Position statement Executive Board
Wageningen University & Research

Regarding the WIMEK-SENSE peer review assessment (2014-2020)

According to the Strategy Evaluation Protocol (SEP 2021-2027) the Wageningen Institute for Environment and Climate Research (WIMEK) has been evaluated, alongside the four other participating research institutes in the SENSE research school assessment (Institute for Environmental Studies (IVM, Vrije Universiteit Amsterdam), Department of Environment & Health (E&H, Vrije Universiteit Amsterdam), Copernicus Institute (Utrecht University) and the IHE Delft Institute for Water Education). An assessment committee of independent experts assessed the performance of WIMEK-SENSE based on a self-evaluation and an online site visit.

The WUR Executive Board has received the final report of the assessment committee. We have read the report with interest, and are pleased that the committee concludes that the researchers connected to WIMEK make an excellent contribution to scientific knowledge, with societal impact, and that the committee was impressed by the quality of the PhD programme and training at WIMEK. The Executive Board would like to thank the peer review committee for carrying out the evaluation.

The response to the main recommendations of the committee has been put together by WIMEK and its SENSE partners and the Executive Board has integrally accepted the response, in which is described how the recommendations will be addressed and how the outcomes of the research evaluation will be used to further strengthen WIMEK’s performance.

The Executive Board can only take up tasks following the recommendations to a certain extent as it is not responsible for the entire SENSE community. We are in the middle of a ‘Recognition and Rewards’ trajectory and agree with the committee that new assessment criteria of researchers are needed which include a broader range of activities. Moreover, we fully embrace diversity as a prerequisite to excel in science. Therefore we will keep attention on diversity beyond gender and nationality. Progress on follow-up actions will be monitored in our yearly quality assurance cycle.

The assessment report together with the response to the recommendations is published on the WUR website, together with a summary of the WIMEK self-evaluation and case studies.
With kind regards,

Prof. dr Arthur P.J. Mol
Vice-president of the Executive Board
Response to the conclusions and recommendations of the review committee

In this document, WIMEK presents first a response to the main recommendations of the review committee (page 1 and 2) and thereafter a summary of the main findings and conclusions of the review committee (page 3 and 4). We are pleased that the committee concludes that the researchers connected to WIMEK make an excellent contribution to scientific knowledge, with societal impact, and that the committee was impressed by the quality of the PhD programme and training at WIMEK.

Main recommendations (in italics)

**Recommendation**: If significant investments in social sciences and humanities research are not feasible for WIMEK, underline in the mission statement that interdisciplinary research is mostly promoted from a natural science perspective.

**WIMEK response**: WIMEK aims to develop an integrated understanding of environmental change, its impact on the quality of life and sustainability, and offers solutions for environmental improvement. WIMEK combines fundamental, strategic and participatory research in environmental, climate and sustainability sciences, from both social and natural sciences perspectives. So, WIMEK acknowledges the need for inter- and transdisciplinary research and teaching, and agrees that social sciences are essential for this. This is key for WIMEK, and the main reason why WIMEK crosses borders of science groups in Wageningen. The larger part of WIMEK staff is rooted in the natural sciences, but WIMEK's staff includes also researchers in the field of environmental policy, environmental economics, water resources management and governance of environmental change. This means also that WIMEK will not adjust its mission statement and will strive for strengthening the contributions of the social sciences. For this WIMEK will create a stronger liaison with the social sciences at WUR to ensure sufficient financial investments in research capacity in the social sciences and humanities in the field of sustainability sciences within WIMEK and the full WUR scientific research ecosystem. WIMEK will also make the contributions of the social science researchers to WIMEK's research programme more visible. Moreover WIMEK will strengthen the collaboration with researchers in the social sciences and humanities outside WIMEK in research projects and programmes to fulfil its mission fully. WIMEK will stress the importance of interdisciplinary and transdisciplinary research approaches to address the global challenges by WUR and where possible advocate possible incentives to stimulate the collaboration between social sciences and natural sciences and to break down organisational and institutional barriers for this approach.

**Recommendation**: Broaden the perspective on sustainability through an increased opportunity to collaborate with social sciences and humanities, within as well as outside Wageningen University. This could for instance be pursued through an challenge-based approach that includes all disciplines and expertises relevant to a particular aspect of the Grand Challenges.

**WIMEK response**: WIMEK will take up the recommendation of the committee by organising meetings, workshops and conferences in connection to the Grand Challenges and inviting researchers from the social sciences and humanities inside and outside WIMEK to participate, especially other WU and SENSE researchers with relevant expertise on these topics.

**Recommendation**: Improve internal and external communication to highlight a comprehensive story that links all contributions to society and the Grand Challenges, specifying goals, target groups and actions.

**WIMEK response**: WIMEK would like to improve the external communication and societal impact by the following actions:
- Formation of a small WIMEK PR and communication committee, that stimulates external communication on WIMEK research findings and activities, such as press releases, in close collaboration with the corporate and departmental communication officers. Moreover, this committee should also organise activities for stakeholders and the general public and coordinate WIMEK contributions to open science days and other relevant open science events.
- WIMEK will present expert teams of WIMEK researchers on the most pressing environmental and climate topical issues on the WIMEK website.
• Improving the information about WIMEK research on the WIMEK website by posting stories, videos and other communication materials illustrating current research and societal impact related to WIMEK’s Grand Challenges.
• Taking the initiative to stimulate WIMEK researchers to write “WIMEK perspectives papers” regarding the Grand Challenges. The perspective papers should present an optimistic inspiring view on how an attractive sustainable future might look like in the year 2100 or 2120 and which steps are needed to reach the future goals.
• WIMEK will take the initiative to set-up a collaboration with the municipality of Wageningen regarding local environmental, climate and related sustainability issues.

**Recommendation:** Keep pursuing an open science approach, involving stakeholders and policy makers from the very start of the project to maximize the potential for achieving change.

**WIMEK response:** WIMEK researchers involve often stakeholders and policy makers from the start in their research projects. However, WIMEK would like to strengthen the transdisciplinary research approaches by exchanging experiences and good practices and by formulating a common strategy to maximise the societal impact of WIMEK research, with special attention to the societal impact of PhD and postdoc research. Moreover, WIMEK will develop an outreach strategy in which WIMEK specifies its goals, target groups and actions on the level of the Grand Challenges, and the contributions it wants to highlight. It should be noted, that in WIMEK there is also room for more disciplinary research, with a natural science focus.

**Recommendation:** Formulate a clear strategy for growth, including determining strategic research investments, as well as how to manage the workload associated with growth.

**WIMEK response:** The policy on human resource management and strategic investments is the final responsibility of the “line-management”, i.e. chair groups, science groups (departments) and WU at corporate level. The role of WIMEK is more or less limited to drawing attention to the positive and negative consequences of growth, and to facilitate potential solutions regarding growth, in particular for PhD candidates. WIMEK is co-responsible for the well-being of PhD candidates and postdocs and will analyse, indicate and discuss issues related to work load and stress and put these issues on the agendas of chair groups, Wageningen Graduate Schools, science groups and the executive board of the university.

**Recommendation:** Continue implementing the new assessment criteria of researchers to include a broader range of activities to relieve pressure on researchers, and investigate other measures to promote work-life balance.

**WIMEK response:** WIMEK will contribute actively to the discussion on changing the culture or rewarding and recognition of scientific output indices to a more diverse set of activities, with special attention to the requirements for PhD theses. Moreover, WIMEK will promote also the diversification of PhD trajectories by creating various pathways (including a recently launched WUR Eng-D degree) focusing for example on fundamental scientific research or scientific research for societal impact or scientific research combined with teaching and education.

**Recommendation:** Improve diversity in leadership, for instance by considering talented junior staff members when looking to fill leadership positions.

**WIMEK response:** WIMEK will take up this recommendation by creating a more diverse composition of all WIMEK management bodies, including junior staff and diverse nationalities and will promote the importance of including talented junior staff members in leadership positions at other management levels.

**Recommendation:** Keep attention on diversity beyond gender and nationality, for instance by considering the inclusion and representation of various minority groups.

**WIMEK response:** WIMEK will take up this recommendation by promoting a more diverse composition of all WIMEK chair groups and committees by the inclusion and representation of various minority groups.

**Recommendation:** Increase efforts to help PhD students finish their thesis in time by reconsidering thesis requirements, looking into possible relations between well-being, delays and backgrounds of PhD students, in particular their employment status and taking appropriate actions.

**WIMEK response:** WIMEK or WGS will establish a small working group to analyse the causes of delay in PhD trajectories and to propose appropriate actions to help PhD students, and their supervisors, finish the PhD theses in time.
**Recommendation**: Develop a vision of the future for SENSE and organize the SENSE Research School accordingly.

**WIMEK response**: WIMEK endorses the viewpoint of the review committee that a national network for cooperation between environmental institutes is a very good idea with great potential. WIMEK will promote this vision and would like to extend the SENSE network with other relevant academic research groups, in order to create an effective national platform, which can act as representative and spokesperson for the environmental, climate and related sustainability research in the Netherlands to NWO, KNAW, ministries and other external parties.
Summary main findings and conclusions of the review committee

Aims and strategy
The committee considered the strategy and aims of WIMEK, and thinks that they are fitting for the field of environmental and climate research. The Grand Challenges as defined by WIMEK are very relevant, and fit the research performed within the chair groups. Interdisciplinarity is key for this. The committee observes that WIMEK has a strong natural science focus and wonders whether WIMEK currently has the capacity to be a balanced interdisciplinary institute that spans the natural sciences, social sciences and humanities. It recommends to build-up its internal capabilities in the social sciences and humanities, or to strengthen cooperation with social science groups outside of WIMEK.

Research quality
The committee concludes that the researchers connected to WIMEK make an excellent contribution to scientific knowledge. Its research is among the best in the global environmental sciences research, which is evidenced by the high-quality publications and the use of these papers by the academic community as demonstrated in the bibliometric analysis provided to the committee. With its strong natural science focus, it has a unique leading position to explore in-depth fundamental problems in Earth System science.

Societal relevance
In the documentation and during the site visit, WIMEK has shown many impressive examples of contributions to the three Grand Challenges (climate action, managing our future biosphere and advancing circular systems). According to the committee, WIMEK is very aware of the need to create impact with its research, and makes structural efforts to perform research with societal impact, actively pursuing opportunities to reach policy makers, industry and other stakeholders. Nevertheless, the committee thinks that there is room for improvement, not on the level of individual achievements such as reports, conferences, contracts and patents, but by systematically demonstrating collective efforts on a higher level. WIMEK could work on improving both the internal and external communication to highlight a comprehensive story that links all these efforts, and brings to light what WIMEK as a whole aims to contribute to society and the Grand Challenges. The committee advises WIMEK to strengthen its outreach strategy in which the Graduate School specifies its goals, target groups and actions on the level of the Grand Challenges, and the contributions it wants to highlight. The committee stresses how important it is to not only present research results to policy makers after completion, but to also include stakeholders from the very beginning of the research conceptualisation. To achieve this in a more structural way, the committee advises WIMEK to discuss their ambitions with regard to the Grand Challenges internally and with stakeholders.

Viability
Future outlook
The committee concludes that WIMEK is well-funded and maintains an excellent body of researchers. Even though staffing and research funding are not primarily the responsibility of the research school, the committee nevertheless is fully confident that WIMEK is well-equipped for the future.

Talent management
One of the most pressing issues at WIMEK is the high workload that in particular its junior staff experiences. One of the proposed solutions is to lower the pressure on in particular junior staff by changing the culture of rewarding and recognition from scientific output indices to a more diverse set of activities.

Diversity
The committee is positive on the efforts of WIMEK to pursue gender balance. It considers the current staff composition of WIMEK to be very international, and increasingly diverse. However, it agrees with the conclusion of WIMEK that diversity in full professor positions and management is less favourable. It recommends accelerating the diversity of leadership within WIMEK wherever possible, for instance by considering talented junior staff members when looking to fill leadership positions. The committee recommends WIMEK to reflect on how diversity can be increased beyond gender dichotomies and nationality to include diversity in knowledge, expression, and experience in education, research, and institutional practice.

**PhD Education and training**

**Education**

The committee was impressed by the quality of the PhD programme and training at WIMEK. PhD students have ample opportunities for development, both in terms of academic and transferable skills. WIMEK and the SENSE Research School provide an inspiring community in which PhD students can meet with their peers and experts in the field. The guidance and support system at WIMEK is well-developed. It is very good and necessary that there is an active PhD committee that advocates for the PhD well-being and position within the institute. This should be fostered.

**Success rates**

Based on the interviews during the site visit, the committee considers the PhD delays to be mainly an issue of academic culture. Timely completion is not the number one priority when assessing a PhD trajectory, and PhD students inclined to continue doing research to reach better results are not always guided towards completion. The committee believes that with more attention towards this issue and less tolerance towards extensions, WIMEK’s PhD students can be better supported to finish on time. In particular, the committee asks WIMEK to reflect on whether four published papers are needed for each thesis. In line with the qualitative assessment procedures in development at WIMEK, PhD trajectories might also benefit from putting quality over quantity. Some projects might take longer to yield results, or could be more suitable for less than four papers with a larger scope. Flexibility in this regard might not only promote success rates, but also reduce stress for PhD students.

The committee noted during the site visit that a large fraction of PhD students is funded by fellowships, which do not offer the same financial stability and opportunities (such as social security) as employed PhDs. If WIMEK really wants to create a level playing field and alleviate additional stress, it could consider topping up the competitive, governmental scholarships from abroad to match the payment levels of employed PhD students, like for example some other universities do.

**SENSE Research School**

The committee thinks that a national network for cooperation between environmental institutes is a very good idea with great potential. The current limited scope however does not fully realize the opportunities such a network has. Also, the level of support is very dependent on a small number of participants, in particular WIMEK. The committee encourages SENSE to develop a vision of the future.