the funding decisions have been made during 1.1.2005-31.12.2010, and
     - the administrator of the funding is/has been the University of Helsinki
   - On the e-form the RCs were asked to provide:
     1) The relevant funding source(s) from a given list (Academy of Finland/Research Council, TEKES/The Finnish Funding Agency for Technology and Innovation, EU, ERC, foundations, other national funding organisations, other international funding organisations), and
     2) The total sum of funding which the organisation in question had decided to allocate to the RCs members during 1.1.2005–31.12.2010.

Competitive funding reported in the text is also to be considered when evaluating this point.

A written feedback from the aspects of: scientific quality, scientific significance, societal impact, innovativeness, future significance
   - Strengths
   - Areas of development
   - Other remarks
   - Recommendations

8. The RC's strategic action plan for 2011–2013
   - RC's description of their future perspectives in relation to research and doctoral training.

A written feedback from the aspects of: scientific quality, scientific significance, societal impact, processes and good practices related to leadership and management, national and international collaboration, innovativeness, future significance
   - Strengths
   - Areas of development
9. Evaluation of the category of the RC in the context of entity of the evaluation material (1-8)

The RC's fitness to the chosen participation category
A written feedback evaluating the RC's fitness to the chosen participation category

- Strengths
- Areas of development
- Other remarks
- Recommendations

Numeric evaluation: OUTSTANDING (5), EXCELLENT (4), VERY GOOD (3), GOOD (2), SUFFICIENT (1)

10. Short description of how the RC members contributed the compilation of the stage 2 material
Comments on the compilation of evaluation material

11. How the UH's focus areas are presented in the RC's research?
Comments if applicable

12. RC-specific main recommendations based on the previous questions 1-11

13. RC-specific conclusions

1.7 Evaluation criteria

The panellists were expected to give evaluative and analytical feedback to each evaluation question according to their aspects in order to describe and justify the quality of the submitted material. In addition, the evaluation feedback was asked to be pointed out the level of the performance according to the following classifications:

- outstanding (5)
- excellent (4)
- very good (3)
- good (2)
- sufficient (1)

Evaluation according to the criteria was to be made with thorough consideration of the entire evaluation material of the RC in question. Finally, in questions 1-4 and 9, the panellists were expected to classify their written feedback into one of the provided levels (the levels included respective descriptions, ‘criteria’). Some panels used decimals in marks. The descriptive level was interpreted according to the integers and not rounding up the decimals by the editors.

Description of criteria levels

Question 1 – FOCUS AND QUALITY OF THE RC’S RESEARCH

Classification: Criteria (level of procedures and results)

Outstanding quality of procedures and results (5)
Outstandingly strong research, also from international perspective. Attracts great international interest with a wide impact, including publications in leading journals and/or monographs published by leading international publishing houses. The research has world leading qualities. The research focus, key research questions scientific significance, societal impact and innovativeness are of outstanding quality.

In cases where the research is of a national character and, in the judgement of the evaluators, should remain so, the concepts of “international attention” or “international impact” etc. in the grading criteria above may be replaced by “international comparability”.

10
Operations and procedures are of outstanding quality, transparent and shared in the community. The improvement of research and other efforts are documented and operations and practices are in alignment with the documentation. The ambition to develop the community together is of outstanding quality.

**Excellent quality of procedures and results (4)**

Research of excellent quality. Typically published with great impact, also internationally. Without doubt, the research has a leading position in its field in Finland.

Operations and procedures are of excellent quality, transparent and shared in the community. The improvement of research and other efforts are documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of excellent quality.

**Very good quality of procedures and results (3)**

The research is of such very good quality that it attracts wide national and international attention.

Operations and procedures are of very good quality, transparent and shared in the community. The improvement of research and other efforts are documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of very good quality.

**Good quality of procedures and results (2)**

Good research attracting mainly national attention but possessing international potential, extraordinarily high relevance may motivate good research.

Operations and procedures are of good quality, shared occasionally in the community. The improvement of research and other efforts are occasionally documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of good quality.

**Sufficient quality of procedures and results (1)**

In some cases the research is insufficient and reports do not gain wide circulation or do not have national or international attention. Research activities should be revised.

Operations and procedures are of sufficient quality, shared occasionally in the community. The improvement of research and other efforts are occasionally documented and operations and practices are to some extent in alignment with the documentation. The ambition to develop the community together is of sufficient quality.

**Question 2 – DOCTORAL TRAINING**

**Question 3 – SOCIETAL IMPACT**

**Question 4 – COLLABORATION**

**Classification: Criteria (level of procedures and results)**

**Outstanding quality of procedures and results (5)**

Procedures are of outstanding quality, transparent and shared in the community. The practices and quality of doctoral training/societal impact/international and national collaboration/leadership and management are documented and operations and practices are in alignment with the documentation. The ambition to develop the community together is of outstanding quality. The procedures and results are regularly evaluated and the feedback has an effect on the planning.

**Excellent quality of procedures and results (4)**

Procedures are of excellent quality, transparent and shared in the community. The practices and quality of doctoral training/societal impact/international and national collaboration/leadership and management are documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of excellent quality. The procedures and outcomes are evaluated and the feedback has an effect on the planning.

**Very good quality of procedures and results (3)**

Procedures are of very good quality, transparent and shared in the community. The practices and quality of doctoral training/societal impact/international and national collaboration/leadership and
management are documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of very good quality.

Good quality of procedures and results (2)

Procedures are of good quality, shared occasionally in the community. The practices and quality of doctoral training/societal impact/international and national collaboration/leadership and management are documented and operations and practices are to large extent in alignment with the documentation. The ambition to develop the community together is of good quality.

Sufficient quality of procedures and results (1)

Procedures are of sufficient quality, transparent and shared in the community. The practices and quality of doctoral training/societal impact/international and national collaboration/leadership and management are occasionally documented and operations and practices are to some extent in alignment with the documentation. The ambition to develop the community together is of sufficient quality.

Question 9 – CATEGORY

Participation category – fitness for the category chosen

The choice and justification for the chosen category below should be reflected in the RC's responses to the evaluation questions 1–8.

1. The research of the participating community represents the international cutting edge in its field.
2. The research of the participating community is of high quality, but the community in its present composition has yet to achieve strong international recognition or a clear break-through.
3. The research of the participating community is distinct from mainstream research, and the special features of the research tradition in the field must be considered in the evaluation. The research is of high quality and has great significance and impact in its field. However, the generally used research evaluation methods do not necessarily shed sufficient light on the merits of the research.
4. The research of the participating community represents an innovative opening. A new opening can be an innovative combination of research fields, or it can be proven to have a special social, national or international demand or other significance. Even if the researcher community in its present composition has yet to obtain proof of international success, its members can produce convincing evidence of the high level of their previous research.
5. The research of the participating community has a highly significant societal impact. The participating researcher community is able to justify the high social significance of its research. The research may relate to national legislation, media visibility or participation in social debate, or other activities promoting social development and human welfare. In addition to having societal impact, the research must be of a high standard.

An example of outstanding fitness for category choice (5)

The RC's representation and argumentation for the chosen category were convincing. The RC recognized its real capacity and apparent outcomes in a wider context to the research communities. The specific character of the RC was well-recognized and well stated in the responses. The RC fitted optimally for the category.

- Outstanding (5)
- Excellent (4)
- Very good (3)
- Good (2)
- Sufficient (1)

The above-mentioned definition of outstanding was only an example in order to assist the panellists in the positioning of the classification. There was no exact definition for the category fitness.

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5 The panels discussed the category fitness and made the final conclusions of the interpretation of it.
1.8 Timetable of the evaluation

The main timetable of the evaluation:

1. Registration   November 2010
3. External peer review    May–September 2011
4. Published reports    March–April 2012
   - University level public report
   - RC specific reports

The entire evaluation was implemented during the university’s strategy period 2010–2012. The preliminary results were available for the planning of the following strategy period in late autumn 2011. The evaluation reports will be published in March/April 2012. More detailed time schedule is published in the University report.

1.9 Evaluation feedback – consensus of the entire panel

The panellists evaluated all the RC-specific material before the meetings in Helsinki and mailed the draft reports to the evaluation office. The latest interim versions were on-line available to all the panellists on the Wiki-sites. In September 2011, in Helsinki the panels discussed the material, revised the first draft reports and decided the final numeric evaluation. After the meetings in Helsinki, the panels continued working and finalised the reports before the end of November 2011. The final RC-specific reports are the consensus of the entire panel.

The evaluation reports were written by the panels independently. During the editing process, the evaluation office requested some clarifications from the panels when necessary. The tone and style in the reports were not harmonized in the editing process. All the reports follow the original texts written by the panels as far as it was possible.

The original evaluation material of the RCs, provided for the panellists is attached at the end of the report. It is essential to notice that the exported lists of publications and other scientific activities depend how the data was stored in the TUHAT-RIS by the RCs.
2 Evaluation feedback

2.1 Focus and quality of the RC’s research

- Description of
  - the RC’s research focus
  - the quality of the RC’s research (incl. key research questions and results)
  - the scientific significance of the RC’s research in the research field(s)

- Identification of the ways to strengthen the focus and improve the quality of the RC’s research

ASPECTS: Scientific quality, scientific significance, societal impact, innovativeness

This RC has its research focus on tropical rain forests and drylands in developing countries which they also support by development projects and teaching. Due to this approach they are unique not only within the university but also within the country. They started their activities in the eighties and therefore it is already a very mature group which has a good network with relevant research communities and governmental entities. The RC started its activity in Indonesia. Today its geographical reach has broadened to a large number of tropical and dry zone countries. At the beginning the RC was very much dedicated towards research related to practical development projects such as tree nursery and planting techniques. During the second stage they have not only widened the field of research topics but seem also to get more research oriented projects. This is already seen in the recent years’ journal articles.

Due to the constraints of practical oriented project work and the high teaching efforts, the scientific publication activities have somewhat suffered and need to be enhanced in future. This is recognized by the RC and it is expected that with a better focus on research oriented projects the scientific publication activities will further increase.

One way to improve this is the encouragement of cumulative (article based) doctoral theses, which would strengthen situation on the scientific publication. This would be useful not only for the earlier scientific feedback in the thesis processes (see 2.2) but also for a wider reach of the results. Research focus is very much applied, which does not have to be a problem, but a continuous discussion of the methodological base for the work, and how to improve it, should be valuable.

Despite some criticism and constraints reported above, the level and volume of listed scientific research is good and it is with no doubt dealing with real world problems in tropical and arid area realms.

In their vision they have identified their research in between social and natural sciences, and there are examples on that. One new idea is the post-conflict natural resource management, which seems to be an important field not yet occupied by many other institutions within Europe. One may conclude that the positive future perspective according to the visions presented in the report may well be feasible.

Numeric evaluation: 3 (Very good)

2.2 Practises and quality of doctoral training

- Organising of the doctoral training in the RC. Description of the RC’s principles for:
  - recruitment and selection of doctoral candidates
  - supervision of doctoral candidates
  - collaboration with faculties, departments/institutes, and potential graduate schools/doctoral programmes
  - good practices and quality assurance in doctoral training
  - assuring of good career perspectives for the doctoral candidates/fresh doctorates

- Identification of the RC’s strengths and challenges related to the practises and quality of doctoral training, and the actions planned for their development.
The doctoral training seems to be well organized and the number of doctoral students is in a good range, even in an excellent one taking into account the limited permanent senior resources of the RC. Two doctoral students are allocated to the Graduate School in Forest Sciences. However, regarding the wide disciplinary range covered by the theses, it might be of advantage to get linked also to other graduate schools.

The supervision of doctoral students is very intensive and well organized. Most of the students are funded by grant money. It is stated that the selection of students depends on grants but little information is given if and what quality criteria also applies for the final selection. The international students have covered roughly half of the PhD students.

The multidisciplinarity of the doctoral research (taken as a whole) is a strength of the doctoral training, although it may be an overstatement that VITRI is in the forefront of applying approaches of social sciences into forest research in Finland. It also may be questioned is it possible to maintain high quality supervisors, including high methodological knowledge, in all these multiple fields.

It stays unclear why no better use of the doctoral research is done by supporting cumulative theses, which would lead to a better scientific publication situation for the RC. It also deserves consideration whether joining the Finnish consortium to publish joint academic dissertations (Dissertationes Forestales) would bring benefit if even the summaries could be made available in Viikki Tropical Research Reports. One may note here that the monograph doctoral dissertations published in the Viikki Tropical Forestry Reports - not included in the evaluation material - are often referred to in the research literature on tropical forests.

A very positive point is the comprehensive networks of the RC which provide good opportunities for doctoral students to find a job. This is related to an early history and adopted pioneering policy of creating permanent partnerships between VITRI and institutions in the South. This is something that became part of the official development policy in Finland much later. An apparent strength has been that almost all foreign students have returned to their home countries.

An important part of a PhD education is the introduction to the scientific community, including publications in scientific journals, presentations at international workshops etc. The publication is already discussed, but the financing of the field activities of PhD students is another challenge.

**Numeric evaluation: 4.5 (Excellent)**

### 2.3 The societal impact of research and doctoral training

- **Description on how the RC interacts with and contributes to the society (collaboration with public, private and/or 3rd sector).**
- **Identification of the ways to strengthen the societal impact of the RC's research and doctoral training.**
- **Additional material: TUHAT compilation of the RC's other scientific activities.**

**ASPECTS: Societal impact, national and international collaboration, innovativeness**

The specific feature and strength of RC VITRI is the multifunctionality of its mission and activities. It interacts with and contributes to the society through doctoral (and to some extent MSc) training and applied development research as well as by being an active development partner itself.

Through its multiple functions the RC is able to collaborate with international research networks and national academic institutions, with public governmental organisations, private companies and non-governmental non-profit organisations (with the last one, more concrete steps have been taken only recently). All this - including that many graduated PhDs are well positioned in their countries - means a large variety of societal impacts, often creating cumulative positive development spirals as well as durable organisational and human ties and partnerships.
It is evident that all the three functions (research, doctoral training and development activities) are needed to maintain the mutual interactions with both internal and external beneficiaries and added impacts.

In Finland the RC has comprehensive networks with all major governmental organizations in the fields of development policies and related areas. The RC’s international ties, research networks and national partnerships are an asset also for the Finnish organizations - and vice versa. Societal impacts by the group are at the same time seen in the target countries as well as domestically. The benefits for the Finnish society are not only improvements in the development policies and activities but - as it is generally known - due to fact that successful development activities improve security and peace at global level and strengthen fair and sustainable access to natural resources for the active countries, thus triggering trading and development opportunities also with the third countries.

Ways to increase societal impacts would be to strengthen policy and social studies with means available and a strategy for publication (in all medias) of scientific results, including the results of the international PhD students’ theses also in their home countries.

**Numeric evaluation: 5 (Outstanding)**

### 2.4 International and national (incl. intersectoral) research collaboration and researcher mobility

- **Description of**
  - the RC’s research collaborations and joint doctoral training activities
  - how the RC has promoted researcher mobility
- **Identification of the RC’s strengths and challenges related to research collaboration and researcher mobility, and the actions planned for their development.**

**ASPECTS: Scientific quality, national and international collaboration**

The researcher mobility of this RC is naturally very high due to the focus, and thus an asset for the whole university. Former doctoral students of this RC work in major collaborative organizations in their home countries. However, it is not clear to what level the links to the United Nations and its development and environmental programmes have been matured into important partnerships. The RC has a very strong intersectoral orientation which is a specific strength for their research work.

A problem seems to be the financing of field work for doctoral students. For this the RC has plans to take advantage of the new program of the Ministry for Foreign Affairs facilitating hopefully not only the field work itself but also its proper guidance and supervision. Internationally, other sources of funding might also be possible and should be investigated by the RC.

Although the RC has good contacts to the development research and training institutions in Finland, there is room to intensify collaboration with forest organizations and units active in the field. The need to increase the role of social and political sciences in forest related development research is evident. All the most senior posts are focused on tropical silviculture or ecology. Deeper collaboration should be sought with socio-economic research within the faculty and with the development and political studies within the University of Helsinki. Furthering the cooperation possibilities within the relevant units of the member universities of the Finnish Universities’ Partnership for International Development (UniPID) is an additional option.

Internationally, VITRI’s close contacts with the World Agroforestry Centre (ICRAF) and in particular with Center for International Forestry Research (CIFOR) may also provide ways to strengthen the social science and political sciences (including political economy) research in order to support policy relevant research and doctoral training.

**Numeric evaluation: 4 (Excellent)**
2.5 Operational conditions

- Description of the operational conditions in the RC's research environment (e.g. research infrastructure, balance between research and teaching duties).
- Identification of the RC's strengths and challenges related to operational conditions, and the actions planned for their development.

**ASPECTS: Processes and good practices related to leadership and management**

A good management practice has been to have regular monthly meetings where all activities of the RC are discussed. The institutional memory and implementation support have been maintained by the recorded minutes of the meetings.

The operational conditions seem to be satisfying, although a bit more senior research resources should be available for research and supervision of doctoral students. Also the organization of the two planning workshops have so far enhanced the operational conditions allowing the take up of a variety of improvement ideas from all members of the RC.

There is a clear vision how to further improve the organizational conditions by better linking with the stakeholders via the re-establishment a consultative group.

2.6 Leadership and management in the researcher community

- Description of
  - the execution and processes of leadership in the RC
  - how the management-related responsibilities and roles are distributed in the RC
  - how the leadership- and management-related processes support
    - high quality research
    - collaboration between principal investigators and other researchers in the RC
    - the RC's research focus
    - strengthening of the RC's know-how
  - Identification of the RC's strengths and challenges related to leadership and management, and the actions planned for developing the processes

**ASPECTS: Processes and good practices related to leadership and management**

This RC has a very well structured leadership organization. The report is fully convincing and provides the best conditions for the functioning of the RC. In particular, stronger project implementation for development projects and private sector cooperation will be achieved as well as facilitating the senior staff to focus more on high quality research and doctoral training.

Also the planned emphasis to form research groups focused on given topics instead of the present, mainly individual, research work will promote the higher quality of research. It is important for the continuation and strengthening of the research activities that also the recently nominated VITRI director has a high research profile and international experience in tropical forestry research.

It is suggested to divide the monthly meetings into two types of sessions: One related to academic work and doctoral work supervision and the other with more administrative and project related topics. This allows more efficient use and participation of external researchers and supervisors, which is recommended.

According to all this, it is to expect that the RC will be able to make the best out of the capacities they have. Very promising!
2.7 External competitive funding of the RC

- The RCs were asked to provide information of such external competitive funding, where:
  - the funding decisions have been made during 1.1.2005–31.12.2010, and
  - the administrator of the funding is/has been the University of Helsinki
- On the e-form the RCs were asked to provide:
  1) The relevant funding source(s) from a given list (Academy of Finland/Research Council, TEKES/The Finnish Funding Agency for Technology and Innovation, EU, ERC, foundations, other national funding organisations, other international funding organizations), and
  2) The total sum of funding which the organisation in question had decided to allocate to the RCs members during 1.1.2005–31.12.2010.

Competitive funding reported in the text is also to be considered when evaluating this point.

ASPECTS: Scientific quality, scientific significance, societal impact, innovativeness and future significance

The RC seems to have a comfortable funding situation. The funding is mainly based on the European Commission (EC) research funding and funding from the Academy of Finland and the Ministry of Education and Culture. The value of funding is exceptionally high and the RC seems to be very successful in fund acquisition.

However, it could have been expected, due to the research focus, that more international funding from the agencies and programmes of the United Nation would have been sought. Also more enterprise oriented funding could be expected due to the practical orientation of the research. On the other hand it is a positive surprise that the group managed to get such high funds from the EC. If scientific research being in the interests of the private sector participation will be enhanced, it might be possible also to get research funding from the Finnish Funding Agency for Technology and Innovation (TEKES).

2.8 The RC’s strategic action plan for 2011–2013

- RC’s description of their future perspectives in relation to research and doctoral training.

ASPECTS: Scientific quality, scientific significance, societal Impact, processes and good practices related to leadership and management, national and international collaboration, innovativeness, future significance

The RC wants to better focus their research on to areas where they have outstanding experience. This is the right idea and will strengthen the RC. They have very ambitious plans wanting to become one of the leading centers in Europe for research and higher education for tropical forests and [should perhaps be: related] natural resources.

Seven key areas to focus the research and higher education have been defined based on a principle where strengths and expertise are likely to reach the greatest impact - as a part of the process of renewing the strategy.

However, seven areas seem to be quite a lot taking into account the limited number of permanent staff. Four questions related to the seven key areas need to be raised.

- The first question concerns the key area called “Forest-tree eco-physiology and population ecology”. Besides it provides relevant knowledge to the tropical silviculture, it also sounds as a resource demanding field and not so closely related to development oriented research. Could this type of RC be competitive in that area and would it be possible to organize the needed input in any other ways?

- The second question relates to the role of dryland forest research, which has been one of the significant strengths of the RC. Dry regions are now only mentioned in the community-based management together with humid regions. Globally, dryland problems including forest and tree related issues have received less attention they deserve, and as a part of climate change and population increase, the dryland circumstances and living conditions are worsening. Although some key areas may be relevant also for dryland research, it is not the same as to define dryland resource problems and dryland management as
one of the key areas. Why this low profile in the field where the RC may really have potential to be at the cutting edge and which is much needed also in non-tropical countries?

A third question: Where the innovative idea is hidden of initiating and focusing the post-conflict management of natural resources in the key areas?

Finally, the development and improvement of new methodologies needs to be discussed more by the RC.

2.9 Evaluation of the category of the RC in the context of entity of the evaluation material (1-8)

The RC’s fitness to the chosen participation category.

Category 1. The research of the participating community represents the international cutting edge in its field.

The RC has selected participation category 1 ‘Research of the participating community represents the international cutting edge in its field’.

As it has been emphasized several times, the major activities of the RC are doctoral training, research and development work. It is difficult to be at the cutting edge on three different although closely related fields of activity. This evaluation has seen the doctoral training to be the strongest component of these three activities, and has also praised the significant societal impacts of the three combined activities, including the development oriented research.

Question arises whether the word ‘research’ should represent only research, research and training of PhD students or, in this particular case, also development activities.

It is assumed here that the last choice is apparently not possible and therefore the fitness of the RC’s selected participation category is not ideal. Taking into account the emphasis this chosen category lays on high profile research and related activities at the cost of the other criteria, the RC is doing very well, but the fitness needs to be assessed lower than in case of other chosen category such as category 4 (‘The research of the participating community represents an innovative opening’).

Nevertheless, it can be assumed that the group is in a very good stage to reach a position among the leading research communities in Europe in regard to multifunctional and multidisciplinary approach to the tropical forest and dryland related research of developing countries.

Numeric evaluation: 2.5 (Good)

2.10 Short description of how the RC members contributed the compilation of the stage 2 material

The procedure to integrate the ideas of all members of the RC was by collecting the information of all members and then discussing the future perspectives in strategic workshops and with the new director. This is a very effective way to integrate the best ideas for the sustained benefit of the RC’s development strategy.

2.11 How the UH’s focus areas are presented in the RC’s research

Focus area 1: the basic structure, materials and natural resources of the physical world

The research of the RC is related to natural resources component of Key focus area 1, to climate and other environmental issues in Key focus area 3 as well through development issues to Key focus area 3 ‘Globalisation and social change’. In addition, it strongly supports the efforts of the university to continue its processes to become more international.
2.12 RC-specific main recommendations

Check the seven focus areas of research in regard to comments on their number, role of eco-physiology and dryland research, post-conflict management and methodological development.

Increase the synergies between doctoral theses and quality research by moving more into article-based dissertations (as it is in the strategy).

Explore deeper the networking possibilities in multidisciplinary use of social and political sciences and development studies within the faculty, the university and elsewhere.

Note that the implementation of the outlined strategy brings the RC steps forward in many ways.

Establish leadership structures to have better support in the focused research development.

Make careful evaluation on the possibilities for research focused in the area of post conflict forest and land management. Isn’t it also something located between social and natural sciences and science and political conflict management efforts?

When trying to become more research oriented with your projects, as you envisage, make attempts to keep that also in place when external funding may call for very “practical” approaches.

2.13 RC-specific conclusions

The RC is unique in its combined (multifunctional) approach (research, doctoral training, development work) to tropical forest and dryland. The value of this approach seems to be increasing although it means to some extent compromises in each activity.

By so far it has perhaps been the quality of research which has somewhat suffered. However, the relevance of research has been high. There are strategies to improve research performance and further synergies between the three tasks.

The number and content of key areas need to be related to the available resources.

The “generation” shift in the RC is being implemented in a way that it maintains the strength of the community.

Exploring further networking possibilities inside and outside the university may further strengthen the RC while maintaining its multifunctional ability to work with different stakeholder capacities.

The appropriate resource increases suggested in the strategy deserve to be supported by the university and other funding sources.

2.14 Preliminary findings in the Panel-specific feedback

The institutional diversity at the university should be allowed as the VITRI-case demonstrates.

There is a lot of room to strengthen multi- and interdisciplinary interactions inside the university.

2.15 Preliminary findings in the University-level evaluation

[These given in 2.14 may be as valid here].

The institutional diversity at the university should be allowed as the VITRI-case demonstrates.

There is a lot of room to strengthen interdisciplinary interactions inside the university.
3 Appendices

A. Original evaluation material
   a. Registration material – Stage 1
   b. Answers to evaluation questions – Stage 2
   c. List of publications
   d. List of other scientific activities

B. Bibliometric analyses
   a. Analysis provided by CWTS/University of Leiden
   b. Analysis provided by Helsinki University Library (66 RCs)
International evaluation of research and doctoral training at the University of Helsinki 2005-2010

RC-SPECIFIC MATERIAL FOR THE PEER REVIEW

NAME OF THE RESEARCHER COMMUNITY:
Viikki Tropical Resources Institute (VITRI)

LEADER OF THE RESEARCHER COMMUNITY:
Professor Olavi Luukkanen, University of Helsinki, Department of Forest Sciences/VITRI

RC-SPECIFIC MATERIAL FOR THE PEER REVIEW:

- Material submitted by the RC at stages 1 and 2 of the evaluation
  - STAGE 1 material: RC’s registration form (incl. list of RC participants in an excel table)
  - STAGE 2 material: RC’s answers to evaluation questions
- TUHAT compilations of the RC members’ other scientific activities 1.1.2005-31.12.2010

NB! Since Web of Science (WoS)-based bibliometrics does not provide representative results for most RCs representing humanities, social sciences and computer sciences, the publications of these RCs will be analyzed by the UH Library (results available by the end of June, 2011)
1 RESPONSIBLE PERSON

Name: Luukkanen, Olavi
E-mail: 
Phone: 045-1238796, 09-19158643
Affiliation: University of Helsinki/VITRI
Street address: Latokartanonkaari 7

2 DESCRIPTION OF THE PARTICIPATING RESEARCHER COMMUNITY (RC)

Name of the participating RC (max. 30 characters): Viikki Tropical Resources Institute
Acronym for the participating RC (max. 10 characters): VITRI
Description of the operational basis in 2005-2010 (eg. research collaboration, joint doctoral training activities) on which the RC was formed (MAX. 2200 characters with spaces): The Viikki Tropical Resources Institute was established at the then Department of Forest Ecology, University of Helsinki, in 1980, as a research group for educational and research collaboration especially with Kasetsart University in Bangkok, Thailand. This cooperation had started already in 1966 as a scholarship programme for Thai students in Finland.

By 1984, when the professorship in tropical silviculture was established at the University of Helsinki, VITRI had become involved in afforestation and tree nursery projects supported by the Finnish government in Indonesia, Sudan and Kenya. Other essential tasks were forest researcher education for the partner countries and support to their institutions, as well as training of Finnish tropical foresters and forest researchers. From Southeast Asia and eastern Africa the activities have later expanded to Central America, China and West Africa. Presently, VITRI has ongoing research activities also in Costa Rica, Tanzania, Ethiopia, Ghana, Laos and India.

The present research topics at VITRI include, both in humid and dry regions, community-based management of forests; the regeneration and successional dynamics of trees in natural forests; forest ecosystem restoration and forest landscape rehabilitation; agroforestry system management and modeling; forest tree eco-physiology and population genetics. Strong institutional links are maintained especially with Kasetsart University, Bangkok (Thailand), Bogor Agricultural University in Indonesia; the National University of Laos, Wondo Genet College of Forestry (Hawassa University, Ethiopia); the Kenya Forestry Research Institute, the Forestry Research Institute of Ghana; and the Forests National Corporation, the Forestry Research Centre of the Agricultural Research Corporation and the University of Khartoum (all in Sudan); as well as ICRAF, CIFOR and CATIE among the international research centers. VITRI is actively involved in the European Tropical Forest Research Network (ETFRN) and collaborating with several European countries. - VITRI has
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

RC-SPECIFIC STAGE 1 MATERIAL (registration form)

been led since its establishment in 1980 until the end of 2010 by Dr Olavi Luukkanen, professor of tropical silviculture. Dr Mark

3 SCIENTIFIC FIELDS OF THE RC

Main scientific field of the RC’s research: biological, agricultural and veterinary sciences
RC’s scientific subfield 1: Forestry
RC’s scientific subfield 2: Agricultural Economics and Policy
RC’s scientific subfield 3: Environmental Sciences
RC’s scientific subfield 4: --Select--
Other, if not in the list:

4 RC’S PARTICIPATION CATEGORY

Participation category: 1. Research of the participating community represents the international cutting edge in its field

Justification for the selected participation category (MAX. 2200 characters with spaces): The Viikki Tropical Resources Institute (VITRI) and the research group that preceded it have since 1980 carried out training, research and development work related to sustainable natural resource management in tropical and developing countries. VITRI has become a leading national hub in its specific field and trained researchers and other professionals (including 30 doctoral graduates and more than 70 MSc degree holders) for a variety of employers in Finland and abroad. From its current pool of expertise, it provides staffing for international projects related to natural resource management and social or economic issues, especially contributing to implementation of the Finnish development policy. VITRI also supplies ad hoc expertise for development cooperation and global environmental and forestry processes, at the Ministry for Foreign Affairs and the Ministry of Agriculture and Forestry and for Finnish government participation in international negotiations. Internationally VITRI is recognised as a source of expertise for research tasks in international research centres and especially for development projects (Olavi Luukkanen is also a member of the Board of Trustees of World Agroforestry Center, ICRAF). VITRI partners also include leading Finnish private-sector actors in international forestry and natural resource development. VITRI has provided expertise and carried out tasks for bodies such as the EU Commission, UNCCD, and CTA (ACP-EU cooperation; prior to 2005). VITRI has carried out research or contributed to institutional capacity building at universities and research institutions in more than 10 countries of the South.

5 DESCRIPTION OF THE RC’S RESEARCH AND DOCTORAL TRAINING

Public description of the RC’s research and doctoral training (MAX. 2200 characters with spaces): The research at VITRI first focused on tree nursery and planting techniques in tropical countries. This research generated new research-based information for forestry projects under Finnish development cooperation (already in the 1980s it produced a tree nursery innovation that has been applied to tens of millions of tree seedlings in Indonesia). Those projects were related to environmental protection and local wood supply (in Sudan and Kenya) or industrial plantation forestry on denuded rainforest lands (in Indonesia). The
researcher training at VITRI continues the educational cooperation between the University of Helsinki and Kasetsart University in Thailand which started already in 1966 and where VITRI has been responsible for doctoral and MSc thesis supervision, field courses and student and staff exchange. VITRI is now active in more than 10 countries in Africa, Asia and Latin America, carrying out research that has rehabilitation of man-made or natural production systems as a common crosscutting theme. Specifically, it addresses such problems as biodiversity conservation and management in natural and man-made ecosystems, forest tree ecophysiology and population ecology, tree-crop interactions in agroforestry; non-timber forest products (in research on gums and resins VITRI is a leading institution in Europe), community-based natural resource management (including gender issues), watershed management, and cultural and religious functions of trees. In VITRI, a total of 33 doctoral theses have been completed and more than 70 MSc graduates have been trained, all related to natural resource management in tropical or developing countries. Doctoral thesis work is typically pursued with two co-supervisors, representing forest ecology/silviculture and social sciences (eg cultural anthropology), economics or geoinformatics. Researcher training is increasingly linked directly to development projects for livelihood improvement, land-use policy reforms or environmental benefits and services. A new research topic is post-conflict or post-civil-war natural resource management, which VITRI is already pursuing in Southern Sudan, with potential extension to Darfur an

Significance of the RC's research and doctoral training for the University of Helsinki (MAX. 2200 characters with spaces): At the University of Helsinki (UH), VITRI with its international and national network represents the strongest combined actor in research and training that is directly linked to sustainable management of natural resources in tropical countries. Apart from forestry and agroforestry, VITRI also provides researcher training in tropical agriculture and rural development, biodiversity conservation and management, community organisation (including the role of women), and policy and institutional development. For the University, VITRI also provides expertise for participation in national consultative bodies and in the Finnish representation in global and EU processes for environmental and forest policy development.

VITRI is an example of societal interaction in that it provides (directly as an organisation, or by supplying individuals for long or short-term tasks) expertise for international development projects. It is a forerunner in private-sector cooperation which gives access to researcher training in real developing-country situations, and, significantly, to funding which in academic research communities is considered "marginal" but which in reality exceeds the government funding for development research by a factor of magnitude. VITRI carries out tasks for the University (especially the Faculty of Agriculture and Forestry) in creating new contacts and new researcher training opportunities by receiving developing-country visitors and delegations in Helsinki and by negotiating with new potential UH partners in developing countries. In several cooperation agreements VITRI is the de facto Finnish implementer of cooperation: for MoUs with universities in Thailand, Laos (where an MoU is pending), Indonesia, Sudan (with three universities in this country alone), and Ethiopia. Olavi Luukkanen and VITRI represent UH in the Board of the Finnish University Partnership for International Development (UniPID), where Luukkanen is the Chair, for 2009-2011. Through UniPID, VITRI is responsible for maintaining a virtual learning platform for tropical forest restoration and rehabilitation (until this year, the only UniPID virtual learning activity at UH).

Keywords: tropical forests, agroforestry, rural development, biodiversity, land-use policy, participatory research, development studies
Justified estimate of the quality of the RC’s research and doctoral training at national and international level during 2005-2010 (MAX. 2200 characters with spaces):

A shift occurred in VITRI, with new financing opportunities after 1997, towards larger, interdisciplinary projects, which thus were in place in 2005. In 2005-2008, research was carried out in the upper Yangtze watershed in Sichuan that added a component of geoinformatics and landscape-scale modelling into previous ecological and silvicultural work. In Sudan, from 2005 onwards, five doctoral theses were prepared on agroforestry, non-wood products, economic valuation of trees, and community roles in development. In Tanzania, the topic was rainforest conservation through improved agroforestry systems, and in northern Thailand, possibilities for community-based natural forest management were investigated. A comparison among six countries in Africa and Asia gave new insight into devolution of land-use rights.

A network of international partners (including large research organisations such as ICRAF, CIFOR and CATIE and a private company, NIRAS) now allows VITRI’s interdisciplinary research to expand. Recent arrangements have involved VITRI in stronger institutional capacity building at universities in the South (with ICI projects funded by the Finnish Ministry for Foreign Affairs in Southern Sudan in 2008-2009 and Laos in 2009: this activity will most likely continue). The CIMO North-South-South programme finances VITRI’s cooperation with Sudan and Ethiopia; it includes intensive field training with programmes suitable for doctoral students from the three countries and student and staff exchange among them. Faculty members from Sudan and Ethiopia participate in teaching in Finland. Obvious strengths at VITRI are (1) a comprehensive international network which now also includes the private sector on a more permanent basis; (2) interdisciplinarity, which is facilitated by a diversity of academic backgrounds of researchers, (3) international recognition as a research organisation with a sufficient critical mass; and (4) as an innovative aspect among university RC’s, combining in a balanced way research, training and pure development work. Weaknesses include not being able to publish in the absolute top journals and using monograph format for some docto

Comments on how the RC’s scientific productivity and doctoral training should be evaluated (MAX. 2200 characters with spaces):

VITRI differs from most academic RC’s in that it is also directly involved in development work, through partnerships with governments, the private sector, rural communities, and (most successfully recently in Southern Sudan) with NGOs. Therefore it is essential to measure its research against development impacts. This requires assessment of the career development of VITRI graduates working in their home countries. This is facilitated by the fact that in most cases research cooperation continues between VITRI and its alumni after their graduation. A significant societal impact is created simply by the fact that doctoral students at VITRI commonly include researchers, academics and high government administrators who are on leave from their regular positions in their home countries. The strongest impact in VITRI’s research and training has been obtained in Sudan, which is witnessed by the recognition of the results at highest government levels and which is now leading to new R&D involvement with the private sector in that country, also including its southern part.

VITRI promotes South-South cooperation, which should be analysed by contacting researchers and doctoral students who have participated in VITRI-led training in another country (for instance, Sudanese students in
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RC-SPECIFIC STAGE 1 MATERIAL (registration form)

SE Asia, or Ethiopian and Sudanese students and academic staff visiting each other’s countries). Significantly, the first VITRI partner in a developing country, Kasetsart University in Bangkok, has decided to establish a Thai national centre for Africa studies on its campus, as a result from its experience on VITRI’s achievements. Similarly, VITRI has contributed to the planning of a plant ecophysiology unit for the whole Shambat campus of the University of Khartoum, serving doctoral student training. (Fulfilment of these plans in Thailand and Sudan is still to be seen). - The publishing strategy of VITRI includes more emphasis on articles published in truly leading international journals, and of shifting more consistently to article-based doctoral theses.
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INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE
UNIVERSITY OF HELSINKI

RC-SPECIFIC STAGE 2 MATERIAL

BACKGROUND INFORMATION

Name of the RC’s responsible person: Luukkanen, Olavi
E-mail of the RC’s responsible person:

Name and acronym of the participating RC: Viikki Tropical Resources Institute, VITRI

The RC’s research represents the following key focus area of UH: 1. Maailman perusrakenne, materiaalit ja luonnonvarat – The basic structure, materials and natural resources of the physical world

Comments for selecting/not selecting the key focus area: VITRI is involved in research on the basic structure, materials and natural resources of the physical world by focusing on the natural resources of the South and their sustainable management. The key means of intervention is to be part of the process towards good governance and better scientific research-based information on natural resources and society. VITRI and its members do not only carry out research on this theme but are also actively involved in management improvements and policy reforms that support conservation and sustainable use of natural resources. A key feature of VITRI is promoting both North-South and South-South cooperation in research, training and development.

1. FOCUS AND QUALITY OF RC’S RESEARCH (MAX. 8800 CHARACTERS WITH SPACES)

- Description of the RC’s research focus, the quality of the RC’s research (incl. key research questions and results) and the scientific significance of the RC’s research for the research field(s).

In Sudan, the traditional agroforestry practice known as gum arabic gardens was studied in great detail. Tree-crop interactions were separately studied on sandy and clay soils, and the general outcome of the research was that acacia trees make the production systems more sustainable as compared to monocropping. Sandy soils and clay soils differ in their water and nutrient balance, and Acacia senegal trees are genetically adapted to different soil conditions. In Sudan there already exist models that allow joint forest management. The forest policy and forestry legislation are well developed for further application of these models, and this situation should be utilized for wider adoption of community participation in forest management. Women are crucial in the development of sustainable natural resource management.

Another example of VITRI’s interdisciplinary research is the environmental-economic study on the alien, potentially invasive tree species Prosopis juliflora in Sudan. Because of the potential threats to environment and land-use, this species has been banned by the Sudan government. However, Jörn Laxén could demonstrate that this tree has particular benefits for the poorest rural population in Sudan. In Sudan, VITRI also was a partner in supporting sophisticated molecular genetic studies on date palm that resulted in identification of a number of date palm cultivars in that country.

The research group that eventually developed into VITRI had its very first roots in cooperation with Thailand. After five doctoral thesis studies completed earlier on Thailand in VITRI, in 2006 Minna Hares produced a study on selected local communities in northern Thailand and their perceptions related to forests and forest management. Similarly to Anu Eskonhemo’s work in Sudan, this was a truly interdisciplinary study using methodologies of social science for clarifying natural resource management issues.

In the East Usambara Mountains in Tanzania, the work carried out by Teija Reyes resulted in new understanding of the role of agroforestry in income generation (especially for women) and natural forest conservation.
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Policies related to forests and other natural resources became an important field of VITRI research after 2005. Pia Katila’s studies on devolution of land-use rights in six countries in Asia and Africa used an innovative new method that allowed quantitative analysis of the degree of devolution.

China became a partner in VITRI’s research already in the early 1990’s. From 2004-2008, the research on rehabilitation of the upper Yangtze River watersheds in Sichuan Province in China resulted in important breakthroughs in understanding the dynamics of natural forest regeneration as a tool for watershed management. This research had an interdisciplinary approach, with sophisticated geoinformatics tools applied to research questions related to forest ecology and management and policies.

The most recent focus in VITRI’s research has been forest policy and good governance in particular, using Southern Sudan and Ethiopia as case studies. This research gives a good opportunity to VITRI to become a partner in post-conflict natural resource management efforts in Sudan and elsewhere in the Horn of Africa region.

**Ways to strengthen the focus and improve the quality of the RC’s research.**

The focus of research should be and will be more on theoretical and global aspects, while in the past the research has been much of applied nature and has had a local focus. More emphasis will be put on publishing in leading international scientific journals. The research will be more closely linked to international centers in tropical natural resource management, such as the World Agroforestry Centre (where Olavi Luukkanen is a member of the Board of Trustees) and the Center for International Forestry Research (CIFOR) where Markku Kanninen has been a leading scientist for a long time before assuming his position as VITRI director in January 2011.

**2 Practises and Quality of Doctoral Training (max. 8800 characters with spaces)**

- **How is doctoral training organised in the RC?** Description of the RC’s principles for recruitment and selection of doctoral candidates, supervision of doctoral candidates, collaboration with faculties, departments/institutes, and potential graduate schools/doctral programmes, good practises and quality assurance in doctoral training, and assuring good career perspectives for the doctoral candidates/fresh doctorates.

Starting from 1989, VITRI has had 32 doctoral theses completed, and additionally 14 doctoral students are presently actively associated with VITRI. The recruitment of doctoral students takes place normally when VITRI applies for research grants, or, alternatively, when doctoral students join VITRI with their own finding. In the selection of new doctoral study candidates, the main criterion is compatibility with existing VITRI research strategies and country priorities.

Since most doctoral study programmes in VITRI are interdisciplinary with typically two supervisors from different disciplines and departments, the supervision is also divided between these. The interdisciplinary approach and shared supervision has been found to be most useful for the students in question. It has also created a natural link between the Department of Forest Sciences and other departments and study lines, recently most notably with development studies, cultural anthropology and agroecology. The links between different disciplines and departments have been additionally strengthened by the fact that MSc theses have been commonly co-supervised by VITRI staff and various other departments and carried out in VITRI projects. This cooperation has also produced strong new candidates for doctoral studies.
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Since 2005, two VITRI doctoral students have been full members of the Graduate School in Forest Sciences, which has substantially strengthened the links to researcher training in the field of forestry.

The quality assurance in doctoral training is guaranteed by individual supervision, typically by professors from two different departments, as well as by monthly meetings of all VITRI staff and students where the current situation in all ongoing doctoral (and MSc) theses is recorded and discussed.

Career perspectives for new doctoral degree holders in tropical silviculture have been good, with many of them recruited by either international organisations or the private sector. Almost all of the foreign doctoral students at VITRI have returned to their home countries, where they now form the backbone of much of the forestry education, research or management. Examples (from the period before 2005) include, in Sudan, the director general of forestry, two directors of forestry research, and two associate professors, and, in Thailand, two associate deans and the head of silvicultural forest research at the national forest service. An especially important career opportunity for Finnish VITRI doctoral degree holders has been the public administration, with the Finnish Ministry of Foreign Affairs so far recruiting four VITRI doctoral degree holders and the Ministry of Education one. Two doctoral degree holders from VITRI have been employed by an international forest company.

Specifically for the period 2005-2010, the recruitments of VITRI doctoral degree holders are as follows: (1) technical department director, Sudan forest service (Forests National Corporation, FNC), (2) doctoral student in environmental law, University of Helsinki (for a second doctoral degree), (3) & (4) Finnish Ministry for Foreign Affairs positions, (5) associate professor, Sudan Forestry Research centre, (6) position as VITRI project director, (7) researcher at the Finnish Forest Research Institute, (8) visiting researcher at a university in the U.S.A., (9) associate professor and later researcher in forestry research in China.

- RC’s strengths and challenges related to the practises and quality of doctoral training, and the actions planned for their development.

Strengths include a network of partners in the countries of the South that has been created by training key actors there. Another strength is the long history of activities of VITRI, starting in 1980 and developing into a progressively more diversified and scientifically more qualified network. While practical problems in forest management in Africa and Asia were prominent in VITRI’s work in the 1980’s and 1990’s, for the last ten years the focus has already been on high-quality interdisciplinary research. VITRI is now in the forefront of applying approaches of social sciences into forestry research in Finland and also an internationally acknowledged actor in forest-sector development in the countries of the South.

Challenges include adaptation to new emerging global research issues. With Dr Markku Kanninen as new VITRI director from 2011, and with his long international career in tropical forestry with special focus on forests and climate change, it is quite obvious that VITRI can well adjust its research and doctoral training accordingly.

3 SOCIETAL IMPACT OF RESEARCH AND DOCTORAL TRAINING (MAX. 4400 CHARACTERS WITH SPACES)

- Description of how the RC interacts with and contributes to the society (collaboration with public, private and/or 3rd sector).

VITRI is unique and exceptional among the University of Helsinki institutions in that it was established (as a tropical silviculture research group) in 1980 specifically for implementing research, training and
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

RC-SPECIFIC STAGE 2 MATERIAL

development activities in the South. The most innovative aspect, that only can be appreciated now that the university in 2010 has become an independent legal entity separate from the government, is that VITRI was active already in the 1980’s as implementer of development projects in the South. Such projects offered and still offer an excellent opportunity for researcher training.

Development projects in which VITRI is involved either alone or in partnership with the private sector allow a close contact with society in developing countries and different actors there, including the government administration, the rural communities and NGO’s. The most illustrative recent case is the LAMPTESS project implemented by VITRI in Southern Sudan in 2008-2009. In this project, under the Institutional Cooperation Instrument (ICI) scheme of the Finnish Ministry for Foreign Affairs, VITRI succeeded in bringing together the local communities in selected villages of the pilot area (Renk county in Upper Nile State), all levels of the government administration, representatives of academic training in natural resource management, and NGO’s. The result was a stronger local capacity for sustainable natural resource management, and for practical purposes, a model farm run by local villagers, serving for training of extension officers and other professionals at Upper Nile University, whose agricultural campus is at this very location.

• Ways to strengthen the societal impact of the RC’s research and doctoral training.

VITRI already is a leading actor in Finland in bringing a societal impact to its research and doctoral training in the countries of the South. The geographical range of contacts is already wide, covering eastern and western Africa, Southeast Asia, India, China and Central America. Further strengthening will take place by involvement in more development projects implemented by the private sector (enterprises or NGO’s). Currently VITRI is a partner in only one such project, the Nile Basin Community Watershed Management Project in Sudan, in a consortium with the NIRAS company for 2010-2014. However, this project alone will give huge opportunities for research and training in livelihood development and environmental rehabilitation in an African dryland environment (which, incidentally, has been of VITRI’s main fields of activity since its establishment in 1980).

4 INTERNATIONAL AND NATIONAL (INCL. INTERSECTORAL) RESEARCH COLLABORATION AND RESEARCHER MOBILITY (MAX. 4400 CHARACTERS WITH SPACES)

• Description of the RC’s research collaborations and joint doctoral training activities and how the RC has promoted researcher mobility.

The backbone of VITRI’s research and doctoral training has been partnerships with universities and research institutions in the South. These partnerships have been created by VITRI senior staff working in developing countries in their research projects or in separate development projects. VITRI has now active cooperation with the following institutions: Kasetsart University, Thailand; National University of Laos (NUOIL); Bogor Agricultural University, Indonesia, Kenya Forestry Research Institute (KEFRI); University of Khartoum, Sudan; Forestry Research Centre, Sudan; National Foreests Corporation, Sudan; Ministry of Agriculture and Forestry, Government of Southern Sudan, Upper Nile University, Southern Sudan; University of Juba, Southern Sudan; Wondo Genet College of Forestry and Natural Resources, Ethiopia; and the Forestry Research Institute of Ghana (FORIG).

International organizations where VITRI has ongoing work or its former researchers positioned include the Center for International Forestry Research (CIFIR), Indonesia; the World Agroforestry Center, Nairobi, Kenya; Bioversity International (Rome and Kuala Lumpur); and CATIE, Costa Rica.
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Typically, VITRI doctoral students work at these partner institutions for their research and doctoral thesis work. These partnerships are also important for offering opportunities for VITRI MSc students for research; many of these students then continue their career as doctoral students at VITRI. In Finland, VITRI has close links with several University of Helsinki departments, including the Department of Agricultural Sciences, the Department of Economics and Management, Development Studies, and Cultural Anthropology Studies. With these departments or study lines, doctoral students are jointly supervised.

Researcher mobility is a natural part of VITRI activities, since all research sites are in foreign countries. This mobility is financially supported either from research projects (such as CASFAD financed by the Academy of Finland in Sudan), or from external additional funding applied for by the doctoral student. There is a constant problem in providing sufficient funding for the field work carried out by VITRI doctoral students.

- RC’s strengths and challenges related to research collaboration and researcher mobility, and the actions planned for their development.

VITRI has obvious strengths in its long-established collaboration with partners of the South. The strengths are created by the fact that many of the persons responsible for this collaboration in other countries are former VITRI staff or doctoral students.

Challenges include the fact that financing of the field work in the South is not readily available for doctoral students at VITRI. This causes considerable stress on the students and on supervising professors, when external financing is applied from various sources.

New actions include applications for comprehensive new research project where all travel and field costs are included. VITRI will take full advantage of the new programme planned by the Ministry or Foreign Affairs to offer financing for doctoral and MSc study field work that is connected to Finnish development cooperation projects.

5 OPERATIONAL CONDITIONS (MAX. 4400 CHARACTERS WITH SPACES)

- Description of the operational conditions in the RC’s research environment (e.g. research infrastructure, balance between research and teaching duties).

The operational conditions in the RC’s research environment are satisfactorily met. In particular, the positive feature is now having two professors in tropical silviculture active for 2011-2012. There is also a university lecturer in tropical silviculture on regular basis, and a project director financed from project budgets. One docent also works in tropical silviculture.

Because of shared supervision of doctoral students, typically by two professors from different departments, the present high number of doctoral students active in tropical silviculture (14) is not a major problem.

However, a clear problem is that doctoral students are not fully utilized for teaching. There is a consensus that they should have more opportunities for lecturing and for co-supervising MSc thesis work. The few cases in which VITRI has already had a doctoral student in field work supervising a MSc student at the same site and on related research topics have been highly successful.
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

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- RC’s strengths and challenges related to operational conditions, and the actions planned for their development.

  On several occasions, including two strategy planning workshops, the operational conditions for VITRI’s work have been discussed and improvements suggested. VITRI has had the advantage of having regular monthly meetings with minutes recorded where all activities are discussed. This has included project work, progress in doctoral and MSc studies, and new initiatives for teaching.

  Presently the perhaps most urgent task is to re-establish a consultative group for VITRI, consisting of stakeholder representatives. Such a group existed for two three-year terms until the end of 2007. New legislation and adoption of the subsequent reform of university administration have delayed the re-establishment of this body. It would be important in linking VITRI activities to those carried out by other stakeholders and to the development policy of the Ministry for Foreign Affairs.

6 LEADERSHIP AND MANAGEMENT IN THE RESEARCHER COMMUNITY (MAX. 4400 CHARACTERS WITH SPACES)

- Description of the execution and processes of leadership in the RC, how the management-related responsibilities and roles are distributed in the RC and how the leadership- and management-related processes support high quality research, collaboration between principal investigators and other researchers in the RC, the RC’s research focus and strengthening of the RC’s know-how.

  The execution and processes of leadership in VITRI are based on practices established already in the 1980’s when VITRI started to implement its first major projects financed by the Ministry for Foreign Affairs. The project leader, usually the professor and director of VITRI, has had the sole responsibility for project implementation. However, project matters as well as the progress in doctoral and MSc thesis works have been discussed in detail at the monthly “Executive Committee” meetings of VITRI.

  When the number of projects increased, other project leaders were nominated, in addition to the professor and VITRI director. A significant boost to VITRI activities was the establishment, in 2002, of the position of project director, first with financing directly from the university central administration. Later this position was maintained and financed by funding from VITRI projects. There is now some difficulty in continuing with this arrangement, and plans are ready in the Department of Forest Sciences to have a project director/coordinator permanently financed from departmental budgets. The project director should in the future have the responsibility to also independently lead some of the VITRI projects.

  Because of the strong emphasis on development projects and cooperation with the private sector in implementing them, there should definitely be a stronger project implementation unit within VITRI. That unit would then be responsible for project implementation and reporting. Some educational projects, such as the North-South-South exchange project that VITRI coordinates with Sudan and Ethiopia as partners, includes administrative duties which are not easily met by the present staffing (the university lecturer functions as project leader in this case).

  Support to high-quality research will from now on be ensured by strong involvement of the new VITRI director, Prof. Markku Kanninen, who is a globally acknowledged expert in issues related to tropical forests and climate change. This theme will also become more prominent in research, teaching and development work at VITRI.

  VITRI will in the future be more based on research groups focused on a given topic, instead of the present structure of independent researchers working alone on their own topics. These groups will
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

RC-SPECIFIC STAGE 2 MATERIAL

have their assigned principal investigators as leaders. MSc theses would also be supervised more by groups of researchers than by a sole supervisor.

- RC’s strengths and challenges related to leadership and management, and the actions planned for developing the processes.
  The strength in VITRI has been and still is the strong cohesion formed by its monthly meetings and daily communication among its senior members. As has already been decided by VITRI, the monthly meetings which so far have covered all activities in a uniform way and also paid much attention to announcements of events where VITRI members have been participating, will, in the future, be divided into two types of sessions. One type will more focus on academic work, in particular on the progress in doctoral theses. Another type of sessions will more highlight the progress in VITRI projects and other administrative issues. Both types of meetings would be strongly recommended for all VITRI staff and doctoral students; MSc students could also participate and they should especially attend the sessions on progress in scientific research work.

<table>
<thead>
<tr>
<th>7 EXTERNAL COMPETITIVE FUNDING OF THE RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Listing of the RCs external competitive funding, where:</td>
</tr>
<tr>
<td>- the funding decisions have been made during 1.1.2005-31.12.2010, and</td>
</tr>
<tr>
<td>- the administrator of the funding is/has been the University of Helsinki</td>
</tr>
</tbody>
</table>

- Academy of Finland (AF) - total amount of funding (in euros) AF has decided to allocate to the RC members during 1.1.2005-31.12.2010: 734000

- Finnish Funding Agency for Technology and Innovation (TEKES) - total amount of funding (in euros) TEKES has decided to allocate to the RC members during 1.1.2005-31.12.2010:

- European Union (EU) - total amount of funding (in euros) EU has decided to allocate to the RC members during 1.1.2005-31.12.2010: 910000

- European Research Council (ERC) - total amount of funding (in euros) ERC has decided to allocate to the RC members during 1.1.2005-31.12.2010:

- International and national foundations - names of international and national foundations which have decided to allocate funding to the RC members during 1.1.2005-31.12.2010, and the amount of their funding (in euros).
  - names of the foundations: Metsämiesten säätiö
  - total amount of funding (in euros) from the above-mentioned foundations: 20000

- Other international funding - names of other international funding organizations which have decided to allocate funding to the RC members during 1.1.2005-31.12.2010, and the amount of their funding (in euros).
  - names of the funding organizations:
  - total amount of funding (in euros) from the above-mentioned funding organizations:
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

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- Other national funding (incl. EVO funding and Ministry of Education and Culture funded doctoral programme positions) - names of other national funding organizations which have decided to allocate funding to the RC members during 1.1.2005-31.12.2010, and the amount of their funding (in euros).
  - names of the funding organizations: Ministry for Foreign Affairs
  - Ministry of Education and Culture/CIMO
  - total amount of funding (in euros) from the above-mentioned funding organizations: 826000

8 RC’S STRATEGIC ACTION PLAN FOR 2011–2013 (MAX. 4400 CHARACTERS WITH SPACES)

- Description of the RC’s future perspectives in respect to research and doctoral training.
  The Viikki Tropical Resources Institute (VITRI) was established at the Department of Forest Ecology, University of Helsinki, in 1980, as a research group for educational and research collaboration with developing countries. In 1984, the professorship in silviculture in developing countries was established at University of Helsinki with Dr Olavi Luukkanen as the chair holder.

  By mid-1980’s, VITRI became involved in development cooperation and research projects supported by the Finnish government mainly on afforestation and tree nursery projects in Indonesia, the Sudan and Kenya. Other essential tasks were forest researcher training and institutional support in partner countries and education of Finnish tropical foresters and forest researchers. The activities have later expanded to Central America, West Africa and China. Presently, VITRI has on-going research, development or training activities also in Ethiopia, Tanzania, Ghana, India, Laos and Costa Rica.

  By January 2011, the new department of Forest Sciences was established through a merger of three former departments of forest sciences, and VITRI became administratively unit of the new department with a special focus on tropical forestry and natural resources management. At the same time, Dr. Markku Kanninen was nominated as the professor of tropical silviculture and director of VITRI.

  The mission of the Viikki Tropical Resources Institute (VITRI) is to promote ecologically, socially and economically sustainable use and management of tropical forests and natural resources through research, higher education, and development cooperation. The vision of the Viikki Tropical Resources Institute (VITRI) is to be one of the leading centers of research and higher education on tropical forests and natural resources in Europe, and an internationally recognized institution and partner for collaboration in research, education, and development cooperation.

  VITRI will focus its research, education and development cooperation activities on areas where its strengths and expertise are likely to achieve the greatest impact. VITRI will endeavor to maintain and build on its qualities, strengths and reputation that distinguish it from other organizations.

  VITRI’s positioning and comparative advantage is based on:

  - Brand name: VITRI is associated with high-quality education and research.
  - Mandate: VITRI is the only unit in Finland offering university-level higher education in tropical silviculture and natural resources management.
  - Partnerships: VITRI has well-established partnerships with national universities and research institutions in both developed and developing countries, with leading international research
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

RC-SPECIFIC STAGE 2 MATERIAL

organizations, and with private sector and civil society actors focusing on tropical forests and natural resources.

- Distinctive perspective: in its teaching and research, VITRI applies best scientific knowledge, interdisciplinary approaches, and global perspectives in research and higher education that is not only of high quality but also relevant in achieving sustainable development.

VITRI’s research and higher education focuses on the following key areas:

- Tropical agroforestry and plantation forestry
- Forest tree eco-physiology and population ecology
- Rehabilitation of degraded lands, forests and agricultural production systems
- Forest landscape restoration (ecological, social, economic and cultural aspects)
- Community-based management of forests and trees both in humid and dry regions (with emphasis also in gender issues in natural resources management)
- Climate change – both mitigation (e.g. REDD+) and ecosystem-based adaptation
- Ecosystem services in tropical forested landscapes

Throughout the years, VITRI has built and maintained strong institutional links especially with Kasetsart University, Bangkok, Thailand; Bogor Agricultural University, Indonesia; Chengdu Institute of Biology (Chinese Academy of Science); Wondo Genet College of Forestry, Ethiopia; University of Khartoum Faculty of Forestry, Forests National Corporation, and Forestry Research Centre (Sudan); Kenya Forestry Research Institute (KEFRI); Forestry Research Institute of Ghana (FORIG), and the National University of Laos (NUOL) in Vientiane, Laos. In addition, VITRI collaborates with regional and international research organizations.

Prof. Olavi Luukkanen has collected the information from RC members, especially from those responsible for project leaderships. The future perspectives of VITRI are based on the results of two strategic planning seminars in VITRI and formulated by the new VITRI director Prof. Markku Kanninen in cooperation with Olavi Luukkanen.
1 Analysis of publications

<table>
<thead>
<tr>
<th>Publication type</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total Count 2005 - 2010</th>
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<tr>
<td>A1 Refereed journal article</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>6</td>
<td>13</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>A3 Contribution to book/other compilations (refereed)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>A4 Article in conference publication (refereed)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>B2 Contribution to book/other compilations (non-refereed)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>B3 Unrefereed article in conference proceedings</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>C1 Published scientific monograph</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C2 Edited book, compilation, conference proceeding or special issue of journal</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>D1 Article in professional journal</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>D2 Article in professional hand or guide book or in a professional data system, or text book material</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D4 Published development or research report</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>E1 Popular contribution to book/other compilations</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>E2 Popular monograph</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
2 Listing of publications

A1 Refereed journal article

2005


2006


2007


2008


2009


2010

Glover, EK, Luukkanen, O, Elsiddig, E 2010, 'Community-based forest management strategies for increasing the forest cover in Gedaref, Sudan', Sudan Journal of Desertification Research, vol 2, pp. 86-103.


**A3 Contribution to book/other compilations (refereed)**

2005

2006

2008

2010

2005

2008

2009
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RC-SPECIFIC TUHAT COMPILATIONS OF PUBLICATIONS DATA 2005-2010

VITRI/Luukkanen


B2 Contribution to book/other compilations (non-refereed)

2005

2006
Budaviciute, S, Budaviciute, S 2006. 'Atraktyvi medžiag, tinkan bulvinis minamus Liriomyza bryoniae (L.) monitoringui, tyrimas', Atraktyvi medžiag, tinkan bulvinis minamus Liriomyza bryoniae (L.) monitoringui, tyrimas.

2010

B3 Unrefereed article in conference proceedings

2006


2007


2008

2009
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RC-SPECIFIC TUHAT COMPILATIONS OF PUBLICATIONS DATA 2005-2010


2010


Kalame, FB, Luukkanen, O, Kanninen, M 2010, ‘Can adaptive policy address forestry and climate change adaptation in Africa?’, in 2nd Global conference on environmental governance and democracy: Strengthening institutions to address climate change and advance a green economy., pp. 85.

C1 Published scientific monograph

2006


C2 Edited book, compilation, conference proceeding or special issue of journal

2005

Jalkanen, A, Nygren, P (eds) 2005, Sustainable use of renewable natural resources: from principles to practices, Helsingin yliopiston metsäekologian latoksen julkaisuja, no. 34, University of Helsinki, Department of Forest Ecology, Helsinki.

2008


D1 Article in professional journal

2007


D2 Article in professional hand or guide book or in a professional data system, or text book material

2008


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VITRI/Luukkanen

2009


2010


D4 Published development or research report

2006

Luukkanen, O 2006, Project on rehabilitation of degraded forests with collaboration of local communities [Ghana], Forestry Research Institute of Ghana (FORIG), Kumasi.

2008


E1 Popular contribution to book/other compilations

2008


E2 Popular monograph

2006

1 Analysis of activities 2005-2010

**Activity type** | **Count**
---|---
Supervisor or co-supervisor of doctoral thesis | 25
Prizes and awards | 2
Editor of research journal | 3
Peer review of manuscripts | 9
Membership or other role in national/international committee, council, board | 9
Membership or other role in public Finnish or international organization | 24
Participation in TV programme | 1
2 Listing of activities 2005-2010

Supervisor or co-supervisor of doctoral thesis

Olavi Luukkanen, Supervisor or co-supervisor of doctoral thesis

- Community involvement in tropical dryland rehabilitation in Sudan, Olavi Luukkanen, 01.01.2001 → 31.05.2005, Finland
- Improvement of traditional Acacia senegal agroforestry, Olavi Luukkanen, 01.01.2001 → 31.05.2005, Finland
- Community forestry and environmental literacy in northern Thailand, Olavi Luukkanen, 01.01.2002 → 31.05.2006, Finland
- Tropical dryland agroforestry with Acacia senegal on clay soils, Olavi Luukkanen, 01.01.2002 → 31.07.2006, Finland
- Women, environmental changes and forestry-related development, Olavi Luukkanen, 01.01.2002 → 31.05.2008
- Ecological-economic analysis of Prosopis juliflora as an invasive alien tree species in Sudan, Olavi Luukkanen, 01.01.2003 → 30.04.2007, Finland
- Landscape-scale soil erosion modelling and ecological restoration in Sichuan, China, Olavi Luukkanen, 01.01.2004 → 30.04.2008, Finland
- Devolution of forest-related rights in Africa and Asia, Olavi Luukkanen, 01.01.2005 → 28.02.2008, Finland
- Global and EU governance for sustainable forest management: cases Ethiopia and Southern Sudan, Olavi Luukkanen, 01.01.2006 → 31.12.2010, Finland
- Prosopis - an alien among the sacred trees of South India, Olavi Luukkanen, 01.01.2006 → 31.12.2010, Finland
- The role of forest policies and products in supporting adaptation of society to impacts of climate change in Sub-Saharan Africa (Burkina Faso, Ghana and Sudan), Olavi Luukkanen, 01.01.2006 → 31.12.2010, Finland
- Livelihood impacts of exclusionary vs. integrated management scenarios of forest biodiversity: exploring outcomes in tropical landscape mosaics, Olavi Luukkanen, 01.01.2007 → 31.12.2010, Finland
- Microcredits as a tool for community development in Laos, Olavi Luukkanen, 01.01.2007 → 31.12.2010, Finland
- Variation in soil properties as related to tree cover in the Taita Hills, Kenya: Implications for forest regeneration and water balance., Olavi Luukkanen, 01.01.2007 → 31.12.2010, Finland
- Ensete-based agroforestry systems in Gedeo, Ethiopia: carbon dynamics, livelihood opportunities, Olavi Luukkanen, 01.11.2008 → 31.12.2010, Finland
- Improved fallows as a means of biodiversity conservation and sustainable medicinal plant production in The Gambia, Olavi Luukkanen, 01.01.2009 → 31.12.2010, Finland
- Policy frame for the REDD initiative and comparative analysis of forestry legislation in selected Mekong Basin countries, Olavi Luukkanen, 01.01.2009 → 31.12.2010, Finland
- Commiphora trees for aromatic resin production in pastoral communities in NE Kenya, Olavi Luukkanen, 01.01.2009 → 31.12.2010, Finland
- Impacts of dryland agro-ecosystems and fulewood plantations on carbon sequestration and greenhouse gas emission in Sudan., Olavi Luukkanen, 01.01.2009 → 31.12.2010, Finland
- Options for land rehabilitation in Southern Sudan: studies on agroforestry systems and biochar application, Olavi Luukkanen, 01.01.2009 → 31.12.2010, Finland

Fobissie Blese Kalame, Supervisor, Fobissie Blese Kalame, 01.05.2009 → 30.03.2010, Burkina Faso


Prizes and awards
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RC-SPECIFIC TUHAT COMPILATIONS OF OTHER SCIENTIFIC ACTIVITIES 2005-2010

VITRI/Luukkanen

Olavi Luukkanen,

Nelain Decorations First Class, Olavi Luukkanen, 10.11.2005, Sudan

Silviija Budaviciute,

Grant for field work in Indonesia, Silviija Budaviciute, 08.08,2008 → 15.10.2008

Editor of research journal

Olavi Luukkanen,

Tropical Forestry Reports, Olavi Luukkanen, 06.10.1989 → 31.12.2010, Finland

Minna Hares,

Ambio - a Journal of Human Environment, Minna Hares, 01.01.2006 → 31.12.2006, Sweden

Pekka Olavi Nygren,

Silva Fennica, Pekka Olavi Nygren, 01.09.2004 → 31.08.2005, Finland

Peer review of manuscripts

Fobissie Blese Kalame,

Referee of peer review scientific article, Fobissie Blese Kalame, 24.04.2008 → 27.06.2008

Referee of peer review scientific article, Fobissie Blese Kalame, 01.10.2010 → 23.11.2010

Referee of peer reviewed scientific articles, Fobissie Blese Kalame, 28.11.2010 → 12.12.2010

Pekka Olavi Nygren,

Tree Physiology, Pekka Olavi Nygren, 01.01.2003 → 31.12.2010, Canada

Agroforestry Systems, Pekka Olavi Nygren, 01.01.2005 → 31.12.2010, Netherlands

Silva Fennica, Pekka Olavi Nygren, 01.08.2005 → 31.12.2010, Finland

Annales of Botany, Pekka Olavi Nygren, 01.01.2006 → 31.12.2006, United Kingdom

Acta Oecologia, Pekka Olavi Nygren, 01.01.2007 → 31.12.2007, France

New Phytologist, Pekka Olavi Nygren, 01.01.2007 → 31.12.2007, United Kingdom

Membership or other role in national/international committee, council, board

Olavi Luukkanen,

European Tropical Forest Research Network, Olavi Luukkanen, 01.01.2005 → 31.12.2007, Netherlands

Senior Advisors Committee for Forestry & Agroforestry, Olavi Luukkanen, 01.01.2005 → 31.12.2010, Sweden

Finnish University Partnership for International Development (UniPID), Chair, Olavi Luukkanen, 01.01,2007 → 31.12,2012, Finland

Board of Trustees member, Olavi Luukkanen, 01.04,2009 → 31.03,2012, Kenya

Markku Kanninen,

Member of the Adaptation Fund Board, Markku Kanninen, 01.01,2008 → 31.12,2011

Pekka Olavi Nygren,

International Foundation for Science, Pekka Olavi Nygren, 01.01,2005 → 31.12,2005, Sweden

Suomen Metsätieteellisen Seuran, Pekka Olavi Nygren, 01.01,2005 → 31.08,2005, Finland

International Foundation for Science, Pekka Olavi Nygren, 01.01,2007 → 31.12,2007, Sweden

Lithuanian State Science and Studies Foundation, Pekka Olavi Nygren, 01.01,2007 → 31.12,2007, Lithuania

Membership or other role in public Finnish or international organization

Olavi Luukkanen,

Member and Vice Chair of Consultative group for international forestry, Olavi Luukkanen, 01.08,1997 → 31.12,2010, Finland
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RC-SPECIFIC TUHAT COMPILATIONS OF OTHER SCIENTIFIC ACTIVITIES 2005-2010

VITRI/Luukkanen

Membership in Finnish government delegation in UN Forum for Forests, Olevi Luukkanen, 10.05.2005 → 13.05.2005
Jörn Laxen,

Expert contribution to UNEP report in Geneva, Jörn Laxen, 21.08.2006 → 24.08.2006, Switzerland
Meeting with Minister in Upper Nile State, South Sudan, Jörn Laxen, 25.10.2008, Sudan
Meeting with Renk County Commissioner, Jörn Laxen, 10.06.2008, Sudan
Meeting with Renk County Council Administration, Jörn Laxen, 16.10.2008, Sudan
Meetings with Upper Nile University Faculty Administration, Jörn Laxen, 17.08.2008, Sudan
Planning of funding programme for the Finnish University Programme for International Development, Jörn Laxen, 12.01.2008, Finland
Project Steering Committee Meeting in Renk County, South Sudan, Jörn Laxen, 28.10.2008, Sudan

Several meetings with Government of South Sudan
Several meetings with the Government of South Sudan

Meeting with Commissioner of Renk County Council Administration, Jörn Laxen, 26.10.2009, Sudan
Meeting with Forest Department of Sudan (Forests National Corporation), Jörn Laxen, 09.08.2009, Sudan
Meeting with Rector of University of Upper Nile, Jörn Laxen, 22.04.2009
Meeting with UNEP Juba Office, Jörn Laxen, 05.11.2009, Sudan
Meeting with UNEP Khartoum Office, Jörn Laxen, 22.08.2009, Sudan
Meeting with Vice Chancellor of University of Juba, Jörn Laxen, 09.08.2009
Meeting with Vice Chancellor of University of Juba, Jörn Laxen, 16.11.2009
Meetings at Government of South Sudan/Ministry of Agriculture and Forestry, Jörn Laxen, 04.11.2009 → 07.11.2009, Sudan
Meetings with Government of South Sudan/Ministry of Agriculture and Forestry, Jörn Laxen, 23.04.2009 → 25.04.2009, Sudan
Project Steering Committee Meeting at University of Upper Nile, Jörn Laxen, 13.11.2009

Pekka Olavi Nygren,

Stora Enso Metsän sertifiointiryhmän FSC (Forest Stewardship Council) metsäsertifikaatin myöntämisauditointi Scientific Certification Systems sertifiointiryhmä (Emeryville, California, USA) asiantuntijana, Pekka Olavi Nygren, 01.01.2005 → 31.12.2005, Finland

Participation in TV programme
Minna Hares,

TV-ohjelma, Minna Hares, 02.11.2006 → 31.12.2011, Sweden
Appendix B.b.

Maria Forsman, Chief Information Specialist, DSocSc
Helsinki University Library 7.7.2011

The bibliometric analyses by Helsinki University Library (HULib)

Background: The bibliometric analyses – especially citation analyses – have raised a lot of discussion and critics among researchers in social sciences and humanities. Researchers view that bibliometric analyses are often unfair to these fields of sciences because they do not give a good enough picture of the publishing. Citation databases – Web of Science and Scopus – cover only weakly the main publications in these fields. Also, in humanities and social sciences monograph is still the main form of publishing, and it does not include in these article databases.

At the University of Helsinki, the above mentioned concerns have been taken into account in the evaluation. The Evaluation Office has ordered analyses from the Helsinki University Library (HULib) for the participating researcher communities that are weakly represented in Web of Science. The database for the HULib analyses is TUHAT (https://tuhat.halvi.helsinki.fi/portal/en/) including all the publications that the researchers have considered important.

Based on this data, information specialists at HULib have carried out the following analyses:

1) Number of authors/publication/year as a table; a pie of authors/publication in the period 2005-2010;
2) Language of publication/year; a pie of language of publication in the period 2005-2010;
3) Articles/journal/year; journals have been compared by ISSN with the Norwegian, Australian and ERIH (2007-2008) journal ranking lists; number of articles in ranked journals;
4) Publisher/monograph type (according to TUHAT database); monographs have been compared with the Norwegian publisher ranking list. According to this, it has been counted how many monographs are published by a leading scientific publisher (2) or a scientific publisher (1).
5) Conference publications (from TUHAT database) especially in computer sciences; compared with the Australian conference ranking list.

Where relevant, some additional analyses and notes concerning the publication culture of a scientific field have been added. Overall, these analyses complement the other evaluation material and lists of the publications of the participating researcher communities.

If the publications of the RCs were less than 50 or/and the internal coverage less than 40 percentage, the WoS analyses were considered not reliable. These RCs were 58 altogether.

In addition, both Leiden and Library analyses were done to the RCs if WoS analyses covered less than 40 per cent of the peer review (A+C) publications of the RC. These RCs were 8 altogether.

The appendix includes the analyses of the RC under discussion.
Analysis of publications by Helsinki University Library – 66 RCs altogether

Biological, Agricultural and Veterinary Sciences
Luukkanen, Olavi – VITRI
Valsta, Lauri – SUVALUE

Natural Sciences
Abrahamsson, Pekka – SOFTSYS
Kangasharju, Jussi – NODES
Ukkonen, Esko – ALKO
Väänänen, Jouko – HLG

Humanities
Aejmelaeus, Anneli – CSTT
Anttonen, Pertti – CMVG
Dunderberg, Ismo – FC
Havu, Eva – CoCoLaC
Heikkilä, Markku – RCSP
Heinämaa, Sara – SHC
Henriksson, Markku – CITI
Janhunen, Juha – LDHFTA
Kaja, Mika – AMNE
Klippi, Anu – Interaction
Knuuttila, Simo – PPMP
Koskenniemi, Kimmo – BAULT
Lauha, Aila – CECH
Lavento, Mika – ARCH-HU
Lukkarinen, Ville – AHCI
Lyytikäläinen, Pirjo – GLW
Mauranen, Anna – LFP
Meinander, Henrik – HIST
Nevalainen, Terttu – VARIENG
Pettersson, Bo – ILLC
Pulkkinen, Tuja – Gender Studies
Pyrhönen, Heta – ART
Ruokanen, Miikka – RELDIAL
Saarinen, Risto – RELSOC
Sandu, Gabriel – LMPS
Tarasti, Eero – MusSig
Vehmas-Lehto, Inkeri – TraST
Östman, Jan-Ola – LMS

Social Sciences
Airaksinen, Timo – PPH
Engeström, Yrjö – CRADLE
Granberg, Leo – TRANSRURBAN
Haila, Anne – Sociopolis
Hautamäki, Jarkko – CEA
Heinonen, Visa – KUMU
Helén, Ilpo – STS
Hukkinen, Janne – GENU
Jalilnoja, Riitta – SBI
Kaartinen, Timo – SCA
Kettunen, Pauli – NordSoc
Kivinen, Markku – FCRES
Koponen, Juhan – DEVERELE
Koskenniemi, Martti – ECI
Kultti, Klaus – EAT
Lahtela, Elina – KUFE
Lanne, Markku – TSEM
Lavonen, Jari – RCMER
Lehtonen, Risto – SocStats
Lindblom-Ylänne, Sari – EdPsychHE
Nieminen, Hannu – MECON
Nuotio, Kimmo – Law
Nyman, Göte – METEORI
Ollikainen, Markku – ENFIFO
Pirttilä-Backman, Anna-Maija – DYNASOBIC
Rahkonen, Keijo – CulCap
Roos, J P – HELPS
Simola, Hannu – SOCE-DGI
Sulkunen, Pekka – PosPus
Sumelius, John – AG ECON
Vaattovaara, Mari – STRUTSI
Vainio, Martti – SigMe

The next appendix includes the analyses of the RC under discussion.
INTERNATIONAL EVALUATION OF RESEARCH AND DOCTORAL TRAINING AT THE UNIVERSITY OF HELSINKI

28.6.2011/EI

PUBLICATION DATA 2005-2010

VITRI / Luukkanen

Category 1. The research of the participating community represents the international cutting edge in its field.

Basic Statistics

The group has 90 publications in TUHAT, showing a peak in A1 refereed journal articles, and additionally, significant amounts of publications in other categories, as shown in a chart with publication counts per classification.

Out of 90 publications, 48 had international co-authors, 15 national co-authors (with an overlap of 4 publications) and 11 had only University of Helsinki affiliated authors. These numbers are approximate, as the affiliation data in TUHAT is not comprehensive.
Typically, the publications of this group have 1-5 authors. The following table shows the yearly breakdown of papers with 1...8 authors:

<table>
<thead>
<tr>
<th># of Authors</th>
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<th>2007</th>
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<td><strong>18</strong></td>
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The amount of publications is too small for detecting quantitative trends in the number of authors per publication. The overall trend is shown below:

**Languages**

Out of 90 publications, 80 are in English and 7 (mostly popular and professional texts) are in Finnish.
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### Journal Ranking (Norway, Australia)

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### Amount of ranked articles (Norway)

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Level 2 = highest scientific, Level 1 = scientific
Amount of ranked articles (Australia)

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Australian ranking

A*  
Typically an A* journal would be one of the best in its field or subfield in which to publish and would typically cover the entire field/subfield. Virtually all papers they publish will be of a very high quality. These are journals where most of the work is important (it will really shape the field) and where researchers boast about getting accepted. Acceptance rates would typically be low and the editorial board would be dominated by field leaders, including many from top institutions.

A  
The majority of papers in a Tier A journal will be of very high quality. Publishing in an A journal would enhance the author’s standing, showing they have real engagement with the global research community and that they have something to say about problems of some significance. Typical signs of an A journal are lowish acceptance rates and an editorial board which includes a reasonable fraction of well known researchers from top institutions.

B  
Tier B covers journals with a solid, though not outstanding, reputation. Generally, in a Tier B journal, one would expect only a few papers of very high quality. They are often important outlets for the work of PhD students and early career researchers. Typical examples would be regional journals with high acceptance rates, and editorial boards that have few leading researchers from top international institutions.

C  
Tier C includes quality, peer reviewed, journals that do not meet the criteria of the higher tiers.