

Action Plan accompanying the recommendations in the ‘Assessment Report Wageningen Plant Research’

Between 13 and 15 June 2023, the scientific assessment of Wageningen Plant Research (WPR) took place. The assessment was conducted by An Michiels (chair), prof. Jean-Marie Aerts, Angela Karp, Isabel Roldan and Monique van Vegchel and was based both upon the written self-assessment and the panel’s on-site review. The committee has presented WPR with a number of useful recommendations. The following sections present the response to each cluster of recommendations as well as the related actions that WPR will take. These were formulated during an away day dedicated to the outcomes of the assessment in November 2023.



The actions form only the beginning of a multi-year strategic plan for WPR, which is now also aligned to the PSG strategic plan and WUR strategic plan in timing. The actions described below will form the basis of a more detailed set of plans which will then be connected to the overall development of the organization and developed into a SMART set of actions for the coming period.

1. Quality of the research

The committee assesses the quality of research at WPR as ‘very good’. The challenge for the future will be to keep the quality of WPR’s research at its current high level and to strengthen it even further. To do so, the committee suggests that WPR should strive to refine its research focus and to define a unique selling proposition, to create alignment between the business units, to communicate relevant insights from research in different ways to targeted audiences, in function of their needs, and to ensure that all staff – especially young researchers and new WPR employees – are thoroughly trained in scientific integrity.

Recommendations

- I. Value scientific papers and other kinds of output equally. Communicate relevant research in different ways, taking into account the needs of the targeted audience.
- II. Create focus in WPR research and define WPR’s unique selling proposition. Communicate this well with all employees.
- III. Avoid overlap in research activities. Create alignment between the business units. Consider establishing a WPR-broad research fund that is used to support key research projects contributing to WPR’s unique selling proposition.

- IV. Continue to prioritize scientific integrity. Take care that young researchers are thoroughly trained to stand their ground when working with industry, and to retain scientific independence.
- V. Make sure that all researchers have access to the gene bank of the Centre for Genetic Resources.

Response

We are pleased with the overall result and agree that our focus should be on maintaining and ideally improving upon the current standard of research.

Although the general feeling is that different kinds of output are valued equally within WPR, this could be displayed better in the way we communicate our output to the outer world, in which scientific papers often seem to be valued more. A scientific paper should not be a goal in itself, but a means of reaching a goal. As WPR, we have the same goals to which we all contribute in our own ways, on different TRL levels and for different groups of stakeholders; different goals ask for different outputs. Other outputs to be considered are e.g. more popular publications, public performances, starting inspiration sessions, but also our simulation models. These should be part of our narrative, but also of our rewards structure, so we will work towards the overall WR objective of an improved R&R process.

Our scientific integrity is of paramount importance. Our drive and willingness to serve our customers well has the potential to be a pitfall for our independence as researchers. We therefore agree that this topic should be given continuous and high priority among young researchers, new employees, but also for senior staff. The importance to attend to this topic is also essential in the society where debates are increasingly polarised. Scientific integrity is our compass in these debates where we must contribute as scientists.

Although in many areas we do not see a lot of overlap in our research activities (indeed we see underlap as a potentially bigger issue), we support the idea of establishing a WPR-broad research fund to stimulate structural collaboration. In fact, there are and have been several successful collaborative projects within WPR, but we recognise that this needs to stretch beyond the project level and be elevated to a programmatic or 'community' level across business units. We also note that there are better opportunities for alignment of funding, such as the alignment of EU, KB and PPS programmes, which requires more join-up of funding instruments and better access to co-financing.

We recognise that programmatic innovations are only part of the solution to improve BU alignment and so we will work towards a culture of shared responsibility for our estates and facilities crucial to our strategic research programmes, our staff progression and mobility and the positioning of our overall research offer.

Taken together these will ensure a more aligned approach to communication of our USP and a more segmented approach to customer interactions, better demonstrating our value proposition.

Regarding the last recommendation on the gene bank; all researchers do currently have access to this, but not everybody might be aware of this. We will ensure that this will be better communicated and that attention is given to 'bridging' resources that may act to make the genebank more accessible in practical terms.

Actions

- As part of the wider national recognition and rewards process we will work with our colleagues in other institutes to evaluate the WR process. We will ensure consistent metrics to value research outputs at the personal and at the team/group level.
- Scientific integrity will be addressed regularly in the WPR MT-meetings. We will discuss concrete examples within the group and explore possible training and coaching / intervision possibilities within WUR, developing a plan for this. The goal would be to improve the awareness of the dangers of loss of scientific integrity.
- We will formulate a clear WPR and PSG narrative that emphasizes our mutual values, strategy and goals in line with the WUR strategic plan.
- As part of the PSG strategic plan we will explore thematic programme construction and mechanisms to ensure connection across business units. We will also explore models to ensure that this way of working becomes a structural part of WPR and assists with defining our USP for our key stakeholders.
- To highlight our existing and emerging thematic connections we will highlight this more clearly on the website and through our communication channels. As the WUR-website will be revised over the next two years, there is a clear opportunity to improve this and show some examples.
- The quality of all our output should be emphasized in all communication. As such we will instigate a continuous improvement programme in this area, headed by our communications team, aligning communications throughout WPR to a common set of quality indicators which will be developed during the strategic planning process for implementation in 2024.
- We will ensure a culture of openness and intervision; when in doubt, issues should be discussed within the WPR-MT and at regular team meetings within the BUs. This goes for possible overlap as well as integrity questions. In the months following the panel report this action is already underway and is connected to the overall continuous development of WUR's framework for collaboration.
- We will share our facilities and develop a connected development and exploitation plan, making this a joint responsibility for the WPR-MT (and beyond), ensuring facilities, both at the Wageningen campus and at our field research sites are seen as shared opportunities both within WPR, across WU and across WUR. The latter will form a key part of the development of our regional strategy (elaborated in the section on knowledge transfer).
- A PSG-level strategic budget will be made available to support the above activities.

2. Societal and economic impact of the research

The committee assesses the societal and economic impact of WPR as 'good'. The institute has a strong connection with the Dutch government on priority setting and is an important and attractive partner for its stakeholders. Areas that offer room for improvement are the translation of research outputs towards direct application – which is now not always effective – and building and valorizing a well-defined intellectual property portfolio. In the committee's view, WPR could further strengthen its position by systematically offering its stakeholders integrated solutions and transformative thinking, instead of incremental measures.

Recommendations

On agenda setting

- I. Choose your position with regard to policy topics (for instance center of expertise, advocacy, advice) and set up a clear corporate narrative about this position for your employees.
- II. Build capabilities in policy-engagement, learning from models that other knowledge institutes use.
- III. Select talented employees to talk to journalists and press on policy-issues. Train and brief them well and ensure all queries/invitations are directed only to them.

Response

Again, we are pleased with the positive evaluation of our impact. We do see that there is room for better stakeholder engagement through development of our staff.

We interpret taking position on policy topics as advising and informing based on scientific facts. We do not choose sides and see a position as distinct from a side. Therefore, we work in developing scenarios to activate internal and external dialogues.

We think we are already doing quite well on policy engagement, though this may not have been fully visible to the panel. However, we could still learn from others to improve our engagement in this area.

We agree with the idea that talented employees should be selected and trained to talk to journalists and press on policy issues. At the same time, also other colleagues will be approached by journalists or have a role in interacting with (policy) stakeholders on certain topics that they are expert on. By involving our communication team when interacting with the press, we can assure quality and train this group whilst identifying talented employees for a further expert role and external communication on policy issues.

Actions

- Activate internal dialogues on policy issues by ensuring link up between WPR topics for discussion and the wider WUR opportunities afforded through the WUR 'Let's Explore' dialogues. We will ensure that we have a standing agenda point to identify and prioritize topics for activities. This will be facilitated by our communications team.
- Contact persons will be chosen per topic or theme to convey the appropriate science-led position(s) for policy development. Following the panel's advice, we have already started this (see for example the Farm of the Future team), and this can be expanded to other themes. Appropriate media training will be organized for chosen contact persons on specific topics.

On stakeholder conversations

- I. Bring stakeholders new innovative and beyond state-of-the-art strategies that are too long-term and risky for companies to invest in by themselves. Facilitate their transition into the future. Create networking opportunities to investigate the needs of stakeholders, potentially together with business associations.
- II. Create one clear entry point for all stakeholders to contact and navigate WPR.
- III. Professionalize business management by training project managers in how to interact with external stakeholders.

Response

We agree fully that our role is to de-risk adoption of technology through strategic research and development through partnering, to enable responsible market uptake. This requires a good understanding of our stakeholder landscape and their needs, as well as excellent command of relevant technical disciplines.

Regarding contacts with stakeholders and networking opportunities; many networking opportunities with stakeholders are organized in specific scientific fields. In addition to this we agree that we could increase our efforts on sector level in other areas and following the panel's advice we have started to train project managers on stakeholder interactions in a more coordinated way. The idea of creating one entry point for all stakeholder groups is appealing but does not seem feasible given the size of and the broad scope of the organization. We should, however, continue to make sure that stakeholders contacting us will be actively helped to the right contact in our organization.

Actions

We will:

- Ensure a strong science-led strategy, which will feed through into research group capability development to address industry needs. We will ensure alignment of KB and EU programmes to build our capability and to preserve integrity (to prevent one-sided focus).
- Explore how best to catalyze and co-develop stakeholder dialogues to inform our strategy and capabilities
- Check the content of our stakeholder management training and decide if this needs to be updated or altered.
- Increase our proactive sector-based approach, linking our way of working to our narrative and strategic goals. We will build on our existing approach of having contact points for key topics ensuring staff are well connected to our sector strategies and that our web and online presence reflects our stakeholders needs effectively.
- Improve website (on-going)

On knowledge translation and use

- I. Train project leaders to understand the needs of stakeholders or increase customer-centricity by hiring a partner to tailor WPR's reports and advice.
- II. Explore whether the Club of 100 approach can be expanded to other areas or entrepreneurship.
- III. Keep or rebuild capabilities in agronomy and practical breeding, since these skills are key in closing the gap between science and practice.
- IV. Living Labs are a promising development. Position yourself effectively to gain a competitive edge.
- V. Emphasize that the goal of on-farm data gathering is an empowerment for farmers to take better decisions on the management of their farms.
- VI. Define your envisioned IP portfolio and market niche. Also make a plan to valorize your IP.

Response

We have been training project leaders to understand and translate the needs of stakeholders and we will continue to do so, so we agree this is an important point. We make use of the project leader training programmes which include focus on stakeholders. In addition, we actively couple sr. project leaders to

jr. project leaders to introduce and train the new colleagues in this aspect. We do agree that we should put more emphasis on actively asking for more frequent feedback from our stakeholders. We should increase awareness on the level of team leads regarding this issue and keep helping our employees in maintaining our scientific integrity and independence whilst being customer/ stakeholder focused.

We agree that it is worthwhile exploring if the Club of 100 approach can be expanded to other areas, for example in *Seeds 4 the Future*.

We recognize the importance of agronomy and practical breeding for the role of WPR to bridge the gap between science and practice. It is true that there are some knowledge gaps in certain areas, so we agree that this needs attention.

The development of Living Labs is in progress, for example Farm of the Future. We use many opportunities and should make this clearer in our communications.

We play an important role in the empowerment of farmers with their data (use) by designing and implementing the FarmMaps platform.

Actions

We will:

- Increase awareness among team leaders and business unit managers that the translation of the scientific and technical findings into an understandable report for our customers is important and project leaders should be trained in this with respect to science rules on reporting.
- Explore different variants of the Club of 100 for different sectors.
- As noted in other sections, we will review our research team portfolio to identify areas that require strengthening.
- To close the existing knowledge gaps, we will explore the possibilities for training at WU level, especially for new employees, such as Life Long Learning.
- We will explore how to further strengthen our position in on-farm data collection and how our current suite of management tools can be further developed for farmers to improve best practice and research to have access to real-time farm data.
- As a lot is being done implicitly regarding our IP, we will develop our envisioned IP strategy and catalogue our existing portfolio. We will ensure that our strategy is clearer and tailor made per group.

3. Viability of the organization

The committee sees a need for improvement, mainly in three areas of viability: organizational structure, diversity in funding sources, and diversity and equality in personnel. Concerning structure, the committee finds it imperative to thoroughly re-evaluate the complex structure within WPR and its intricate relationship with the Department of Plant Sciences at Wageningen University. About funding, there is concern for WPR's strong dependency on the Top Sectors, which – to some degree – are subject to political discretion. Regarding human resources, it worries the committee that there is still little diversity in gender and nationality at the higher levels, despite the previous assessment committee's strong recommendation to prioritize improvements on this point.

Recommendations

On collaboration within and structure of WPR

- I. Rethink the way you manage your knowledge and talent. This is necessary in order to remain flexible, agile and responsive to future changes and remain competitive compared to other research institutes and companies with increasing research capacity.
- II. Examine the successful integrated model of the business units Plant Breeding and Biometris for potential application in other business units.
- III. Promote a shared leadership vision and create a cohesive One Plant Sciences Group view among the leadership team.
- IV. Create mechanisms that enable or enforce close collaboration and joint programming across business units, based on joint strategic thinking.

Response

We recognize that there are areas that require improvement, while also acknowledging that it is not always possible to separate WPR functions specifically from those of PSG and those of WUR, sometimes giving the impression of unnecessary complexity.

Managing our knowledge and talent is indeed important. The current possible career paths may be too limited to keep employees in the organization for a longer time. We recognize that both employees as well as team leaders and BU-manager might be restricted to look at career paths in their own team and not stimulate the opportunity with WPR, or PSG and WUR as a whole. At the same time, we expect employees to have a wide range of skills, while not all staff will have the same talents and interests.

A stronger collaboration between WU and WR will support WPRs challenge to attract talent and knowledge and remain competitive in future. There are multiple ways to organize cooperation between WR and WU successfully (partly also brought into practice), in addition to the integrated models of Plant Breeding and Biometris.

It is vital that WPR stimulates and continues to increase collaborative actions across units, based on a joint vision and strategy. Actions

We will:

- Attract personnel with specific skills and stimulate skill development of employees with targeted courses.
- Use the WUR vision on leadership profile as basis to further develop leadership skills of our leaders.
- Exploration of additional career paths at WR and diversification of roles and, with colleagues look at how to encourage mobility across the whole of WR.
- Inventory of current best practices for cooperation between WU and WR, translate into more formal guidelines and share these with DO and MT.
- Development of a joint vision, mission and strategy at WPR-level which forms part of the PSG and WUR strategies
- Create an inventory of potential mechanisms to enable and enforce joint programming: e.g. installing joint programs based on the current project portfolio

- Analysis on expertise that is missing and/or overlapping within WPR (and DPS), according to TRL levels.
- Explore the potential of the installment of “Centres of excellence” across WPR (and DPS).
- Ensure that our organisational structure serves to create both strategic alignment and collaboration. We will review current business unit structure and size to ensure the optimum fit to our strategy and to the wider norms within Wageningen Research as a whole.

On co-operation within and structure of the Plant Sciences Group

- I. Evaluate the tensions that stand in the way of integrating WPR and the Department of Plant Sciences and propose ways to mitigate them.

Response

We agree that more can be done to integrate groups while maintaining their specific focus in their domain and/or position in the discovery-> application landscape. The tensions are mostly (perceived) organizational barriers and there are multiple examples that they do not need to hinder collaborating across WPR and DPS. Not all chairs and BUMs are aware of the possibilities.

Action

Besides the integrated model of the business units Plant Breeding and Biometris, other successful practices exist that stimulate and enable cooperation between WPR and DPS. These best practices will be collected, and shared as more formalized guidelines with DO and MT. And will pro-actively be suggested by HR-advisors in their contacts with the teams.

On human resources strategy

- I. Introduce a regular ‘reality check’ of what happens on the work floor and if and how management plans are perceived, in the form of targeted feedback collection.
- II. Profile diversity and inclusivity as desirable values in all communications.
- III. Develop a short-term action plan for improving gender diversity and closing the gender pay gap. Specific attention should be given to middle and higher management levels.
- IV. Diversify your personnel at middle and senior management positions by enabling women and internationals to grow and by attracting female and international talent from outside WPR and WUR.
- V. Facilitate alternative career paths besides research, such as people management, policy support, communication, translation of scientific results, proposal writing and intellectual property.
- VI. Make team leader a clear role and support it. Consider identifying portfolio leader and team leader roles between business unit managers and researcher, especially in larger business units.
- VII. Continue stimulating mobility within and outside WPR. Plan career and team development activities.

Response

In most teams, management plans are often discussed, but it would be good to harmonize the communication about management plans by WPR management to the work floor and ensure two way dialogue and feedback.

All BU's have strategic personnel plans which are made in cooperation with the MT's of the BUs and the HR advisor. These are at least annually discussed with the PSG board. Aspects mentioned, such as succession planning, diversity, candidates for talent programmes are included, just as organizational structure, and role tasks and competencies are described, etc.

Regarding diversity and inclusivity; A lot of the recommended actions are already ongoing but may not have been very visible or made explicit enough during the review process for which we apologize. This is because they sit above the level of a single institute. More specifically, we adhere to the central WUR policy in which diversity and inclusivity are important themes. At central HR (cHR) level there are Centre of Expertises for various HR topics; diversity & inclusion is one of them. Our HR-department is closely connected to the cHR-policy, support and activities on this. We will ensure that this is clearer in future evaluations.

WPR recognizes the importance of diversifying career paths for staff, both to retain talent within the organization and to facilitate collaboration with DPS, but also to appeal to a more diverse group of potential employees.

A RACI analysis is ongoing that will inform us about the diversity of functions and roles within WPR including the possible differences in responsibilities of such roles across the BU's, including the team leader role. This will give us insight in best practices and potential improvements.

Actions

- Communication about management plans to the work floor will be on the agenda of the WPR MT to make sure all employees will receive the same message and have appropriate mechanisms to deliver feedback.
- The diversity and inclusivity guidelines for HR will be revitalized and shared with WPR management and employees.
- The possibilities of additional career paths at WR and diversification of roles will be explored, including joint hay profiles across WPR and DPS.
- The findings of the RACI's and learnings regarding team leader role (amongst others) will be reported back in the MT WPR.
- Team-processes to optimize the MT's of the BU's and the way of working together as teams have been initiated at various BU's and will continue.

On acquisition and funding

- I. Continue diversifying your income streams and identify a long-term contingency plan in case Top Sector funding starts to decline.
- II. Look critically at how EU funding can be increased.
- III. Think outside of existing funding schemes and explore other possibilities.

Response

A decrease in top sector funding can be a threat indeed but might also be an opportunity. Some companies will be interested in bilateral collaborations which will increase margin on those projects (we have seen a shift from the bilateral market to the TS market in the past). This margin could help us to invest in research, knowledge and facilities to further serve our added value to our clients. It is important to identify now which companies are interested in bilateral collaboration and to encourage this type of cooperation more. Nevertheless, it is important to identify and develop alternative income streams and have a more diverse and healthy portfolio of various income streams.

International income streams are relatively low. WPR agrees that a larger international income stream would be beneficial. EU funding is one of the possibilities, but this needs co-funding which has decreased over the past years. We want to focus on other international opportunities and strengthen our activities on this that are now scattered in various parts of the organization.

Actions

We will:

- Identify companies that are willing to cooperate in bilateral projects. Stress to researchers (project leaders and business developers) to make better choices what topics are suitable for TS – PPS projects and which are more suitable for that bilateral projects. Increase the focus of bilateral focus of project leaders and business developers. This will allow for more opportunities to work with other companies and organizations through topsector funding.
- Increase the joint approach of project leaders and business development, to better use each other's role, strengths and contacts with stakeholders
- Carry out an exploration of how to diversify income streams. Including the use of WPR investment budget and KB to generate income streams in future through for instance intellectual property. A stable budget for EU co-funding is lacking. This hampers an increase in EU project collaboration. If WPR is to increase cooperation in EU projects, a stable income stream for co funding is required.

On collaboration with external partners

- I. Translate your roadmap for collaboration with applied universities into concrete actions.
- II. Proactively work on a partnering strategy for the global North and South.

Response

In general our ability to work with external partners is determined by what funding is available. Increasing the amount of EU cofunding available, where programmes are aligned to the Knowledge and Innovation Agenda would significantly increase collaboration possibilities. Within the Netherlands we collaborate extensively, particularly with other TO2 institutes and technical universities. Collaboration with applied universities is beneficial for knowledge transfer, but not essential for the viability of WPR. At various places, especially at the experimental farms, there are existing and close relations with applied universities and vocational education (MBO'S). We will explore where better linkages can be made in these areas, as this will increase the impact of WPR's work.

Increased collaboration in the global North and South may have potential and we will increase our efforts.

Actions

We will:

- Make use of our diverse international staff to increase our network in the global North and South and identify potential interesting partners.
- Have international market as a focus across the BU's at WPR & PSG level to join forces. Align more with the WUR-central international account managers, who have strong international connections at relevant levels in their international territory.
- Find out how working from abroad is related to WUR, PSG and BU missions and responsibilities.
- Partner up with DPS and build on a joint international network.
- Where possible we will include international partners in topsector projects to increase knowledge development in the Netherlands.

On facilities and long-term experiments

- I. Decide which facilities are critical to your core research areas to prioritize investments.
- II. Consider a combination of funding sources for large and critical infrastructures.
- III. Evaluate public-private sharing of equipment across WU and WR teams.
- IV. Create visibility and overview of available facilities and resolve any barriers that hinder shared use of facilities withing WUR.
- V. Develop an onboarding and exit plan for expensive technologies and/or explore a service model.
- VI. Set up a Capital Expenditure investment plan for cutting-edge equipment.

Response

We agree that prioritization of investments is crucial to retaining a strong core and that combining funding sources is important for critical infrastructure. Strategic Research Facilities is already in place and provides an overview of most of the available facilities, but developing clearer plans to utilize this capability is an excellent suggestion. As a WUR-wide instrument this was explained to the panel, but not evaluated in detail by the panel. Nevertheless, it is important to complete the overview of facilities to be able to prioritize future investments. In some cases organizational (financial) barriers hinder use of facilities across WR and WU teams.

Actions

- We will ensure an overview of all facilities in the different units will be made to increase their visibility to potential users through the existing SRF overview portal.
- The installment of an “vereveningsfonds for facilities” will be explored to remove financial barriers that hinder use of those facilities by other groups across DPS and WPR.
- We will develop an onboarding and exit plan of those facilities and be linked to SRF.
- We will stimulate joint responsibility of strategic research facilities at WPR and PSG level through development of our management team and inter-team leadership and use this improved connectivity to think ‘bigger’ and make effective use of funding schemes as arise – a close link to SRF is beneficial for this as the recent success of the TO2 subsidies have shown.