

Extension & Update Strategic Plan 2019 | 2024

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In January 2019, Wageningen University & Research (WUR) launched the 2019-2022 Strategic Plan 'Finding answers together'. In 2021, its ambition and content remain highly relevant, while COVID-19 and geo-political developments, among others, have changed the context of our mission.

We have decided to update the 2019-2022 Strategic Plan and extend it by two years: the 'Extension & Update Strategic Plan 2019-2024'.

Reflections

In preparing for this extension, we have reflected on what has been accomplished and discussed new developments. Most importantly, in the last three years, we have been able to continue to offer high quality research and education despite the limiting circumstances of Covid-19. We have achieved many of our ambitions linked to digitalisation of education, much faster

than expected. We conclude that we have taken significant steps towards achieving the envisaged outcomes and impact.

At the same time, Covid-19 has changed our world dramatically. WUR responded to this new challenge rapidly, answering scientific questions as they arose. Our new research programme

ERRAZE (Early Recognition and Rapid Action in Zoonotic Emergencies) is an example of this rapid response. At the same time, we continued our work in a changing geo-political context, contributing to global challenges which have become even more urgent, such as climate change, healthy food and living, biodiversity, nitrogen-crisis, circularity, and competing claims for space. We have also responded to and provided input for national and European policy developments, including the European Green Deal. It has become even more clear that the key to finding answers to these societal challenges lies in more intensive interdisciplinary and multi-stakeholder collaboration. Simultaneously, we need to deal with the shifting position and role of science in a more polarised public debate. We will

intensify the dialogue on the role of knowledge institutes in the public debate on controversial topics, in particular our own role and position.

To face the global challenges, especially in the aftermath of a Covid-determined society, we need to safeguard our independence, integrity, transparency, and sustainability. We must apply and show these values in what we do and in how we support and train all our employees and students to work in a safe scientific environment. We will strengthen social safety for all our staff and students by facilitating and stimulating openness and inclusiveness, also concerning the (ethical) dilemmas we face as an organisation and as individuals.

Extension and update



The plan period for the 2019-2022 WUR Strategic Plan has been extended by two years to 2024. This extension allows us to revise our strategy in response to the many recent external developments and to align our strategic internal planning processes. In this 'Extension & Update', we have also incorporated insights gained from the mid-term evaluations and the TO2 evaluation.

The ambitions and plans of the 2019-2022 Strategic Plan remain unchanged. This 'Extension & Update' only presents adaptations, additions, and changes to the original Strategic Plan to ensure that it remains future proof for the extended

period until 2024. To ensure that the additional ambitions in this 'Extension & Update' are feasible and to deal with the high workload, we will apply a gradual and prioritised realisation process.

Our Change Performance Indicators (CPIs), continue to form the leading pathways for achieving the set objectives. For each CPI, we have recalibrated our ambitions, plans and priorities. The CPIs are clustered in our organisation's focus areas: education, research, impact, and enabling operations. This 'Extension & Update' outlines the most important additions and reprioritisations for the five CPI clusters.





Globally we continue to be confronted with pressing challenges that require immediate actions, as well as new knowledge and insights. WUR aims to provide this knowledge and to contribute to the needed answers. With a focus on impact, open science,

dialogue with society, and a stronger evidence-based position, we aim to contribute to the required societal transitions and related decision-making processes.

Research quality for impact

Both fundamental and applied research are essential for finding answers to societal questions and challenges. We will continue to invest in our high quality research to maintain and further increase scientific and societal impact. Research requires high-quality research facilities. Major investments are needed to maintain that infrastructure and make it future-proof, in accordance with the TO2 evaluation. To give direction to this, we are drawing up a Roadmap for research infrastructure.

In addition to our PhD programmes, new Engineering Doctorates will be added to our portfolio to integrate academic research in a professional context to enhance its impact. To safeguard the quality of the PhD programmes and Engineering Doctorates and to increase our impact, we will strengthen the harmonisation and integral coordination of the six Graduate Schools.



We aim to develop a shared understanding of academic excellence. This recalibration will be in line with both international developments and the national trajectory of universities 'Recognition and reward'. In this programme, academic excellence refers to research, education, value creation, and leadership, for both individual scientists and teams. By 2024, it will be clear how 'Recognition and reward' impacts our tenure track system.

In research, we will work together to find answers and share knowledge. Digitalisation has created new opportunities for translating and sharing knowledge through Open Science,

and partners, new knowledge will be shared and translated to applications facilitated by new digital tools and technologies, while safeguarding our knowledge security. The WUR Open Science & Education programme connects our research and education with those of other knowledge institutes and with society, increasingly making Open Science principles and approaches standard practice. Open access publications, Citizen Science, and FAIR data (Findable, Accessible, Interoperable and Reusable) are key goals. Open Science contributions made by WUR staff will be recognised and rewarded.

digital tools, and platforms. To better meet the needs of society

Investments in research priorities

We will invest in research priorities through:

- three WUR investment themes,
- five Wageningen Research themes and,
- 'free investment resources' programmes.

Investment themes

Our investment themes expand fundamental and applied research on priority issues with temporary investments, after which these themes are embedded in our regular research portfolio. In the 2019-2022 Strategic Plan, we chose three investment themes: Connected circularity, Protein transition, and Digital twins. These four-year research programmes end in 2022. At the start of 2022, we will launch three new three-year investment themes: Biodiversity-positive food systems, Transformative bioeconomies and, Data-driven discovery in a changing climate.

Biodiversity-positive food systems

The rate of biodiversity decline is unprecedented. There are growing concerns that this biodiversity loss will, among others, undermine our food system resilience. We therefore need to explore pathways towards food systems with biodiversity as an intrinsic, vital component. We will explore:

- 1 how genetic and species diversity of crops and livestock can be implemented to enhance ecosystem services such as food production, soil health, and resilience to stress (abiotic and biotic);
- 2 how biodiversity-positive farming practices can be scaled up in different regions;
- 3 the post-harvest implications for industry and other stakeholders.

In this theme, we will develop new integrated WUR expertise and knowledge on agriculture and environment in a systems approach towards food systems that meet the local and global goals for food security, biodiversity conservation and human wellbeing.

Transformative bioeconomies

Many materials we use for comfort and shelter such as building and construction, packaging, furniture, and textiles, are made from fossil carbon resources. Converting to renewable carbon-based materials is an important aspect of our transition to a circular bioeconomy. We will work together with leading (research) organisations in materials production to gain new knowledge on three different transformative pathways towards renewable materials and phasing out fossil carbon resources:

- 1 producing materials from biomass main and side streams;
- 2 producing material through CO, capture and use; and
- 3 recycling of carbon-based materials.

The fundamental knowledge gained from these three pathways, and the role of leading organisations therein, will further deepen our knowledge and understanding of how to facilitate responsible and socially-just system transformation in our domain.

Data Driven Discovery in a changing climate

Heat waves, forest fires, floods, and landslides: these extreme events are now global and increasing in frequency. We urgently need to gain a deeper understanding of these regional climate change effects, and to identify viable adaptation and mitigation strategies. Recent developments in machine learning and AI (Artificial Intelligence) offer promising approaches and tools for gaining a better understanding and for creating solutions to these extremely complex problems. Building collaborations between data science and climate change expertise will lead to data-driven discoveries in regional climate change, providing valuable insights into how to use AI in climate change research.











Wageningen Research themes

Each Strategic Plan period, we select new Wageningen Research Programmes as part of our total research portfolio. These programmes strengthen our knowledge base. We will extend the existing five Wageningen Research programmes by two years:

- · Circular and climate-neutral
- Food Security and Valuing Water
- Nature Inclusive Transitions
- Safe and Healthy Food Systems
- Data Driven and High Tech

The programmes have been recalibrated to ensure they target urgent and emerging developments and needs, and that they

reflect the lessons learned to date. Following the recent positive mid-term evaluations, we will continue the governance structure of these Wageningen Research programmes.

In coming years, the Wageningen Research themes will more strongly focus on adding to and innovating our disciplinary. interdisciplinary and methodological knowledge base. We will enhance the cooperation between the Wageningen Research programme leads/core teams and the sciences groups at the level of the business units and business developers. We will also improve the ways we connect these programmes with Wageningen University. In addition, we will reinforce the international character of the programmes.

'Free' investment resources

We will allocate financial reserves that help us to achieve our research ambitions. These 'free investment resources' will be made available for research and research infrastructures for which there is no or insufficient external funding. By definition, the size of these resources is limited, while at the same time they are an important instrument for strategic investments such as in innovative research, unique facilities, infrastructure,

digitalisation, partnerships, and talent development. This requires a thorough and balanced transparent selection of initiatives that will strengthen WUR's strategic impact. The Board of Directors will take the lead in identifying, selecting, and allocating resources for these initiatives. We will start by allocating Wageningen Research's free investment resources.





The world of higher education is changing rapidly, not least thanks to the Covid-19 pandemic. Digital communication and education platforms play a major role in learning and teaching. Staff rapidly gained experience with online and blended education and digital innovations; together these factors have accelerated the relevance and achievement of our educational vision.

It remains our ambition to be a leading university in our domain and to continuously educate a stable number of bachelor and master students, as well as an increasing number of professionals. We will continue to offer our characteristic WUR education and remain committed to facilitating and supporting the well-being of our students and staff. In the coming period, we will update our Vision for Education in preparation for the Institutional Accreditation.

Maintain and expand innovations

In coming years, we will maintain, improve, and expand effective blended and small-scale education innovations, while retaining the face-to-face teaching methods that were dearly missed during the lockdown. Our campus will remain 'the' centre of our

education. Offering blended education will require new didactics, skills and tools. As a consequence, teaching is increasingly becoming a team effort. We will ensure that our teaching staff are appropriately facilitated to continue on this blended journey.

Further develop our education portfolio

Many of our study programmes and learning paths are unique. We will further strengthen our strong profile in both the Netherlands and abroad. We will ensure that sustainability is more visible in our education programmes. To contribute to the shortage of experts in the technical sectors linked to our domain, we will boost engineering education in our degree programmes. We will also capitalise on the unique synergy

between Wageningen Research and Wageningen University for our education and accelerate the integration of state-of-the-art knowledge in our courses, minors, and other programmes. New ideas for master specialisations and programmes will be explored, alone or together with, for instance, our alliance partners TU/e, UU and UMC Utrecht.

Expand professional education

Following the growing national and global demand for high-level professional education, we will expand our programme of education for professionals in our domain and enlarge our position in this market. Lifelong learning will be integral to our core education activities and knowledge transfer, enabling professionals in our domain to keep up with and extend their knowledge and skills.

In 2024, WUR will have a sustainable business model for professional education, with a diverse course portfolio that covers the entire scope of the WUR domain. It will include online learning paths tailored to the individual professional, as well as tailor-made in-company courses, executive education, and MOOCs. We will maintain synergy with our degree-education programmes, and increase collaboration with other universities and partners, both regionally, nationally, and internationally. We will further strengthen our support organisation for professional education and degree programmes.





Our staff and students are driven by our mission to 'explore the potential of nature to improve the quality of life'. The actions, plans, and instruments implemented over the past three years

have strengthened our entrepreneurial culture and collaboration, providing a strong foundation for the impact we further want to accomplish.

Culture for impact

We aim to create more comprehensive impact by better aligning our research efforts with the information and knowledge required for agenda-setting, policy development, decision-making, and implementation in society, in the Netherlands and elsewhere. We will ensure that our research responds to and supports societal needs and the UN SDGs. New initiatives start with a critical reflection, specifically with regard to our capacity and profile in relation to the potential social impact. We will further facilitate and stimulate a culture of entrepreneurship in what we do and how we work. Our ambition is to utilise new technologies and new ways of knowledge dissemination, among others through our start-ups and Intellectual Property.

Collaborating for impact

We work together with a diverse range of scientific, education, business (from farm to consumer) and societal partners (including SMEs) as well as with charitable foundations, in innovative ecosystems and on our expanding Campus. We will further develop and extend our local and global networks and partnerships to increase our scientific and societal impact based on current and future needs and developments in society. We will strengthen our Europe strategy to enhance collaboration with the EU institutions and partners in European countries.

Complex global challenges come with dilemmas around different goals and interests, thus our answers require wide stakeholder involvement and navigating trade-offs. Geo-political powershifts impact our international collaboration and partners. Our values, our strategic ambitions to find answers and accelerate transitions, and our principles of complementarity and comparative advantage are key in selecting partners in research and education. We will develop a clear strategy and further improve the decision-making process for selecting partnerships. WUR will reinforce 'Science diplomacy' in collaborations with local and international governmental and societal partners to address common societal issues. When working with external partners, we will ensure that we retain our scientific independence.







In line with the 2019-2022 Strategic Plan, we will continue to reinforce our processes, systems, and facilities to optimally enable and support our high-quality research, education and

value creation. Our excellent facilities and buildings have made it possible to anticipate and adapt to the various needs of students, staff, and partners.

Enabling impact

New technologies and digital ways of sharing knowledge will help us meet the needs of society even better. We will further explore and utilise these growing possibilities, facilitating our students and staff to apply them in their research, education

and other day-to-day business, safely and securely. Simultaneously, it is our priority to provide cyber and knowledge security to safeguard our data, systems, staff and students.







Management

Wageningen University and Wageningen Research are combined in one organisation, which makes WUR a unique and complex organisation. This combination is a key asset. We will enhance integral management to increase internal collaboration and reduce complexity, while ensuring compliance. By strengthening the alignment of our planning cycle, especially for those functions and departments that support the primary processes, we will improve efficiency and collaboration. We will ensure that our managerial efforts contribute to the objectives we set out to accomplish. To gain enduring impact, we will make choices and set priorities in order to safeguard a sustainable and feasible pace of change. Our annual plans and budgets will be based on the multiannual resource allocation that supports our long-term ambitions. Our new leadership profile will stimulate our leaders to collaborate, reflect and set priorities.

Easy Service and Time4You

The planned improvements in our enabling processes and systems are focused on achieving a positive impact for users in an easy, intuitive, and efficient way: we have called this 'Easy Service'. This relates to, amongst others, mobile accessibility, an intuitive look and feel, and an efficient and personable

single-entry point for different services that logically belong together from a user perspective, based on trust. We will reduce the administrative pressure for researchers and lecturers, providing them with 'Time4You'.

Working@WUR

The way we conduct research, offer education, and work together internally and with partners and society has changed drastically as a result of the Covid19 pandemic and accelerated digitalisation. Many of us have worked and studied online, and in a hybrid form when possible. The experiences and lessons learned with hybrid forms of working, in combination with the growing staff and student population, have shaped our new vision on Working@WUR. We want to maintain the flexibility of working in any place and at any time, and to use our buildings and facilities more sustainably. A new strategic accommodation plan will enable and facilitate our vision.

In the next three years, we aim to find the right balance in these new ways of working. The new Working@WUR strategy will contribute to the intrinsic motivation of staff as well as to achieving our ambitions for impact. We will invest in facilities and our buildings to enable staff to work together and meet each other online and offline at the same time. We will pay extra attention to creating a safe and healthy workplace, and to increasing connections among staff. Digital tools, support, and skills training will enable and support our staff in this process.





Our 2019-2022 Strategic Plan provides the foundation for this updated strategy, extending the original plan to 2024. With this 'Extension & Update', we can respond rapidly and adequately to new developments and changed conditions. We have extended the original plan period by two years and reassessed our

priorities in order to continue to find answers together and further increase our impact. Together with existing and new partners, we will develop selected new initiatives, enhance our quality, innovate our ways of working, and educate future leaders to address today's and tomorrow's global challenges.

Colophon

Publisher

Wageningen University & Research

Text editing and coordination

Corporate Strategy & Accounts (WUR)

Graphic design, photo research and visuals

Communication Services (WUR)

Photography

Guy Ackermans (7 right, 14 middle), Alamy (1), Marcel van den Bergh (4), Jeroen Bouman (7 left), Eemsdeltadrones (7 middle), Rob Goossens (12), NASA (16 left), Anne Reinke (14 right), Eric Scholten (13 middle), Shutterstock (2, 7 second from left & second from right, 8, 15, 16), Minke Stadler (10), Wageningen University & Research (5, 13 left & right, 14 left & middle)

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Wageningen, January 2022

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