Annual report

WAGENINGEN UNIVERSITY & RESEARCH

VIRO 3

1003

WUR & One Health

The strength of Wageningen University & Research (WUR) lies in how it uniquely combines education with both fundamental and applied research. Every area of our domain – from food to agriculture to living environment – directly or indirectly – affect health and sustainability. Our work in these fields also enables WUR to assist in predicting and preventing future outbreaks of zoonotic diseases and other illnesses.

Table of Contents

| | Sup | ervisory | Board | 3 |
|---|------|-----------|---|----|
| | Exe | cutive Bo | pard | 4 |
| | Prof | ile and C | Core Activities of Wageningen University & Research | 5 |
| | Lett | er from | the Executive Board | 7 |
| 1 | Intr | oduction | 1 | 9 |
| 2 | Wag | jeningen | University & Research Executive Report | 10 |
| | 2.1 | Superv | isory Board | 10 |
| | | 2.1.1 | Report of the Supervisory Board | 10 |
| | | 2.1.2 | Report of the Audit Committee | 11 |
| | | 2.1.3 | Report of the Appointments Committee | 12 |
| | | 2.1.4 | Report of the Education and Research Committee | 12 |
| | | 2.1.5 | Independence and Compliance | 13 |
| | | 2.1.6 | Background of the Supervisory Board Members | 13 |
| | 2.2 | Key Fig | jures | 14 |
| | | 2.2.1 | Wageningen University & Research | 14 |
| | | 2.2.2 | Wageningen University | 15 |
| | | 2.2.3 | Wageningen Research Foundation | 16 |
| | 2.3 | Mission | n, Vision and Strategy | 17 |
| | | 2.3.1 | Mission and Ambition | 17 |
| | | 2.3.2 | Strategic Plan 2019-2022 | 17 |
| | | 2.3.3 | Attention for Corporate Social Responsibility | 20 |
| | 2.4 | Educat | ion | 21 |
| | | 2.4.1 | Profile and Policy | 21 |
| | | 2.4.2 | Highlights | 22 |
| | | 2.4.3 | Results and Success Rate | 25 |
| | | 2.4.4 | | 26 |
| | | 2.4.5 | Funding | 27 |
| | | 2.4.6 | Quality Agreements | 27 |
| | | 2.4.7 | | 33 |
| | | 2.4.8 | | 39 |
| | | 2.4.9 | Outlook | 40 |
| | 2.5 | Resear | | 41 |
| | | 2.5.1 | Coronavirus | 41 |
| | | 2.5.2 | Policy and Organisation | 41 |
| | | 2.5.3 | International | 42 |
| | | 2.5.4 | Results | 45 |
| | | 2.5.5 | Quality Assurance | 45 |
| | | 2.5.6 | Open Science | 46 |
| | | 2.5.7 | Funding | 48 |
| | | 2.5.8 | Outlook | 48 |
| | 2.6 | | Creation | 49 |
| | | 2.6.1 | Collaboration, Tech Transfer, and Co-Creation with Partners | 50 |
| | | 2.6.2 | The Entrepreneurial Use of Knowledge | 51 |
| | | 2.6.3 | Sharing Knowledge | 55 |
| | | 2.6.4 | Wageningen Campus, Ecosystem & Facilities | 57 |
| | | 2.6.5 | New Professionals | 60 |
| | | 2.6.6 | Outlook | 60 |

| | 2.7 | Employe 2.7.1 | | 60 61 |
|---|-------|------------------|---|------------|
| | | 2.7.1 | One Wageningen Recruitment, Onboarding, and Inclusion | 61 |
| | | 2.7.2 | Leadership & Talent Development Theme | 62 |
| | | 2.7.3 | Organisational Development Theme | 63 |
| | | 2.7.5 | Self-Career Development & Happy Work Life Theme | 63 |
| | | 2.7.6 | HR Operational Excellence Theme | 64 |
| | 2.8 | | onal management | 67 |
| | 2.0 | 2.8.1 | Personal Data Protection Act | 67 |
| | | 2.8.2 | Management of Information Provision and ICT Developments | 68 |
| | | 2.8.3 | Corporate Social Responsibility | 69 |
| | | 2.8.4 | Safety and Environment | 71 |
| | | 2.8.5 | Procurement Policy and Supply Chain Responsibility | 75 |
| | 2.9 | Complia | | 76 |
| | | 2.9.1 | Governance | 76 |
| | | 2.9.2 | Independence | 77 |
| | | 2.9.3 | Risk Management and Internal Control | 78 |
| | | 2.9.4 | Remuneration of executives | 82 |
| | | 2.9.5 | Secondary Employment Activities of Supervisory Board Members and | |
| | | | Executive Board Members | 85 |
| | | 2.9.6 | Clarifications | 88 |
| | | 2.9.7 | Treasury Policy | 88 |
| | 2.10 | | ic performance indicators | 88 |
| | | 2.10.1 | Direct economic value | 88 |
| | 2.11 | | ngen University Continuity Section | 90 |
| | | | Principles of the Financial Policy | 90 |
| | | 2.11.2 | 5 | 93 |
| | 2 1 2 | 2.11.3 | Risks and Uncertainties | 93 |
| | 2.12 | - | Criteria and Scope | 95 |
| | | 2.12.1 2.12.2 | Consolidated Report | 95 95 |
| | | 2.12.2 | Report Criteria Scope | 95 95 |
| - | A I | | · | |
| 3 | | _ | geningen University & Research Annual Financial Report | 96 |
| | 3.1 | - | ngen University | 96 |
| | | 3.1.1 | Result Development | 96 |
| | | 3.1.2 | Development of Turnover and Costs | 97 |
| | | 3.1.3 | Development of Balance Sheet Items | 98 |
| | | 3.1.4 | Outlook for 2021 | 98 |
| | | 3.1.5 3.1.6 | Abridged Wageningen University Annual Financial Report Accounting Principles | 100 103 |
| | | 3.1.0 | Auditor's Report by the Independent Auditor | 105 |
| | 3.2 | | ngen Research Foundation | 110 |
| | 5.2 | 3.2.1 | Result Development | 110 |
| | | 3.2.2 | Development of Turnover and Costs | 110 |
| | | 3.2.3 | Development of Balance Sheet Items | 110 |
| | | 3.2.4 | Outlook for 2021 | 111 |
| | | 3.2.5 | Abridged Wageningen Research Annual Financial Report | 112 |
| | | 3.2.6 | Accounting Principles | 115 |
| | | 3.2.7 | Auditor's Report by the Independent Auditor | 122 |
| | Арре | endix 1 E | ducation at Wageningen University | 123 |
| | Арре | endix 2 K | nowledge valorisation indicators | 128 |
| | Арре | endix 3 C | orporate Social Responsibility Report | 134 |
| | Арре | endix 4 G | ilossary | 140 |

Supervisory Board

At the end of 2020, the members of Wageningen University & Research's Supervisory Board were as follows.

J.R.V.A. Dijsselbloem (Chair) Prof. Korver (Vice Chair) Ms T. Klimp Prof. P.M. Herder¹ Ms R.P. Dr R. P. Smith RA M.A. Verhoef

The members of the Supervisory Board for both institutions (Wageningen University and Wageningen Research) are the same.

Refer to 2.9.4.1 for an overview of the side activities of the members of the Supervisory Board.

¹ Prof. P.M. Herder was appointed as a member of the Supervisory Board with effect from 1 February 2020.

Executive Board

At the end of 2020, the members of Wageningen University & Research's Executive Board were as follows:

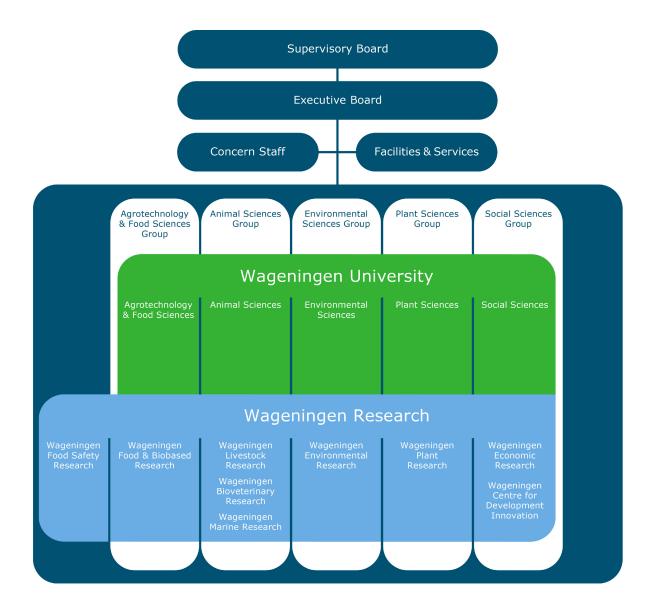
Prof. L.O. Fresco (President) Prof. A.P.J. Mol (Vice-President, Rector Magnificus of Wageningen University) L.A.C. Buchwaldt, MBA

The members of the Executive Board are the same for both institutions (Wageningen University and Wageningen Research).

Refer to 2.9.4.2 for an overview of the side activities of the members of the Executive Board.

Profile and Core Activities of Wageningen University & Research

Wageningen University & Research (WUR) is a partnership between Wageningen University (WU) and Wageningen Research (WR). The association is organised into five sciences groups. This collaboration is the organisational, functional and administrative tool which, through combining forces, helps achieve greater effectiveness and quality of research and education. Each sciences group consists of a Wageningen University department that is organisationally integrated with one or more application-oriented Wageningen Research institutes. However, the organisations are separate administrative and legal entities. The matrix of the sciences groups together with the board of education, the research institutes and the programme directors that operate across Wageningen University & Research, ensure that interdisciplinarity and demand management are achieved.



One research institute, Wageningen Food Safety Research (WFSR), was not organisationally integrated into a science group in 2020. WFSR carries out Legal Research Tasks in the area of food safety. In terms of content, the objectives and activities of these separate legal entities are aligned both at the strategic and tactical levels within the Wageningen University & Research partnership. Collaboration occurs in the operational management of some components. However, the relationship between these components is neither determined by nor dependent on policy. Individual organisational resources

may not be used for any other purpose than to realise the objectives and perform the primary tasks of the individual organisation. For this reason, the separate legal entities publish a consolidated financial report for their group. WUR as a whole does not publish a consolidated annual report.

Letter from the Executive Board

2020 will go on the books as the year of the coronavirus pandemic, and that goes for Wageningen University & Research as well. From one day to the next, education and research have largely had to be conducted remotely. WUR has shown itself to be highly adaptable and solution-oriented. Especially now, with a zoonosis that is affecting the world on a massive scale, Wageningen can contribute to finding solutions with a focus on people, animals, and nature.

Education

For a university of more than 13,000 students, the coronavirus pandemic has led to a seismic shift. Students abroad rushed home. Lecture halls were suddenly emptied out, while online *classrooms* filled to the brim. The IT department, the Education Support Centre, and the Open & Online Education team were firing on all cylinders to support lecturers and students. WUR's experience with digital education paid off, both internally and externally. The strength of our digital education became strikingly apparent during the pandemic due to additional worldwide interest in *WUR's Massive Open Online Courses* (MOOCs), which landed them their millionth registration last summer.

Wellbeing

In 2020, students did everything they could to successfully complete the academic year. Additional guidance was provided for those who needed it. Because, as it turns out, being a student without a student life is difficult: loneliness and psychological complaints are lurking. Just as much, the well-being of WUR employees has become an even more important point of attention in the past year than it already was. Despite working remotely, hours-long digital meetings, challenging home situations, and missing their colleagues, they have not lost ambition and motivation for even a moment. By focusing more on a sustainable work pace, additional financial support, and maintaining vitality in the past year, WUR has tried to support colleagues as best it can.

Coronavirus research

At the beginning of 2020, WUR immediately focused on research into the properties of the coronavirus.

(COVID-19 and a vaccine to be developed. The physical impact of a coronavirus infection and the social effects of the *lockdowns* were scrutinised. The lab of Wageningen Bioveterinary Research (WBVR) in Lelystad accounted for a significant part of the total testing capacity of nose and throat samples last year. On television and radio, in newspapers and online, Wageningen scientists provided explanations and a look ahead. This is because WUR has the knowledge and contacts to make an important contribution to tackling a future pandemic. For this purpose, the ERRAZE@WUR research programme, in which work was conducted throughout WUR and with partners for the early detection, isolation, and combat of zoonoses, was set up at the end of 2020.

Achievements

All the attention to the coronavirus should not overshadow the many other successful efforts of WUR in 2020. These include the "Map of the Netherlands in 2120", which visually shows how future-proof our country could be if nature were given the room it deserves, but also the step-by-step plan to tackle the nitrogen issue that attracted a great deal of attention from media and policy makers in mid-2020.

And although it was quieter than ever on campus after March, developments there continued in full force. For example, the go-ahead was given for the construction of a loop duct for thermal energy storage (TES) in the ground. The Plus Ultra II building was completed at the end of May, where the WUR *starter community* (Starthub, Startlife and Student Challenges), the OnePlanet partnership, and other organisations were given a brand new home.

Collaboration

Working together in person was almost impossible last year, yet we managed to do it. We did this both at WUR and with our external partners near and far: from companies to governments, citizens, social organizations and other knowledge institutions. In 2020, WUR has also succeeded in contributing to the motto of the Strategic Plan in this way: "*Finding Answers Together".* Together we will find answers to the most pressing questions and challenges of our time: how do we keep the earth hospitable to life in the midst of climate change, the global food issue, loss of biodiversity, and last but not least, pandemics? Integrity and transparency are paramount and have our attention every day.

At the national level, the EWUU alliance (Eindhoven University of Technology, Wageningen University & Research, Utrecht University, and University Medical Center Utrecht) was created in 2020 and WUR provided additional inspiration for national innovation with the first Techrede (tech lecture series) of the 4TU Federation. Within the European Framework Programme for Research and Innovation, *Horizon 2020*, WUR collaborated with partners on more than 70 projects in 2020, involving approximately 35 million euros in EU funding for WUR. Furthermore, WUR is part of international networks such as A5 (5 leading agri-food universities), ELLS (Euro League for Life Sciences), and ICA (Association for European Life Science Universities).

Finances

Financially, WUR had a stable year in 2020. A solid reserve position allows us to absorb the inevitable changes caused by coronavirus pandemic and enables us to respond to the challenges and opportunities that arise. For example, the reduced number of incoming students from outside the European Union for the 2020-2021 academic year is a reality, but not a surprise. It proved worthwhile for WUR to preemptively map out the possible lasting effects of the coronavirus in the "WURId after the Curve" report in the summer of 2020. It is now clear that *the Curve* is taking longer than expected and will therefore largely determine the course of 2021. We look to the future with resilience.

Appreciation

We would like to express our appreciation for the enormous efforts made, the adjustments made, and the creative solutions of our employees and students in dealing with the coronavirus pandemic and for staying focused on their studies, on providing education, and carrying out research and collaboration with our partners.

Prof. L.O. Fresco (President of the Executive Board) Prof. A.P.J. Mol (Vice President of the Executive Board / Rector Magnificus) L.A.C. Buchwaldt, MBA

1 Introduction

This annual report covers the 2020 financial year of Wageningen University & Research (WUR), the partnership between Wageningen University (WU) and Wageningen Research (WR). This encompasses both the joint executive report and the individual annual financial report of the separate legal entities.

In the annual report, the performance of WUR will be presented along with the social aspects of this performance. Holding both internal and external stakeholders accountable, extends across the economic, environmental and societal impact of this performance. The annual report has been prepared in accordance with internationally accepted guidelines of the Global Reporting Initiative (GRI). The elements of the Corporate Social Responsibility Report, such as the implemented personnel policies and personnel indicators, are a part of this annual report.

Both WU and WR have a social function. How both organizations have implemented this in 2020 is made clear in this annual report

The following chapters offer the reader an overview of the key developments that occurred in 2020.

Chapter 2 contains the reports from the Executive Board and the Supervisory Board (2.1). Section 2.2 gives key figures; section 2.3 discusses WUR's ambition to follow up on the results achieved for education (2.4), research (2.5), and value creation (2.6). In addition to the Corporate Social Responsibility Report (Appendix 3), the developments in terms of human resources (2.7) and business operations (2.8) are also covered. Section 2.9 offers insight into how the organisation is managed, reporting on the remuneration of executives (2.9.3). Section 2.10 deals with the Economic Performance Indicators and section 2.11 is the Continuity paragraph Wageningen University. Section 2.12 offers insight into the reporting criteria for this annual report.

Chapter 3 includes the condensed financial statements of WU (3.1) and WR (3.2), as well as the auditor's report on the condensed financial statements. The abridged annual financial reports are directly derived from the full Annual Financial Reports, which are published separately on the WUR website.

The Wageningen University & Research Annual Report 2020 was prepared and validated by the Executive Board on 19 April 2021 and approved by the Supervisory Board on 17 May 2021.

2 Wageningen University & Research Executive Report

2.1 Supervisory Board

2.1.1 Report of the Supervisory Board

2020 was a special year, a year in which the coronavirus pandemic obviously had a major impact on WUR, its students, and employees. In 2020, the Supervisory Board had frequent contact with the Executive Board and, since the start of the coronavirus pandemic, has been updated weekly on the wellbeing of employees and students and the guidelines and measures taken by WUR. The Board held six regular and two scheduled meetings in 2020 as well. Furthermore, the Board met seven times in closed sessions.

Supervisor

The Supervisory Board frequently discussed various topics related to the coronavirus crisis, such as the wellbeing of staff and students, measures taken, possible financial scenarios, the consequences for education (online and "blended" education), the development of student numbers, sickness absence, and the "WURId after the curve". The Supervisory Board also discussed the realisation of the strategic plan, current real estate projects, WR's self-evaluation in the context of the evaluation of the TO2 institutions, WUR in the media, and changes in staff/management positions with the Executive Board.

In 2020, the new "Code for Good Governance in Dutch Universities" came into effect. Following the entry into force of the new code, WUR drew up the "Code for Good Governance in Dutch Universities as applied to Wageningen University & Research" and the Supervisory Board decided to adopt this code.

The Supervisory Board discussed the progress of the 2019-2022 quality agreements on the basis of the annual report for 2019 and several progress reports for 2020. The progress of the quality agreements was discussed with the board, the central participational structures, and the Student Council. The Supervisory Board has also made sure that the participational structures can properly perform their role with regard to the quality agreements.

The Supervisory Board has approved the 2019 WUR Management Report and the 2019 Annual Financial Reports of WU and WR.

Based on the positive recommendation of the Audit Committee, the Supervisory Board approved the 2021 budget of Wageningen University and WR.

The Supervisory Board supervised the effective spending of resources, including the government grant and the TO2 subsidy. The Board did this primarily by assessing the intended expenditures as stated in the budgets and multi-year prognoses and performing a general check on them to see whether they are on track with the Strategic Plan. The Supervisory Board also assessed whether the ratios and key figures are in line with other organisations in the sector. Finally, the Supervisory Board assesses all investments larger than \in 5 million. This was not relevant for 2020.

The Supervisory Board and the Audit Committee consulted with the external auditor regarding the 2019 Annual Financial Reports, the Management Report and the 2020 Management Letter. The Supervisory Board requested that the Executive Board adopt the auditor's recommendations. Furthermore, the Board regularly discussed the financial reports and investments.

The Supervisory Board and audit committee also discussed the tender procedure for the new auditor, who will perform the annual audit from 2021. The Board approved the proposed selection procedure with

regard to the call for tender for the accountant. In December 2020, the Board decided to appoint EY as the external auditor.

Employer

The Supervisory Board approved the half-year overviews of personal expenses by Executive Board members. The board also granted its approval for the (new) secondary employment activities and external activities of members of the Executive Board. The Supervisory Board completed performance reviews with the members of the Executive Board in 2020.

Relationship with stakeholders

In March 2020, the Supervisory Board attended the internal meeting with the WUR Council. The council also attended the consultation meeting between the Executive Board and the participational structure in June 2020. Additionally, an informal consultation was conducted between the Supervisory Board and the participational structure in December 2020. In addition to this, consultation on the profile for the appointment and reappointment of members of the Supervisory Board took place with the central participational body. The implementation and follow-up to the quality agreements are the Board's recurring points for discussion with students as well as employees.

Normally, the Supervisory Board visits a WUR division after each meeting to meet employees and be updated on the research that is being conducted and the education that is being provided. The Board also meets key employees, such as management, lecturers, and researchers who make an important contribution to social issues and groundbreaking research. Due to the coronavirus crisis, in-person visits in 2020 have not been possible from mid-March. The Board did attend the Dies Natalis and paid a virtual working visit to the potato demo day, the Student Challenge, the TEDx Climate Conference, and the online alumni day. The Board was also present at the online opening of the academic year and the Techrede 2020.

Individual members of the Board spoke with various WUR employees and students and online meetings were organised. This way the Board remains well informed about what is happening in the organisation and about employee and student concerns. This also offers new Board members an opportunity of getting to know the organisation better.

The Board also maintained contact with external stakeholders. Various meetings were organised and attended by the Board in a VSNU context, such as with regard to institutional accreditation.

Development

In the autumn of 2020, the Board carried out a self-evaluation with the help of an external supervisor. One of the outcomes of this evaluation was the increased frequency of bilateral discussion between the members of the Supervisory Board and the members of the Executive Board, in addition to the regular meetings. Additional time will be made available for the meetings so that there is more room for exchange such as on strategically important topics. A discussion will also be held each year to determine which courses members will attend. Furthermore, when the profile for a new Board member is adopted, the Board specifically reviews the Board's composition and the desired development of the Board.

2.1.2 Report of the Audit Committee

The Audit Committee convened for four regular meetings and one additional meeting with the auditor in 2020.

The Audit Committee discussed WUR's 2019 annual report and WU and WR's 2019 annual accounts. The auditor's report was reviewed in the presence of the auditor. Subjects given attention were the project checks and the new, more intensive process with regard to the LNV subsidy account records. The Audit Committee advised the Supervisory Board to approve WU and WR's 2019 financial statements and to adopt the auditor's recommendations.

Another topic of discussion was the action plan for the call for tender for the new accountant. The audit committee advised the Supervisory Board on this and was involved in the verification session with the potential new auditor.

In autumn, consultations were held with the accountant about the 2020 management letter. Specific points of attention that emerged were the payment process, IT security, the internal control of required processes, project control of research projects, and the LNV subsidy account records. In the presence of the "internal auditor", the status of the "internal control plan" 2020 and the introduction of the BRiX system were discussed, which laid the foundation for "continuous auditing".

In the autumn, the audit committee discussed the 2021 budgets of WU and WR. Topics discussed included the consequences of the coronavirus crisis, incoming new employees, and the use of resources to improve the wellbeing of students. The audit committee gave a positive recommendation to the Supervisory Board on the 2021 budgets of WU and WR. The process of project control for large investment projects was also discussed.

2.1.3 Report of the Appointments Committee

The appointments committee met three times in 2020 in regular consultations and once in an additional meeting. There were selection committee meetings, of which the appointments committee forms an integral part.

The Appointments Committee prepared and conducted the annual performance appraisals with the members of the Executive Board. The meetings were prepared by the Committee, in part on the basis of input provided by various employees in the organisation, including the Central Participational Body. The results of the performance interviews were reported to the Board.

As of 1 February 2020, Prof. P.M. Herder was appointed by the Ministers of OCW and LNV as a member of the Supervisory Board. As of January 1, 2021, M.A. Verhoef was reappointed, on the joint recommendation of the central participational structure and the Supervisory Board.

In the spring, discussions were held with some recruitment agencies, on the basis of which the appointments committee chose to be assisted by one of these agencies in the recruitment of new Supervisory Board members. At the recommendation of the appointments committee, preparations started in the autumn of 2020 for the recruitment of two new members of the Supervisory Board, as the terms for Mr Korver and Mr Smith ended on 1 January 2021.

In January 2020, the composition of the Supervisory Board consisted of two women (40%) and three men (60%). With the appointment of Prof. P.M. Herder on 1 February 2020, this changed to three women (50%) and three men (50%).

At the initiative of the Appointments Committee, the Supervisory Board conducted a self-evaluation in 2020. The Board is involved in this self-evaluation. As a result of this, several actions have been formulated by the Supervisory Board and these have been shared with the Executive Board.

Details of the remuneration for the members of the Executive Board and Supervisory Board for 2020 are provided in Section 2.9.4 of this report.

2.1.4 Report of the Education and Research Committee

The Education and Research Committee met three times in 2020. The first meeting concerned the postponed meeting that was cancelled in December 2019 due to special circumstances, and the second was settled in writing due to the crisis management situation at WUR in March 2020 as a result of the coronavirus crisis.

Fixed topics that were discussed at the meeting were the quality agreements and quality assurance of WU, the early registrations of students, the WOT report, the management of the WR themes, and relevant matters related to integrity. With regard to education, the committee discussed the national

plan to accelerate educational innovation through IT, in which WU is developing one of the subprogrammes, called Flexibilisation.

Other topics discussed in the committee were the investment theme Digital Twins, the development of the Professional Doctorate Engineering (PD Eng), the education of the WU, TUe and Utrecht (EWU) alliance, and the evaluation of the education portfolio. The committee was also updated on the consequences of coronavirus for education, and the experiences and lessons that have been gained from this.

2.1.5 Independence and Compliance

The Supervisory Board ensures that board members are independent. In the Supervisory Board's opinion, this is indeed the case in accordance with the <u>Wageningen University & Research's Corporate</u> <u>Governance Code</u>. The Executive Board is responsible for compliance with all relevant legislation and regulatory requirements and for managing the risks associated with the activities of the institution. The Executive Board reports on and discusses internal risk management and control systems with the Supervisory Board and the Audit Committee. The WUR <u>Regulations</u> (in Dutch) apply to the Supervisory Board.

2.1.6 Background of the Supervisory Board Members

Mr J.R.V.A. Dijsselbloem (1966) has been Chairman of the Supervisory Board since 1 April 2019, and is chairman of the Appointments Committee and a member of the Audit Committee. As of 1 January 2021, he has also been a member of the Education and Research Committee. Mr Dijsselbloem is Chairman of the Dutch Safety Board.

Prof. S. Korver (1953) has been a member of the Board since 1 January 2013 and is chair of the Education and Research Committee and a member of the Appointments Committee. His second term ended on 1 January 2021 and he was no longer eligible for reappointment. Mr Korver was Director of VION and is a professor holding an endowed chair at Tilburg University.

Mr R.P. Smith RA (1960) has been a member of the Board since 1 January 2013 and is also chair of the Audit Committee. His second term ended on 1 January 2021, and he was no longer eligible for reappointment. Mr Smith was Chair of the Executive Board of Royal Cosun until 1 June 2017.

Ms M.A. Verhoef (1959) has been a member of the board since 1 January 2017 and is a member of the Appointments Committee and of the Education and Research Committee. From 1 January 2021, she will chair the Committee on Education and Research. Her first term of office ended on 1 January 2021. She has been reappointed for a second term until 1 January 2025. Ms Verhoef is also chair of the Executive Board of Spirit Jeugdhulp, a youth-care organisation in Amsterdam.

Ms T. Klimp (1972) has been a member of the board since 1 September 2018 and is a member of the Audit Committee. From 1 January 2021, she will be chair of the audit committee and also a member of the appointments committee. Her first term of office will expire on 1 September 2022. At this point she will be eligible for reappointment due to the provisions of the Board's rotation schedule. Ms Klimp is Senior Vice President of Strategy at Corbion B.V.

Ms P.M. Herder (1971) became a member of the Supervisory Board on 1 February 2020 and a member of the Education and Research Committee. Her first term of office ends on 1 January 2024². Ms Herder is Professor of Engineering Systems Design in Energy & Industry at TU Delft.

² Ms PM Herder stepped down from the Supervisory Board with effect from 20 January 2021 in connection with her appointment as Dean of Applied Sciences at TU Delft.

2.2 Key Figures

2.2.1 Wageningen University & Research

Table 2.1 Education

| | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|-----------------------|-----------|-----------|-----------|-----------|
| Bachelor's programmes | 19 | 19 | 19 | 19 |
| Master's programmes | 29 | 30 | 30 | 30 |

Table 2.2 Research

| Number of PhD degrees obtained | 296 | 295 | 286 | 293 | 283 |
|-----------------------------------|-------|-------|-------|-------|-------|
| Wageningen Research Foundation | 1,401 | 1,356 | 1,517 | 1,475 | 1,422 |
| Wageningen University | 3,986 | 4,064 | 4,614 | 4,415 | 4,661 |
| Number of scientific publications | 4,514 | 4,826 | 5,305 | 5,142 | 5,411 |
| | 2016 | 2017 | 2018 | 2019 | 2020 |

• Data from Pure (dated 02/03/2021).

• (Number of scientific publications (articles in academic journals (refereed/non-refereed, books, book chapters, conference proceedings and dissertations)).

• This number includes the academic articles with the status e-pub ahead of print. These articles were published online in 2020, but have not yet received a publication year, volume, and issue from the publisher at the time of reporting.

Table 2.3 Students

| 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
|-----------|--|--|--|
| 12,000 | 12,439 | 12,847 | 13,275 |
| 5,655 | 5,902 | 5,928 | 6,037 |
| 5,822 | 6,105 | 6,409 | 6,936 |
| 523 | 432 | 510 | 302 |
| 2,977 | 3,003 | 2,923 | 3,032 |
| 1,711 | 1,744 | 1,629 | 1,745 |
| 1,266 | 1,259 | 1,294 | 1,287 |
| 3,190 | 3,323 | 3,239 | |
| 1,162 | 1,268 | 1,295 | |
| 2,028 | 2,055 | 1,944 | |
| 106 | 106 | 102 | 106 |
| | | | |
| 3 | 3 | 5 | 6 |
| 40 | 38 | 36 | 34 |
| | 12,000 5,655 5,822 523 2,977 1,711 1,266 3,190 1,162 2,028 106 33 | 12,000 12,439 5,655 5,902 5,822 6,105 523 432 2,977 3,003 1,711 1,744 1,266 1,259 3,190 3,323 1,162 1,268 2,028 2,055 3 106 33 3 | 12,000 12,439 12,847 5,655 5,902 5,928 5,822 6,105 6,409 523 432 510 2,977 3,003 2,923 1,711 1,744 1,629 1,266 1,259 1,294 3,190 3,323 3,239 1,162 1,268 1,295 2,028 2,055 1,944 106 106 102 3 3 5 |

³ The number of diplomas for the 2020-2021 academic year will only be known after the summer of 2021. These figures will be included in the 2021 Annual Report.

Table 2.4Employees

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|-------|
| Average number of employees (in FTE) | 4,912 | 4,852 | 5,040 | 5,400 | 5,880 |
| Distribution on the basis of appointment: | | | | | |
| Wageningen University | 2,523 | 2,492 | 2,590 | 2,743 | 2,951 |
| Wageningen Research Foundation | 2,389 | 2,360 | 2,450 | 2,657 | 2,929 |
| | | | | | |

Relates to staff with a regular employment contract.

Table 2.5Sustainability

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|------|------|------|------|------|------|------|
| Reduction of CO ₂ emissions by % | 47 | 46 | 47 | 51 | 48 | 50 | 63 |
| compared to 2010 ⁴ | | | | | | | |
| Annual energy reduction (%) | 4.2 | 3.4 | 2.3 | 6.0 | 2.2 | 1.1 | 6.5 |

2.2.2 Wageningen University

Table 2.6 Key financial figures for Wageningen University ($x \in 1$ million)

| | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|
| Government funding excluding targeted grants | 189.9 | 202.5 | 226.4 | 241.9 |
| Tuition and tuition fees ⁵ | 36.9 | 37.8 | 38.1 | 39.2 |
| 2 ^e Research funding and targeted grants | 28.6 | 32.2 | 34.3 | 33.7 |
| Matching market and contract research | 59.1 | 60.0 | 64.1 | 59.3 |
| Accommodation ratio (%) ⁶ | 10.4% | 10.1% | 8.2% | 9.2% |
| Investments in buildings and land | 3.7 | 6.4 | 17.7 | 48.4 |
| Investments in other fixed assets | 9.5 | 11.3 | 15.4 | 24.7 |
| Net result | 13.2 | 27.6 | 20.0 | 20.5 |
| Wageningen University capital | | | | |
| Capital in fixed assets | 247.4 | 238.0 | 248.1 | 285.1 |
| Equity capital | 164.4 | 192.0 | 212.0 | 232.5 |
| TOTAL LIABILITIES | 348.0 | 369.6 | 405.3 | 437.6 |
| Solvency ratio 1 (%) ⁷ | 47.3% | 51.9% | 52.3% | 53.1% |
| Solvency ratio 2 (%) ⁸ | 52.1% | 55.3% | 55.2% | 56.0% |
| Identification value of excess equity ⁹ | | | | 0.74 |
| Wageningen University liquidity | | | | |
| Liquid assets | 53.9 | 88.9 | 114.2 | 104.2 |
| Current ratio | 0.6 | 0.8 | 0.9 | 0.8 |
| | | | | |

 $^{^4}$ The annual CO₂ emissions as a percentage of the total CO₂ emissions for the reference year 2010 (100%). For further explanation see section 2.8.3.2.

⁵ Excluding course fees.

⁶ Accommodation ratio: (depreciation of buildings and land + accommodation costs - / - rental income) / total costs.

⁷ Solvency ratio 1: equity capital / total liabilities.

⁸ Solvency ratio 2: (equity capital + provisions)/ total liabilities.

⁹ Identification value in accordance with the Reporting Guidelines for Educational Institutions model. With a value greater than 1, there may be excessive equity capital.

2.2.3 Wageningen Research Foundation

| Table 2.7 | Key financial figures for Wageningen Research foundation (x €1 million) |
|-----------|---|
|-----------|---|

| | 2017 | 2018 | 2019 | 2020 |
|--|-------|-------|-------|---------|
| Turnover | 299.4 | 321.9 | 344.0 | 355.1 |
| | | | | |
| LNV proportion in total revenue (%) | 38 | 42 | 43 | 43 |
| | | | | |
| Investments in company buildings and land | 16.6 | 17.7 | 9.8 | 19.0 |
| Investments in other tangible fixed assets | 5.5 | 7.2 | 13.7 | 7.2 |
| | | | | |
| Net result | 4.2 | 10.4 | 14.9 | 17.0 |
| Wageningen Research capital | | | | |
| Capital in fixed assets | 336.1 | 339.5 | 339.0 | 344.2 |
| Equity capital | 308.7 | 319.1 | 334.0 | 351.0 |
| TOTAL LIABILITIES | 525.1 | 547.9 | 555.8 | 579.3 |
| Solvency ratio (%) | 58.8 | 58.2 | 60.1 | 60.6 |
| Wageningen Research liquidity | | | | |
| | 02.0 | 1177 | 120.2 | 1 4 2 7 |
| Liquid assets | 93.8 | 117.7 | 129.2 | 143.7 |
| Current ratio | 1.4 | 1.3 | 1.4 | 1.3 |

2.3 Mission, Vision and Strategy

2.3.1 Mission and Ambition

Wageningen University & Research (WUR) is an internationally renowned university and research organisation in the field of agriculture, healthy nutrition and quality of life. Our mission is 'to explore the potential of nature to improve the quality of life'. Located in the Netherlands, we work together with academic partners, companies, government organisations and NGOs on global, regional and local challenges and transitions.

The 21st century is characterised by major global challenges that transcend countries and sectors. Humans are exhausting our planet's natural resources, malnutrition remains a global problem, cities are becoming overcrowded, and the climate is changing rapidly.

With knowledge, education and research of the highest possible standard, WUR aims to tackle global challenges and shape and accelerate the required transitions. In doing so, we contribute to the development of innovative technological, social, and nature-based solutions for building bio-circular agri-food systems and to protecting nature, improving biodiverse ecosystems, and supporting the quality of life in urban and rural communities. At the same time, we focus on continuous internal innovation, change and further development in order to retain and strengthen our quality, social impact and global position.

WUR's domain of healthy food and living environment consists of three interrelated core areas with partial overlap:

- Society and well-being
- Food, feed and biobased production
- Natural resources and living environment

2.3.2 Strategic Plan 2019-2022

We have now been working for two years on the realisation of our strategic plan 2019-2022 with the title "Finding Answers Together". It is our ambition to tackle global challenges with our knowledge, education, and research of the highest level and to shape and accelerate the required transitions. We do this together with new and existing partners, because we can only find answers together. We increase our impact by conducting fundamental research, translating our research into practical applications and solutions, and training students to become professionals with impact.

A guiding principle for the realisation of the strategic plan is that we work with twelve "Change Performance Indicators" (CPIs). These CPIs serve as a guide for the implementation:

- 1. Continuous improvement to maintain excellence in research.
- 2. Significant scientific and social impact on the three investment themes.
- 3. Greater focus on and evaluation of team performance.
- 4. Further integration and innovation of the Education Ecosystem.
- 5. Greater flexibility in learning paths and educational spaces.
- 6. Greater entrepreneurial culture and practice in education, research and value creation.
- 7. Expansion of our campus ecosystem and sharing of research facilities.
- 8. Greater mobility, diversity and rejuvenation of WUR personnel.
- 9. Greater harmonisation within the organisation and satisfaction with internal systems and processes.
- 10. Increased connection with society and partners.
- 11. Improved culture of trust and taking responsible risks.
- 12. Higher volume and higher margin of clients and contracts within our applied research.

The CPIs will be further operationalised and quantified as part of our implementation process. There is an active core team per CPI, and they coordinate with a broader group of colleagues from the organisation. The core teams have detailed a "Theory of Change'¹⁰ with concrete actions and changes to achieve the intended impact. In this way we remain strongly focused on the impact in realisation and monitoring. In 2020, we also gave colleagues from the YoungWUR network the opportunity to structurally contribute to one of the CPIs.

We can only realise the Strategic Plan as a team. This is why it is important for the plans and actions of the Executive Board, Sciences Groups, and staff services are carried out through a united effort. The achievement of ambitions and plans in the strategic plan follows this line as much as possible. We use existing processes and tools, such as the Planning & Control cycle, the budget, and existing boards and councils. Each science group has translated the strategic plan into its own four-year strategic plan and annual objectives. The latter also applies to staff services.

In addition to the involvement and contributions of the core teams, broader sounding board groups per CPI, the science groups, and staff services, the employees are also involved through the "Finding Answers Together" (FAT) sessions. In these interactive sessions, we regularly discuss concrete ambitions from the strategic plan and together we look for answers to questions or solutions to challenges in the realisation process. Everyone who works at WUR is welcome, and management is always present. Since June, the FAT sessions have been organised online every month. FAT sessions were organised on topics such as diversity, entrepreneurship, remote working, education during the coronavirus pandemic, and "OnePlanet Research Centre".

WURId after the curve

At the beginning of the year, the world was confronted with coronavirus and all related measures to prevent its spread. Education had to take place largely or entirely online. Research was allowed to continue, but with limitations and delays. This has had enormous consequences for our employees and students. In addition to its commitment to addressing the urgent and immediate consequences, the Executive Board has asked a special task force to map out the impact of the coronavirus crisis on the years ahead and to advise on the measures to be taken. The task force has mapped out the possible consequences, opportunities, and risks and outlined three future scenarios. Appropriate measures have been drawn up for the various scenarios, with a number of detailed "no-regret" measures that apply in each scenario. The task force found that many of the no-regret measures correspond to initiatives aimed at existing ambitions in the strategic plan. Despite the impact of the coronavirus crisis, our strategic plan remains current and provides the necessary direction in the external changes that await us. The recommendation was therefore mainly to expedite the realisation of several ambitions in the strategic plan, so that we are well prepared for the changing future.

After the summer, the Executive Board selected and prioritised several no-regret measures. These measures will be incorporated into the realisation of the strategic plan as much as possible. External developments will be monitored in order to be able to take additional measures to manage risks and identify opportunities in a timely manner.

Results

Overall, progress has been made on each CPI, despite the impact and obstacles caused by the coronavirus measures. Planned actions have been executed and are being implemented. A number of CPIs came before the realisation, because plans had already been developed at the start. Other CPIs were able to build on previous initiatives and programmes. The core teams for these CPIs have drawn up additional plans. Three CPIs (numbers 3, 8, and 11) are more complex because they focus on cultural aspects of the organisation, and culture is influenced by many different factors, actors, and processes. Several new projects have been started for these and other CPIs. We are on the right track and accelerating the realisation of multiple ambitions to be better prepared for the situation after the coronavirus crisis. We will continue to fine-tune plans and actions to achieve our ambitions in order to align well with the new reality. The interim "realization review" in 2021 will also play an important role in this.

¹⁰ More information about the Theory of Change can be found on <u>our website</u>.

In the spring of 2021, the Executive Board decided to extend the term of the strategic plan by a period of two years, so that the term will run through 2024. This was prompted on the one hand by the need to align the WUR Strategic Plan cycle with that of the Strategic Agenda Wageningen Research, and at the same time to ensure that the most important developments, such as the impact of the coronavirus crisis, are a structural part of the implementation of the strategic plan.

Research

In Wageningen, we devote our efforts to the entire knowledge chain: ranging from curiosity driven by fundamental research to scientific and scalable practical knowledge needed to create solutions. We focus on a multi-faceted definition excellence, and we continuously strengthen our research by appointing various successful researchers and young talent. We are increasing our innovative capacity through improved collaboration between WR and WU.

During the strategic planning period, we organise the development of new knowledge for Wageningen Research in terms of five robust programmes. On the basis of three investment themes, we accelerate the development of knowledge and innovation in our domain.

Investment themes (WUR):

- Connected Circularity
- Protein Transition
- Digital Twins

Research themes (WR):

- Circular and climate-neutral
- Food Security and the Value of Water
- Nature-inclusive and Landscape
- Safe and Healthy
- Data-driven and High-tech

Our education and our students

We offer students and professionals the knowledge and skills required to understand and facilitate key global transitions. Students and professionals come to WUR to participate in our growing portfolio of online and on-campus programmes, training programmes and courses bundled in our Education Ecosystem. New courses on entrepreneurship and "data science" have been realised and two new courses are being developed.

Our education ecosystem is constantly developing through innovation and the expansion of content and different forms of education. We continue to supply high-quality education, create flexible learning paths and strengthen the diversity of our student population. We do this together with our partners, such as in our Alliance with UU, UMC Utrecht, and TU/e, where we work on joint innovations in education and a flexible Master's programme.

Additional staff has been appointed to continue to offer small-scale education, despite increased student numbers. Lecturers have received additional support and training to provide education online or in a blended form as a result of the coronavirus measures. Additional efforts have also been made for student welfare in order to support students as best possible in this complicated time with so much online education.

Our employees, organisation, and resources

WUR's impact is the result of our people's efforts. They develop and disseminate new knowledge and innovations, train students and professionals and find answers to social issues. The support staff ensures that education and research proceed efficiently. Our policy, organisation, and resources facilitate the excellent work of the staff and their collaboration with colleagues, students, partners, and society at large. "Easy Service" is our ambition, so that our staff has as much time as possible for education and research. We achieve this through a better dialogue with staff and by designing our systems and processes based on their experience and integrated chain thinking.

Together we are One Wageningen. We are committed to strengthening the synergy between WU and WR by increasing flexibility and mobility between and within the two institutes. We are also focusing on strengthening interdisciplinary teams and increasing the diversity of the teams, so that the staff achieve a greater impact together. Diversity programs have been launched, and the first positive results can already be seen. Entrepreneurship is proactively encouraged and supported based on trust.

Impact: our social value

Since our foundation just over a century ago, our motivation has been to find answers and improve our world. We aim to make a difference. We make this difference by providing high-quality education, conducting innovative research together with our partners and creating spinoffs and start-ups. We continue to make a contribution to social agendas and to organise social dialogues. Our partner strategy is being strengthened further. We will continue to develop our campus and build our relationships with the increasing number of organisations and companies on campus.

New collaborations

On the basis of complementarity, we work together in the alliance with TUe, UU and UMCU to increase the joint impact in society, train talent, and bolster the scientific field. In doing so, we place young talent at the helm, we make joint choices for new focus areas, we pool investment capacity, we inspire each other about strategy, and whenever useful, we work together supportively and efficiently. This multi-year collaboration was officially launched in 2020 in the presence of Minister Ingrid van Engelshoven.

The alliance's priority areas are Circular Society and Preventive Health. The ambition is to conduct groundbreaking research on both themes and to translate this into practical applications. Another important pillar in the collaboration is education: we are education innovators, who teach our students to apply knowledge and insights from multiple disciplines to concrete issues through challenge-based education. We promote student mobility by removing administrative barriers and by ensuring an appealing range of courses that are accessible to students of the alliance. The Center for Unusual Collaborations was also established in 2020, bringing together young researchers to design and lead unusual, interdisciplinary collaborations.

In 2020, a group of "founding fathers" (HZ University of Applied Sciences, Scalda, University College Roosevelt, Utrecht University and Wageningen UR) expressed an administrative commitment to the plans for a Delta research centre. The focus of the research centre is on developing innovative solutions to social issues involving "life in the Delta", in the context of climate change/the rising sea level and with special attention to the cohesiveness and interaction between the domains of water, food/bio-raw materials, and energy.

2.3.3 Attention for Corporate Social Responsibility

"Science for Impact" continues to be the basic principle underlying our research and education. Through research and education, we contribute to the global social challenges relating to food security, safety, health, liveable cities and sustainable land use. "One Wageningen" is central to our Corporate Social Responsibility (CSR) strategy. In this manner, we can make optimal use of all available knowledge and strive for sustainability on all fronts: education, research, and business operations. In everything we do, we are aware of the social effects and we take our social impact into account in our decision-making.

The <u>WUR 2019-2022 Strategic Plan</u> gives priority in the area of CSR to "promoting the vitality of our employees and students, to a healthier and more sustainably produced food supply in our cafeterias, and to reducing food waste." We apply a 'Living Lab' concept in making our organisation sustainable: an approach that provides opportunities for research and educational experiments. In our procurement policy, we put pressure on chains to work on a transparent, sustainable, circular basis free of modern slavery.'

The ambitions and goals from the strategic plan, which affect CSR and sustainability, are included in our CSR agenda: a list of 17 social themes that are important to our organisation and stakeholders (see 2.8.3). Research and education feature prominently in this agenda; it is precisely at the core of the activities that social responsibility is paramount. Innovative challenges are sought out, and sharing and disseminating knowledge is key. Vitality, aimed at the health and well-being of our employees and students, is also an important focus area. And research must be ethical; employees are expected to act with respect towards people and animals and with an eye for nature and the environment. This is stated in our integrity code.

2.4 Education

2.4.1 Profile and Policy

As an international university, we contribute to the development of solutions for urgent and relevant challenges. The power of WUR lies in its potential to combine the expertise of WU with that of the specialised research institutes of WR. The interdisciplinary nature of WU enables us to integrate our efforts and insights from various scientific, social, scientific and technical academic fields. Bringing this expertise together leads to scientific breakthroughs that can quickly be implemented in practice. This multidisciplinary approach is also central to education: this is the Wageningen approach. In education, attention is also paid to entrepreneurship, both through the education curriculum and through extra-curricular initiatives (e.g. in the 4TU partnership, see also 2.6.2.1).

Companies, government bodies, and research institutions can visit the "Society Based Education" window to connect their questions to courses for students who are learning to use their academic skills to resolve concrete issues (see also 2.6.3.4.). The Science Shop is available for non-profit organisations (see 2.6.3.7). Through Wageningen Academy and the Centre for Development Innovation (CDI), WUR offers courses, training programmes, and degree programmes for professionals in the business community, in government, or in the semi-public sector (see 2.6.3.6).

Our education and research is aimed at the domain of healthy food and living environment (see 2.3.1). In the 2020/2021 academic year, the range of programmes for the 13,000 campus students consisted of 13 Dutch Bachelor's programmes, 6 English Bachelor's programmes, and 30 English Master's programmes in the fields of Agro Technology and Food Sciences, Animal Sciences, Environmental Sciences, Plant Sciences, and Social Sciences (Appendix 1, Table B1.1). Three of these study programmes are jointly provided with other institutions of higher education.

Three of these study programmes are jointly provided with other institutions of higher education: the Tourism Bachelor's programme with the Breda University of Applied Sciences (BUAS) and the Water Technology Master's programme (MWT) with the University of Groningen, Twente University, and Wetsus in Leeuwarden. The Metropolitan Analysis, Design, and Engineering (MADE) Master's programme is offered along with the Delft University of Technology, under the umbrella of the Amsterdam Institute for Advanced Metropolitan Solutions.

Three Master's programmes offer online a part-time specialisation, which provides students across the world with the opportunity to obtain a full Master's and to combine study and work. In addition to these degree programmes which are accredited by the Accreditation Organisation of the Netherlands and Flanders (NVAO) and are publicly-financed, Wageningen University offers open and online education, such as Massive Open Online Courses (MOOCs) and professional online courses.

Wageningen education is multidisciplinary and the Master's programmes, in particular, are strongly international in character, both in regards to the curriculum and the composition of the campus student population. The International Classroom is the instrument used to educate students about working in an international context and to further enhance the educational quality. The form and content of education in the Bachelor's and Master's programmes is updated and reviewed annually in the "education change cycle". The Board of Education, the degree programme board of all NVAO-

accredited programmes at WU, determines the curriculum of the study programmes and is responsible to ensure the quality and study feasibility of the programmes.

In 2018, a start was made with the implementation of the "Vision for Education" (2017) with the following education mission for Wageningen: "We educate students to become academic professionals, who can contribute to sustainable solutions for existing and future complex issues in the domain of healthy food and living environment all over the world, and who take their social, personal and ethical responsibilities seriously."

The implementation was continued in 2020. In it, three important pillars for the development of education are defined:

- 1. high-quality scientific knowledge;
- 2. a rich learning environment is offered, in which the development of knowledge, skills, and approaches are combined;
- 3. flexible and personal learning paths.

To ensure a permanent focus on the further development of education and our study programmes, WU collaborates with (or is a member of) many umbrella associations and organisations relevant to its domain.

- 4TU.Federation (the four universities of technology: Wageningen University, University of Twente, TU Delft and Eindhoven University of Technology)
- A5 (the top five agri-food universities in the world: University of California Davis, Cornell University, China Agricultural University, University of Sao Paulo and Wageningen University & Research)
- Academic Cooperation Association (ACA)
- Association for European Life Science Universities (ICA)
- Euroleague for Life Sciences (ELLS)
- European University Association (EUA)
- Knowledge alliance between Eindhoven University of Technology, WUR, Utrecht University, and the University Medical Centre Utrecht (EWUU).
- Accreditation Organisation of the Netherlands and Flanders (NVAO)
- Netherlands Universities' Foundation for International Cooperation (NUFFIC)
- Bologna Process Organisation
- Platform for International Education (PIE)
- Platform EdX (MOOC provider and online learning platform)
- Association of Universities in the Netherlands (VSNU)

2.4.2 Highlights

Education during the coronavirus

Due to the coronavirus outbreak, the Dutch government decided to close all universities in March 2020. Education and exams in periods 5 and 6 had to be offered completely online within a short period of time. A major challenge for lecturers, students, and support staff. Many creative solutions have been devised and digital tools have been used to enable the students to achieve the learning objectives. WU already had experience with "remote proctoring" and greatly scaled this up in a short time so that students could take exams online from home and study delays could be prevented as much as possible.

In September 2020, small-scale interaction on campus was allowed again and courses could be offered in a "blended" format. Some of the exams could be taken on campus and self-study on campus became possible as well. When the coronavirus measures were made stricter again at the end of 2020, practical education, exams, and self-study were allowed to continue on campus.

Many students were abroad during the coronavirus outbreak and, if necessary, returned to the Netherlands. Due to the negative travel recommendations, after March 2020 there were little to no options to travel abroad for international study activities such as field trips, internships, exchange, and

thesis. These activities have been replaced by online activities and activities in the Netherlands as much as possible.

The coronavirus has had a huge impact on education in 2020. On the one hand, it has led to many innovations in education and major steps have been taken in the digitisation of education and, in turn, in the realisation of strategic goals in the field of education. On the other hand, all the necessary adjustments resulted in a very high workload for lecturers and support staff and both students and lecturers missed the interaction on campus that is so characteristic of WU.

Educational reform

In 2020, the new way of educational innovation that was renewed in 2019 was continued: the possibility to innovate continuously and to utilise the resources to do so, instead of holding an innovation round once a year. A method – the "redesign lab" – was developed to thoroughly redesign a course, method of working, specialisation or teaching guideline. The implemented innovations are more structurally researched in terms of their effectiveness and are more broadly communicated.

In 2020, as a result of coronavirus, education was thoroughly redesigned to offer students education that still appealed to them. Instead of recording or livestreaming lectures, much more is done with online interaction in the "Brightspace Virtual Classroom", Microsoft Teams, and through other instruction methods that replace lectures. Online alternatives for practicals and fieldwork were also sought. Over the course of the year, educational spaces on campus were set up for hybrid education, allowing students to receive education on campus and at the same time providing the same education online to students who could not or did not want to be on campus. As a result, by the end of 2020, Wageningen education consisted of a mix of online, blended, hybrid, and in-person forms of education.



In the context of the "Educational Reform with ICT Acceleration Plan", a process was developed to integrate new ICT applications into the education process in as streamlined and broad a way as possible. In 2020, this led to experiments and the implementation of eight new tools, which made a major contribution to online education.

Furthermore, efforts were made in 2020 to make education more flexible, which is also part of the educational reform acceleration plan with ICT. The emphasis here was on increasing student mobility by working on the automatic exchange of student data between institutions when a student wants to take a course elsewhere.

Finally, in 2020, further work was done on the implementation of "skills" in the Bachelor's programmes as far as possible. The experiences gleaned from innovative education are shared via the 4TU website.

Open and online education

From mid-March 2020, the expertise accumulated in recent years in the field of online education was implemented across the board to bring Bachelor's and Master's education online. We also worked on four new MOOCs in the field of circular fashion, influencing sustainable change (as part of a "student challenge"), climate and landscape development (in collaboration with WCDI), and water management in agriculture. We also developed a "Small Private Online Course" (SPOC) in which WUR students and students from eight other universities jointly tackle drainage issues in an "international class". We also supported Wageningen Academy in developing four online courses for professional learners. The total Wageningen portfolio now consists of 38 active MOOCs plus six smaller online courses for professionals and other specific target groups.

From March, we saw the numbers of participants in the entire MOOC portfolio increase enormously as people worldwide were forced to sit at home and became interested in online learning possibilities. The number of registrations rose from an average of 15,000 per month to a peak of 65,000 in April. The number of upgrades to the certificate track within the MOOCs rose from an average of 600 per month to a peak of almost 4000 in June. We revised four MOOCs and a number of back-office processes to cope with these increasing participant numbers. During the first coronavirus wave, we also participated in edX's "Remote Access Programme", where students and employees of participating institutes could request a voucher to upgrade to the certificate track in a MOOC of their choice free of charge. Some 1,250 WUR students and employees applied for this kind of voucher, and roughly 7,800 vouchers were used for Wageningen MOOCs. We have set up a procedure for students to earn ECTs on request with MOOCs; about 20 MOOCs have been recognised for ECTs. Finally, in 2020, more than 400 regular "degree" students participated in virtual exchange education at WUR or one of the partner universities.

Data Science

Lecturers from various science groups and the Wageningen Data Competence Center started developing an application-oriented Master's degree in the field of data science. The intention in this Master's degree is that knowledge of data science is combined with knowledge in the field of nutrition and health from the Wageningen domain.

Quality Agreements

In 2020, strides were made towards the realisation of the agreements made in 2019 regarding the Quality Agreements 2019-2024 for WU. As such, a decision has been taken on how to deploy the funds released due to the discontinuation of the basic study grant, for the purpose of improving the quality of education at WU (see Section 2.4.6 for additional details).

Student Welfare

As a result of the coronavirus pandemic, a task force was set up in 2020 that focuses on optimising the support and supervision of students. The aim of this is to clarify WU's duty of care and to promote the wellbeing of students. For a more extensive report on attention to student welfare, see 2.4.7.2.

Portfolio Evaluation

In 2020, a structured evaluation of the education portfolio took place for the first time, looking at the current portfolio of complete Bachelor's and Master's degree programs from different perspectives. It has been concluded that the portfolio is still very relevant, but that it can still be strengthened in the field of engineering skills, the visibility of sustainability in our degree programmes, and new interdisciplinary specialisations and that the activities already initiated regarding flexibility and lifelong learning should certainly be continued.

Student Challenges

In 2020, the second edition of the <u>Urban Greenhouse Challenge</u> was organised. In this international competition, student teams were asked to bring professional food production back to urban neighbourhoods, integrating social, economic, technical, and environmental aspects into a cohesive concept. 53 teams from 79 universities and 29 countries took part in this edition. The focus was on the Pearl River Delta in China. After two selection rounds, 10 teams presented their design during the grand finale on August 27 (online and on Wageningen Campus). The winner of the challenge was

<u>Team Bagua</u>, followed by the <u>Team KAS</u> (second place), and <u>Team Spirit</u>(third place). Other challenges that took place in 2020 were the <u>Soil Challenge</u>, the <u>Food System in 10 Years Challenge</u>, the <u>Food Systems Innovation Challenge</u>, the <u>A5 Student Challenge</u> and the <u>Smartwatch Hackathon</u> <u>WUR & OnePlanet</u>. Two Wageningen startups completed the second edition of the <u>Dutch 4TU Impact</u> <u>Challenge</u>. A total of 767 students, 229 of which were WUR students, participated in these challenges.

IT in education

A number of changes were accelerated in 2020 as a result of the coronavirus pandemic. For example, over a two-week period in April, QMP was replaced for some of the exam questions by the new digital testing system ANS. Also due to coronavirus, remote proctoring, Virtual Classroom via Brightspace, Microsoft Teams, and applications such as Labster, H5P, Codegrade, Traintool, Comprove, and the Peek app were made available at an expedited pace. All course applications that are used in education were included in the WUR AppStore and made available to students on their own devices. New tools made new forms of online education and examinations possible, so that instruction could continue as effectively as possible during the coronavirus pandemic. We took ANS into use entirely in the second half of 2020. In January we initiated the call for tender for course scheduling software, which was awarded to the candidate TimeEdit. We implemented this new software and put it to use before the start of the new academic year on 1 September. In autumn we started working on a call for tender for software for video distribution and management. Finally, in December, after almost three years of preparation, the new student information system OSIRIS was successfully launched.

Educational reform with ICT acceleration plan

WU is actively participating in the Educational Reform through ICT acceleration plan introduced by the VSNU, the Netherlands Association of Universities of Applied Sciences and SURF – the collaborative organisation for ICT in Dutch education and research. The objectives of this acceleration plan are to make flexible studying possible, use technology to enable students to study smarter and better, and improve graduates' alignment with the labour market. WU is committed to the following themes: improving the flexibility of education, collaboration with EdTech, and digital learning resources. In this respect, we worked with alliance partners TU Eindhoven and Utrecht University in 2020 to promote student mobility, and investments were made in the "lifelong development" offerings. We also worked on pilots designed to implement new tools in education and on a national infrastructure for learning resources.

2.4.3 Results and Success Rate

The success rate (study success) of the Master's programme after two years is 33% and 2018% after three years. Compared to previous years, Master's programme yield has declined after two years. This is partly due to thesis and internship delays incurred due to the coronavirus outbreak in March 2020. The yield from the Master's programmes after three years has fallen slightly from 82% to 80% (for the 2017 cohort). In the Bachelor's programmes, the yield has fallen slightly after three years from 39% to 36%. The yield after four years for the Bachelor's programs is 75%; this is similar to previous years.

For the 16th consecutive time, WUR has been chosen as the best university in the Netherlands in 2020 (Keuzegids 2021) with an overall rating of 73 points, one less than last year. Nine of the 19 Wageningen Bachelor's degree programmes received the distinction of *Top Degree Programme* (national total of 63), six less than last year. This is related to an adapted and retooled calculation method. Due to the coronavirus crisis, the annual National Student Survey (NSE), in which students give an opinion about their studies, was cancelled. This will take place again in 2021 and with a reworked questionnaire. At the same time, some additional quality criteria were introduced, such as more emphasis on study success. The assessments of experts have also expired.

In prominent international rankings such as Times Higher Education, ARWU, and QS, WU consistently received top spots in 2020, despite some of these rankings not adjusting for the formative scope of an institution. Our quality comes best to the fore in the subject rankings that differentiate between different fields. WU ranked first for Agriculture (ARWU, QS ranking and US Best Global University

Rankings) and second in the fields of Plant and Animal Sciences, Environment/Ecology (Best Global University Rankings), and Food Science and Technology (ARWU).

In accordance with the UI GreenMetric University Ranking, which focuses on policies and facilities relating to a green campus and sustainability, WUR for the third consecutive year is entitled to refer to itself as the greenest university in the world in 2020.

2.4.4 Quality Assurance

Internal

The course and programme evaluations provide crucial feedback to lecturers, programme directors, chair holders and the Examining Board regarding the quality of education. The assessments are transmitted, the information is collected, and the reports are prepared using the Programme and Course Evaluations (PaCE) system. The revised questionnaire for the curricula was evaluated in 2020 on the basis of data obtained from periods 1 to 4. The analyses show that the themes devised in advance are also reflected in the results and, moreover, are measured well to reasonably well. In 2019-2020, the Education Evaluations working group developed proposals for new questionnaires for BSc graduates, the thesis, and the internship.

The average overall satisfaction score across all courses is 3.8 on a scale of 1 to 5; once again the same as the preceding year. The average satisfaction of students was also high in the periods in which full or partial online education was provided due to coronavirus measures. In addition to the regular evaluations, the Education and Learning Sciences (ELS) chair group has conducted intensive research into education during the coronavirus pandemic, including into the experience of students and lecturers and the results achieved.

The response to the professional evaluations decreased in 2020 (on average 31%). The number of courses on which feedback was given by the course coordinator increased from 15% in 2018-2019 to 22% in 2019-2020. Students greatly appreciate the feedback on the evaluations; this provides insight into how the results of the evaluations are concretely used for improvements.

The programme evaluations are conducted at the end of the first year of the BSc (average response rate of 26%) and upon completing the BSc or MSc programme (response rate of 35% and 38%, respectively). The reports are sent to programme directors and committees with the objective of using the feedback to continue improving their study programmes.

As of this year, the program committees will be writing an annual report and annual plan, in which they reflect on the education provided and the improvements that have been made and look ahead to the new academic year. In it they describe their ambitions, innovations, and improvements. Discussing this annual report is part of the annual visit by the programme committee to the Board of Education.

Due to the coronavirus pandemic, a meeting was held in 2020 between the Board of Education, the examination boards, and the programme committees/directors to discuss whether the intended learning outcomes of the programmes are being achieved with the coronavirus measures, where bottlenecks arise, and what solutions are used to tackle them.

External

In 2020, the on-site inspection for the first degree programmes as part of the fourth cycle of degree programme assessments were started. The BSc and MSc programs in Biology were inspected. With the approval of NVAO, this inspection visit was prepared and conducted in a manner that deviated from the standard. The programmes received a positive assessment based on existing documents (instead of a self-evaluation) and an online inspection. During the process, extensive consideration was given to matters the degree programmes wished to develop further. The Educational minor was also inspected in 2020. Although this is not an independent degree programme, it does involve a teaching qualification. The minor received a positive assessment from the panel.

From the recommendations of the panels in the third cycle of degree programme assessments, the thesis procedure and assessment, the internship assessment, and the functioning of the examination boards were chosen for further elaboration.

In 2019-2020, the Master of Biobased Sciences degree was also required to demonstrate that it meets the conditions of a New Programme Assessment. The panel issued a positive ruling on this in 2020 after an inspection.

2.4.5 Funding

Education at WU is funded by direct government funding for education and research that consists of government funding of €241.9 million and the proceeds from tuition and course fees of €39.2 million, totalling over €281.1 million. Effective as of 1 January 2018, the funding of green education was transferred to the Ministry of Education, Culture and Science (OCW). 2018 was the last year in which the government funding for WU was capped. This capping method was included in the old funding agreements with the Ministry of Economic Affairs and Climate Policy (EZK) and the Ministry of Agriculture, Nature and Food Quality (LNV). The capping was abolished effective 1 January 2019 and WU is now fully incorporated into the university funding model of the Ministry of Education, Culture and Science (OCW).

2.4.6 Quality Agreements

2.4.6.1 Process

The 2019-2024 quality agreements have been established by the Executive Board and approved by the Student Staff Council and the Supervisory Board in 2019. WU started implementing the programme to improve our education quality two years ago. The results of these efforts are detailed in a dashboard per period. The steering committee managed, monitored, and reported the implementation using these dashboards. The Executive Board, the Student Staff Council, and the Supervisory Board evaluated and discussed the progress. The most recent version of the dashboard has been posted publicly on the website of <u>Wageningen University</u>.

In general, the implementation of the quality agreements is on schedule. Some projects have been delayed due to the coronavirus measures for higher education. The projects are still very relevant, even under the changed circumstances of the coronavirus pandemic.

The subsidy we receive from the Ministry of Education, Culture and Science (OCW) was spent in 2020 in accordance with the quality agreements of 2019-2024. WU has also invested its own resources in the quality agreements for 2019 and 2020. Our own additional funding has not been fully spent.

2.4.6.2 Progress

WU invests in five of the six quality themes. For each theme, different projects have been defined with concrete goals and budgets per year. Despite the coronavirus crisis, the objectives for most projects have been achieved. For each project, we provide an overview of the results, an explanation and some reflection. WU is also evaluating the effectiveness of the measures. This impact analysis is used for internal discussions and can lead to changes in projects to improve the impact where necessary.

a. Small-scale education

| Project | Objective | Objective achieved? |
|-------------------------|---|---|
| Thesis supervision | All chair groups will continue to provide | Based on the positive results from ten random |
| | intensive thesis supervision, despite the | interviews per year, we have been able to |
| | growing number of students. | establish that all chair groups have been able to |
| | | implement or have maintained this intensive |
| | | supervision. |
| Sciences Groups | In total, the sciences groups will take on | In total, the science groups have appointed |
| Measures | 7.3 additional FTE for intensive small-scale | 7.3 additional FTE in support of intensive small- |
| | education. | scale education. |
| Additional lecturers in | 11.1 FTE additional staff have been appointed | 10.2 FTE additional staff have been appointed to |
| chair groups | to 37 chair groups. | 34 chair groups. The target of 11.1 FTE will be |
| | | achieved in 2021. |

The chair groups and science groups are seeing a lighter task load for the lecturers, who now have more time for education and their students. The chair groups can continue the intensive thesis supervision with the additional funding. Many chair groups have hired extra staff, partly covered by additional funding for thesis supervision in accordance with the quality agreements. Many chair groups have also been able to invest in improving the thesis supervision procedures and processes. Since 2018, the investments in thesis supervision and procedures have led to an increase in student satisfaction with the thesis.

The additional staff hired (7.3 FTE) facilitate and support small-scale education in the implementation of the detailed plans of the science groups. They help the lecturers design, organise, and offer intensive (online/hybrid) courses. The target for additional teaching staff for the chair groups has increased due to the additional funding from the free project space that was discontinued and reorganised at the start of the quality agreements. The new target for this project is 11.1 FTE instead of 8 FTE. The original target of 8 FTEs has been achieved. Recruitment of the additional 3.1 FTE was started in the summer of 2020.

| Project | Objective | Objective achieved? |
|----------------------------------|--|--|
| "Dealing with Stress" | Organise a mental health week and at least | All activities have been organised, including |
| Campaign | four other activities . Permanent presence of the additional student psychologist (0.4 FTE) who organises the events. | the "Surf your Stress" week. Since 2018, a coordinator for 0.4 FTE has been appointed to organise the activities. |
| More Study Advisors | 3.0 FTE additional study advisors | 1.8 FTE additional study advisors appointed. The target of 3.0 FTE will be achieved in 2021. |
| More student psychologists | 2.4 FTE for additional student psychologists. | 2.0 FTE extra appointed student psychologists (0.4 FTE flexible capacity) and 0.4 FTE support staff to relieve the psychologists so that they have more time for students. |
| Student initiatives for students | 4 student initiatives funded. | 7 student initiatives approved. Due to the coronavirus measures, only 4 initiatives could be implemented: 2 were delayed and 1 initiative was cancelled. |
| Virtual training centre | Appoint a coordinator. Publish website and announce. Coordination of activities offered by WUR. | A coordinator has been appointed. Website has been published with activities that were coordinated. |
| Employee training | Give at least two training sessions per year to identify the problems students face and support them in doing so. | Delayed due to coronavirus. Student psychologist walk-in hours for lecturers. Ad-hoc training by psychologists. Stock was taken of what teachers need in terms of support. <i>The target will be achieved in 2021.</i> |

b. More and better study guidance

Since 2019, students can sign up for activities in the context of the stress prevention campaign, including the "Surf your Stress" week. There was a lot of enthusiasm for the activities and the Surf your Stress week. The students indicated that these activities were very useful. Due to the increasing stress among students, stress prevention activities have become even more relevant and important. The evaluation surveys show that the students are satisfied with the activities.

In the summer of 2020, WUR started hiring additional study advisors (0.1 or 0.2 FTE per study programme). Recruitment has been delayed in some courses, partly due to the coronavirus measures, but the target will be achieved in 2021. Students with problems can also ask for help from the extensive group of student psychologists. WUR also offers candid conversations with trained fellow students and student coaches. Students are also supported in helping other students improve their wellbeing. Despite the obstacles posed by the coronavirus, four projects were able to be set up in an online environment — creating an online community — or organised outdoors. In these communities, students can help and support each other.

The Student Training & Support centre was successfully rolled out in 2020. Here, students will find a clear overview of the available support and options for personal development. Additional training courses and activities were set up based on information from a student survey.

In 2020, lecturers needed time to transition from their on-campus teaching to online or hybrid teaching. As a result, lecturer workload increased significantly and there was less time to invest in training courses that indirectly applied to their teaching work, such as problems encountered by students. The training courses to recognise that mental health problems in students were integrated more deeply into the training courses that were already being offered to the teachers.

| Project | Objective | Objective achieved? | |
|---|---|---|--|
| Student Challenge | WU organises at least 1 Student Challenge per | 2 Student Challenges have been held so far. | |
| | year. | | |
| Skills development | Implementing new skills in degree | In some degree programmes skills training | |
| | programmes, supported by educational | programmes are implemented. Since | |
| | designers. | November 2020, a coordinator has been working | |
| | 6 training courses for student assistants. | to implement this project. All degree | |
| | Growing digital learning environment for | programmes will begin implementing this in | |
| | skills. | 2021. | |
| | | 6 custom training courses have been | |
| | | organised for student assistants. | |
| | | A digital learning environment and digital | |
| | | skills education tools have been implemented. | |
| Extra-curricular More activities from the Student Career Services More activities from | | More activities from the Student Career | |
| Activities | centre and the appointment of 0.5 FTE for | Services centre and a career coach was hired | |
| | career coaching. | for 0.5 FTE. | |
| | "Bildung" programme customised for multiple | Bildung pilots implemented in 4 degree | |
| | degree programmes. | programmes. | |
| | More extra-curricular workshops/training | More than 10 new training programmes | |
| | programmes for all students: at least two | available to students through the virtual Student | |
| | extra. | Training & Support centre. | |

c. Differentiated instruction

Two "Student Challenges" were organised in 2020 with the help of funding from the quality agreements. The participants were very positive about the contribution to their personal development and networking within the business community as well as their academic disciplines. Some courses started implementing the skills training programmes in 2020, but not all degree programmes succeeded. Despite this, all preparations have been made to roll out the skills courses in the degree programmes.

Lecturers experience great pressure in the transition to an online environment, which is why student assistants have been trained to provide support in hybrid education. Furthermore, student assistants were also trained to provide additional support to new students.

A pilot for the Bildung programme has started at four study programmes. Participating students reviewed these pilots very positively and indicated that they were very helpful in their education and personal development. The Student Career Services centre organised several additional and new on-campus activities, as well as additional and alternative online activities. The new career coach for students was highly appreciated and found to be useful by the students.

| Project | Objective | Objective achieved? | | |
|---------------------|--|---|--|--|
| Training for PhD | At least 140 PhD students with a teaching | 125 PhD students with a teaching position | | |
| students | position are receiving didactic training. | have received didactic training. The target will be | | |
| | | achieved in 2021. | | |
| Professionalisation | Fund at least 6 requests for compensation. | 15 compensation requests were funded. | | |
| Fund | Provide compensation for at least 4 peer | At least 4 (cluster) courses were financed with | | |
| | reviews (from a cluster). | peer reviews in accordance with the quality | | |
| | | agreements. | | |
| Relieving and | 5.5 FTE for additional staff to unburden | 4.6 FTE of additional staff have been appointed. | | |
| Supporting of | lecturers. | The target of 5.5 FTE will be achieved in 2021. | | |
| Lecturers | | | | |

d. Lecturer professionalisation

In 2020, fewer PhD students participated in the online training courses. This is due to the increased workload of lecturers (including PhD students) during the transition to online education. The participants indicated that they could apply the training courses directly in their education and that they could better support their students thanks to these training courses.

Teachers have also made extra efforts to improve their didactic skills. In addition to the compensation requests, additional training courses were also offered for hybrid and online education and online exams.

Lecturer workload was relieved by the additional staff appointed by the sciences groups. Several sciences groups set up educational support points where teachers could turn to for help and support in facilitating their education. The relief measures allowed the teachers to spend more time on the transition to online education and the required new online tools and innovations. The latter has led to further professionalisation of our teaching staff. The number of employees hired by the sciences groups was lower than expected due to the cancellation or delay of on-campus projects.

e. Education facilities

| Project | Objective | Objective achieved? | |
|-------------------------|-----------------------------------|---------------------------------|--|
| Bring Your Own Device = | Make the WUR app store available. | The WUR app store is available. | |
| study anytime, anywhere | | | |

The WUR app store was rolled out in 2020. All the software students need for online computer practicals is available on this platform. In 2021 we want to set up a "One-Stop-Shop" in which students can find all the necessary software on a single platform.

Furthermore, the Executive Board and the Student Staff Council agreed to allocate part of the former miscellaneous budget (€120,000) for a swap service and RSI prevention kits. With the swap service, students can borrow a laptop from the IT Service Desk if their own laptop needs to be repaired and they urgently need a computer for online education. The RSI prevention sets were offered at a discount so that students could work more ergonomically. No students have used the swap service yet. In 2020, more than 750 students purchased RSI prevention products.

2.4.6.3 Budget

For 2020, and including salary compensation, WU received a total of €3,835 million (€3.728 million + € 107,000 <u>salary and price corrections</u>) for the quality agreements received from the Ministry of Education, Culture and Science (OCW). WU also budgeted a maximum of €1,502 million in additional financial resources for the quality agreements in 2020. The financial resources of the OCW were spent in full in 2020, in accordance with the financial agreements that fall under the quality agreements. WUR's own funding was not fully spent.

There was a net underspending of approximately $\leq 186,000$, consisting of a total underspending of approximately $\leq 454,000$ in various projects and a total overspending in other projects of $\leq 268,000$.

In the guiding agreements of the Student Staff Council and the Supervisory Board, we determined which part of the underspending could be used to compensate for overspending in other projects and which part of the underspending would be carried over into 2021. Under the guiding agreements, underspending may be used for projects with overspending, provided that the objectives in the projects with underspending have been fully achieved or the objectives have been changed and the budget is not needed in the following year. Another guiding agreement concerns projects with underspending where the objectives have not been achieved in the relevant year but will be achieved in the following year. This underspending amounts to approximately €260,000, and this money will be added to the 2021 budget.

The table below shows the financial reporting of the 2020 quality agreements.

| | | Budget | Objective |
|-------------|--|--------|-----------|
| | | (k€) | achieved |
| | | | (k€) |
| Small-scale | e intensive education | | |
| 1.1 | Thesis supervision | 1,700 | 1,907 |
| 1.2 | Sciences groups | 500 | 500 |
| 1.3 | Additional staff to resolve bottlenecks* | 990 | 959 |
| | Total | 3,190 | 3,366 |
| More and b | etter study guidance | | |
| 2.1 | Stress prevention campaign | 50 | 67.6 |
| 2.2 | More study advice for students by hiring more study advisors** | 272 | 152.5 |
| 2.3 | More psychological support for students by hiring more student psychologists | 200 | 184.6 |
| 2.4 | Fund for student initiatives to support students | 20 | 7.7 |
| 2.5 | Roll out and run training centre | 50 | 87.6 |
| 2.6 | Staff training to recognise and address student problems | 40 | 10 |
| | Total | 632 | 510 |
| Differentia | ted Instruction | | |
| 3.1 | Student Challenges | 300 | 300 |
| 3.2 | Skills development | 285 | 164 |
| 3.3 | Expand extracurricular activities, including more personal development | 130 | 131.4 |
| | coaching and career guidance | | |
| | Total | 715 | 595.4 |
| Profession | alisation | | |
| 4.1 | Skills training for PhD candidates | 75 | 31.3 |
| 4.2 | Fund to compensate chair groups for professionalisation and peer review | 105 | 110.2 |
| | expenses | | |
| 4.3 | Relieving and supporting teachers by hiring support staff and education | 300 | 218 |
| | designers | | |
| | Total | 480 | 359.5 |
| Suitable fa | cilities | | |
| 5 | Bring Your Own Device Project | 320 | 320 |
| | Total | 320 | 320 |
| Total | | 5,337 | 5,150.9 |
| Total OCW | | 3,835 | 3,835 |
| WUR total | | 1,502 | 1,315.9 |

* The annual budget has been aligned to €810,000 per year for 2019-2021. This equal distribution is necessary for the allocation of additional personnel. Furthermore, €180,000 was added from the miscellaneous budget in 2020. This will increase to €300,000 as of 2021.

** Additional funding of €107,000 in 2020 due to salary and price adjustments and increased market share.

2.4.6.4 Student Staff Council and Supervisory Board

The progress of the quality agreements, as presented in the dashboard, is regularly discussed by the representatives of the steering committee with the sounding board group of the Student Staff Council (at least four times a year), by the Executive Board with the Student Staff Council (at least twice a year) and with the Supervisory Board (at least twice a year).

In 2020, after discussion with the Executive Board, the guiding agreements for changes in the quality agreements were approved by both the Student Staff Council and the Supervisory Board. In 2020, many new members were elected to represent the staff and students in the Student Staff Council. These new members have been extensively informed about the quality agreements and the steering group has scheduled more meetings to further incorporate the sounding board group.

2.4.6.5 Review of the Student Staff Council

The sounding board group is a delegation from the Student Staff Council, consisting of one employee and three students. The sounding board group and a delegation from the steering group meet every two months. At these meetings, they discuss the implementation of the plans, including the realisation, adjustment, and supervision of policies and processes. The sounding board group is also involved in the development of new ideas and changes to the plan at an early stage. The steering group provides the sounding board group with relevant information such as dashboards, impact assessment, annual reports, and other portfolios such as "Consequences of coronavirus". The sounding board group as a delegation of the Student Staff Council is therefore positive about the collaboration between the sounding board and steering group. The sounding board group is satisfied because they are well informed about the procedures, have time to respond to documents that are shared, and are generally well involved in the quality agreements as a whole. This includes discussions with the project leaders and the sounding board group also being asked to give an opinion on documents on which they do not have the right of approval. This makes the sounding board group feel like a fully-fledged discussion partner.

The sounding board group contributed to the annual report of the quality agreements. The sounding board group is pleased that, despite the coronavirus, new opportunities are being sought to allow projects to continue. It advised the steering committee to communicate the implementation of the quality agreements more intensively within the organisation with both students and staff. The steering group agrees with this recommendation.

2.4.7 Students

2.4.7.1 Student numbers

Interest in WU's BSc programmes increased in 2020. The growth of first-year BSc students (including transition students) is 7%. This growth is caused by an increase in first-year Dutch students. The inflow in the MSc programmes has grown by 4%. As for the BSc programmes, the number of incoming Dutch students in the MSc programmes increased (+11%). However, the number of foreign incoming students in MSc training courses has fallen by 7% compared to last year. The developments in the student numbers can partly be explained by the coronavirus outbreak in the previous academic year, which resulted in a higher number of incoming Dutch students and lower number of incoming foreign students (particularly students from non-EEA countries).

On the reference date 1 October 2020, the percentage of non-Dutch BSc students was 6%: 350 of 6,037 students, spread across 52 nationalities. Of the international students, most are of German nationality (24%), followed by Italian (12%), and Belgian and French nationality (both 7%). Six of the BSc programmes were taught in English.

Of the Master's students, 34% have non-Dutch nationality: 2,359 of 6,936 students, spread across 97 nationalities. The most common nationalities are Chinese (440), German (267), Italian (237), Greek (137), Indonesian (129), and Spanish (127). All the Master's programmes are taught in English and are provided to Dutch and non-Dutch students together.

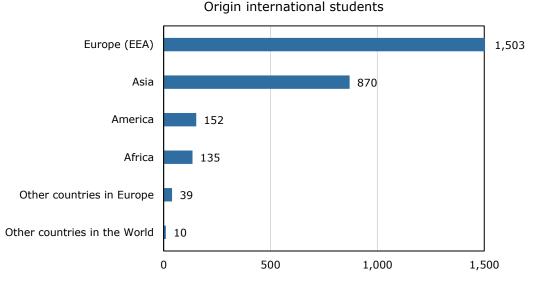


Figure 2.1 Distribution of the 2,709 foreign students (BSc and MSc) at Wageningen University based on nationality, reference date 1 October 2020. The "other" category includes Australian and New Zealand students and students whose nationality is unknown

2.4.7.2 Study and student counselling

To ensure good study progress, we provide our students with study counselling via study advisers and student counselling via student deans and psychologists.

Students who encounter problems in or during their studies that they cannot solve themselves can contact the student dean, student psychologist, or confidential adviser. Since 2020, students can also request a meeting with an experienced student coach.

Student wellbeing

- In 2020, there was a lot of media attention for student wellbeing due to the coronavirus pandemic. Our own research also shows that our students are struggling with depression and sadness. However, students have not asked for help from deans and psychologists more often than usual. One explanation could be that students have a greater need for other forms of assistance. Another explanation is that our students are resilient enough to deal with the situation themselves. We also see this reflected in the fact that students continue to organise many activities themselves.
- Various new initiatives were developed by WUR to support students. A stress prevention week was
 once again organised with resources from the quality agreements ("Surf Your Stress"). An
 additional psychologist was hired. Student Training & Support was also set up with various training
 courses for students. Since 2020, students can also request a meeting with a student coach. At the
 end of 2020, the team started using
 a bastly. With the "Coronada Bast" platform, the psychologists can use medules that support the

e-health. With the "Gezonde Boel" platform, the psychologists can use modules that support the conversations. Students also have the opportunity to go through certain modules independently (without the intervention of the psychologist) in order to increase their mental resilience.

- A "Duty of Care" task force was set up to clarify where WUR's services end and where other organisations can and should take over the care for the student. A social map is being drawn up together with the municipality of Wageningen.
- A great deal of consultation took place with the municipality of Wageningen, Idealis, and student
 organisations. Together we looked at how students could be better informed about the spread of
 coronavirus. Investments were made in providing information about coronavirus in student
 housing. Study and student organisations received support in organising activities (often digital).

Student Deans

- Students can contact the student dean for support in the event of a study delay or to request facilities for students with a disability.
- In 2020, the student deans had a total of 1,688 conversations with students, including
 1,021 students who had not consulted a student dean before. The total number of discussions
 decreased by more than 10% compared to 2019. There was a shift from conversations with Dutch
 and EU students to conversations with non-EU students and from Bachelor's to Master's students.
 Fewer students who visited had psychological and medical complaints and the number of
 conversations per student with a complaint decreased.
- The coronavirus pandemic probably played a role in these changes. Due to the lockdown from March 16, 2020, discussions with students were only possible by telephone and online. It was not until mid-June that it became possible to meet on campus again. This led to 112 fewer calls during the lockdown compared to the same period in 2019. Dutch students in particular postponed conversations or asked questions by e-mail instead. As a result, the focus of the discussions shifted to international students, who usually participate in a Master's programme. Deans were unable to make a big difference with Dutch and EU students when it came to the pandemic; there were no special arrangements for this group of students.
- The number of answered e-mails increased sharply in 2020 to 3029 e-mails; this is an increase of 64% compared to 2019. This increase was partly caused by the coronavirus pandemic; some of the students sent an e-mail instead of a request for a discussion. Whether this trend will continue remains to be seen.
- Some of the conversations are currently being held in person and some online. A small portion of
 the students actually enjoy being able to meet digitally, so this option will remain available in the
 future. However, some of the students do not have a safe or good place to have a digital
 discussion, so it was important that this group could continue to talk to a dean in person. For this
 reason, it was decided that from the summer some of the deans will be physically present on
 campus.
- The number of conversations with students with health problems decreased in 2020. Medical symptoms such as concussions and mononucleosis were probably less common because students were able to participate in far fewer activities due to coronavirus. The reason for the decrease in conversations with students with mental problems is not clear. One explanation could be that students with relatively serious psychological complaints may benefit from the coronavirus measures. Coronavirus did cause problems with motivation, concentration, and mood, but these complaints were apparently relatively minor and caused little to no study delay.
- The decrease in students with complaints may have to do with the forced postponement of the writing of theses, because many complaints are about thesis supervision and assessment.
- The percentage of discussions in which a disability also plays a role has remained stable in recent years, around 16%. However, a shift is visible from students with a relatively mild disability (such as dyslexia) to students with more severe disabilities (such as Autism Spectrum Disorders (ASD).
- The number of students who reported to the dean's office with RSI/KANS problems has increased in 2020; from 78 to 93 students. Online studying has undoubtedly played a role in this. The "bring your own device" policy may also have had a negative effect. Within WUR there is a lot of attention to prevention, but it remains important to stay focused and to provide students with even better information and guidance on this subject.

Psychologists

- Students can go to the psychologist with personal problems such as grieving, but also with more study-related problems such as a lack of motivation and stress.
- In 2020, 1059 students registered with the student psychologists; this is very similar to 2019, in which 1062 new students registered for a discussion. The percentage of international students who register for individual discussions remained more or less the same. The number of conversations per student increased. A total of 2415 conversations took place; this is an increase compared to 2019 in which 2105 conversations took place. The average number of follow-up discussions per student increased from 2 to 2.3.
- In the year under review, approximately 15% of students were referred to external institutions (sometimes specialised) for diagnosis or treatment. In 2019 this was 20%.

- The ratio of the number of students with a study-related request for help to the number of students who sign up with a personal problem has changed over the years. The percentage of students reporting a personal problem increased to 79% in 2020. In practice, however, there are usually problems in multiple areas (both personal and study areas) that are interrelated.
- The main reasons that students seek help from the student psychologists has not changed much over the past few years. The most common study-related issues are study stress, performance anxiety, problems with discipline, and graduation problems. It is striking that lack of discipline increased sharply compared to fear of failure and study stress. The loss of structure and the limited facilities due to the coronavirus measures seem to play an important role in this. In the category of personal problems, depression-related help requests are by far the most frequent. In this category, a reasonably stable picture can be seen in recent years.
- In 2016, a walk-in session was started in the Forum building during the lunch break called "Walk-in counselling". Students can come here for urgent or quick questions related to their psychological or social issues. In this way, the support is easily accessible and they can talk about their problem in 15 minutes or less. Due to the coronavirus measures, the Walk-In was converted to a digital consultation in March 2020, in which students could receive a short 15-minute consultation. A total of 173 students used the brief Walk-in/digital consultations. This decrease is a striking break in trend compared to previous years, which may be related to the changes described above.

2.4.7.3 Student services

We are highly committed to providing excellent service to our students. To a large extent, this is provided for by the Student Service Centre (SSC), housed in the Forum building. Students with questions about enrolment, admission, tuition fees, grade lists, graduation and more are welcome here. Students can also contact the SSC for advice and financial support in the event of study delay or help from a psychologist. Furthermore, the SSC provides support and advice to students with a disability, offers financial support to student organizations, organises the Annual Introduction Days, supports international students upon their arrival and first period in the Netherlands and is responsible for the international exchange of students.

The service provided by the SSC is organised according to the principle of "self-service where possible, extra personal service where desired and necessary." In this way, the SSC wants to be able to provide tailored solutions, which also takes into account diversity in relation to services. In 2020, the SSC switched to a new student information system, Osiris. Osiris is a standard system used by several other institutions of higher education. The system was set up in 2020, and every effort was made to continue to do justice to the personal and tailor-made services provided by the SSC.

Service provision to students is conducted by phone, online (website), the student contact system, and the information desk. Due to the coronavirus pandemic, the SSC had to switch to online services in 2020; questions from students were mainly answered via the student contact system. The helpdesk was closed during the first period of the pandemic, but was reopened in the summer period. In 2020, 87,747 questions were submitted to SSC via the student contact system. The aim is to answer a question within three working days. This target was met in 98% of the cases. Over 28% of the questions was received and dealt with during the months of July and August.

In 2020, a lot of creativity was required from SSC due to the pandemic. The services to students had to continue, but at the same time there were stricter conditions. At the start of the pandemic, a lot of work was done to bring all Dutch students who were abroad safely to the Netherlands. WUR's travel policy was adjusted and the exchange programs had to be stopped twice. A lot of work was also done to continue distributing diplomas to graduates and the graduation ceremonies were conducted entirely online. International students who wanted to come to Wageningen all received personalised advice and a special quarantine service was set up. The Annual Introduction Days continued in a modified format and a special buddy campaign was set up in the winter.

2.4.7.4 Student facilities

We feel it is important for students to have a rich life in and outside of the university, in addition to being active in their study programme. The university supports a range of extracurricular activities for organisations: student associations, study associations, sports and cultural associations, and

organisations involved in social responsibility, sustainability, entrepreneurship, skills, etc. A wide variety of facilities are realised this way, while students gain experience in organising these. Students also play a crucial role in the preparation of the introduction weeks for new students (in August and February) and in the organisation and support of sports activities for students.

SWU Thymos, WU's Sports Foundation, promotes the interests of Wageningen student athletes – individual athletes, as well as members of the student sports associations (SSAs). Although 2020 was a difficult year due to the coronavirus, Thymos ensured that the Wageningen students kept moving in various ways. For example, there was a subsidy for home sports equipment, 1.5 metre activities were organised, and "Get Fit with Thymos" group lessons were held when free sports were no longer allowed. The Foundation operates on the "for students, by students" principle and is in close contact with the Sports Centre De Bongerd (SCB), the Municipality of Wageningen and Student Sports Netherlands. The campaign "#eenkleingebaar" was set up in collaboration with Studentensport Nederland to encourage people to look after each other and help each other to get through the coronavirus crisis in a healthy way.

SCB is the sports centre for students and employees of WUR. All students and staff are able to use the SCB facilities at reduced rates. SCB offers a high-quality sports programme with a broad range of sports and activities in excellent indoor and outdoor facilities. In 2020, the SCB, like the rest of the sports world, was affected by the coronavirus pandemic. After the lockdown that began in mid-March 2020, the SCB was allowed to restart its outdoor sports programme on 11 May. With the help of the SCB teachers and the boards of the student sports associations, all kinds of protocols were written to make sports possible. In this way, despite all the changes in October and November, we managed to keep sports options available. In November only fitness activities were allowed and a gymnasium was set up as an extra fitness space to meet the demand. Furthermore, all kinds of live online lessons were provided and many videos were recorded, which even found their way around Europe. During the first lockdown, the new Nautilus power zone was opened, the indoor climbing hall was completed and the Sports Pub was given a new look and range, which had been further adapted to the wishes of the customers.

2.4.7.5 Profiling fund

A number of regulations for supporting students financially have been incorporated into the WU Profiling Fund:

- 1. the Student Financial Support Regulation (FOS Regulation) for force majeure, including informal care, recognised administrative activities and professional sport;
- 2. Wageningen University study financing for students following a two-year Master's programme in Social Sciences who are entitled to Dutch study finance (MCS, MDR, MID and MME);
- 3. Wageningen University Fellowship Programme (WUFP), scholarships/grants/tuition waivers for non-EEA students;
- 4. Emergency Student Funding.

| Category | Number of | Number of | Total | Average | Total | Average |
|---|--------------|-------------|-------------|---------|----------|----------|
| | applications | allocations | allocations | payment | duration | duration |
| | | | (€) | (€) | (months) | (months) |
| 1. FOS regulation ¹) | | | | | | |
| 1.1 Force Majeure | 117 | 117 | 134,011 | 1,145 | 302 | 2.6 |
| 1.2 Administrative/participational | 511 | 511 | 716,454 | 1,402 | 1,954 | 3.8 |
| 1.3 Participation as a top athlete | 6 | 6 | 12,136 | 2,023 | 19 | 3.2 |
| Total FOS regulation | 634 | 634 | 862,601 | n/a | 2,275 | n/a |
| 2. Social Sciences masters, | 12 | 12 | 38,047 | 3171 | 144 | 12 |
| 2-year ²) | | | | | | |
| 3. Fellowships ³) | | | | | | |
| 3.1 WUFP grants ⁴) | n/a | 56 | 683,000 | 12,196 | 438 | 8 |
| 3.2 WUFP tuition fee waivers ⁴) | n/a | 364 | 860,000 | 2,363 | 1907 | 5 |
| 4. Emergency Student | 2 | 2 | 1,080 | 540 | n/a | n/a |
| Funding ¹) | | | | | | |
| Total incl. WUFP | 648 | 1,068 | 2,444,728 | n/a | n/a | n/a |
| Total excl. WUFP | | 648 | | | | |

Table 2.8 Overview of Wageningen Financial Support 2020

1) EEA + non-EEA

²⁾ EEA

3) Non-EEA

⁴⁾ WUFP: selection of accepted MSc students

Comment:

- 1. The FOS scheme was used by 634 students, 40 of which were non-EEA students: 18 due to force majeure and 22 for recognised administrative activities. The application process is organised in such a way that only students who are actually eligible for the regulation can apply (student dean, head of the university sports centre).
- 2. A total of 12 students applied for the "Social Sciences Master's regulation".
- 3. Only non-EEA students are eligible for the WUFP. In 2020, 17 new grants for a maximum of the institutional tuition fees were awarded to talented students, totaling €320,100, and 7 full grants were awarded to talented African students, totaling €230,000. The figures mentioned apply to the first year. Additional payments were for ongoing grants (a total of 33) that started in 2019. Total expenditures from the WUFP were €1,543,000 in 2020. This includes discounts and top-ups for scholarship programmes and bilateral agreements.
- 4. The grants from the Social Emergency Fund were disbursed due to unforeseen costs relating to serious family circumstances.

2.4.7.6 International exchange

The exchange programme offers WU students the opportunity to study abroad at renowned international institutions and thus gain new experiences. In return, the university receives international students who perhaps otherwise would not have come to WU to study. Incoming students are a welcome addition to the diversity of nationalities in Wageningen and contributed to the international character of our education. The exchange program also contributes to the success of the ELLS network with 69 outgoing students and 56 incoming students (in 2019/2020).

In 2020, WUR was awarded a record amount in Erasmus+ funding: $\leq 1,860,825$ for scholarships for WU students and staff for an exchange with partner universities within the EU and $\leq 91,075$ for an exchange with The Hebrew University of Jerusalem (HUJI, Israel) and Lincoln University (LU, New Zealand).

In 2020/2021, out of 560 applications, 483 WU students were nominated for exchange (459 in 2019/2020). A quarter were nominated for a destination outside Europe. With a few exceptions, the exchanges were cancelled for everyone due to the coronavirus. Of these students, 199 submitted a new application for an exchange in 2021/2022. The exchange with incoming students was almost entirely cancelled as well.

Some students started an online exchange programme instead of going on an exchange in person. However, there was not much interest in this: for many students, online exchange was apparently not a good alternative because an important part of the experience of physical exchange was missing. A lot of education was blended too, so it was often not possible to take courses 100% online.

Several new agreements with universities were concluded in order to meet the demand for exchange options in different fields and regions in the coming years. For example, new agreements were concluded with partners in Australia, Japan, and Europe.

2.4.7.7 Student participational structure

Students at WU enjoy participation at different levels within the university: in the decentralised programme committees (concerning the content and quality of the degree programmes) and at the central level in the Student Staff Council (SSC) and the Student Council (SC).

The Student Council consists of twelve full-time members from various groups and nationalities. These student members are elected for a one-year term by WU students. The turnout for the elections, which took place entirely online in 2020 due to the coronavirus measures, was 28.8%. Important topics on the agenda of the SR in 2020 were — in addition to standard topics such as the Education and Examination Regulations (EER) — the consequences of the coronavirus pandemic and the resulting measures, addenda to the EER as a result of the coronavirus outbreak, and the SCB's 2020-2025 vision. Furthermore, the SR requested specific attention from the organisation to fighting racism and discrimination.

2.4.7.8 Objection and appeal

Dispute Advisory Committee

In 2020, the WU Advisory Committee on Disputes (GAC) received six notices of objections, three of which were directed towards a decision based on the resolution on registration, two against the rejection of an application for a scholarship, and one against a decision based on the regulations for vaccination and travel expenses for work placement/thesis. In five cases, an amicable settlement of the disagreement was possible, and the GAC did not need to provide a recommendation to the Executive Board. In one other case, the GAC advised the Executive Board to declare the objection inadmissible.

Examinations Appeals Board

In 2020, the WU Examination Appeals Board (CBE) received 71 appeals, 51 of which were directed towards a decision not to admit the appellant to an MSc programme. Of the other appeals, ten were directed towards a binding negative study advice and six against an assessment. The other appealed decisions concerned sanctions for fraud, resuming an MSc thesis, and a refusal to grant an exemption. In one case, the appeal was declared inadmissible due to inexcusable delay and, as a result, the hearing of the applicant was cancelled. In 65 cases, the parties agreed on an amicable settlement and the EAB consequently did not handle the appeal. In five cases, the EAB issued a ruling after hearing the student and the Examining Board. The CBE upheld three appeals and declared two appeals unfounded.

2.4.8 Alumni

The alumni network of WU in 2020, had a network of more than 56,700 graduates and PhDs, spread across some 160 countries. Due to coronavirus, the year 2020 was characterised by the transition to online events. 18 online events took place, with the first already within two weeks of the initial measures taking effect. The second Alumni Open Day was also organised in 2020 on 3 October — entirely online as well — with approximately 500 participants from almost 40 countries. The afternoon began with a discussion between Louise O. Fresco and Joris Lohman (Food Hub), followed by three selection rounds with discussion groups and lectures. The WUR Connect Platform saw a significant increase during the coronavirus period. At the end of December 2020, the online alumni platform had 9,500 members and 65 subgroups. Through challenges, in which alumni shared stories and photos, there was lively interaction with the alumni. Unfortunately, the 25- and 50-year reunions could not be held.

In October, we said goodbye to the KLV alumni association in an online ceremony. Content-based subassociations ("study circles") and networks will continue independently after a transition period and the student committee YKLV (now YUFA) is now directly supervised by UFW.

In 2020, the alumni network "Wageningen Ambassadors" consisted of 35 Dutch WUR alumni. Each and every one of them are leaders from the business community and the government-related organisations, who have a soft spot for Wageningen. Using their network, experience, and financial resources, they want to build a bridge between WUR and society. In 2020, the ambassadors supported six projects, including a contribution to the organisation of TEDx WU. The Wageningen Ambassadors also contributed to the WUR Student Challenges, not only financially but also as coaches in the Urban Greenhouse Challenge. An Emergency Fund was set up in 2020 for WUR students who were in acute financial distress as a result of the coronavirus crisis. With the support of this fund, affected students can continue their studies properly and safely. The Wageningen Ambassadors kickstarted the Emergency Fund with a generous contribution.

2.4.9 Outlook

In 2021, WU will continue to adapt to the circumstances surrounding the coronavirus pandemic. Once the situation has normalised and on-campus education is fully possible again, meaningful insights and practices gained during the pandemic will be implemented more structurally in education and in education support.

In 2021, Wageningen University will continue the implementation of the quality agreement, which has to lead to strengthening the quality of education, improving the support of students, and reducing the work pressure for lecturers. In this context, the implementation of the ambitions and objectives as set out in the "Vision for Education" will be continued. For example, the skills education offerings for the Bachelor's programmes will be further developed and the new framework developed in 2020 for the Master's programmes will be implemented step-by-step to enable greater flexibility as well as to make other improvements. Furthermore, work will also continue on implementing the recommendations of the Quality Assurance Institutional Audit, and the recommendations of the programme accreditations. The activities of the Educational Reform with IT Acceleration Agenda will be continued, including flexibility in education. The educational activities in the context of the alliances with Utrecht and Eindhoven will also be continued, as will the education reform activities together with the other partners in 4TU.

In 2021, attention will also be focused on the further development and integration of the "Education Ecosystem", a cohesive portfolio of campus education, online education, and education for professionals. The emphasis will be on addressing the recommendations that emerged from the evaluation of the education portfolio and developing a portfolio for online education for professionals (B2C). Work is also being done on the renewal of the student housing contract, which is of great importance to Wageningen education in relation to the large number of international students. Furthermore, 2021 will be dominated by activities such as the preparations and live debut of the new student portal and the completion of the implementation of "Bring Your Own Device" (BYOD) and Osiris.

2.5 Research

2.5.1 Coronavirus

The coronavirus has had an effect on research at WR and WU in 2020. Negative effects mainly meant delays in conducting or starting research projects. It turned out that much of the research could sometimes be continued in a creative way or that it was possible to plan research programmes in such a way that delays were limited. In several multi-year studies, season-dependent measurements could not be taken.

At WU, temporary projects were particularly affected, such as PhD or postdoc projects with a temporary funding basis. Where possible, tailored solutions were sought out in the design and phasing of research. Together with PhD students, solutions were sought for funding the extension of research in the event of serious delays.

Within WR, there was a slight delay in conducting research in 2020, especially for research activities abroad. The bilateral market, which is important for WR, nevertheless remained at a good level in 2020. Participation in public-private partnership projects regarding the top sectors also remained at a high level.

In order to guarantee the quality of foreign projects, the project managers involved maintained intensive contact (by telephone, e-mail, online meetings, etc.) with the local partners to provide them with the best possible remote support in the implementation. Quality assurance was carried out in accordance with the usual procedures.

2.5.2 Policy and Organisation

The WU investigation will be conducted by the chair groups. Each chair group, led by a professor, has its own sphere of expertise within the domain of healthy food and living environment.

WU leads six graduate schools within an overarching organisation. The Wageningen Graduate Schools:

- Experimental Plant Sciences (EPS; a national graduate school).
- Wageningen School of Social Sciences (WASS).
- Graduate School for Production Ecology & Resource Conservation (PE&RC).
- VLAG Graduate School for Biobased, Biomolecular, Food and Nutrition Sciences.
- Wageningen Institute of Animal Sciences (WIAS).
- Wageningen Institute for Environment and Climate Research (WIMEK; part of the national graduate school SENSE, for which Wageningen University acts as coordinator).

The WU graduate schools have three core tasks: they coordinate, develop, and facilitate the PhD programme of Wageningen University. They also ensure the safeguarding, monitoring, and advancement of the quality and progress of academic research (PhD candidates, postdocs, and researchers). Finally, they coordinate a cohesive research programme for the university that is in line with the mission of the graduate school.

The research of WR can be grouped into the following categories: Knowledge Base Research (KB), Policy Support Research (BO), Legal Research (WOT) and top sector and contract research.

KB is an important part of the research carried out within the WR themes. Effective from the start of 2019, the themes were redefined, whereby the eight knowledge base themes of previous years were incorporated into five new knowledge base themes (2019-2022 Strategic Plan).

- Circular and climate-neutral
- Food Security and the Value of Water
- Nature-inclusive Transitions
- Safe and Healthy
- Data driven and high tech

The research within the five knowledge base themes is funded from the knowledge base resources. The programme content of the PSR, SRT, the top sector research, and the contract research is connected to these themes as much as possible, without allowing it to exert a controlling influence on them.

In the context of the Strategic Plan 2019-2022, WUR also decided to make additional investments in a number of research themes. For this, strategic resources from WU, knowledge base resources from WR and R&D resources from the top sectors will be used. In 2019, these investment themes were redefined into three themes:

- Connected Circularity
- The Protein Transition
- Digital Twins

The policy-supporting research is part of two programmes: 1) sustainable food supply, production chains, and nature and 2) climate envelope.

The legal research tasks have been incorporated into six programme units.

- Infectious Animal Diseases
- Food Safety
- Genetic Resources
- Nature and Environment
- Fisheries
- Economic Information

Research within the top sectors Agri & Food and Horticulture & Propagation Materials is managed by the Top Consortium for Knowledge and Innovation (TKI), specifically set up to manage these two top sectors. Planning for each top sector is done on the basis of questions that are formulated in the context of the "golden triangle" of the government, the business community and knowledge institutions. From these questions, public-private partnerships (PPPs) arise through the implementation of projects and programmes. In 2019, the top sectors, with input from WUR, developed a Knowledge and Innovation Agenda for the Agriculture, Water and Food theme. This agenda forms the programming framework for the top sectors for the next four years.

2.5.3 International

In order to increase the quality and quantity of the international portfolio, WUR employs regional account managers for Brussels/Europe, the Middle East and Northern Africa, Asia, China, Latin America, and North America. Within these regions, the account managers focus on the countries or areas that are most relevant for WUR.

Brussels/Europe is important for WUR because the Brussels framework programmes for research and innovation use a lot of research resources. The current Horizon 2020 programme and the next Horizon Europe programme to be started up in January 2021 are of major importance to WUR, because they contribute to the scientific positioning, collaboration with partners in and outside Europe, network formation and the attraction of talent. In Horizon 2020, Wageningen is by far the largest player within the nutrition and agriculture theme, and in 2020, various attractive projects where once again funded.

In 2020, the WUR Europe Council, successor to the EU account team, was launched on the basis of a new Europe strategy. This Europe strategy focuses more on long-term impact as well as both Brussels and the EU Member States. The WUR Europe Council has the ambition firstly to make WUR the strategic knowledge partner in its domain in Europe, secondly to contribute to solving the societal challenges in our domain together with strategically leading European partners, and thirdly to support the European Commission in the development and implementation of its policy with regard to the European Green Deal (climate), international food security, the future of agriculture (CAP), new breeding techniques, and so on.

In 2020, the Europe Council took steps to further professionalise and develop relationship management with EU institutions (various Directorates General, the European Parliament, and agencies), but this has been somewhat delayed due to coronavirus. The strategic cooperation with INRAE was further strengthened. In order to align WUR's Europe strategy with LNV's international strategy, various consultations were held with LNV directors and employees of the Strategy, Knowledge, and Innovation (SKI) departments and European and International Affairs (EIA) departments. Coordination also took place on the development of the new European Partnerships in the context of Horizon Europe. As chairman and secretary of an "Interfaculty Committee Agraria" (ICA) task force, the WUR Europe Council contributed to an initial report on potentially strengthening the ICA into a network that will greatly increase its activities in Brussels. The task force is now working on a recommendation for expanding the ICA network with the various institutions in Brussels, which should lead to more influence on the Brussels knowledge and innovation agenda, in relation to the objectives of the Green Deal, in order to achieve a more sustainable and green economy.

In order to investigate the consequences of Brexit for WUR, a thorough analysis of the possible impact on collaboration with the UK was conducted. This has led to a number of recommendations in the form of a "UK strategy follow-up".

A new WUR region account for the Middle East and North Africa was launched in 2020, with a focus on the Gulf, Levant, and Maghreb sub-regions. Research projects in the Gulf region focus on efficient water use, self-sufficiency, and food safety in horticulture. WUR mainly contributes in the United Arab Emirates and Saudi Arabia by designing and demonstrating research facilities, setting up research programmes, and capacity building. As a result of the coronavirus pandemic and falling oil prices, interest in local food production and storage has increased in the Gulf region; there are opportunities for collaboration here. In the Levant, WUR is involved in projects to improve water productivity (Egypt, Jordan) and innovation in the horticultural sector (Jordan). In North Africa, WUR supported research into the impact of potato supply chains as part of a regional food system in Morocco and Algeria. In Tunisia, WUR developed a programme specifically aimed at employment for young people and women in the agricultural sector.

The coronavirus crisis has had an impact on the way in which we collaborate with parties in Africa: short courses that are usually organised in Wageningen have been converted into online courses, the fourth international food security conference turned out to be a very successful online meeting, and about twenty quick scans were conducted on the impact of the coronavirus on food systems in Africa. Despite the travel restrictions due to the pandemic, many research programmes continued and new ones were started. This was possible because WUR always works with local partners. For example, a new programme was launched in East Africa for regenerative and inclusive food systems. WUR researchers were asked to provide evidence on whether degraded agricultural land can be restored as a result and whether this way of farming can also ensure a fair income for all farmers. The OneWageningen Sahel platform combined WUR research projects into a single brochure and started new projects for healthy and safe vegetables, the relationship between climate change and conflict, and the development of sustainable and resilient food systems. 2020 was also dominated by preparations for the UN Food System Summit to be held in 2021. WUR was asked to write the IFAD Rural Development Report in the run-up to this summit, and WUR researchers also made many other contributions and organised discussions on this theme. In 2020, the EU launched a new Africa Strategy; WUR is part of a large EU-AU consortium that was asked to set up a platform in which all stakeholders in food, food security, and sustainable agriculture from both Africa and Europe can participate. In this way, WUR contributes to the Africa-EU platform. To attract additional talent from the African continent, the Wageningen University graduate schools launched a new programme, the Africa Talent program, which focuses on attracting PhD students and postdocs from Africa.

Despite the travel restrictions, there were many opportunities to forge or strengthen strategic partnerships in Asia. Several new agricultural advisors were received virtually on the Wageningen campus, including those from India, Sri Lanka, Myanmar, Indonesia, Malaysia, and Singapore. WUR was co-organiser and moderator of the closing webinar that was part of an RVO innovation mission on Climate Smart Agriculture in India. In India, WUR was also involved in decision-support projects for small farmers through strategic advice in collaboration with Bayer Crop Science India. The first steps

were taken with the Asian Development Bank towards a collaborative project on the development of saline agriculture in Myanmar. In Vietnam, WUR took part in a TV broadcast on food safety, which was broadcast on the leading TV channel Hanoi TV. Various research projects were developed together with partners in Singapore, Malaysia and India, one of which — a project on waste valorisation in India — has now been awarded.

China is of great importance to WUR, and collaboration with Chinese partners has proven resilient throughout the coronavirus crisis. Two joint PhD programmes, with the China Agricultural University (CAU) and the Tsinghua Suzhou Institute, started in 2020. Several other major programmes are in development, including the YST Research and Innovation Center on Biological Control.

The WUR guidelines for business relations with China were established in 2020. Adherence to these guidelines will avoid or significantly limit reputational damage and economic risks. In response to the increasing public debate about scientific cooperation with China, a <u>WUR "narrative"</u> was created that explains why and how WUR collaborates with Chinese partners. In the second half of 2020, the WUR China Office conducted more than ten business visits. WUR's business relations with China over the past three years will be evaluated in 2021. To further improve transparency and internal communication, an inventory was made of WUR employees with a second affiliation at a Chinese institution. The first information meeting with these employees was well received.

The priority countries in Latin America are Brazil, Colombia, and Mexico, followed by Argentina and Chile. The Caribbean Netherlands is also receiving increasing special attention within WUR, partly through studies under the knowledge base theme "nature-inclusive transitions".

In 2020, a "Seed Money" project on smart soy production was successfully conducted in Brazil, resulting in a larger public-private partnership under the AgriFood Top Sector. A joint/double PhD programme was set up together with the Faculty of Agriculture (ESALQ) of the University of Sao Paolo, which will start in 2021. In Colombia, the project on sustainable palm oil has been delayed somewhat due to travel restrictions as a result of the coronavirus. A project proposal together with Deltares and IHE Delft on aquifer recharge in Colombia's banana sector was approved at the end of 2020. In Mexico, an agreement was concluded with the national science organisation CONACYT about scholarships for Mexican students who want to participate in an MSc or PhD programme in Wageningen. In the Caribbean, ties with Surinamese partners were strengthened, which will hopefully lead to more collaboration in the years to come. WUR produced a report on the state of affairs and development opportunities for agriculture in the Caribbean Netherlands on behalf of the permanent House of Representatives Committee on Kingdom Relations. Specifically for Bonaire, a nature-inclusive vision for 2050 was developed together with local stakeholders.

Our key strategic partners in the US are Cornell University, UC Davis, and MIT. In Canada, these are the University of British Columbia, University of Alberta, and University of Guelph. In 2020, efforts were made to strengthen collaboration with other universities of strategic importance, including the University of Florida (US) and Simon Fraser University (Canada). The collaboration with these partners progressively increases our visibility among local government and local businesses. Together with the Dutch business community (FME) and government (agricultural council, Consulate General in San Francisco, MinLNV), we are initiators of CaWaDu, a long-term research and innovation programme with parties in California and Washington State. The themes are robotics in fruit growing, greenhouse horticulture, precision farming, dairy, and food waste. Over the course of 2020, a process was started with parties in Texas for a similar programme on the themes of Food & Water and Postharvest & Packaging.

In Canada, the emphasis in 2020 was on the "protein transition" theme. With the Protein Industries Supercluster and 4 Canadian universities as well as the support of the Dutch government (Consulate General in Vancouver, MinLNV, agricultural council) and their Canadian counterparts, the first steps were taken towards realising the plans to arrive at a public-private partnership programme. Several Canadian universities and a federal funding programme for student scholarships also started making scholarships available for the exchange of Master's students and PhD candidates based on research assignments. In the spring of 2020, we received both the Dutch Ambassador to Canada and the Canadian Ambassador to the Netherlands on our campus. The result is an action plan for strengthening collaboration, in which the Canadian business community will be particularly involved.

2.5.4 Results

Academic awards

The awarding of eight Veni, seven Vidi and two Vici grants in 2020 brought the total number of laureates since the beginning of the innovational incentive in 2002 up to 108 Veni, 55 Vidi, and 14 Vici grants. In 2020, two ERC Starting Grants were awarded to Wageningen researchers. Since the ERC grants were set up by the European Research Council in 2007, 9 ERC Starting Grants and 11 ERC Advanced Grants were awarded to WUR. The ERC Consolidator Grant was set up in 2013, of which Wageningen has received one. Two of these were awarded to Wageningen researchers in 2020, bringing the total for WUR to seven ERC Consolidator Grants.

PhD graduations

The graduate schools ensure a challenging PhD programme and are committed to helping their PhD candidates attain the highest possible level. Their success has been demonstrated numerous times by the positive assessments of the inspections that have been carried out and by the participation levels of PhD candidates in Europe in the courses offered in Wageningen.

At year-end 2020, WUR had 2,196 PhD candidates. Most PhD candidates are affiliated with one of the Wageningen graduate schools: EPS (209), WASS (444), PE&RC (438), VLAG (504), WIAS (211) and WIMEK (387). A few PhD candidates are affiliated with graduate schools led by other organisations.

After many initial PhD graduation cancellations at the beginning of the coronavirus pandemic, holding these ceremonies online resulted in the number of PhD graduations in 2020, 283, being comparable to previous years (293 in 2019, 286 in 2018). Because of coronavirus restrictions, 133 PhD graduations took place entirely online. Of the 283 PhD graduations in 2020, seven were "joint graduations", in which a partner university was also involved. For two of those, the graduation ceremony did not take place in Wageningen. Of the 283 PhD candidates, 149 were women (53%). 182 PhD students (64%) had non-Dutch nationality. The percentage of PhD candidates with a successfully completed Training & Supervision Plan (TSP) increased slightly to 93% (91% in 2019).

Top Sectors

Within the framework of the Knowledge and Innovation Agenda for Agriculture, Water Food (LWV), the TKI awarded 119 new PPPs for Agri & Food and Horticulture and Propagation Materials in 2020. 89 of these were financed from the LNV subsidy from Wageningen Research (total value €16 million, to be spent in 2020), 13 from the PPP subsidy from the Horticulture and Propagation Materials top sector, and 17 from the PPP subsidy from the Top Sector Agrifood. Wageningen Research Foundation participates in these PPPs funded by the Ministry of Agriculture, Nature and Food Quality (LNV) and the Ministry of Economic Affairs and Climate Policy (EZK), while the business community makes a 50% financial contribution to PPP projects (combination of cash and in-kind).

Furthermore, 20 projects were started within the framework of the "Kennis op Maat" programme (with a total value of \in 1.1 million, to be spent in 2020). \in 0.6 million was available for the "Seed Money" programme aimed at internationalisation. 15 projects were financed from this. Additionally, \in 1.9 million was committed to 52 new EU co-funding projects of Wageningen Research Foundation.

2.5.5 Quality Assurance

The research inspections at WU are part of a national system, in which each university is required to submit to an external inspection once every six years. These external inspections are carried out in accordance with the Standard Evaluation Protocol (SEP 2015-2021), developed and established by the Royal Netherlands Academy of Arts and Sciences (KNAW), the Netherlands Organisation for Scientific Research (NWO) and the Association of Universities in the Netherlands (VSNU).

WU undergoes these external inspections with the graduate schools as the leading unit. In 2015, all inspected Wageningen graduate schools received a positive recommendation from this committee enabling them to continue their activities as accredited graduate schools. In 2015, this assessment of the graduate schools took place, in which both the performance of the graduate schools and all their chair groups received an excellent rating in general. For details, visit the Wageningen University website and the website of the graduate schools (EPS, PE&RC, VLAG, WASS, WIAS, WIMEK). The "mid-term assessment" took place in 2018. The resulting findings together with the revised Standard Evaluation Protocol (SEP) (2021-2027) largely determine the way in which the following assessment will be organised in 2021. The reason is that the focus of this assessment will no longer be on the smallest unit, the chair group, but on the level of newly formed units of chair groups with a collective strategy.

The obligation to periodically have the research institutes of Wageningen Research (WR) scientifically assessed is part of the agreement between the Ministry of Economic Affairs (EZK), the Ministry of Agriculture, Nature and Food Quality (LNV) and the Wageningen Research Foundation. In previous years, the WR institutes were individually inspected. In 2020, WR as a whole was inspected according to a protocol (EMTO) that was specially developed by the Rathenau Institute for the assessment of the five Applied Research Organisations (TO2). An independent sub-committee reviewed WR according to the guidelines of this protocol. The feedback from the evaluation committee was very positive; the report was still being finalised when this annual report was created. The evaluation report will be made public together with the administrative response. The evaluation committee's recommendations for WR will be incorporated into the new Strategic Agenda WR, which will be adopted in May 2021.

2.5.6 Open Science

Open Science is a more open way of conducting, publishing, and evaluating scientific research. Open Science therefore focuses on the pursuit of greater collaboration and reusing knowledge and transparency, not only between researchers and disciplines, but also in society as a whole. In recent years, the Dutch government and research and funding organisations have made progress in this area through a joint "National Plan Open Science" (NPOS). The transition to Open Science is a priority area of the WUR 2019-2022 Strategic Plan. The four-year WUR Open Science & Education Programme was started in 2019. The aim of the programme is to make Open Science principles increasingly standard practice in WUR research and education. The program facilitates WUR researchers and lecturers in this and provides support with guidelines, tools, resources, and best practices. The WUR OSE programme has six themes: Open Access, FAIR Data, Outreach to the Public, Citizen Science, Open Education, and Recognition & Valorisation (Figure 2.2).

In 2020, the first version of the Open Science skills programme for researchers will be developed and applied in the WUR circular knowledge base programme and Climate Neutral. VSNU and NPOS have collaborated on the new Open Science vision and approach for 2021-2030. WUR had made preparations to host the National Open Science Festival on 15-16 April 2020, but due to the coronavirus it did not take place until 11 February 2021 and online.



Figure 2.2 Themes of the WUR Open Science & Education programme, adapted from <u>EU FOSTER</u> <u>Open Science Portal</u>

Open Access

The share of Open Access articles published by WUR research associates rose to 71% in 2020. This figure rises to 84% when articles are included for which WUR authors are corresponding author. WUR Open Access policy was refined: researchers are obliged to publish referenced articles in which they are corresponding authors in Open Access. The Dutch copyright act (Taverne amendment) offers researchers the opportunity to make their publications available via the WUR "Repository Open Access". A working method for this was developed in 2020 and will be implemented in 2021. This brings the objective of 100% Open Access in 2020 significantly closer.

FAIR Data

In 2020, the WUR "Data Stewardship" network will be strengthened and expanded. Data stewards operate out of organisational units and support researchers in making their research data "findable and accessible". With this network, WUR is taking an important step towards an academic FAIR data culture. Under the motto "open if possible, closed if needed", data sharing guidelines were created in 2020 with the aim of providing practical guidelines for the open or restricted sharing of research data.

Citizen Science

In 2020, the WUR "Citizen Science" network was established to exchange experiences and best practices and to improve skills for Citizen Science research. The WUR "Citizen Science Investigations" (CSI) portal was also launched to facilitate co-creation with the general public and other stakeholders in the fields of nature, food, health, and sustainability. The Citizen Science MOOC (Massive Open Online Course), for which the first steps have already been taken, is also part of this.

Open Education

For some time now, WUR has been developing new forms of open education (e.g. MOOCs, open textbooks). WUR has its own portal "Library for Learning": a large collection of open access educational materials. In 2020, a number of new functionalities were added to this portal that make it easier for WUR lecturers to share educational materials. The initial steps were taken in the internal sharing and reuse of teaching materials by/for WUR teachers, especially for skills education.

2.5.7 Funding

2.5.7.1 Wageningen University

Research at WU is funded by direct government funding, indirect government funding, and contract funding. The amount of direct government funding for education and research was \in 281.1 million in 2020. In addition, targeted subsidies from the Ministries of EZK and OCW totalled \in 1.7 million. The indirect research funding, the second flow of funds, which is mostly provided by the Netherlands Organisation for Scientific Research (NWO), amounted to \in 32.0 million in the year under review. External funding, or the third flow of funds, amounted to \in 59.3 million. Of this amount, approximately \in 37.6 million was related to contract research, \in 2.8 million to top sector research, and \in 18.9 million to co-funding and subsidies.

In 2020, the graduate schools had slightly more than \in 2.6 million own resources at their disposal for the appointment of PhD candidates and postdocs.

2.5.7.2 Wageningen Research Foundation

Of the research funding at WR, €30.6 million comes from institutional grants provided by the Ministry of Agriculture, Nature and Food Quality (LNV), €83.5 million from LNV programme funding (PSR and SRT), €13.4 million from NVWA programme funding, €2.8 million from indirect government funding from NWO, €23.9 million from co-funding and subsidies (including the EU), €63.5 million from the top sectors (including LNV programme funding for top sectors), and €88.3 million from the bilateral market/contract research (including the business community and LNV).

A point of attention within the LNV subsidy is the increasing amount of work still to be completed (NAPRO) in programmes within policy-supporting research and the top sectors in particular. Due to increasing pressure on available capacity (personnel), it is not always possible to complete projects within the subsidy year and this NAPRO is carried over to the next year. WR is trying to catch up on this NAPRO by hiring more staff and better aligning project budgets with the available staffing capacity.

2.5.8 Outlook

The quality of our research is high, and that applies to both WU and WR. This gives us a good starting position for the coming years. The use of Van Rijn and sector planning resources has given university research a boost. WR's knowledge base has been structurally strengthened since 2018. The Knowledge Coalition has been working on an argument for substantial structural government investment in research and innovation. This, with instruments such as the growth fund and crisis recovery tools, results in us looking to the future with confidence.

In the context of the implementation of our Strategic Plan (2019-2022) "Finding Answers Together", further improving excellence in research is paramount: Continuous improvement for research excellence (CPI 1). In addition, we will further intensify the excellent connection to important clients and partners, such as the government, the European Union (EU) and the business community.

During the term of the new strategic plan, the development of new knowledge at Wageningen Research Foundation was organised into five programmes, financed by the strategic knowledge base funds described under 2.5.2. The appointment of five programme leaders, responsible for programming content, external and internal positioning, and management of the programmes constitutes an important innovation aimed at more integral design and management of the themes. In the year to come, it will be evaluated whether this innovation has the desired effect.

Furthermore, additional investments will be made in the three WUR-wide research themes (connected circularity, the protein transition, digital twins). For this, strategic resources from Wageningen University, knowledge base resources from the Wageningen Research Foundation and R&D resources from the top sectors have been used. The KB themes and the investment themes are closely coordinated. The investment themes "Connected Circularity" and "Digital Twins" involve the KB programme leaders of

"Circular and climate neutral" and "Data Driven and High Tech" respectively as heads. They form a team together with the Wageningen University coordinator.

The coronavirus has had an effect on the ongoing research, but new priorities have also emerged in our domain and opportunities have arisen that will receive priority attention. A great deal of knowledge development is still needed to be better prepared for the emergence and prevention of new pandemics and to deal with their effects. We will therefore start the programme ERRAZE@WUR (Early Recognition and Rapid Action in Zoonotic Emergencies) in 2021. The coronavirus crisis has also taught us that good health and living environment, healthy and sustainable food, and preventive measures by the government are important for public health. Knowledge development in this area is desirable and contributes to reducing the pressure on the health care system. The coronavirus pandemics has also shown just how fragile and intertwined the global food system is. This vulnerability poses a threat to food security. Our goal is to work with international partners on knowledge development for interventions and strategies for resilient and sustainable food systems.

The development of a sustainable food system involves food from the land and food from the sea. Much is still unknown about the potential of marine food and what undesirable side effects marine food can have, such as resource depletion and food security. We want to strengthen knowledge development about the role that the sea can play in food systems.

Within the existing research programming, we will focus even more explicitly on issues related to climate adaptation and use of space in the coming years. Both are closely related, as we have shown with our initiative "The Netherlands in 2120". Guiding the development of the Netherlands into a sustainable economy with room for nature and biodiversity and with adaptations to climate change requires the development of new knowledge.

2.6 Value Creation

Due to our international position as a leading research institution in the field of healthy food and living environment, we have an even greater responsibility to put the knowledge that we have developed into practice. This is why we share our knowledge and infrastructure and we make these usable for the crucial social challenges in our knowledge domains. Our knowledge achieves economic and social impact through application.

The initiatives, which originated in the strategic plan, were continued in 2020, with some delays due to coronavirus. Spin-off policy has been established, various ideas have been moved forward with the "Road-to-Innovation Grant"; value creation activities have been combined and physically moved into a new building, Plus Ultra 2. Organising in-person meetings came to a standstill, but new online ways to network have been found.

Research funding providers, government organisations, the Royal Netherlands Academy of Arts and Sciences (KNAW), and the business community expect us to make our impact and value creation apparent. <u>Quantifiable valorisation indicators</u> were developed in a VSNU context that make our output visible across the breadth of all the WUR activities, from our graduates to spinoffs and from IP requests to the additional training of pre-university education teachers (see Appendix 2). Output is an indicator of future impact. In addition to quantifiable indicators for output measurement, narratives are also important for identifying long-term impact. In this report, we identify a number of fields for which we highlight the results of our valorisation efforts:

- Collaboration, tech transfer, and co-creation with partners
- The entrepreneurial use of knowledge
- Sharing knowledge
- Wageningen Campus Ecosystem
- New professionals

For more detailed information about our valorisation output, see Appendix 2 with an overview of the VSNU indicators.

2.6.1 Collaboration, Tech Transfer, and Co-Creation with Partners

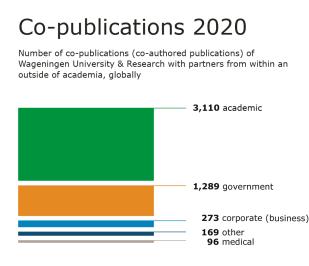
Our knowledge makes a significant contribution to innovation and progress within society. Our value creation is not only done by transferring knowledge and technology through various forms of intellectual property rights, licences, and spin-offs, but forms of collaboration such as contract research and public-private partnerships are especially important for this. WUR works with businesses, governments, NGOs, and other academic institutions. Knowledge development through co-creation with various stakeholders in the production chain or with partners that have different perspectives increases the chance of broadly accepted solutions and the actual use of knowledge to create impact and innovation.

2.6.1.1 Co-creation and the development of new partnerships

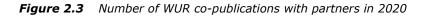
An important component of Wageningen's knowledge valorisation is co-creation: the added value from research with stakeholders and other parties; Finding Answers Together. In 2020, WUR implemented many new, ongoing projects and programmes funded by public-private partnerships (PPPs), especially through the participation in the top sectors Agro & Food and Horticulture & Propagation Materials. WUR also participated in various consortia for the development of research, education and innovative business clusters at the regional level, of which the Foodvalley ecosystem and the Foodvalley region are key examples. In 2020, the foundation was also laid for the FoodSwitch consortium.

The turnover from EU grant programmes is a measure for the contribution of WUR to co-creation on international social challenges. In 2020, Wageningen University's revenue from EU subsidies, to the tune of ≤ 17.0 million, was slightly higher than in 2019 (≤ 16.6 million). The turnover of Wageningen Research from EU funding programmes was ≤ 19.0 million in 2020, compared to ≤ 20.5 million in 2019. See also Table B2.15 in Appendix 2.

Research projects carried out through co-creation with stakeholders often lead to co-authored publications in academic journals and trade journals (Table B2.16 in Appendix 2). Figure 2.3 shows that the primary share of the nearly 3400 co-publications are prepared with other academic institutions, roughly one third are prepared with government organisations and 10% with the business community.



source: Scopus, Elsevier B.V. All rights reserved. SciVal ®



2.6.1.2 Knowledge transfer and innovative capacity

WUR sometimes records the intellectual property of its discoveries. The main objective here is to encourage the business community to use these for the development of new products or processes. This increases the innovative capacity of society. By granting patent licenses to potential market partners, knowledge can be broadly disseminated, thus leading to more innovations and impact. WUR has 133 active patent families in its portfolio and has granted 145 licenses for patents, species, models, or materials. In 2020, 19 new patent applications were submitted, of which 16 were submitted by WU and 4 by WR (see Table B2.4 in Appendix 2). This number is in line with the long-term trend.

In 2020, in close consultation with the science groups, the IP portfolio was examined and choices were made regarding phasing out, intensifying business development, etc. There was a continuous focus on screening and scouting potential IP-worthy ideas. Scouted ideas are screened and an Invention Disclosure Form (IDF) is prepared for ideas with potential. In 2020, approximately 24 IDFs were registered.

The "Thematic Tech Transfer Circular Technology" (TTT-CT) program led by WU is a collaboration within 4TU. In 2020, TTT-CT brought two startups to "investor ready" level for SHIFT Invest. WUR spin-off <u>SAIA</u> wants to unleash a revolution in robotics in greenhouse horticulture. The goal of the startup <u>FUL Foods</u> is to unlock the benefits of microalgae in relation to health and sustainability.

The turnover in bilateral research with the business community is a measure for the contribution of WUR to the innovative capacity of businesses. Wageningen University's contract research, bilaterally funded by the business community, amounted to \in 14.2 million in 2020, compared to \in 17.0 million in 2019. The turnover of Wageningen Research from bilateral research for the business community consisted of \in 42.7 million from contract research funded by the business community in 2020, compared to \in 47.6 million in 2019. The decline at WU was caused by delays and orders lagging behind due to the coronavirus. See also Table B2.14 in Appendix 2.

2.6.1.3 Knowledge for government policy and legislation

An important part of the research conducted at WR institutes is commissioned by the Dutch and EU government. We carry out SRT (statutory research tasks) in the areas of infectious animal diseases, food safety, economic information, fisheries management, genetic resources and nature. Our policy-supporting research and scientific research form the basis for government policy, rules and regulations in our domain aimed at protecting the health of people and animals, promoting exports and preserving a vibrant nature. Through the SRTs and the policy-supporting research (PSR), we make a concrete contribution to society. The knowledge is made available via <u>KennisOnline</u> and newsletters.

An example from the 2020 published <u>WOT Magazine</u> is the diagnostic pipeline developed to allow for faster characterisation of new pathogens. An outbreak of an infectious zoonotic disease has major social and economic consequences. Rapid characterisation helps to prevent major outbreaks, and the government can then take more targeted measures.

2.6.1.4 Customer satisfaction

The Ministry of Economic Affairs and Climate (EZ) has submitted an impression of customer satisfaction and knowledge utilisation for all five TO2 institutes to the House of Representatives. This is why, starting in 2016, a new survey system was introduced at all TO2 institutes, in which the same questionnaire is used for all types of projects (with the exception of those that fall under the statutory research tasks and projects without a clear external commissioning party). In 2020, just as in the previous years, WR clients were very satisfied. In 2020, WR scored an 8.4 for client satisfaction and 96% of respondents deemed the research to be useful (see Tables B2.7 and B2.8 in Appendix 2).

2.6.2 The Entrepreneurial Use of Knowledge

New enterprises contribute to the application of new knowledge and, through their growth, to economic development. Stimulating entrepreneurship and supporting startups are therefore important components of value creation for WUR. WUR encourages entrepreneurship among students supports the founding of startups. If these startups grow, they will have the opportunity to establish a location on Wageningen Campus. Employees and startups outside of Wageningen are also welcome to use their knowledge in the agri-food domain. We aim to have WUR serve the entire chain: from stimulating and inspiring students to linking up with investment funds for scale-ups.

2.6.2.1 Entrepreneurial education

With its regular course programme, WU offers a wide selection of degree programmes that support enterprising students at all stages of their education. The introduction of a continuous learning line "entrepreneurial skills" has started, but has been implemented less quickly than planned due to limitations in educational changes as a result of the coronavirus. In the 2019-2020 academic year, there were 20 courses that were fully or partially focused on value creation or entrepreneurship for beginning Bachelor's students, Master's students, and PhD candidates, reaching more than 1300 students (non-unique). Only counting the students (non-unique) who actively opted for an entrepreneurship course (in other words outside the standard curriculum), there are 525 students this academic year (for additional details see Table B2.2 in Appendix 2).

In the 2019/2020 academic year, 60 new students entered our designated MSc entrepreneurial programmes (Mastertrack & C-KIC, > 48 ECTS), in which a total of 140 students are currently enrolled. In the 2019-2020 academic year, WU students carried out 30 entrepreneurship-related projects for businesses in the context of the course E-ACT.

The flow of students from the BSc or MSc education to extra-curricular follow-on activities has increased significantly. More than 500 unique students took part in extra-curricular education on entrepreneurship via StartHub, about 150 of which transferred from curricular education (~30%). Over 550 students participated (transfer about 100 students; ~20%) in the "Inspiration" workshops, and 90 students participated (transfer of about 40 students; ~40%) in the "Ideation" and "Realisation" programmes. About 10% of the participants are PhD candidates. The StartHub has 150 active student members. Several students started a business from the various education programmes, such as FarmVent (Master's track in entrepreneurship), Ephora (CKIC), and CoffeeCreators (Circular Entrepreneurship: co-creating the circular economy).

2.6.2.2 StartHub

Student incubator StartHub Wageningen caters to students, PhD candidates and recent graduates who wish to learn more about entrepreneurship and/or who have already started their own business. The educational components test and develop the interest of students. Guidance and assistance with actually starting a business provide career perspectives. The StartHub works together with an active Student Board, sponsor partners, and external private partners in order to provide advice to students starting businesses.

In 2020, the incubator organised a total of 29 practical workshops on entrepreneurship as part of the StartHub programme, with more than 526 participants. The total number of participants in StartHub events was 1267. Because we were able to quickly switch to online or hybrid events with our own recording studio this year, we see that fewer workshops were given, with a similar number of participants.

The number of intake interviews was 64. Here we see a small decrease due to the coronavirus situation; students are less likely to visit us, but they can find us online thanks to a stronger social media presence and a new website. There are fewer "flexible" rentals at StartHub this year, but the number of teams coached by StartHub is stable, around 40. In 2020, seven (see Table B2.6: Reshore, Ephora Solutions, Syklus, InsectSense, Urban Fungi, CowMas, and Cano-Ela) were established by members and tenants of StartHub and five startups received a student startup loan from StartLife to accelerate their activities.

In 2020, StartHub housed 24 startups with offices in the Student Incubator, a decrease compared to last year. This is due to the reduced influx of tenants and the stricter exit policy: this policy involves entrepreneurs now drawing up a development process with their StartHub coach and being allowed to rent from StartHub for a maximum of two years from their move into PlusUltra2. This is expected to accelerate the development of the companies. This year, 11 tenants left the Student Incubator: 8 to continue their business elsewhere in the Foodvalley region and 3 to continue their activities elsewhere in the Netherlands.

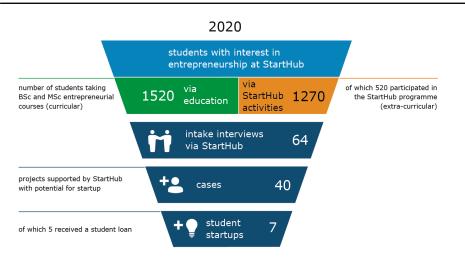


Figure 2.4 Education and incubator programmes for entrepreneurship for WU students

2.6.2.3 StartLife

StartLife is one of Europe's leading and longest-running agri-food technology startup accelerators and celebrated its 10th anniversary in 2020. The mission is to help startups that contribute to making the global food system more sustainable, excel, and accelerate. The accelerator offers startups business development, support, mentors, loans, and access to a global network of investors, corporates and experts. The accelerator, which has close ties with co-founders WUR and regional development agency Oost NL, has provided support to more than 300 agri-food technology startups since its inception in 2010, which have raised more than €137 million in follow-up capital and created more than 1400 new jobs thus far.

In 2020, 36 startups will be included in the StartLife program, two of which are WUR spin-offs. In 2020, 14 startups were provided with financial support with a total of more than \in 620,000 in pre-seed loans.

In 2020, the number of corporate partnerships of StartLife grew to ten corporate partners, to eight programme partners, and five investor partnerships. In 2020, the role of StartLife as one of the primary implementing organisations for the entrepreneurship line of the Foodvalley2030 programme will be further developed.

Rabobank, Anterra Capital, StartLife, and WUR organised the fifth F&A Next in 2020, which was entirely online for the first time due to the coronavirus. F&A Next is the first and largest European platform that connects investors, corporates, and startups/scale-ups in the agri-food domain. The online approach yielded a record number of participants (1129 live participants from 67 different countries, including 285 agri-food startups/scale-ups and 217 investors).



Figure 2.5 StartLife output

2.6.2.4 Spin-offs

Knowledge application can occur through the transfer of intellectual property to researchers who start a company or have shares in a company (a spin-off according to the VSNU definition). In 2020, WUR adopted its spin-off policy and developed a special R label for WUR spin-offs. WUR has launched a total of 41 spin-offs. By investing in the valorisation programme, StartLife, the national impact of WUR on new business activities is much higher than through spin-offs alone. Four spin-offs were founded in 2020: Scope Bioscience (WU), Peek (WU), and Time Travelling Milkman (WU) (Table B2.6 in Appendix 2).



In 2020, WUR was awarded four phase 1 Take-Offs grants from the Netherlands Organisation for Scientific Research (NWO) in order to conduct feasibility studies into commercialising knowledge through the establishments of spin-offs. Furthermore, WUR supported three phase 2 Take Offs, from founders of startup companies who have taken on knowledge from WUR.



Spin-off: a company established for the purpose of developing or exploiting WUR IP with formal contractual arrangements for the use of this IP.

Figure 2.6 Timeline of WU and WR spin-offs

In 2020, WUR started a Road-to-Innovation Grant, a WUR-wide financing option to promote valorisation. Many of WUR's ideas and knowledge are too fundamental for direct application in practice. Road-to-Innovation Grants support translational and innovative research with targeted funding, with a focus on determining application possibilities, a valorisation path, and end users. Four grants were awarded for further development of an idea with potential. A grant for "CRISPR-Cas based diagnostics" led to the creation of the spin-off Scope Bioscience. Another grant for "Single molecule localization microscopy" was instrumental in securing an NWO phase 1 Take Offs grant in order to strengthen feasibility with regard to commercialisation.

2.6.3 Sharing Knowledge

Our students, clients, and other scientific institutions make use of Wageningen knowledge via the existing routes. Our knowledge is also relevant and applicable to anyone who is a little further away from WUR. Making our knowledge and knowledge infrastructure accessible to professional learners, businesses, citizens, and societal organisations is an important part of the value creation of WUR.

2.6.3.1 Sharing scientific knowledge through open access

WUR not only shares its scientific output in scientific journals (long-term average of roughly 5000 annually), but also does so through field-specific publications for professionals in the sector and through publications for the general public, in print as well as electronic (social) media. Results are made available via the library, (research@wur), Kennis Online and other online databases and via a large number of popular websites which cater to the target group. The WUR website provides various, theme-focused <u>publications</u>. This enables a larger group of potential users of this new knowledge to be reached. The number of publications for professionals and the general public remained stable (Appendix 2, Table B2.17).

2.6.3.2 Applicable knowledge for SMEs

The agri-food sector consists largely of SMEs. WR works closely with them in all kinds of research projects. In 2020, a new programme was launched together with the top sectors and the Ministry of LNV to unlock available knowledge in such a way that it offers a concrete action perspective for SMEs. Almost 30 projects have been started. At WR, half of the contract research is financed by SMEs. Questions from SMEs are also addressed within "Society Based Learning", the practical networks around WR's regional locations and in collaboration with HBO. The Wageningen Campus also provides space to many SMEs.

2.6.3.3 Science communication and Wageningen Dialogues

In addition to communication with fellow scientists, businesses, NGOs, and government bodies, WUR is active in science communication directly with society. Our organisation operates at the cutting edge of today's major social themes, which pose significant challenges for the world and elicit a wide range of diverging opinions. WUR aims to make the dilemmas and trade-offs of different solutions visible and open them up for discussion. WUR and stakeholders are encouraged to discuss this through Wageningen Dialogues. For several years, WUR has gained experience with the Wageningen Dialogues concept and the dialogues within WUR and with society are being stimulated as this work progresses. In 2020, in view of the coronavirus situation, only a few multi-stakeholder dialogues were organised and supported, specifically about Circular Future and Nature Inclusive NL2120. This enabled organisations and researchers from different disciplines to discuss complex transitions and social issues. In 2020, the foundation was also laid for the "Dialogue Navigator", which helps our colleagues and students to use, conduct, and facilitate dialogues.

In addition, various broadly accessible meetings have been organised on and around Wageningen Campus, which contribute to the dissemination of knowledge:

- In the speakers corner of Impulse;
- The evenings of Studium Generale;
- The Science Café lectures in Loburg in Wageningen;
- Kinderuniversiteit;
- MOOCs on edX;
- initiatives for a wide audience, such as Food Waste Free United;
- Videos on WURtube.

2.6.3.4 Society Based Education

Companies, governments and research institutions can be supported with <u>Society Based Education</u>, where questions from society are connected to subjects in our education. In the different courses, students and their supervisors investigate the problem at hand, enabling students to learn to apply academic skills in order to solve problems in society. This usually takes place in a multidisciplinary environment. In the 2019-2020 academic year, this involved 244 projects for small and medium-sized businesses, startups, PPS consortia, the government, and social organisations. These projects come from 190 unique clients. A total of 1795 Bachelor's and Master's students and 438 employees (WU and

WR) were involved (see Table B2.10 in Appendix 2). Due to the coronavirus, both the group work and the interaction with the clients within these courses took place online.

2.6.3.5 Collaboration with primary, secondary and green education

With the assistance of PPPs, WUR provides a major contribution to lessons on nutrition and food in primary education. A tremendous number of students and teachers in the primary education sector were reached with taste lessons and EU school fruit.

Together with researchers, the Wageningen University Science Hub (WKWU), the Smaaklessen and EU Schoolfruit support centre, and the Food Valley Network VO-HO developed lesson materials and activities for primary and secondary education. Through this, WUR contributes to socially relevant, challenging and attractive education and improves the quality of incoming students. In the year under review, the Science Hub offered 14 teaching products, introducing approximately 1,346 teachers and 30,000 children in primary education to themes and studies from WUR. In 2020, the Smaaklessen and EU Schoolfruit support centre reached 18,800 teachers and 376,000 primary school pupils with the Smaaklessen teaching programme. The EU School Fruit programme reached 527,600 students and 24,000 teachers. The Food Valley Network VO-HO reached nearly 3676 lecturers through courses, workshops, and lecturer development teams with 50 lesson products. The Youth Institute challenges secondary students to look for solutions to one of the largest challenges facing the world at the present time: "How do we feed the world in 2050 in an equitable, sustainable and healthy way when the world population will have risen to 10 billion people?" It reached almost 600 secondary education students in 2020, fewer than in 2019 due to the coronavirus (see Table B2.11 in Appendix 2).

WUR also participates in the Green Table - the partnership for green education. The Green Table encourages the exchange of knowledge in the green education system via programmes such as Groen Kennisnet and Groenpact.

2.6.3.6 Courses and degree programmes for professionals

WUR underscores the importance of lifelong learning: for its own students and employees and for professional learners outside WUR. In recent years, WUR's range of online and in-person courses and degree programmes has been presented more cohesively to the outside world. Through Wageningen Academy and the Centre for Development Innovation (CDI), WUR organises courses, training programmes and degree programmes for professionals in the business community and in the public or semi-public sector. In doing so, it provides its clients with the most current and relevant Wageningen knowledge. In this process, the focus is on everyone in and related to the agri-food business from young professionals to senior executives. In addition, WUR provides a varied offer of study programmes through Massive Open Online Courses (MMOC), for students and professionals at edX-Wageningen(see also 2.4.2).

Wageningen Academy feels that its role is to match the demand from this target group with the Wageningen knowledge it provides. In addition to open-enrolment courses, Wageningen Academy is increasingly developing customised programmes (via co-creation). Wageningen Academy provided 27 open-enrolment courses for 566 participants in 2020. Four tailor-made courses were developed and provided to 27 students for companies. The number of organised programs and participants is significantly lower than in previous years due to the coronavirus crisis. As a result, programmes on location have been limited; for example, there were no Summer Schools in 2020. Online offerings grew considerably, partly due to the coronavirus. A total of 27 online/blended programs were conducted in which 335 students participated. At the executive level, Wageningen Academy offers an Executive MBA in Food & Agribusiness in collaboration with TIAS Business School.

The Wageningen Centre for Development Innovation (WCDI) offers an annual programme of short, open enrolment courses for mid-career professionals primarily from Africa and Asia, the MENA region (Middle East and North Africa) and to a lesser degree also from Latin America, Europe and North America. The courses cover the full range of WUR's knowledge domain, with topics such as Climate Change Adaptation, Fisheries Governance and Rural Entrepreneurship. Course participants come from government institutions, research institutes, NGOs and the business community. Sometimes WCDI course participants continue on to MSc or even PhD programmes at Wageningen University. Alumni

from WCDI courses regularly secure follow-up assignments for – and together with – WCDI or other WUR divisions. A total of 784 people participated in the 34 WCDI courses in 2020. With a course duration of two to three weeks, WCDI organised approximately 5,465 course days this way. Aside from the Open Access courses, WCDI, on request, also organises tailor-made training programmes in the above-referenced regions, generally for government organisations and/or NGOs. Due to the coronavirus, several courses were cancelled in the first half of 2020. Before the summer, efforts were started to offer all courses online, resulting in the number of students/grants remaining at an average level. For deferred courses from 2020, the registered students will be merged with the same course from 2021.

Summer schools at WUR are organised by the graduate schools, Wageningen Academy, ELLS, European Master in Food Studies, or by student organisations. More information is available online at www.wur.eu/summerschool.

The year 2020 required a huge effort from WUR employees involved in professional learning to quickly switch to fully online. This has been done successfully, and we have benefited greatly from the fact that we had already been working on online education for years. Further strengthening a cohesive proposal for online and in-person training and Summer Schools will continue to be a point of attention in the years to come. We are starting from a great place: plenty of online education and a strong international position. Maintaining that position requires continuous innovation and good internal coordination, including research.

2.6.3.7 Science Shop

Social organisations that want to use Wageningen's knowledge can request research projects via the Science Shop, which is where students and researchers collaborate with clients on new solutions for society at the local or regional level. This requires a great deal of attention to the social sensitivity of students and the practical value of the recommendations provided to the client. With these types of Learning in Communities, WUR promotes dialogue between science and society. The Science Shop completed 17 projects in 2020, in which 46 WUR employees, 169 Bachelor's and Master's students, and 62 external stakeholders were involved (See Table B2.9 in Appendix 2). In 2020, the Science Shop produced 8 reports, 7 brochures, 3 fact sheets, 39 presentations, and 4 dialogues.

2.6.3.8 Wageningen in the region

WUR works globally but is also firmly integrated into its own locale. We participate in many networks in our own region, such as Foodvalley, Foodvalley Region and KIEMT, and the Stadsagenda with the municipality of Wageningen, and in other regions, such as the DairyCampus in the Province of Friesland or the region surrounding our location in Yerseke in the Province of Zeeland. WECR works together with the universities of Rotterdam, Delft, and Leiden in the provincial programme ACCEZ regarding the circular economy. In 2020, the Foodvalley 2030, RegioDeal Foodvalley, OnePlanet, and World Food Center Experience programmes were further expanded.

2.6.4 Wageningen Campus, Ecosystem & Facilities

WUR continues the development of the Wageningen Campus ecosystem. More specifically, this relates to increasing the number of parties within the ecosystem (campus acquisition), the interaction within the campus ecosystem (local buzz/campus community), and the optimal use of research facilities of WUR/Wageningen Campus (Shared Research Facilities). These matters are closely related to the physical aspects of the further development of Wageningen Campus, for which there is close collaboration between colleagues at the Real Estate & Housing department of Facilities & Services (which is responsible for the physical aspects of campus development) and the Municipality of Wageningen.

2.6.4.1 Campus acquisition

The Wageningen Campus ecosystem has taken on a clear structure and look in recent years. Wageningen Campus is recognised and appreciated for this. Important elements for maintaining this interactive and vibrant ecosystem are excellent education and research, valorisation activities, quality and talent, entrepreneurship and startups (including StartHub, StartLife, and the accommodation of various organisations and businesses), accessible, high-quality research facilities (Shared Research Facilities, see Section 2.6.4.3), and local buzz (see Section 2.6.4.2).

Interaction within the Wageningen Campus Ecosystem (including the Business & Science Park Wageningen (BSPW)) will lead to greater collaboration among different parties on and near the campus and to increased economic activity in the region. The collaboration with the municipality of Ede (World Food Centre/Food Innovation District) will be further expanded in 2021.

It is already evident that the various elements of the ecosystem of Wageningen Campus are crucial in the selection of a location by businesses and organisations. In 2020, these were just some of the parties that joined us on Wageningen Campus/BSPW: Kubota, Radicle, InsectoCycle, Vivia Ventures, Greencovery. OnePlanet Research underwent a major expansion. The Plus Ultra II building was completed in the spring, after which various organisations moved here from other buildings on Wageningen Campus. Plus Ultra II also offers space for Corporate Value Creation (WUR corporate staff), the various WUR start-up activities (StartHub, WUR student challenges), the StartLife organisation, and Technostarter spaces. The company Upfield also decided to realise an innovation centre on Wageningen Campus; construction already started in autumn.

The coronavirus crisis also impacted the acquisition activities in 2020. In-person visits to Wageningen Campus were only possible to a limited degree. Various organisations have also temporarily put their plans for a possible location on hold as a result of this crisis or even cancelled them altogether.

2.6.4.2 Wageningen Campus community & local buzz

Impulse is an excellent location for an in-person meeting. Between January and 15 March, 20 knowledge meetings and 12 cultural meetings were facilitated by the campus organisation. Due to the coronavirus pandemic, all in-person meetings after March 15 had to be cancelled. The campus organisation is actively participating in the discussions about the programming of the "Dialogue Centre" – the first step has now been taken. Various efforts were made to keep the interaction between the different campus residents vibrant. Among other things, the campus community was kept abreast of relevant matters and interesting news items via five e-newsletters. Monitoring data shows that this newsletter is well read.

In the autumn, an online survey was launched among the campus community. Of the 136 organisations approached, 70 completed surveys were returned. The survey provided insight into how the respondents stay informed about campus developments, events, and other campus-related events, the extent to which they want to contribute themselves, etc. Existing initiatives will be fine-tuned in 2021 and new activities will be started using this information.

2.6.4.3 Shared research facilities

WUR wants to retain its leading position in education and research and advanced research facilities are crucial for this. WUR invests in high-quality research facilities every year. These facilities range from high-quality laboratory equipment and the related expertise to larger research facilities. Through the Shared Research Facilities (SRF), WUR provides third parties with access to its research facilities. This stimulation and facilitation of "joint use" not only contributes to more cost-effective operation of the research facilities, but it is also a good way for researchers (at WUR as well as outside it) to familiarise themselves with and utilise the facilities and expertise of others. This is often the basis for further collaboration in research projects and, thus, actively contributes to the strength of the Wageningen Campus ecosystem.

Important additions in 2020 are the PacBio Sequel II, a new 3T MRI, Orbitrap Exploris, and the Cyclic Ion Mobility Spectrometer. In 2020, NWO Roadmap awarded investment grants for large-scale scientific infrastructure at WUR: UNLOCK and uNMR-NL. Many of these facilities will be built in 2021.

564 pieces of equipment are accessible through SRF, 310 of which are also accessible to external parties. SRF has invested in 87 of these pieces of equipment. Of the 564 pieces of equipment, 7 are owned by an external party (Unilever, MARIN) and 17 are located outside of WUR. The average occupancy of the SRF equipment portfolio (part of WUR's total equipment portfolio) was 55% in 2020

and the number of unique external users was 43 (see Table B2.12 Appendix 2). In addition, the equipment was also extensively used by WUR research projects for external parties. In 2020, an <u>overview</u> of all research facilities at WUR was created. This involves all facilities being presented in an overview so that they can be found more easily.

From 2020, WUR's SRF team will work closely with Foodvalley NL on shared facilities within the Foodvalley 2030 programme. The facilities team from Foodvalley NL was strengthened in the summer of 2020 with two new colleagues, who form one team together with WUR SRF employees. At the beginning of 2020, the RegioDeal Foodvalley subsidy of C7 million was awarded for investments in shared research equipment in the coming five years. In this year, investments were already made in various devices using this subsidy. Furthermore, the RegioDeal Foodvalley subsidy was started at the end of 2020 for investments in shared pilot facilities. A subsidy of C7 million is also available for this. This collaboration is further shaped under <u>Shared Facility Finder</u>, where the possibilities for finding and sharing research facilities are shared within the agri-food innovation ecosystem.

2.6.4.4 Physical aspects of campus development

In 2020, due to employees from many organisations being forced to work from home, it was quieter on campus in terms of meeting and interaction, but Wageningen Campus certainly was not quiet when it came to property and housing. Highlights included the start of the construction of the Dialogue Centre and the Upfield Innovation Centre, the completion of the new research greenhouses phase 1/Red, reaching the highest point of the third education building Aurora, and the opening of Plus Ultra Phase 2 over the summer. The development of the physical campus is accelerating, which will continue to be noticeable in the years to come.

A major step was taken in the field of sustainability with the construction of a ring duct for thermal energy storage (TES) for WUR and additional sources for the aforementioned buildings. In the area of accessibility, an important step has been taken with the decision of the Provincial Executive of the Province of Gelderland about the chosen route for better accessibility in Wageningen and the budget made available by the parties involved for adjustments to this route.

With the completion of Plus Ultra phase 2 and the arrival of Upfield, the available space for the centralised location of knowledge-intensive activity on Wageningen Campus has been almost entirely allocated.

As the city council unanimously decided to adopt the principles for the zoning plan for the Born-Oost property, the development of Wageningen Campus on the other side of Mansholtlaan also reached an important milestone. In this area, where currently only NIOO-KNAW and Aeres University of Applied Sciences are located, the new zoning plan provides space for approximately 80,000 m² of knowledge-intensive activity. BSPW is working hard on a quality stimulus and the promotion of available business accommodation and construction sites. Additional space has also been found around the Wageningen Campus for student housing: according to the principles, 250 extra rooms will become available on Born-Oost and student housing provider Idealis is looking for 350 extra rooms on Bornsesteeg, adjacent to the Sterflat. These and other plans should be finalised in the coming year.

The year 2021 will be marked with the completion of various buildings and the start of new initiatives. In the meantime, the construction of infrastructure and the reinforcement of the green outdoor space are keeping pace.

2.6.5 New Professionals

2.6.5.1 Wageningen alumni

Our alumni contribute to achieving social objectives, such as more sustainable production and consumption, improved health, and the competitive capacity of the business community. In this way, they contribute significantly to the impact of WUR. Of the graduating MSc students, 35% found a job in either the business community or a professional field.

In the reporting year, Wageningen University had a network of over 56,700 alumni and PhD candidates spanning approximately 150 countries. Alumni are kept informed of relevant developments within WUR and the Wageningen domain through social media, such as the LinkedIn Community and Wageningen Connect. In addition, alumni meetings take place at home and abroad. With WUR-Connect we reach more than 9,500 alumni. Alumni involvement at WUR is of great value, and new ambitions were formulated in the year under review to further strengthen this sense of involvement, such as with the Wageningen University Fund. We believe there are more opportunities to strengthen education, research, and value creation in society together with the alumni. In 2020, we began anchoring an already close-knit community of alumni and "friends" around WUR deeper in the organisation.

2.6.6 Outlook

Society is increasingly demanding answers to questions regarding the legitimacy of public spending in the area of research and demanding that these scientific insights be translated into innovative applications. Additional value creation from education and research is a continuous process involving many stakeholders, including the government, the business community, entrepreneurs, regions, and societal organisations with WUR playing a central role. Creating impact together also is the central message of the WUR 2019-2022 Strategic Plan - Finding Answers Together.

In 2021, the initiatives launched within the framework of the Strategic Plan will be further expanded, such as by stimulating an entrepreneurial attitude among our employees, increasing the investment resources for accumulating knowledge and building facilities at WUR, and the crossovers between Wageningen disciplines. The goal is to further anchor creating impact into the DNA of WUR students and employees. In 2021, WUR also aims to engage more actively with the outside world about transparency, academic integrity, and responsibility, issues that are central to WUR's research and collaborations. Furthermore, WUR will focus on closer ties with alumni and a broader approach to fundraising via the University Fund Wageningen and other large charitable funds.

2.7 Employees

The strategic priority areas established by the Executive Board form the basis for the HR policy of WUR.

The coronavirus pandemic that occurred in 2020, the associated measures, and their consequences for our employees were deciding factors for how HR policy was and could be implemented in 2020. One of the most important measures with the most consequences was having to work from home, often in conjunction with additional care tasks for children, sick relatives, etc. All of this continued along with teaching and research tasks — which were often performed remotely as well — which resulted in high and sometimes excessive work pressure for many. The Executive Board sought to alleviate this workload by offering additional leave opportunities and encouraging the search for tailor-made solutions.



Despite this special situation, hard work has also been done on the five HR themes:

- Recruitment, Onboarding, and Inclusion
- Leadership and Talent Development
- Organisational development
- Control of Your Vital Career & Happy Work Life theme
- HR Operational excellence

The key figures characterising our workforce are included in more detail in the Social Annual Report (Appendix 3).

2.7.1 One Wageningen

Based on the One Wageningen idea, we want to encourage collaboration and mobility between WR and WU where possible. This is expressed, among other things, through the development of regulations that apply to all WUR employees. Efforts are also being made to ensure that the collective labour agreements of both entities are aligned as much as possible. Through HR policy we promote employee awareness of how they, through their own position, contribute to WUR as a whole as well. WUR wants individual talents to develop to their full potential by offering employees a challenging, inspiring and international work environment. Using detailed implementation of the five HR themes, we also help shape our Corporate Social Responsibility (CSR).

2.7.2 Recruitment, Onboarding, and Inclusion

In 2019, an increase in research in WUR's domain, the increase in students, and the aging of the organisation served as a stimulus for an extra investment, which was effected in 2020 by setting up a recruitment team. With this team, we are more emphatically present in the labour market, and we show what we can do for talent as an attractive employer. All this is done with the aim of recruiting and retaining diverse talent. Specific recruitment tools such as Textio are used for this, and special recruitment techniques are developed to find the right talent online. Because our current staff composition does not sufficiently reflect society and is also less diverse than the student population, we are specifically focused on placing more women in leadership positions and hiring more international employees. In particular, we have fallen behind with regard to women in academic leadership positions and international employees in leadership positions. There is also a difference in the figures between WU and WR, to the detriment of WR. In order to achieve a better balance in general terms, we have implemented a number of interventions. We try to translate most interventions into a specific approach for the sciences group or department.

Promoting gender balance is done through anchoring at the top, cultural interventions, HR interventions, and enabling women to make optimal use of their talents and capacities. In 2020, in addition to the initiatives already under way, we actively coached Appointment Advisory Committees (BACs) in the neutral recruitment and selection of professors in particular. In 2020, there were also

two calls for the Aspasia Fund, in which women in academia were invited to apply for an activity, training programme, or coaching to support their scientific careers.

In June 2020, the Anti Racist Association (ARA Group) presented a petition to the board of directors calling for attention to combat racism and discrimination within WUR. Since then, a dialogue has been started with the ARA Group to gain a better understanding of the issues of racism and discrimination.

In 2020, the internationalisation project group conducted research into how WUR could be an inclusive and diverse organisation that is an attractive employer for international talent. Based on this, the project group gave practical and actionable recommendations on how to adjust recruitment processes, expand language policy, and set target figures for WUR. Efforts are also being made to appoint more international employees to management positions. It has been found that, during the recruitment and start-up of international employees, there are aspects that require additional attention, ranging from matters such as housing and awareness of cultural differences to work for partners, reasons for organising "international community building" and facilities for international employees, around Wageningen in particular.

At the end of 2020, a partnership was initiated with the Expat Spouse Initiative of Eindhoven University of Technology, in which WUR will offer a dual career centre in Wageningen to promote the integration of the partners of international employees as well.

In the context of "inclusion", specific attention is also given to the employment of people who struggle in the labour market, in response to the Participation Act, the job agreement act (*Wet banenafspraak*), and the quota requirement for people with a work disability (*quotumheffing arbeidsbeperkten*). Thanks to the efforts of JOPS, which began in 2019, we have been able to hire more people who struggle in the labour market and also offer them stable work.

Specific to 2020, due to the consequences of the coronavirus measures, a great deal of attention was also paid to the internal matching of talent and work, supported by the Matchpoint initiative. This is an online platform for employees of WUR, who temporarily had less work, for work elsewhere in the organisation. This was received positively by the employees, also because it energised them to work elsewhere within WUR (temporarily).

2.7.3 Leadership & Talent Development Theme

In 2020, due to the coronavirus pandemic, we were faced with an ad-hoc situation in which we could no longer meet and work on location. With a lot of effort, a sense of responsibility, and flexibility, employees organised and continued their work at home as well as they could, including the managers. The planned leadership dialogues in March and April, in order to conduct a dialogue about leadership within WUR, were postponed to early 2021 due to the coronavirus. HR shifted its attention to collecting the experiences of managers and employees with regard to remote working and management, such as by using "Pulse" measurements. One of the aims of this was to get an idea of the required support. The majority of the respondents felt that their manager kept them well informed about developments and organisational policy regarding the coronavirus. Most of the employees also felt well supported by the new way of working and felt trusted by their managers. In an online webinar in the autumn of 2020, a large group of managers discussed these outcomes and the challenges, opportunities, and points of attention in relation to remote management.

We designed our leadership programmes Personal Leadership Expedition (PLE), Leadership Development Program (LDP), and Leadership in Science (LIS) completely online in 2020, in which the participants worked on their leadership development through peer review, theme meetings, coaching, and strategic assignments. Furthermore, the first steps were taken in shaping a "Community of Practice" for managers, an online location where our managers can meet each other, but also where they can find information that is important for their role as manager and leader.

In terms of talent development, the succession planning of various positions was further developed in 2020, including positions at the higher management level. Attention was paid to a good occupancy in

the positions, now and in the future, but also to the development of talents. Attention was also paid to the abundance of talent at WUR, such as by starting Performance & Development (P&D) interviews in a new style, with a focus on talent, career, and looking ahead. We also focus on stimulating a continuous dialogue on these topics, in which managers and employees are supported by tools and workshops.

2.7.4 Organisational Development Theme

WUR would like to safeguard the benefits of digital and remote working for the future, so we have begun work on a policy for working remotely, which focuses on five success factors:

- social cohesion;
- digital resources and skills;
- clear agreements;
- vitality and safety;
- expenses and reimbursements.

Investments have already been made in 2020 to support people, to continuously motivate them intrinsically, and to pay attention to WUR's performance as an organisation at the same time. Attention is also given to the cultural aspects WUR is working on: entrepreneurship, teamwork, and trust. In 2021, this policy will be developed further, including in coordination with the Strategic Housing Plan, so that employees can work together on or off campus with pleasure and effectiveness.

2.7.5 Self-Career Development & Happy Work Life Theme

Vitality/health/happiness at work

Because we started working from home in 2020, with meetings and lectures mainly taking place online, we are also spending more time sitting down than before. Our home workplace does not have all the facilities as we are used to "at work" either: we talk to each other face to face less frequently and we miss social conversations. All this can contribute to physical and mental issues.

As part of the Vital@work programme, we have therefore started to offer our employees additional support in working (from home) as much as possible in a vital and healthy manner. This is done by offering easily accessible facilities and workshops that can be used free of charge (now 20 options). Vital@work works closely with Sports Centre de Bongerd and other facilities, e.g. PauseXpress has been offered online since 2020. This is a "no-sweat" active work break of approximately ten minutes, which is provided by a teacher from the sports centre. The incentive sessions "Brain Friendly Working", provided by psychologists from Skills, were also frequently attended. The advantage of the current online programmes is that they are now also accessible to colleagues who do not work in Wageningen, which means we have a much greater reach.

Additional attention was paid to the possibility of scheduling an appointment with the Occupational Social Work (BMW) department. Furthermore, specific workshops "Balance in the coronavirus pandemic" were organised by external coaches to provide employees with additional support for the challenges that the coronavirus measures bring with them, such as the balance between work and private life.

November was national work stress week. Vital@work paid attention to this by focusing on happiness at work during this week through various activities, such as a photo competition of the most beautiful photo taken while out for a walk, a lecture on finding happiness in the little things, and Victor Mids taking us into his world, where nothing is as it seems. In general, this week was rated by participants with a 7.8.

Sick leave

In recent years we have been seeing an upward trend in sickness absence. However, we have been seeing a sharp decline in this since April 2020. While the sickness absence at WUR as a whole was still 4.5% in 2019, in 2020 we saw this drop to 3.6%. There is no clear explanation for this sharp

decline. We assume that this is certainly related to the special circumstances due to the coronavirus pandemic, which made it possible to work more flexibly. This may have resulted in fewer people calling in sick, even when they were ill. This was not further investigated. We will see to it that factors that have a positive influence on sickness absence figures are incorporated into future policy to be developed for remote working.

At the same time, we conclude that work pressure, certainly for certain groups, was experienced as high. This is cause for concern, and we will certainly focus on this topic.

Social security

The social security team is in full development. This team supports HR, managers, and employees with questions about social security in the broadest sense of the word. Well-known topics are short and long-term absenteeism, unemployment, and retirement.

If employees leave the organisation and are awarded benefits on the basis of the Dutch Unemployment Insurance Act (WW), they are offered support from an internal work coach in the search for another job. In this way, WUR fulfils its reintegration obligations as self-insurer for unemployment benefits. WUR fulfils its reintegration obligations as a self-insurer regarding the scheme for returning to work for the partially disabled (WGA) and the Sickness Benefits Act (ZW) by involving an external reintegration coach. Due to the reintegration support under the WW, WGA, and ZW, the costs of paying out benefits for WUR are limited as much as possible.

In the coming year, the social security team will focus on employees who are unfit to work for the long term, who will receive WGA benefits, etc. A broader policy will be developed for this.

2.7.6 HR Operational Excellence Theme

A number of improvement processes were carried out in 2020 within the framework of the HR Target Operating Model:

- authorisations, roles and archiving;
- employees from abroad (including the organisation of remuneration);
- communication and information;
- digital checks, signatures, and outgoing letter records;
- sharing knowledge;
- "MyHR" indicators;
- WUR accounts (optimisation/prevention of duplicate accounts).

Finally, in December, the pillar on the scope and professionalisation of the HR Shared Service Center was defined. Scope means: all operational administrative HR processes throughout the entire HR chain. This will be defined more concretely in 2021.

2.7.6.1 Employee participational structure

Employees of WU and WR are represented in decentralised work councils, the Central Works Council (COR), and the Student Staff Council (GV). The latter consists of employee representatives and students of Wageningen University. The COR and GV work together in the WUR Council. The participational structure is an important partner in policy formation for the Executive Board and the managing directors of the organisational units. Involvement of the employees and students in the decision-making process regarding important topics helps to generate broader support.

Extensive discussions took place with the WUR Council about the consequences of the coronavirus pandemic and the resulting measures, including the amendment of the Binding Study Advice regulations. The current Strategic Housing Plan WUR 2020-2025, with special attention to the housing concept myWURspace, has been put on hold due to the expected effects of the coronavirus pandemic. Important topics on the agenda for discussion with the Executive Board were the WUR Good Governance Code, the revised smoking policy, the evaluation of the "Extended Daytime Schedule", the quality agreements 2019-2024, the environmental multi-year plan 2020-2022, and the WUR Council initiative proposal for the standardisation of rules on taking sabbatical leave.

The decentralised works councils and their management boards were able to maintain their normal meeting cycles in the 2020 financial year. However, in 2020, as a result of the coronavirus, little exchange took place between the decentralised works councils. In spite of the coronavirus, the works council elections resulted in well-staffed works councils and a full delegation to the COR and in turn, the GV. Furthermore, with the works council elections as a driving force, important steps were taken throughout the organisation to realise the ambitions in the context of Employee Participation 2.0 (*Medezeggenschap 2.0*).

Periodic consultations were also held with representatives from the employee organisations, involved in the realisation of the collective labour agreements (CAOs), the Wageningen Research staff council (POWR), and the *Overlegorgaan Personeelsaangelegenheden of Wageningen University* (OPWU). In the POWR and OPWU, the most important topics of discussion in 2020 were the consequences of the coronavirus, such as mandatory and voluntary work from home, workload, and workspace(s). Partly in this context, the OPWU also discussed the use of the decentralised terms of employment funds.

In the context of CSR, it is important that suitable employment conditions are offered and that employees can work in a safe, healthy environment. Furthermore, in this respect, scientific integrity must be safeguarded and human dignity protected. The methods employed by WUR to achieve these are described below.

2.7.6.2 Employment Conditions

WUR has two CAOs, the Collective Labour Agreements for Dutch Universities (CAO NU) and the Collective Labour Agreement for Wageningen Research Foundation. The current CAO NU runs from 1 January 2020 to 1 January 2021, with a wage increase of 3% as of 1 June 2020. Furthermore, all employees who were employed on that date received a once-off payment of €750 (for full-time employment).

In July 2019, an agreement was signed for a new CAO for Wageningen Research Foundation which will be valid from 1 April 2019 until 1 April 2021. The CLA-NU contains provisions for a salary increase of 2.5%, effective 1 July 2019 and another 2.5% increase, effective 1 July 2020.

The remuneration for senior executives is in line with the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (WNT).

2.7.6.3 Risk analyses and evaluations

Risk assessments and evaluations (RI&Es) are carried out by Occupational Health and Safety experts and provide insight into the possible risks of certain work activities for the health of employees. This insight is essential to be able to arrange work activities in such a way so as to avoid adverse health effects. In a number of positions at WUR, it is useful to periodically perform medical checks on employees or to provide vaccinations. Where necessary, this is compulsory at WUR. If an employee is unable to comply with this (for example due to their religion), the employee will not be able to carry out the particular work activities and will be assigned other duties. WUR has also developed a policy for periodic occupational health examinations (PAGO). WUR uses the Occupational Health and Safety (Arbo) catalogue which was developed in collaboration with VSNU.

Finally, special attention should be given to the health risks of employees who are posted abroad. They will be given the necessary preventative vaccinations and follow-up care will also be provided upon their return to the Netherlands, in consultation with organisations such as the vaccination centre.

Due to the coronavirus pandemic, travel was kept to a minimum in 2020 and the instructions of the national government were followed.

2.7.6.4 Integrity

Society must be able to trust that the results of the work done at WUR are generated and published independently and with integrity. WUR has therefore adopted a number of core principles in the form of codes, regulations and agreements to ensure the integrity of individual employees and the organisation as a whole. These documents can be <u>downloaded</u> on the website.

These are:

- The Wageningen University & Research Integrity Code. This is fully valid for all employees of WU and WR.
- The Netherlands Code of Conduct for Research Integrity as established by the Association of Universities in the Netherlands (VSNU). This is fully valid for all academic professionals within WUR.
- The Corporate Governance Code of Wageningen University & Research. This code describes the principles of good governance. This code was replaced in 2020 by the Code of Good Governance for Universities as applied to WUR.
- The Implementation Regulations Side Activities Wageningen University & Research. According to
 these regulations, employees are required to ask their employer for permission in advance to carry
 out side activities. It is important both for WUR and for potential clients to have insight into any
 secondary work activities in order to prevent a possible conflict of interest. The approved side
 activities can be found at "we@wur".
- The Whistle-blower's Regulations. These regulations describe how an employee should act if he/she suspects inappropriate behaviour at WUR.
- The Regulations Complaints procedure unwanted behaviour.
- The Personal Data Protection Regulations. These regulations provide a description of the tasks, responsibilities, and procedures with regard to the processing of personal data within WUR and is applicable to all data processing operations within WUR.
- The Camera Surveillance Regulations. This regulation provides a description of the responsibilities and procedures for the camera surveillance carried out within WUR.
- The Anti-corruption Code of Wageningen University & Research.

By signing their employment contract, employees declare that they are familiar with these principles from the integrity code, the code of conduct for academic practice, the network regulations, and the secondary activities regulations and that they will act accordingly.

WUR offers help and guidance in tackling undesirable behaviour through various regulations, various facilities for filing a complaint, and staff members appointed specifically for such matters (such as confidential counsellors) and committees (such as the Scientific Integrity Committee). Under the leadership of the integrity steering group, employees and managers are actively raising awareness of integrity. To this end, there is active communication and various activities have been undertaken, such as actively offering integrity workshops, sharing integrity dilemmas, and paying attention to integrity in management development programmes.

2.7.6.5 Complaints and appeals

Protection of employees against possible objectionable decisions or conduct is guaranteed through various complaints and objection regulations at WUR. The following provides an overview of the number of submitted or processed complaints in 2020 per procedure.

Wageningen University & Research

The Wageningen University & Research Scientific Integrity Committee (CWI) received no new complaints in 2020.

The confidential counsellors for academic integrity were contacted six times in 2020.

In 2020, no complaints based on the Complaints Regulations for Undesirable Behaviour were submitted.

Wageningen University

The Wageningen University Advisory Committee on Appeals and Objections (AWB Chapters 6 and 7, CAO-NU) handled two objection procedures begun in 2019 in 2020. In one case the committee recommended declaring the objection inadmissible, while in the other they recommended declaring the objection unfounded.

One complaint was also made to the Wageningen University Dispute Advisory Committee in 2020. The committee recommended that this complaint be declared unfounded.

Wageningen Research Foundation

On the basis of Wageningen Research Foundation's Individual Right of Complaint Grievance Regulations, one complaint was submitted to the Grievance Committee in 2020.

2.8 Operational management

2.8.1 Personal Data Protection Act

The hack at Maastricht University (December 2019) shows that a well-positioned, solid security and privacy organisation is an important condition for WUR to create a secure, digital learning and work environment. The coronavirus pandemic, which has been affecting WUR since March 2020, also poses considerable challenges to the continuity and integrity of the primary educational and research processes. The sudden standardisation of working from home and the provision of digital education places a heavy burden on the organisation, resulting in pragmatic administrative considerations, such as the use of online proctoring, which will be discussed further below.

The year 2020 was also special because of the European Court of Justice's decision to declare the Privacy Shield invalid in the Schrems II case. The Privacy Shield provided an adequate level of protection for personal data transfers between the EEA and the US. From one day to the next, this level of protection no longer existed. For the protection of privacy at WUR, this first meant that all transfers (via application providers) to the US had to be identified, after which they were provided with other legal frameworks to comply with the level of protection. For example, WU uses an American supplier for remote proctoring (taking exams online), with whom a previously concluded processing agreement had to be renegotiated.

There has been a lot of commotion about remote proctoring because of the coronavirus. The introduction of compulsory room scans for students during examinations, in order to combat fraud, raises many questions about privacy among students, but also among the Data Protection Authority (DPA) and OCW. With three online Master's programmes, WU has many years of experience and has been able to answer these privacy questions well. Furthermore, no privacy issues were identified in the data protection impact assessment on remote proctoring.

In the past year, the WUR privacy team has focused on shaping governance and collaboration with security and data management, including in the form of structural consultation between the various departments involved. In doing so, the boundary between policy/advice on the one hand and supervision on the other is increasingly being maintained within WUR.

The WUR privacy team is increasingly seeking coordination with other institutions. This would not only be via SURF, but also via DPO consultations (data protection officers) and corporate privacy officer consultations between officers from the various universities. New agreements on privacy and security are being made with organisations that transfer personal data on a structural basis, and existing agreements are being modernised.

Ten data breaches were reported to the DPO in 2020. Seven of these reports were forwarded to the Dutch Data Protection Authority, one of which was subsequently withdrawn as it did not qualify as a data breach.

2.8.2 Management of Information Provision and ICT Developments

The management of WUR information provision takes place at the policy and strategic levels through the Architecture Board, chaired by a member of the Executive Board The Architecture Board also consists of the director of Information Management (who is also the secretary), the F&C Group director, the general manager of Facilities and Services, and the domain owners of the "Domain Director Teams" (DRTs): the director of ESA (Education domain), the director of FB-IT (IT domain), the dean of research (Research domain), and the person responsible for the Operational Management domain.

The Architecture Board met six times in 2020 and discussed:

- information provision policy and strategy;
- cross-domain themes;
- WUR-wide and cross-domain risks;
- the progress of the domains and their connection to the WUR Strategic Plan.

This arrangement has continued to expand in 2020, with the launch of DRT Research and the development of the DRT Operational Management continuing and being reinforced with the appointment of a dedicated domain owner. It is precisely in this last domain that WUR has the ambition to take some major steps in the coming years towards a more user-friendly and efficient process and application landscape.

Work is already under way in the Operational Management domain on a single WUR Dashboard. The dashboard gives the management of the sciences groups and study units an immediate overview of how they are doing in the areas of Finance, Acquisition, Implementation, and HR.

Instead of one-to-one replacement of the WUR project management system (MyProjects), a decision was made to include further substitutions in the broader process within operational management, which also involves looking at integration with Finance and HR processes.

Customer Relationship Management (CRM) in conjunction with the Uniform Project File (UDP) was also rolled out at WEcR and WFSR in 2020; the other WR institutes will follow suit in 2021. This is another step towards more unified and integrated processes that fit into the OneWageningen concept. The Proof of Concept (PoC) for the web shop WUR Events and Products has been completed for the Events section. A generic web shop was set up in which all business units with specific products can connect.

2020 was a special year because of the coronavirus, which greatly stimulated certain online movements. Providing online education and examinations gained powerful momentum in the **Education domain** (see chapter 2.4.2).

The **IT domain**, put under pressure in the wake of the coronavirus pandemic, has seen a rapid increase in the options for digital collaboration and working from home. Microsoft Teams has been made available to all WUR employees and students. The preparation for supporting blended meetings with new or modified video conference systems will continue in 2020 and is expected to be completed by mid-2021. The IT Service Desk, including the IT Service Point on the campus, has been quite busy with all these accelerating efforts and has had to cope with considerable peaks in demand. However, through rapid process adjustments and internal shifts, they were able to maintain the service level very well. The rising appreciation figures from the organisation show great understanding and, above all, appreciation for this achievement. A waiting time that is slightly too long is more likely to lead to a friendly chat and thus increase mutual understanding.

Following the cybersecurity incident at Maastricht University at the end of 2019, all universities and politicians have come to realise that a boost in information security is necessary. In addition to the current information security plan, this was addressed in 2020 (see 2.9.2.3). Attention to the safe use of data by employees and students was promoted through various campaigns. The classification of data was made clear and discussed in workshops. Technical monitoring of systems and implementation of multi-factor authentication for MS Office 365 for employees has been implemented and will be in place for students in 2021 as well.

The Research domain is investing more in supporting software development and data management for research. As part of Research Data Management (RDM), the significance of the YODA/IRODS system was investigated through pilots. This initiative is part of a SURF partnership in which several

universities participate. We also have a team of research engineers to support researchers in their research in conjunction with information services. A project was launched at the end of 2020 that will be the first to deliver an IT architecture for WUR institutes with laboratories in general and WFSR in particular. A roadmap will also be delivered to enable a step-by-step migration from the current situation to the desired situation.

The biggest project in the Research domain is the selection of a new PhD candidate information system: Hora Finita. This SaaS solution is expected to replace the current PROMIS self-build system by the end of 2021.

2.8.3 Corporate Social Responsibility

Major excavation work was carried out on the Wageningen campus in 2020 for the construction of a loop duct for the thermal energy storage (TES), so that more buildings can get connected to the TES system. The number of solar panels was also increased: more than 10,000 panels on buildings and grounds now generate renewable energy. Renewable energy and energy conservation remain important themes. Work on biodiversity, circularity, and mobility also continued in 2020.

The vision for circular economy was presented at the beginning of 2020, which WUR will use to make the transition from a waste management policy to a circular economy policy. The travel policy for business trips within Europe was refined on the basis of the Mobility Vision 2030. Public transport is recommended for destinations that can be reached by train within 8 hours. WUR was awarded the Sustainable Business Travel Award by the Dutch Association for Travel Management for this approach. A contract for Mobility as a Service (MaaS) was concluded in 2020 for the kilometres travelled by car for business purposes. The agreement is that the service provider will ensure that all business trips by car will be fully electric within two years and that employees will be enticed to use public transport or a bicycle more often instead of a car.

More and more employees and students are finding their way to the campus as a Living Lab. Examples include the hackathon "The future of Food & Beverage @WUR", in which students and employees were given the opportunity to develop their ideas for healthier and more sustainable catering offerings and WUR researchers and students were able to formulate their green vision for Wageningen Campus. In addition to promoting vitality, diversity is also a CSR theme. WUR wants to be an inclusive organisation. The Job Participation Support (JOPS) team started in 2020. This team is committed to employing employees with a disability. At present, about 60 participation employees have been employed by WUR.

During the coronavirus pandemic, CSR continued receive our attention just as it did prior. The coronavirus demanded additional efforts in some areas; there was greater concern for welfare and safety. Due to the coronavirus measures, many employees and students had to work or study at home instead of on site. Additional safety measures were taken for the activities that had to be conducted on site. Concerns were raised about the workload of lecturers and education support staff and the mental health of students. The pandemic also changed the way we look at issues such as mobility and building use. We rapidly improved our online skills and online meetings replaced face to face ones. Domestic travel decreased sharply while international business travel came to a virtual standstill. As a result, greenhouse gas emissions related to mobility were significantly lower in 2020.

In December 2020, WU was again named the most sustainable university in the world in the <u>UI</u> <u>GreenMetric ranking</u>. WU came third in the 2020 <u>SustainaBul</u> — an annual ranking of Dutch educational institutions organised by students.

Our CSR agenda highlights the social issues that will receive additional attention in the coming years. The CSR agenda includes social, environmental, and economic sustainability. It contributes to the goals of the <u>2019-2022 Strategic Plan</u>, aligning as far as possible with the Change Performance Indicators (CPIs). See Table 2.9 for the themes of the CSR agenda. Our <u>website</u> and the <u>2020</u> <u>Sustainability Report</u> contain more information about the WUR CSR Agenda.

Table 2.9The themes in the CSR Agenda

| CSR Themes and Goals 1. Research and education designed to make a contribution to societal challenges | In this Annual Report Education (2.4); | |
|---|---|--|
| To make a contribution to global social challenges (e.g. themes such as food security, safety, | | |
| | Research (2.5); Value | |
| health and liveable cities) | creation (2.6); Mission and ambition (2.3.1.) | |
| 2 Sharing and disseminating knowledge | Sharing knowledge | |
| 2. Sharing and disseminating knowledge | | |
| To increase the social impact of research by transferring acquired knowledge internally and externally, for example by engaging in public debate. | (2.6.3) | |
| | Education (2.4), Drafile | |
| 3. Innovative and challenging research and education | Education (2.4): Profile and policy; Highlights | |
| To stimulate research projects and education by tapping into new themes with a view to creating a positive social and/or environmental impact. By investigating new themes, we create additional | and policy, migningins | |
| | | |
| mpact. 4. Vitality | Vitality (2.7.5) | |
| Guarantee optimal working conditions. The mental and physical health of employees and students | Vitality (2.7.5) | |
| is protected and we as much as possible promote the wellbeing of our employees and students. | | |
| 5. Ethically responsible research | Corporate Social | |
| To communicate transparently and with integrity about research processes and findings. | Responsibility (2.7.6.4): | |
| Responsible use of research resources (such as test animals, pesticides and GMOs). | Scientific integrity | |
| 6. Climate-adaptive environment | Safety and Environment | |
| To make our own buildings and environment climate-adaptive, for example by rolling out our own | (2.8.4) | |
| innovations (such as sound buildings, green roofs, rainwater buffers, biodiversity retention). | (2.0.7) | |
| 7. Entrepreneurship and Applied Research | Value creation (2.6): Th | |
| To convert knowledge into innovations and to quickly translate scientific breakthroughs into actual | Value creation (2.6): The entrepreneurial use of | |
| practice and education. Stimulate students to display entrepreneurship and, for example, translate | knowledge | |
| in-house and other research into actual practice (for instance through means of spinoffs). | knowledge | |
| 8. Waste and Circularity | Safety and Environment | |
| To minimise the use of new raw materials and reduce residual waste. By optimising reuse and | (2.8.4) | |
| opting for recyclable products, the separated collection of waste flows and countering food waste. | (2.0.4) | |
| 9. Responsible collaboration | Collaboration, tech | |
| To collaborate with national and international partners in achieving our goals (research for and | transfer, and co-creation | |
| towards society). To pursue a cohesive policy relating to the political establishment (local, national | with partners (2.6.1) | |
| and EU), society, the business community and NGOs. | | |
| 10. High-impact partnerships | Value creation (2.6): The | |
| Partnerships with, for example, the business community and government bodies to increase the | entrepreneurial use of | |
| positive impact of research and education. | knowledge | |
| 11. Responsible economic policy | Economic performance | |
| To make responsible use of public funds and to communicate transparently about this. Sustainable | indicators (2.10) | |
| income from research and education to be able to achieve (new) strategic goals. | | |
| 12. Sustainable energy | Safety and Environment | |
| To contribute to the energy transition through the in-house generation of energy and by making | (2.8.4) | |
| energy more sustainable, and by reducing energy consumption in our buildings and on our | (2.0.7) | |
| grounds. | | |
| 13. Chain responsibility | Procurement and chain | |
| To stimulate sustainability in the chain by maximising local procurement and requiring suppliers to | responsibility (2.8.5) | |
| comply with social and environmental criteria (in terms of their business operations, as well as in | | |
| their products and services). | | |
| 14. Development and training | Talent development | |
| Invest in the development of employees by actively offering professional training and degree | (2.7.3) | |
| programmes. To facilitate an enjoyable work environment in which everyone's talents are optimally | | |
| used and developed. | | |
| 15. Diversity in staff and students | Inclusivity (2.7.2) | |
| To realise an inclusive work environment with equal opportunities for every employee and student. | $\frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2} \right)$ | |
| Focus on talent and a proper reflection of society. | | |
| 16. Sustainable mobility | Safety and Environment | |
| - | Safety and Environment | |
| To make the mobility options for employees and students sustainable as a means of reducing the emission of CO _{2eq} . | (2.8.4) | |
| | Education (2.4). Droft | |
| 17. Flexible learning paths | Education (2.4): Profile and policy | |
| To give students the flexibility of creating their own study programme, for instance, by providing | | |

2.8.4 Safety and Environment

WUR is taking its social responsibility seriously with sustainable operational management. This endeavour is also the starting point for the attention areas of safety and environment.

2.8.4.1 Safety

Education, research, and support activities are accompanied by risks. In the areas of health and safety, WUR wishes to protect employees and students as effectively as possible. The objectives are to ensure optimal working conditions, guarantee health and safety, and stimulate the well-being of employees and students.

WUR's health and safety policy (Arbo policy) and the practical implementation of this policy is set out in various theme-related policy documents and is based on the VSNU Health & Safety Catalogue as much as possible. These apply to both WU and WR. Parts of the VSNU Health & Safety Catalogue (and the implementation thereof) concern topics such as In-house Emergency Services; Risk Assessments and Evaluations (RI&E); Hazardous Materials; Information, Instruction and Supervision (VO&T); and Arms, Neck and Shoulder Complaints (KANS).



Each organisational division is responsible for having a current RI&E for all workstations and activities and for conducting in-depth RI&Es. In the context of Information, Instruction, and Supervision (VO&T), various e-learning modules on working safely were created for students and employees in recent years. A WUR-wide e-learning on Biosafety will become available in 2021. Protocols and tools were developed for building and housing management to secure and control attention to health and safety at an early stage during the construction process and in the usage phase.

A lot of attention was paid to a new social and occupational risk: the coronavirus. For each building, protocols and measures have been developed to implement the recommendations of RIVM and the regulations of the Dutch government. As a result of these measures, the number of people working from home has increased enormously. Working from home is supported through targeted information, the provision of resources, workplace research, and support from managers.

2.8.4.2 Environment

The <u>2020 Sustainability Report</u> describes the policy, activities, and results in the area of environment, sustainability, and social responsibility. This annual report outlines the objectives achieved in 2020 for the four environmental themes of the CSR agenda (see section 2.3.3): Climate-Adaptive Environment, Waste and Circularity, Energy, and Mobility. The CO_2 footprint is also addressed. Table 2.10 summarises the 2020 results.

| Component/Issue | Objective | Achievements in 2020 |
|------------------------------|--|--------------------------------|
| Climate-adaptive Environment | To make our own buildings and environment climate- | Wageningen Campus: 69% |
| | adaptive: | |
| | percentage surface area that is suitable for water | |
| | absorption. | |
| Waste and Circularity | Reduction relative to 2014 | Increase of 45% |
| | Percentage waste separation | 73% |
| Energy | 2.0% reduction per year | -6.5% |
| | Sustainable electricity procurement | 100% ^{a)} |
| | Generating wind energy | 71.2 million kWh ^{b)} |
| Mobility | 2.0% reduction in transport-related CO ₂ emissions per | -57% |
| | year | |
| | Share of transport in CO ₂ footprint | 27% |
| CO ₂ footprint | Emissions: reduction relative to 2010 | 63% |
| | Compensation for footprint ^{c)} : increase relative to 2010 | 73% |
| | compensation for rootprint 1 increase relative to 2010 | 7570 |

| Table 2.10 | Summary of | of the | environmental | results o | of operational | management |
|------------|------------|--------|---------------|-----------|----------------|------------|
|------------|------------|--------|---------------|-----------|----------------|------------|

 $^{\rm a)}\,$ Purchase of wind energy with guarantees of origin, registered with CertiQ.

 $^{\mbox{\tiny b)}}$ This is 136% of the electricity consumption of WUR.

 $^{\mbox{c})}$ Calculation of the \mbox{CO}_2 emissions avoided by generating renewable energy.

Climate adaptive environment

A Climate-Adaptive environment is considered especially important by students and has been added as a new theme to the CSR agenda. Due to the coronavirus pandemic, the risk analysis scheduled for 2020 has been postponed. This risk analysis, in the form of a stress test, will identify the possible effects of climate change on Wageningen Campus. It will then be possible to determine the areas on which WUR should focus — for example through additional water capture or planting trees — in order to minimise risks. This is followed by the definition of a set of Critical Performance Indicators (KPIs) and associated targets. Until this KPI set is available, we use the KPIs that form part of the GreenMetric benchmark.

A total of 69% of the Wageningen Campus surface will be suitable for water absorption by 2020:

- 4% of the campus surface area is forested or is covered with forest-like vegetation
- 27% of the campus surface area is covered with landscaped vegetation
- 38% of the surface area (excluding wooded areas and planted vegetation) is suited for water absorption.

Waste and Circularity

WUR adopted its <u>vision for circularity</u> in 2020. This vision marks the transition from a waste management policy to a circular economy policy. In line with the Dutch government's circular economy policy, by 2030, WUR aims to halve the use of abiotic and other raw materials prior in relation to 2014 figures. This will not only reduce WUR's consumption of raw materials, it will also reduce our volume of waste. This will have an impact on procurement: circularity strategies will start to be applied in new contracts with suppliers wherever possible. The first steps for this were taken in 2020. A collaboration agreement has been signed with a number of suppliers for the use of recycled paper. Used paper products from WUR will be used as raw materials for new paper hygiene products.

WUR has three main waste streams: business waste, paper and hazardous waste. The volume of waste for each waste stream that is removed and how it is processed is now known for virtually all

locations in the Netherlands. In 2020, the total waste stream increased by 238 tonnes, or 9% (see Figure 2.7). The waste separation percentage was 73%. The effect of the coronavirus is clear in 2020, but this decrease in waste production is offset by an increase caused by the merger of RIKILT with the Laboratory for Food and Feed Safety of the NVWA to form the new institute WFSR (+131 tonnes) and a number of field trials whose harvest was not suitable for animal consumption (+500 tonnes). The collection of cans and cardboard drinking containers started at Wageningen Campus in November. The effect of this on the waste separation rate will become clear in 2021.

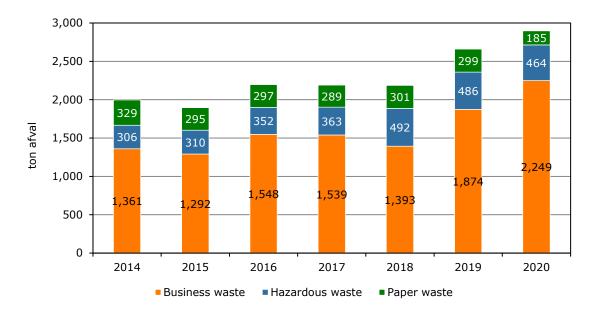


Figure 2.7 Amount of waste produced in tonnes, 2014-2020

Energy

The number of solar panels on Wageningen Campus buildings and on roofs and fields at locations in Lelystad increased by 2020. Wageningen Campus was also given a "makeover" in the autumn for the construction of a thermal energy storage loop duct (TES). More campus buildings will be connected to this TES loop in the coming years, which will drastically reduce gas consumption. The work on the loop was carried out in relative peace. Following the outbreak of the coronavirus pandemic, many employees mainly worked at home and education was largely organised off-campus. During the first lockdown, this had a spectacular effect on the buildings' energy consumption. Conversely, energy consumption went up in the summer and during the second lockdown as a result of ventilation needing to be maximised in the buildings because of the coronavirus.

WUR has committed to the Multi-Year Agreement 3 (MJA-3) on energy efficiency for universities. The objectives of the MJA3 agreement include the use of renewable energy and achieving a 30% improvement in energy efficiency. How we aim to do this is set out in the <u>2030 Energy Vision</u>. The key to this vision is to achieve further energy savings of at least 2% per year and to increase the share of sustainable energy. The energy consumption of the buildings that fall under MJA3 decreased by 5.7% in 2020 compared to 2019. Adjusted for the climatic influence, the reduction was 6.5%. This is in line with the annual target of 2%. Table 2.12 shows that, compared to the year in which MJA3 started (2005), the use of natural gas (-54%) and electricity (-17%) has decreased. In total, energy consumption was reduced by 34% by 2020. Therefore, despite the increase in the number of students and employees in recent years, the objective of the MJA3 has been met.

The MJA3 agreement for universities was valid for the period 2005-2020. A new covenant for the period 2022-2030 is being prepared. In anticipation of this, WUR was obligated by the EU Energy Efficiency Directive (EED) to carry out an energy audit of all locations, including the buildings not covered by the MJA3. This audit showed that the energy consumption of nearly all WUR property has decreased by 2.1% compared to 2019.

Table 2.11 Energy consumption

| Energy consumption | Base year 2005 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------------------|------------|------------|------------|------------|------------|
| Electricity (kWh) | 59,581,768 | 54,930,781 | 51,558,971 | 50,385,528 | 50,401,138 | 46,990,737 |
| Natural gas (Nm ³) | 11,031,812 | 6,302,302 | 5,477,413 | 5,362,499 | 5,141,970 | 5,020,796 |
| Electricity and natural gas (GJ) | 886,033 | 693,845 | 637,391 | 623,193 | 616,354 | 581,825 |
| CO ₂ (tonnes) | 53,598 | 11,290 | 9,812 | 9,606 | 9,211 | 8,994 |
| CO ₂ as a percentage of 2005 | 100 | 21 | 18 | 18 | 17 | 17 |
| Annual energy reduction (%) | | 2.3 | 6.0 | 2.2 | 1.1 | 6.5 |

Sustainable Mobility

The <u>2030 Mobility Vision</u> sets out the policy for sustainable (transport) mobility. This vision along with its implementation agenda was launched in 2019. The focus in 2020 was on promoting electric transport. Instead of using their own fleet of vehicles and rental cars, the concept of Mobility as a Service was introduced. A mobility platform for the use of electric cars was established and an additional charging station was built on the campus. The option of an electric car was also made clearer in the lease policy, and in-house service departments and suppliers were encouraged to use electric vehicles. As part of the quality improvement effort for bicycle parking facilities, the number of charging points for electric bicycles has been further increased. The Ebike2WUR project, which included trial weeks for employees, continued into 2020. A total of 150 employees tested an e-bike or speed pedelec.

The policy regarding rail and air travel within Europe was made stricter. The WUR travel check was introduced in March 2020 to clarify the new guidelines for employees. However, the introduction of the policy coincided with the beginning of the coronavirus pandemic, which suddenly made international travel impossible or very limited. The coronavirus pandemic had a big influence on commuting. A significant number of employees and students primarily worked and studied from home. Business travel within the Netherlands was also limited, which was reflected in the number of kilometres travelled by car and public transport.

The aim of the mobility vision is to reduce the CO_2 emissions of all WUR transport by an annual minimum of 2%. The partial lack of mobility due to the coronavirus is clearly visible in the CO_2 footprint. In 2020, transport emissions in CO_2 equivalents amounted to 8.3 ktonnes (19.4 ktonnes in 2019). This equates to a 27% share of the total calculated CO_2 emissions. Co_2 emissions for mobility were 57% lower than in 2019.

CO₂ footprint

Each year, WUR calculates its $\underline{CO_2}$ footprint in accordance with the ISO 14064-1, based on the Greenhouse Gas Protocol. The footprint provides insight into the direct and indirect emissions of greenhouse gases. Mapping out the emissions provides WUR with insight into what can be done to reduce and compensate for emissions. Figure 2.8 provides an overview of the CO_2 footprints calculated for recent years.

In 2020, the total CO_2 footprint will be 30.6 ktonnes of CO_2 . As such, CO_2 emissions decreased by 64% in comparison to the reference year 2010. CO_2 emissions decreased in comparison to 2019 (-26%; 10.6 ktonnes CO_2). Figure 2.9 shows the sources that contribute to the emission of CO_2 . The major sources are the buildings (especially natural gas), air travel, commuting, and agricultural lands. The effect of the coronavirus pandemic is considerable, which is reflected in the CO_2 emissions of transport movements, which were drastically lower than in previous years. WUR compensates for its CO_2 emissions by generating its own wind and solar energy, through thermal energy storage (TES) systems at Wageningen Campus and through the use of energy from biomass. Expressed in terms of CO_2 , this halted the emission of 45.1 ktonnes of CO_2 .

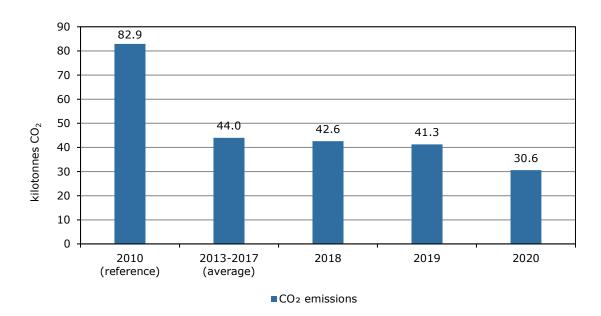


Figure 2.8 Co₂ emissions in kilotonnes, 2013-2020 with the reference year 2010

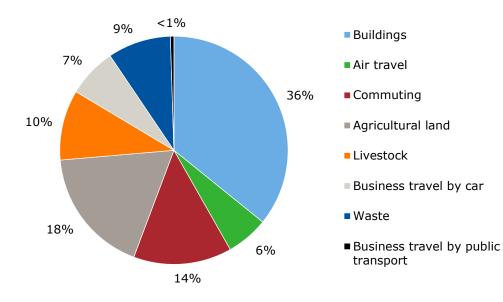


Figure 2.9 Distribution of CO₂ emissions sources in 2020

2.8.5 Procurement Policy and Supply Chain Responsibility

WUR complies with all relevant laws and regulations in the area of procurement and adheres to the principles of proportionality, objectivity, non-discrimination and transparency. In order to responsibly carry out our procurement, the integrity of the purchasers must be beyond repute. For this purpose, the NEVI Code of Conduct used as the foundation. This code of conduct respects the regulations of the United Nations on human rights and the rights of children. This code serves as a test for assessing the behaviour of purchasers. The most recent General Government Terms and Conditions for Public Service Contracts (ARVODI), General Government Purchasing Conditions (ARIV), and the Uniform Administrative Conditions for the Execution of Works and Technical Installations (UAV) are, in principle, applicable to all service contracts and outsourced work projects.

In addition to the existing laws and regulations, WUR also upholds its own procurement policy. The objective of this is to ensure that all controllable expenditures take place lawfully, efficiently and effectively, in accordance with the core values. The policies and procedures for procurement are determined by the Executive Board. The sustainability criteria of the Dutch government, as published

on <u>mvicriteria.nl</u>, are applied as much as possible. Additional sustainability criteria, including the International Social Criteria (ISC), are considered and upheld for each contract, where possible.

WUR continues to fulfil a pioneering role in the area of sustainability and corporate social responsibility (CSR). In our procurement policy, we put pressure on chains to work on a transparent, sustainable and circular basis, free of modern slavery. The results are discussed regularly with the directors of operational management and the responsible member of the Executive Board. As of 2016, the Socially Responsible Procurement (SRP) growth model has been used to measure efforts in relation to Socially Responsible Procurement (SRP) and to create greater CSR awareness throughout the organisation. The Purchasing Department has freed up additional capacity for promoting Socially Responsible Procurement (SRP) by explicitly naming and assigning this task in 2020. Efforts were made to explore the options for circular construction and demolition, to make the transparency requirements for suppliers stricter, and to apply Social Return on Investment (SROI) more often in calls for tender.

No complaints were received in 2020. More information about the activities and results of the procurement policy in relation to sustainability can be found in the <u>2020Sustainability Report</u>.

2.9 Compliance

2.9.1 Governance

Wageningen University and Wageningen Research operate as separate legal entities under the name Wageningen University & Research (WUR). In terms of administration, collaboration has been shaped by a governance union: the Executive Boards of Wageningen University and Wageningen Research consist of the same members. This is intended to guarantee maximum administrative unity between the university and the research institutes. The Executive Boards and Supervisory Boards of Wageningen University and Wageningen Research together form the Executive Board and Supervisory Board of Wageningen University & Research.

The Executive Board is responsible for the administration of the university and the research institutes and is accountable to the Supervisory Board. The Executive Board receives advice from the Board of Directors, in which the five science groups are represented by their managing directors.

The participational structure is an important partner in policy formation for the Executive Board and the managing directors of the organisational units. Each sciences group has a joint works council for employees of Wageningen University and Wageningen Research who work within the sciences groups. Additionally, there are separate works councils for Wageningen Marine Research, RIKILT, Corporate Staff, and Facilities and Services. From these works councils, a Central Works Council (COR) has been formed for which members are elected by and from among the members of the works councils. The Student Council (SC) and the Student Staff Council (SSC) are participational bodies of the university. The SSC consists of members of the Central Works Council, supplemented by two directly elected employees, two directly elected PhD candidates and members of the SC. Students and staff have an equal number of votes in the SSC.

The COR and SSC together make up the WUR Council. The consultation meetings between the Executive Board and the central participational body take place in the WUR Council and the SC. However, the WUR Council does not have any authority, as this remains with the COR and SSC.

WUR strives to ensure complete transparency regarding the governance of the organisation, behaviour and mutual rights and obligations. The general principles of good governance are set out in the <u>University Governance Code as applied to Wageningen University & Research</u>, effective 2020. The code is composed of the "Code of good governance universities" and supplemented by the provisions of the Dutch corporate governance code (NGCG) 2016 that are relevant to the Wageningen Research Foundation. The <u>Administration and Management Regulations of Wageningen University and</u> <u>Wageningen Research translate the method of administration, management and organisation of the</u> institutions into frameworks as specified in the Higher Education and Research Act (WHW) and the <u>Wageningen Research Statutes.</u>

2.9.2 Independence

The independence of scientific research is an important topic. At a time when universities are cooperating more than in the past with governments, NGOs, and the business community, guaranteeing this independence is even more important. WUR has various regulations and procedures in place to guarantee the independence of research, such as:

- Dutch Code of Conduct for Scientific Integrity
- Wageningen University & Research Integrity Code
- General terms and conditions
- <u>The Anti-Corruption Code</u>
- <u>Regulations for secondary activities</u>
- Guidelines for Appointing Professors
- <u>http://www.wur.nl/nl/Over-Wageningen/Corporate-Governance.htmWageningen University &</u> <u>Research http://www.wur.nl/nl/Over-Wageningen/Corporate-Governance.htmWhistle-Blower's</u> Regulations

Anyone who has complaints about the independent operation of researchers at WUR can address the WUR Executive Board. The complaint will then be examined by the Scientific Integrity Committee. Complaints will be assessed on the basis of the <u>Scientific Integrity Complaints Procedure</u>.

In addition to these WUR guidelines, peer reviews are conducted, there is legal supervision, and national and international inspections are carried out periodically. These official inspections to assess the quality of programmes and research groups are carried out by both official bodies and independent external experts.

Conducting independent research and publishing the research results is the core activity of WUR. Conclusions on all research are reported on the basis of facts that were proved and analysed in the research. Commissioners and/or stakeholders have no influence on this. The report always mentions the funding providers. More information can be found on our website under <u>Positioning onderzoek</u> (research positioning).

WUR not only carries out research independently, but also collaborates with businesses, governments, other knowledge institutes, citizens, and social organisations. They put knowledge into practice and challenge us to make science-based changes possible. This approach is an important aspect of our strategic plan Finding Answers Together.

Special and endowed chairs are funded by external parties. Standard agreements are in place to ensure independence from external funding providers. The full list of these chairs is published on our <u>website</u>.

According to these regulations, employees are required to ask their employer for permission in advance to carry out side activities. It is important both for WUR and for potential clients to have insight into any secondary work activities in order to prevent a possible conflict of interest. The approved side activities can be found at we@wur.

Even with this strong focus on the principle of independence and the associated assurances and control measures that were put in place, there are still situations in which we are called to account regarding our independence. Openness, discussion, and self-reflection are a great asset in a scientific environment. Input from our employees, students, clients, and stakeholders is important here. WUR can and must be called to account for its independence, and we also want to learn as an organisation in this respect: both with regard to actual breaches of our independence and imperfections in the communication about this.

2.9.3 Risk Management and Internal Control

2.9.3.1 Risk profile and risk appetite

The coronavirus pandemic that WUR faced in 2020 led to an increase in the risk profile of the organisation. The consequences of the pandemic in 2020 for the organisation's operations and the measures taken to combat its effects are discussed in detail in this annual report. However, the pandemic will also have an impact on the organisation in the longer term, such as how working from home is handled, the further development of blended learning, and the reduction of travel movements as a result of positive experiences with online meetings. The organisation will also need to pay attention to the consequences of the crisis for students and PhD candidates in the coming years. It is now clear that the government has made additional funds available to deal with these consequences.

In recent years, WU has taken a cautious approach to entering into long-term financial obligations. This caution has led to the very positive result in 2019 and 2020. The Executive Board is of the opinion that this caution has permeated too deeply and will take measures to ensure that the actual implementation of the required upscaling is necessary. To this end, a number of measures have been taken to ensure that the available resources are used to the maximum for good education and research and to address the high workload. One of these measures is the conscious allocation of additional funds within the organisation rather than the expected income, with the knowledge that the additional resources with some delay would lead to additional costs. This increases the risk profile. This is a well-considered decision, since WU has sufficient internal capital to offset any temporary shortages. WU is therefore prepared to take on more market risk. Risk tolerance is low in the areas of compliance and image.

Traditionally, WR largely derived its stability from the Ministry of Agriculture, Nature and Food Quality (LNV) funding. Until 2017, there was a rapid decline of available funding from the Ministry of Agriculture, Nature and Food Quality (LNV). In 2018, this trend has reversed, and LNV funding in 2019 and 2020 has also increased significantly. The alignment of Wageningen Research's capacity with the revised financial resources takes time. In times when financial resources are significantly increased, such as in the last three years, it is difficult to scale-up in a timely fashion to meet the capacity required to conduct the requested research. In the event of a future reduction in the large-scale LNV mandate, the reverse situation will manifest itself; it will take time to adjust capacity downwards in the event of a major reduction. For these reasons, Wageningen Research is searching for new research propositions ("markets") in order to be less reliant on LNV funding. Wageningen Research divisions take risks in order to develop new markets, because the scope and potential of the available resources in these markets are uncertain. The Executive Board considers this acceptable, provided that the research propositions fit within the business model of Wageningen Research, in which an innovative research portfolio can be built that covers its own costs on the basis of a mix of LNV funding, contract research, and grant turnover. The risk profile of the general result development is also increasing, because the sensitivity of activities to the economic climate has increased and there are fewer stabilising factors in the financial system. Wageningen Research has sufficient internal capital to offset any temporary shortages and accepts the increased risk profile, as long as solvency stays above acceptable standards. WR is therefore willing to take more market risks, risk tolerance is low in the areas of compliance and image.

2.9.3.2 Risks of strategic objectives

The WUR 2019-2022 Strategic Plan was initiated in 2019. The plan outlines how the organisation wants to answer the social issues in its domain. To maintain its global position as a top knowledge institute, the organisation will need to change. In the strategic plan, twelve Change Performance Indicators (CPIs) are defined to measure the progress of this change process. The twelve CPIs are further operationalised and quantified as part of the implementation process. The Executive Board uses these indictors to monitor the strategy's progress at the highest level.

The long-term financial forecast, including relevant internal and external developments and uncertainties, will be included in the multi-year projections for WU and WR, and will be shared with the Supervisory Board. These give an indication of the risks associated with the growth in student numbers, developments in research turnover, and support decisions for large investments, such as the

third modular education building as well as the progress of the Strategic Plan. The results are shared in the Continuity section.

The main strategic risks facing the organisational units are discussed in the quarterly meetings between the managing directors and the Executive Board. The Executive Board discusses risks with the Supervisory Board

2.9.3.3 Operational and management risks

In order to implement and monitor intended policies, WUR has a planning and control cycle. This includes:

- annual preparation of a framework letter (multi-year framework to define the tasks for upcoming financial year);
- annual budget statement for each unit;
- quarterly reports on the balance and the development of results and the risks;
- monthly monitoring of financial and liquidity developments per organisational unit and department (Early Warning System);
- the Budget Allocation and Project System (BAPS) was implemented for preparing the LNV project estimates. BAPS is used to inform cluster leaders and financial departments about the depletion of the LNV's project budgets; Additional attention was given to managing the position of "unfinished projects" in the second half of 2020, as LNV allows only limited annual underspending;
- recalculation of the cost per business unit. Deviations from previous years are being reviewed. Deviations from the previous year were clarified or explained.

The quarterly reports and the budget are a standard, integral component of the agenda in the discussions between the Executive Board and the management councils. These are organised four times each year.

Since the amount of liquidity is considerable, the policy requires regarding the spending of temporary liquidity surpluses. The treasury regulations are the applicable framework here.

Within WUR, an interest rate committee convenes once every quarter under the direction of a member of the Executive Board.

In 2020, many efforts were made to improve the management of financial processes and internal control. WUR implemented BRIX in 2020. This system uses data analysis to detect and investigate unusual transactions in the business management systems. By quickly detecting and resolving errors and deviations in business operations, the quality of business operations and their reporting improves. 50 controls were developed and put into operation in 2020. The implementation was carried out in close consultation with the decentralised organisation, thus ensuring maximum support for this project. During the first phase of the project, controls were mainly set up in the financial domain. Further roll-out in the other domains will take place in 2021.

The internal control of the grant projects continues to demand a lot of attention from the organisation. To meet the increasingly stringent requirements of funding providers, a great deal of investment is being made in improving project control through training programmes, but also by recruiting new employees with a higher level of education. Furthermore, under the direction of the Corporate Staff, efforts are carried out on the further standardisation of the instruments for project management and the implementation of the internal control of the projects has been centralised.

The internal management of financial processes and internal control fall under the responsibility of the Financial Accounting & Internal Control department. This department not only focuses on the drafting of guidelines, but also independently monitors compliance with these guidelines by the decentralised units.

The cybersecurity risks already identified in the 2019 Annual Report and several major cybersecurity incidents in the sector prompted WUR to start a major accelerated programme in the field of

information security. WUR has asked an external auditor to perform a cybersecurity assessment as part of this to get an objective view of where we stand.

At the same time, ongoing IT work on monitoring and detection tools has been expedited and all WUR employees now use the WURPasscode (2 Factor Authentication). The most important applications in the cloud have been backed up offline. WUR will be one of the first universities to connect to SURF's Security Operations Center in early 2021.

In addition to the above IT work, significant steps were taken for communication/raising awareness, such as through regular intranet communication, a video in collaboration with the LPOs (privacy officers), and the publication of a well-read magazine several times, which further promotes the slogan "WUR is serious about data". At the policy level, an update to the information security policy took place and, in collaboration with all knowledge units, significant steps were taken in data classification.

At WUR, an Architecture Board led by a member of the Executive Board meets regularly to monitor generic ICT design issues on a strategic-tactical level.

Social developments, both in the field of IT security and in our research domain, in conjunction with the open nature of the Campus, result in the risk of emergencies at WUR. WUR also actively participates in the dialogue on "knowledge security" organised by OCW (for universities) and EZ (for TO2 institutions). We also participate in the platform for integrated safety in higher education. Insights from these discussions are translated into WUR policies and processes.

In order to manage these risks when they occur for WUR as an organisation, WUR has an emergency team.

2.9.3.4 Legal risks

Tax laws demand a great deal of effort from the organisation. Topics covered in 2020 were the consequences of tax rulings on commuting allowances and other allowances to employees for the WKR and payroll tax. The formalisation of the new agreements with the tax authorities about the pro rata regulations have been ongoing since 2016. Other universities and universities of applied sciences are also inconvenienced by the slow decision-making and long internal procedures of the Dutch Tax and Customs Authority. Our final returns for the years 2016 up to and including 2019, still have not been processed by the tax authorities. WUR has already based its accounting system on the basis of the expected agreement and, since 2016, has prepared its returns on the basis of this methodology. As long as the tax authorities fail to provide clarity in this matter, there will be a lack of certainty about the amount of tax to be reclaimed.

The public procurement legislation and the increased control make high demands on the quality of the purchasing process. On the one hand, this requires the timely identification and tendering of purchases that should be put out to tender on the basis of national or European procurement directives and, on the other hand, this requires careful documentation of the legality of the other purchases. This matter is complex and requires intensive management of the purchasing process. Unlawful procurement produces risks, not only within the procurement process itself, but also in accounting for grants. In recent years, a great deal of attention has been devoted to improving compliance with procurement legislation. This process was all but completed in 2020 and the residual risks are limited.

2.9.3.5 Risk Committee

The Risk Committee met twice in 2020 and discussed, among other things, the risks associated with professors' additional employment activities and cybersecurity. A guideline on reporting and following up suspicions of fraud was also drawn up. No new reports of suspected fraud were received in 2020.

The Risk Committee has started to update the risk management in 2020. For this purpose, the Risk Committee has drawn up a risk framework, which defines how WUR conducts risk management. The risk framework includes the risk appetite, risk assessment, and the division of tasks and responsibilities. The risk appetite indicates what risks the organisation is prepared to take and thus

provides a framework for management to determine the level of risk mitigation measures to be taken. Risk assessment involves the identification, evaluation, and management of risks. This includes determining who is responsible for managing a risk. The updated framework will be further developed in 2021 and thus form the basis for risk management from 2021 onwards.

2.9.3.6 Looking ahead to 2021

The risk associated with a number of elements in WUR's risk profile will increase over the next few years. Firstly, the consequences of the coronavirus, which have already been mentioned, have direct (short-term damage) and indirect (uncertainty about long-term financing) effects. Furthermore, the strong growth of the organisation leads to an increasing risk profile. This growth needs to happen in a flexible and controlled manner to allow for a timely response to ever-changing exogenous factors, such as availability of government funding and incoming student volume. The limited labour market causes additional risks in this regard. It is more difficult to find qualified employees, which can put pressure on the remuneration structure and the size of the flex staffing. In addition, the increasingly stringent conditions and audits of our most important funding providers and the proliferation of laws and regulations contribute to a higher risk profile. Compliance with laws and regulations and the audits performed by our funding providers sets high standards for the quality of internal business operations. At the same time, society and our own organisation expects the support processes to be as efficient and cost-effective as possible to free up as much funding as possible to be channelled to the primary tasks. At times, these two objectives (more compliance vs. less overhead) are at odds with each other. Therefore, the risk management process must be further developed. As such, it is especially important that risks are detected and discussed by the relevant management transparently and in a timely fashion. To make this possible, the support departments are being developed further.

The key areas for attention for further risk management in 2021 are as follows:

- complete the update of the risk assessments and the risk appetite;
- further development of BRIX and other IT supportive control mechanisms. Data analysis and automation provide the option to redesign the control of business processes. Continuous monitoring and auditing ensure that processes can be kept track of consistently. WUR aims to invest in the development of these tools and processes, which will make it easier to guarantee the correct performance of business processes. WUR has set up controls for the most vulnerable processes in the financial domain in 2020 and will work on expanding them to other processes in 2021. WUR will also examine in 2021 how the information from the audits can be used to improve the processes (continuous improvement);
- strengthening the management of the LNV subsidies, including the top sectors. The introduction of
 the new subsidy scheme for the TO2 institutes as well as the coordination with the top sectors
 regarding financial accountability requires central coordination. On a tactical and operational level,
 the staff departments Corporate Finance and Strategic Accounts will jointly shape the coordination
 with LNV. This guarantees the coordination of the substantive and financial aspects;
- strengthening project control by centralising the development of the project control function and by centralising the internal control of projects. Special attention will be paid to collaborative, complex projects, in which WUR acts as the coordinator and is responsible for the execution involving dozens of partners in Europe and elsewhere in the world. The management of these projects requires a lot of effort from the organisation and carries risks if partners do not meet grant conditions for projects that are not adequately compensated otherwise;
- attention to the cultural aspects within the organisation. Organisations in a dynamic environment require an open culture with sufficient, in-built checks and balances. This prevents tunnel vision. For such a culture, it is necessary that management provides sufficient space to the staff departments, and particularly the controller, to make use of their independent opinion in the decision-making. This requires the controller to have a strong role and management to be willing to hear opinions from others in the organisation. The Executive Board is of the opinion that the checks and balances generally function properly, but feels that it is important to also pay additional attention to this in the coming year;
- it is very important for the organisation to have access to accurate financial forecasts in order to be able to make the right management decisions and, in turn, to use its resources in the best possible way. The quality of these forecasts will be given additional attention in 2021.

These improvement projects are set up and implemented in close consultation with the financial departments and the operational managers.

2.9.4 Remuneration of executives

The remuneration of WUR's executives is established in accordance with the rules of the Standard Remuneration Act for Public and Semi-public Sector Senior Officials (WNT). The remuneration of Supervisory Board members is in accordance with the WNT standards. In compliance with Article 1.1 of the WNT, WUR has summarised the remuneration of the Executive Board members and the Supervisory Board members in Tables 2.13, 2.14 and 2.15.

Table 2.12 Classification

| 202 | 0 Classification | Results | Complexity Points |
|-----|--|---------|--------------------------|
| Α. | Average income 2016-2018 (* € 1,000) | 343,198 | 10 |
| в. | Average number of students 2016-2018 | 10,156 | 4 |
| C. | Number of education disciplines or sectors | 3 | 5 |
| | Total | | 19 |

The maximum remuneration for 2020 is €201,000

Table 2.13 Remuneration for executives

| Overvie | ew 2020 (amounts in €) | Fresco | Mol | Buchwaldt |
|----------|--|---------|---------|-----------|
| Α. | Remuneration | 201,000 | 201,000 | 201,000 |
| | minus additional tax liability for car | - | - | - |
| A1. | Remuneration minus additional tax liability | 201,000 | 201,000 | 201,000 |
| В. | Compensation in the event of termination of contract | - | - | |
| с. | Personal expenses | | | |
| | Representation costs | 2,400 | 2,433 | 2,400 |
| | Domestic travel costs | 26,561 | 9,784 | 11,669 |
| | International travel expenses | 1,207 | 857 | 2,393 |
| | Other expenses | - | - | - |
| C1. | Total personal expenditures | 30,168 | 13,074 | 16,462 |
| D. | Total expenses | 231,168 | 214,074 | 217,462 |
| Distribu | ution across components ¹⁾ | Fresco | Mol | Buchwaldt |
| Α. | Remuneration minus additional tax liability | | | |
| 52.2% | Wageningen University | 104,930 | 104,930 | 104,930 |
| 47.8% | Wageningen Research | 96,070 | 96,070 | 96,070 |
| в. | Compensation in the event of termination of contract | | | |
| 52.2% | Wageningen University | | | |
| 47.8% | Wageningen Research | | | |
| с. | Personal expenditures ¹⁾ | | | |
| | Wageningen University | 28,331 | 11,341 | 14,017 |
| | Wageningen Research | 1,837 | 1,733 | 2,446 |
| | | | | |

¹⁾ The commitment of the Executive Board for Wageningen University and Wageningen Research is 50% each. Due to the maximum amounts set out in the WNT for charged-on employees, not all costs are charged on to the Wageningen Research Foundation.

Tables 2.13, 2.14 and 2.15 contain the consolidated information about the remuneration of the WUR personal union. These tables give the user of the financial statements required insight into the total cost of the top-level executives, members of the Supervisory Board, and non-executives. This statement differs from statutory statements as the legislation requests information by entity. The statutory statements are included in Appendix 1 of the WU and WR annual financial reports. These are consistent with the consolidated statements below.

| | L.O. Fresco | A.P.J. Mol | L.A.C. Buchwaldt |
|---|------------------|-----------------|------------------|
| Job title | President of the | Executive Board | Executive Board |
| | Executive Board | member | member |
| Period of employment in 2020 | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 |
| Extent of employment in FTE | 1 | 1 | 1 |
| (Fictitious) Employment relationship | Yes | yes | Yes |
| Remuneration | | | |
| Remuneration and taxable expense reimbursements | 179,077.92 | 179,081.28 | 179,081.28 |
| Remuneration payable in this term | 21,922.08 | 21,918.72 | 21,918.72 |
| Remuneration | 201,000.00 | 201,000.00 | 201,000.00 |
| Individual maximum remuneration | 201,000.00 | 201,000.00 | 201,000.00 |
| -/- unduly paid amount | | | |
| Total remuneration | 201,000.00 | 201,000.00 | 201,000.00 |
| Reason for exceeding the norm and other notes | n/a | n/a | N/A |
| Data from 2019 | | | |
| Period of employment in 2019 | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 |
| Scope of employment in FTE | 1 | 1 | 1 |
| Remuneration | | | |
| Remuneration | 172,975.04 | 172,861.76 | 172,860.92 |
| Provisions for long-term remuneration | 21,024.96 | 21,138.24 | 21,139.08 |
| Total remuneration | 194,000.00 | 194,000.00 | 194,000.00 |
| Individual maximum remuneration | 194,000.00 | 194,000.00 | 194,000.00 |

Table 2.14 Remuneration of executives (amounts in €)

Within our organisation, those who are identified as top level executives with an employment contract do not have an employment contract with

any other semi-public (WNT) institution(s) as managing top level executives (who entered employment from 1 January 2018).

Table 2.15 Remuneration for supervisors (amounts in €, excluding VAT)

| | J.R.V.A. Dijsselbloem | P.M. Herder | R.P. Smith | S. Korver ¹⁾ | M.A. Verhoef | T. Klimp ²⁾ |
|---|-----------------------|--------------|--------------|-------------------------|--------------|------------------------|
| Job title | Chair | Member | Member | Member | Member | Member |
| Period of employment in 2020 | 1-1 to 31-12 | 1-2 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 |
| Remuneration | | | | | | |
| Remuneration | 16,900.00 | 10,328.45 | 11,023.88 | 11,267.40 | 11,017.40 | 0.00 |
| Individual maximum remuneration | 30,150.00 | 18,447.95 | 20,100.00 | 20,100.00 | 20,100.00 | 20,100.00 |
| -/- unduly paid amount | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total remuneration | 16,900.00 | 10,328.45 | 11,023.88 | 11,267.40 | 11,017.40 | 0.00 |
| Reason for exceeding the norm and other notes | n/a | n/a | n/a | n/a | n/a | n/a |
| Payment on termination of employment | n/a | n/a | n/a | n/a | n/a | N/A |
| Data from 2019 | | | | | | |
| Duration of appointment in 2019 | 1-4 to 31-12 | | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 | 1-1 to 31-12 |
| Remuneration | | | | | | |
| Remuneration | 12,675.00 | 0.00 | 11,517.40 | 11,267.40 | 11,517.40 | 0.00 |
| Provisions for long-term remuneration | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total remuneration | 12,675.00 | 0.00 | 11,517.40 | 11,267.40 | 11,517.40 | 0.00 |
| Individual maximum remuneration | 21,924.66 | 0.00 | 19,400.00 | 19,400.00 | 19,400.00 | 19,400.00 |

¹⁾ Remuneration to company Korver Beheer en Management.

 $^{\rm 2)}$ Ms. Klimp's remuneration will be paid in 2021 and will be included in the 2021 annual report.

Table 2.16 Remuneration for non-executives (amounts in €)

| Job title | Project Leader |
|---|--|
| Period of employment in 2020 | 1-1 to 31-12 |
| Extent of employment in FTE | 0.1053 |
| Remuneration | |
| Remuneration and taxable expense reimbursements | 22,158.97 |
| Provisions for long-term remuneration | 0.00 |
| Total remuneration | 22,158.97 |
| Individual remuneration threshold | 21,157.26 |
| Reason for exceeding the norm and other notes | Payment of holiday hours not taken in previous years |
| Data from 2019 | |
| Job title | |

| Period of employment in 2019 |
|---|
| Extent of employment in FTE |
| |
| Remuneration |
| Remuneration and taxable expense reimbursements |
| Provisions for long-term remuneration |
| Total remuneration |

2.9.5 Secondary Employment Activities of Supervisory Board Members and Executive Board Members

2.9.5.1 Relevant side activities as of 31 December 2020 - Supervisory Board

Ir. J.R.V.A. Dijsselbloem (1966) (Chair of the Supervisory Board, effective 1 April 2019) Principal appointment: Chair of the Dutch Safety Board

Appointed 1 April 2019, end of current term: 1 April 2023

Committees: Appointments Committee (Chair), Audit Committee

- Chair of the Society for the Preservation of Nature in the Netherlands
- Member of the Committee of Recommendations of Transparency International Nederland
- Member of the Committee of Recommendations of the Maria van Renkum Foundation
- Chair of the (European) High Level Group in the area of Financing the transition to a sustainable economy
- Member of the Central Plan Committee at the Netherlands Bureau for Economic Policy Analysis
- Member of the Nationaal Groeifonds (national growth fund) Committee

Prof. S. Korver (1953)

Principal appointment: Professor by special appointment at Tilburg University

Appointed 1 January 2013, end of current term: 1 January 2021

Committees: Appointment Committee and Education and Research Committee (Chair)

- Chair of the Supervisory Board of LTO Bedrijven BV
- Member of the Board of the SBT Share Administration Trust
- Vice chair of the Board of the Diergeneesmiddelen Autoriteit Foundation
- Chair of the Rhenen Voluntary Land Consolidation Committee

Ms T. Klimp (1972)

Principal appointment: Senior Vice President (SVP) Strategy at Corbion

Appointed 1 September 2018, end of current term: 1 September 2022 Committees: Audit Committee Relevant side activities: none

Ms R.P. Smith (1960)

Principal appointment: none

Appointed 1 January 2013, end of current term: 1 January 2021 Committees: Audit Committee

- Member of the Board of HZPC Association
- Supervisory Board member of Coöperatie AVEBE U.A.

Ir. M.A. Verhoef (1959)

Principal appointment: Executive Board of Spirit en Bascule Jeugdhulp

Appointed 1 January 2017, end of current term: 1 January 2021 Committees: Appointment Committee and Education and Research Committee (Chair)

- Member of the Supervisory Board of Nederlands Jeugdinstituut
- Chair of the Associatie voor Jeugd
- Member of the Ministry of Social Affairs and Employment (SZW) Audit Committee
- Member of the Social Security Bank (SVB) Audit Committee
- Member of the External Integrity Committee of the Dutch Tax and Customs Authority

Prof. P.M. Herder (1971)

Principal appointment: Full Professor, Engineering Systems Design in Energy & Industry

Appointed as of 1 February 2020, end of appointment: 20 January 2021 Report of the Education and Research Committee

- Member of the TNO-Energy Strategic Advisory Board
- Chair of the Differ Instituutsadviesraad (institute advisory board)
- Member of the TKI Energy Supervisory Board
- Member of the TKI BioBased Economy Supervisory Board
- Member of the SmartPort (Roadmap Energy in Industry) Steering Committee
- Member of the Computational Sciences for Energy Research Programme, CSER Steering Committee
- Member of the NWO-TTW Board
- Member of the Supervisory Board of Advanced Dutch Energy Materials (ADEM) programme
- Scientific Director of 4TU.Energy
- Member of the Hotelschool The Hague Supervisory Board
- Chair of the Economic Board Zuid-Holland Energy Transition Task Force

2.9.5.2 Relevant side activities as of 31 December 2020 - Executive Board

Prof. L.O. Fresco (1952)

Chair

Appointed 1 July 2014, end of current term: 1 July 2018

Reappointed as of 1 July 2018, end of current term: 1 July 2022

- Editorial staff member of De Gids
- NRC column (every 14 days, less during the summer months)
- Member or honorary member of international academies incl. KNAW
- Member of the Ambassador's Council of the National Holocaust Museum in development
- Member of the National Opera and Ballet foundation Supervisory Board
- Syngenta, member of the Board of Directors (non-executive member of the one tier board)
- Trilateral commission
- Member of the World Food Prize Advisory Board (USA)
- Member of the steering committee Strategy, Public Affairs & Governance VSNU
- Wageningen Ambassadors
- Member of the Advisory Committee of Regio Deal Brainport Eindhoven (2018 2021)
- Chair of 4TU (since October 2019)
- Member of the Management Advisory Group for the Director-General of the Food and Agri culture Organization of the United Nations (FAO)
- Vice-chair of the scientific guidance committee in preparation for the World Summit on Food Systems (September 2021)
- Member of the WHO emergency committee on health and sustainability

Prof. A.P.J. Mol (1960)

Vice-President of the Executive Board and Rector Magnificus of Wageningen University

Appointed per 28 May 2015 to 1 June 2019, reappointed per 1 June 2019 to 1 June 2023

- Editor Book series New Horizons Environmental Politics (Edward Elgar).
- Member of the Board of the Research Committee Environment and Society, International Sociological Association
- Board member of the Sustainable Places Research Institute, Cardiff University, UK (2010-2020).
- Member Editorial Board Journal of:
 - Environmental Policy and Planning
 - Environmental Sociology
 - Current Opinion in Environmental Sustainability
 - Environment and Planning C
 - Nature & Culture
 - Open Environmental Sciences
 - The International Journal of Public Policy
 - Environmental Development
- Member of the Stichting 45 Advisory Board
- Member of the Wetsus Supervisory Board
- ASSOCIATION OF UNIVERSITIES IN THE NETHERLANDS:
 - Member of Rectorencollege VSNU
 - Member of the Education and Research Steering Committee
- Advanced Metropolitan Institute (AMS), member of the Scientific Advisory Committee
- Association of European Life Sciences Universities ICA, President
- 4TU Federation, member of the Executive Board, member of the Education Committee, chair of the Research Committee
- Member of the General Board of Agrifood Capital Foundation
- Member of the Board of Euro League of the Life Sciences ELLS
- Member UNESCO IHE Foundation Board
- Chair of the Guidance Committee of the Netherlands Environmental Assessment Agency
- Member of Regieteam Groenpact 2.0, a structural consultation between the Ministry of Agriculture, Nature and Food Quality, employers in the green sector, and green education
- Member of the board of the OnePlanet Research Centre Foundation
- Member of the TO2 Federatie Board
- Member of the European Bioeconomy University Board

L.A.C. Buchwaldt MBA (1961)

Portfolio of Finance, Business & Services

- Appointed 1 September 2017, end of current term: 1 September 2021
- Member of Member's Council Coöperatie SURF
- Member of the steering committee Operational Management and Finance VSNU
- Member of the DUWO Advisory Board (student housing)
- Member of the Supervisory Committee of the EFRO 2014–2020 Operational Programme, Eastern Netherlands region on behalf of WU, RUN, and UT
- Member of the Economic Board Regio FoodValley
- Member of the Economic Board Arnhem-Nijmegen
- Chair of the Academic Transfer Supervisory Board
- Member of the jury for the Agrarische Ondernemer van het Jaar (Agricultural entrepreneur of the year)
- Member of the Board of the FoodValley.nl foundation
- Chair of the Advisory Council of the Belmonte Arboretum Foundation
- Member of the Board of ACCEZ (ACCelerating Circular Economy Zuid-Holland)
- Member of the Administrative Steering Committee of Th!nk East Netherlands

2.9.6 Clarifications

Outsourcing of one or more components of CROHO Registered Study Programme(s) to a Private Organisation (+ costs)

Wageningen University does not outsource activities in the sense referred to above. Any outside expertise contracted for teaching (for example, as a consequence of the earlier 'division of duties and concentration' operations) is contracted from higher education institution partners and not from private institutions.

Customised programmes for companies/organisations

Wageningen University does not provide any customised programmes for companies and/or organisations in the form of CROHO registered courses leading to a certificate. Under the Wageningen University & Research umbrella, customisation in the form of post-initial courses is provided by the Wageningen Centre for Development and Innovation (WCDI) and Wageningen Academy (WA).

Exchange agreements

Wageningen University has 227 exchange agreements with 177 institutions. The total number of incoming students is 7 and the total number of outgoing students is 4. Due to the coronavirus pandemic, the programme has been cancelled entirely in 2020, except for the cases mentioned above.

Allocation of direct government funding for private activities

Wageningen University allocates a small portion of the direct government funding to the following private activities:

- post-initial education relating to establishing new study programmes and transferring knowledge to society;
- student facilities such as sports facilities and training activities;
- Student accommodation for international Master's students. Although the provision of student
 accommodation is not one of the university's primary duties, the acute accommodation needs
 nevertheless resulted in the Executive Board's decision in 2009 to invest in temporary
 accommodation for international students. The Supervisory Board agreed to this, in light of the
 state of Wageningen's housing market, particularly for students. Accommodation is rented out at
 fair market prices. The objective is to achieve break-even operations with these investments. No
 investments were made in temporary student accommodations in 2020.

WU did not invest in participating interests in 2020.

2.9.7 Treasury Policy

Wageningen University has incorporated the conditions of the 2016 OCW Investing, Borrowing and Derivative Regulations in its Treasury Charter. Temporary surplus liquid assets will be deposited into savings accounts or held in deposits with financial institutions that headquarters in an EU member state and at a minimum have an A rating from two of the three large rating firms. No liquid assets were held in term deposits from 31 December 2020. WU has no investments and did not negotiate any derivatives.

2.10 Economic performance indicators

2.10.1 Direct economic value

WUR is a non-profit organisation. Positive returns are added to the organisation's reserves. The table below shows the main sources of turnover for Wageningen University & Research, divided between its two legal entities: Wageningen University and Wageningen Research Foundation. More details and a substantiation of these key figures are described in the annual financial report (Chapter 3).

Table 2.17 WUR key figures (amounts in € 1 million)

| | 2018 | 2019 | 2020 |
|--|-------|-------|-------|
| Turnover from research Wageningen Research (WR) | | | |
| Contract research | 99.4 | 98.8 | 88.3 |
| Top sectors (including LNV part) | 57.2 | 60.4 | 63.5 |
| Matching market and NWO | 26.5 | 27.2 | 26.6 |
| LNV (excl. top sectors, incl. PSR, SRT) & NVWA programme | 95.8 | 116.8 | 127.5 |
| research | | | |
| Wageningen University turnover | | | |
| Turnover from direct and indirect government funding | 272.5 | 298.8 | 314.8 |
| Turnover from contract funding | 60.0 | 64.1 | 59.3 |
| Solvency as percentage of total assets | | | |
| Wageningen Research | 58.2% | 57.7% | 60.6% |
| Wageningen University | 51.9% | 52.3% | 53.1% |

2.10.1.1 Pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (*middelloonsysteem*). The current coverage ratio decreased from 97.8% to 93.2% in 2020. The policy coverage (the average of the current coverage ratios across the last twelve months) decreased in 2020 from 95.8% to 87.6%. The Ministry of Social Affairs and Employment (SZW) has adjusted the limit for pension reduction from 104% to 90% due to exceptional circumstances. ABP applies this adjustment and will not lower pensions. There was no obligation to make up any shortfall as a result of ABP's coverage ratio. This is why no provisions have been made.

2.10.1.2 Government funding

WUR receives financial support from the government. The extent of these contributions in 2020 is shown in Table 2.18.

| Legal entity | Type of funding | Income | Government contribution |
|-----------------------|---|--------|-------------------------|
| Wageningen University | Direct Government Funding | 241.9 | 241.9 |
| | Indirect government funding and research funding, including targeted subsidies | 93.0 | 35.6 |
| | Tuition and course fees | 39.2 | 0.0 |
| | Other income | 31.1 | 1.4 |
| Wageningen Research | Ministries of LNV and NVWA research programmes | 167.8 | 71.7 |
| | Contract research incl. NWO | 138.1 | 8.9 |
| | Other income | 49.2 | 0.0 |
| Total | | 760.3 | 359.5 |

| Table 2.18 | Overview of the | government's financial | contribution to WUR | (* € 1.0 million) |
|------------|-----------------|------------------------|---------------------|-------------------|
| 10010 1120 | | gerenniene sinnanena | | |

Funding from the central government consists of funding from which it does not directly benefit and that it does not directly control. This includes government funding for education and research of Wageningen University, the contribution from the LNV for knowledge base and top sector research, funding via contract research (NWO), and the TKI supplement for top sectors and other subsidies. LNV applied the TO2 grant conditions to programme research (PSR and SRT), while retaining control over the use of these funds.

2.11 Wageningen University Continuity Section

In accordance with the guidelines set out by the Ministry of Education, Culture and Science (OCW), the Continuity Section is part of Wageningen University's Annual Report. For the financial outlook for Wageningen Research in 2021, refer to the annual financial report of Wageningen Research.

Table 2.19 Key figures for Wageningen University, forecast for 2021-2025 (excluding Expat Center, price index 2020)

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|--------|--------|--------|--------|--------|--------|
| Direct government funding (in € millions) | 241.9 | 256.1 | 265.5 | 270.6 | 272.8 | 275.2 |
| Tuition fees (in € millions) | 39.2 | 38.7 | 40.5 | 40.9 | 41.1 | 41.5 |
| Direct government funding and research funding (including targeted subsidies) (in € millions) | 93.0 | 105.6 | 105.6 | 105.6 | 105.6 | 105.6 |
| Housing ratio ¹¹ | 9.2 | 10.4 | 11.3 | 11.4 | 11.7 | 12.0 |
| Investments (gross € millions) | 73.1 | 68.8 | 32.8 | 25.8 | 27.6 | 30.4 |
| Average number of employees (FTE) and allocation | 3,255 | 3,499 | 3,513 | 3,579 | 3,600 | 3,572 |
| Support staff (%) | 5.2 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 |
| Overhead staff (%) | 17.5 | 17.7 | 17.7 | 17.7 | 17.7 | 17.7 |
| Primary staff (%) | 77.3 | 77.2 | 77.2 | 77.2 | 77.2 | 77.2 |
| Number of enrolled BSc and MSc students | 12,973 | 12,988 | 13,194 | 13,382 | 13,482 | 13,666 |
| Number of PhD degrees obtained | 283 | 305 | 286 | 293 | 305 | 313 |
| Net result excl. valorisations (in \in millions) | 8.3 | -9.0 | -6.5 | -8.3 | -10.4 | -6.8 |
| Net result incl. valorisations (in € millions) | 20.5 | -9.0 | -0.2 | -7.5 | -7.1 | -7.3 |
| WU ASSETS | | | | | | |
| Capital invested in fixed assets (in \in millions) | 285.1 | 324.0 | 323.9 | 319.7 | 314.7 | 314.9 |
| Internal capital (in € millions) | 232.5 | 223.5 | 223.3 | 215.8 | 208.7 | 201.4 |
| Total liabilities (€ millions) | 437.6 | 415.5 | 415.5 | 408.0 | 400.9 | 393.7 |
| Solvency ratio 1 (%) ¹² | 53.1 | 53.6 | 53.6 | 52.8 | 52.0 | 51.1 |
| Solvency ratio 2 (%) ¹³ | 56.0 | 56.3 | 56.2 | 55.4 | 54.6 | 53.8 |
| WU LIQUIDITY | | | | | | |
| Liquid assets (in € millions) | 104.2 | 50.0 | 53.4 | 50.1 | 48.0 | 40.6 |
| Current ratio | 0.80 | 0.52 | 0.52 | 0.50 | 0.49 | 0.44 |
| | | | | | | |

2.11.1 Principles of the Financial Policy

Wageningen University has acquired a great deal more financial room in 2020 due to the allocation of the Van Rijn funds, the sector plan funds, the funds from the Quality Agreements (QA funds), and the allocations from the accumulated reserves. Wageningen University is allocating these four funding categories with a clear purpose, to reduce work pressure and to improve the quality of education.

- The allocation of the Van Rijn funds to education also indirectly creates more space for research, ensuring that the balance between doing research and teaching among existing employees is restored.
- In addition, the B&T Sector Plan provides greater opportunities for targeted research programmes and the Netherlands Organisation for Scientific Research (NWO) contributes to the further build-up of new modern facilities.
- The QA Funding is used to specifically work on a number of quality initiatives pertaining to student guidance that would not have come about without this programme.

¹¹ Housing ratio: (depreciation costs buildings and land + housing costs -/- rental of buildings) / total charges

¹² Solvency ratio 1: equity capital / total liabilities

¹³ Solvency ratio 2: (equity capital + provisions)/ total liabilities

 WU is making funds available from the reserves for the additional appointment of PhD candidates who can support the various programmes. The PhD/postdoc programme focuses on talent development, diversity, entering into and intensifying (new) partnerships, and supporting and deepening the WU investment themes.

The above programme was launched in 2019 and will be completed in 2021. This involves an annual expenditure of approximately \leq 15 million for WU. Part of this expenditure (\leq 11-12 million) is of a structural character and the other portion (\leq 3-4 million) has a term of approximately four to five years. Due to the increased government funding, it is possible to increase the programme budget to a level that is more consistent with the rise in student numbers in recent years and less at the expense of the planned research.

A number of investments will be made to house the growing organisation. Work started on the construction of a third education building and the Dialogue Centre and funds were invested in Unifarm's greenhouse complex and the thermal energy storage facility for the Campus Loop. In addition, in 2020, WUR will develop a strategic accommodation plan to address the need for space and laboratory facilities over the long-term as well. This way, WUR aims to provide an effective, modern work environment to employees and students. WUR expects to take decisions concerning the strategic accommodation plan in 2021.

The organisation experienced significant growth in 2020, and the workforce increased by 250 FTE to 3255 FTE. However, in 2020, the organisation did not yet manage to attract sufficient additional personnel to fully realise its 2020 plans, in part due to the tight labour market. The upscaling process takes a relatively long time under the current economic conditions, which is why part of the funding was not used in 2020.

A number of cost components were lower than normal in 2020 due to the coronavirus pandemic. Some of the reduced costs, such as travel expenses, would have been charged to project funding providers, so these lower costs did not lead to an improvement in the result. The pandemic also led to shifts between cost components. The multi-year projections assume that both costs and benefits return to the normal pattern.

WU has budgeted for a continued significant growth in staffing levels from 2021 and a significant increase in costs, resulting in a deficit of €9.0 million. Wageningen University therefore expects the workforce to increase significantly by 244 FTE in 2021. There is also expected to be a net influx after 2021. Ultimately, the average workforce will grow by about 315 FTE by 2025, in comparison to 2020. As a consequence, the personnel costs will ultimately increase by about €20 million per year. As a result of the scaling-up of facilities, an additional €13-€14 million in operational costs are budgeted in the long term as of 2020-2021, for instance as a result of new research facilities and the opening of the third education building in September 2021. This structural increase is ultimately primarily covered by the increase in the education/research fixed base, of which €5 million remains to be received in the period in question and €10 million has already been received for the period up to 2020 (€6.3 million in 2019 and a further €3.3 million in 2020).

In expanding its programme lines, Wageningen University has consciously opted for internal overspending, which will be overtaken by the additional income expected in the following years. In particular, the first flow of funds (direct government funding and tuition fees) will further increase in the coming years. This increase will largely cover the increase in operating costs over time. However, part of the costs will be covered by the results realised over the period 2017-2019 (from the reserves), including the additional government funding received in 2019 (Van Rijn funds) and the Science & Technology Sector Plan. WU therefore expects an operating deficit of approximately €7 million per year in the period 2021-2024. The organisation's equity capital has sufficient room to adequately cover these shortfalls. Solvency is expected to remain above 50% throughout the entire planning period.

Wageningen University will continue to create value from surplus real estate. Significant valorisation already took place in 2020, so the previously projected book profit has largely been realised. Some further book profits are expected in the planning period. These book profits are used to fund Wageningen University's real estate.

BALANCE SHEET FOR WAGENINGEN UNIVERSITY, FORECAST 2021-2025 (in € millions)

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|-------------------------|-------|-------|-------|-------|--------|-------|
| Intangible fixed assets | 3.2 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Tangible fixed assets | 279.0 | 322.6 | 322.5 | 318.3 | 313.3 | 313.5 |
| Financial fixed assets | 2.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Total fixed assets | 285.1 | 324.0 | 323.9 | 319.7 | 314.7 | 314.9 |
| Inventory | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Receivables | 48.3 | 41.5 | 38.2 | 38.2 | 38.2 | 38.2 |
| Short-term securities | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Liquid assets | 104.2 | 50.0 | 53.4 | 50.1 | 48.0 | 40.6 |
| Total current assets | 152.5 | 91.5 | 91.6 | 88.3 | 86.2 | 78.8 |
| Total Assets | 437.6 | 415.5 | 415.5 | 408.0 | 400.95 | 393.7 |
| General reserve | 210.9 | 206.2 | 207.6 | 201.6 | 196.1 | 188.8 |
| Appropriated reserve | 18.7 | 14.4 | 12.8 | 11.2 | 9.7 | 9.7 |
| Other reserve | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 | 2.9 |
| TOTAL EQUITY CAPITAL | 232.5 | 223.5 | 223.3 | 215.8 | 208.7 | 201.4 |
| Facilities | 13.0 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 |
| Long-term debt | 3.1 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |
| Short-term debt | 189.0 | 176.4 | 176.7 | 176.7 | 176.7 | 176.7 |
| TOTAL LIABILITIES | 437.6 | 415.5 | 415.5 | 408.0 | 400.9 | 393.7 |

PROFIT AND LOSS STATEMENT FOR WAGENINGEN UNIVERSITY, FORECAST 2021-2025 (in € millions)

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|-------|-------|-------|-------|-------|-------|
| INCOME | | | | | | |
| Direct Government Funding | 241.9 | 256.1 | 265.5 | 270.6 | 272.8 | 275.2 |
| Tuition fees | 39.2 | 38.7 | 40.5 | 40.9 | 41.1 | 41.5 |
| Research funding and targeted grants | 33.7 | 37.2 | 37.2 | 37.2 | 37.2 | 37.2 |
| Co-funding and subsidy market | 18.9 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |
| Top Sectors | 2.8 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| Contract research | 37.6 | 42.6 | 42.6 | 42.6 | 42.6 | 42.6 |
| Secondary activities and other income | 18.9 | 27.0 | 26.9 | 26.9 | 26.9 | 26.9 |
| Total income | 393.0 | 427.4 | 438.5 | 444.0 | 446.4 | 449.2 |
| EXPENDITURES | | | | | | |
| Personnel costs | 272.9 | 284.0 | 286.3 | 291.3 | 294.3 | 293.4 |
| Depreciation | 26.3 | 26.7 | 29.7 | 30.4 | 30.5 | 30.6 |
| Accommodation costs | 24.9 | 34.5 | 36.3 | 37.2 | 39.0 | 39.9 |
| General costs | 28.4 | 47.2 | 48.7 | 48.7 | 48.7 | 48.7 |
| Specific costs | 32.2 | 43.9 | 44.0 | 44.7 | 44.2 | 43.3 |
| Total expenditures | 384.7 | 436.3 | 445.0 | 452.3 | 456.7 | 455.9 |
| Operating result | 8.3 | -8.9 | -6.5 | -8.3 | -10.3 | -6.7 |
| Financial income and expenditures | 0.0 | -0.1 | -0.0 | -0.0 | -0.1 | -0.1 |
| Result from operational activities | 8.3 | -9.0 | -6.5 | -8.3 | -10.4 | -6.8 |
| before tax | | | | | | |
| Third-party share and value added ¹⁴ | 12.2 | 0.0 | 6.3 | 0.8 | 3.3 | -0.5 |
| Net result | 20.5 | -9.0 | -0.2 | -7.5 | -7.1 | -7.3 |

¹⁴ The book profit on sold assets is included in this line in the multi-year planning. This income is recorded in the annual financial report under "other income".

2.11.2 Internal Risk Management

The presence and function of the internal risk management and control system is described in Section 2.9.2.

2.11.3 Risks and Uncertainties

WU's results will be influenced by a number of uncertain factors, both exogenous and endogenous, in the coming years.

Pandemic (exogenous factor).

WU has been facing the coronavirus crisis since March 2020. In the first coronavirus wave from March to May, we initially had to deal with restricted services, ranging from reduced efficiency due to partially working from home to disrupted logistics chains. However, in the course of 2020, after this first wave, WU was able to reasonably adapt to the changed circumstances and has been able to keep research and education going for the most part. The impact of the second wave hit our society badly again at the beginning of December 2020. The impact of this second wave is still largely beyond the scope of the 2020 financial year in financial terms and uncertainty remains. In part, these additional uncertainties are not quantitatively included in the above multi-year financial projections and are qualitatively explained below:

- At the time of drafting the 2021 budget, it was still assumed that the situation would not be so bad in practice and that WU would return to normal working and studying conditions sooner. However, the additional effort that was needed in 2020 to deal with the changed circumstances seems to be needed again for the year 2021. As a result, higher staff expenses are once again to be expected as a result of additional allowances for employees and the external hiring of employees to support online education and online examinations. This will be offset by lower costs for facilities (cleaning, catering, and energy) and additional specific OCW allocations for 2021, including for temporary help ("coronavirus jobs").
- The number of new students for the 2021/2022 academic year, especially non-EEA (paying) students, was lower than the budget, but it did not lead to a decrease in incoming students, although the number of incoming non-EEA students was lower. There is further uncertainty about the future number of incoming students, primarily non-EEA students, for the 2021/2022 academic year due to the ongoing pandemic.
- Long-term research delays.
- The acquisition of new projects remained at the same level in 2020. As a result, given the adequate order portfolio, WU does not expect lower turnover as a result of the coronavirus pandemic in 2021, but the situation post-2021 is more uncertain.
- The government measures designed to curb this pandemic are costly and will have an impact at some level. The economic conditions in the countries from which we draw our international students and where some of our clients are located are difficult. This may have an impact on WU in the short- and medium term.

The pandemic was also the trigger for fundamental changes. For example, at WU a new view on working from home has emerged. Working from home and online meetings will increasingly become the norm in the organisation. This will change the cost of accommodation and is expected to structurally reduce travel and accommodation expenses. The consequences for the required accommodation will be included in the decisions to be made on the strategic accommodation plan.

Development of student numbers (exogenous factor)

Over the last few years, student enrolment has steadily grown. Based on the interest of potential students, student enrolment is not expected to further increase over the first few years. As a result of the increased enrolment in previous years, the total student population is expected to continue to grow modestly for a few years. The previous growth in the number of students has already translated into increased investment in education spaces and in the number of lecturers. In 2019, work commenced on the construction of a third education building. This education building is sufficient to accommodate the currently expected growth in student numbers up to about 13,400 by 2024. A further increase in the number of employees is anticipated in order to reduce the current workload caused by this increase and to accommodate future increases.

Development of non-EEA student numbers (exogenous factor)

About 10% of the students participating in study programmes at Wageningen University are international, non-EEA students who contribute to the general cost coverage by paying institutional tuition fees that are based on the full costs for this group of international students. The annual income that could be directly linked to these international non-EEA students was €17.8 million in 2020. This equates to about 4% of total income and about 17% of the size of available liquid assets at the end of 2020. Were this category of students to decrease, a number of financially tight years might follow, but the situation will normalise after a few years.

Assumptions used for the additional resource allocation included in the projections (exogenous factor).

- The additional resources announced by OCW in February 2021, specifically for 2021 and 2022, as compensation for coronavirus-related costs under the Nationaal Plan Onderwijs (national education plan NPO) have not yet been included in the multi-year projections. This additional income is likely to materialise. This could mean approximately €12 million in additional income for 2021 and a further €4 million for 2022. In part, this income will be offset by additional costs, but it will also partially absorb the current negative budgeted result, which, after all, already anticipated the advance funding problems.
- Constant prices were used in the OCW macro model. Therefore, it is assumed that the OCW will
 fully compensate the expected price decrease ("dilution") as a result of the general increase of the
 EEA student population by means of a reference estimate adjustment, included in the February
 2021 NPO.
- A best estimate of the expected wage compensation for 2021 is included as part of the 2021 projection. Price compensation is not included in the income for 2021 and no further wage or price compensation is included for after 2021. Incidentally, the staff costs after 2021 also do not include any increases in the context of the Collective Labour Agreement. For the years after 2021, it is assumed that the wage compensation offered is in line with the increases in the Collective Labour Agreement.
- Any redistribution of funds as a result of the funding discussion (Van Rijn committee) has not been taken into consideration.
- To be on the safe side, the assumption for the growth of non-EEA students (who account for a significant influx of institutional tuition fees) has been set to zero.

Valorisation of real estate in the planning period (endogenous factor).

The developments in the property market may lead to the accelerated sale and valorisation of the surplus of fixed assets during the plan period. Two significant valorisations are scheduled and have been included in 2022 and 2024. There are still uncertainties regarding both the pace of the realisation and the amount of the valorisations. If the planned valorisations do not happen in 2022-2024, then the cumulative result over these two years will be ≤ 9.6 million less. For each major investment, the impact on solvency, the result and liquidity will be included in the decision-making process at that point in time and, if developments in the external environment warrants it, the investment may be adjusted.

Underinvestment of funding (endogenous factor)

There is a possibility that in 2021, WU will once again be unable to spend the funding designated for upscaling, as broadly set out in the autumn 2019 plan, due to the previously mentioned saturation in the labour market. This risk has been captured in the budget and in the long-term projections by including a significant underspending item in operations. This will make the projections more realistic, but it will also increase the risk profile. However, the risk of underspending on the 2020 plan (drafted in autumn 2019) is estimated to be lower than in previous years. The item underinvestment of funding has been adjusted accordingly.

2.12 Report Criteria and Scope

2.12.1 Consolidated Report

The WUR Annual Report presents the organisation's performance, the social impact of its performance and the consolidated financial results. Both WU and WR have a social function. Sustainability and corporate social responsibility are an integral part of the business operations of WUR.

2.12.2 Report Criteria

This annual report has been prepared in accordance with the internationally accepted guidelines of the Global Reporting Initiative (GRI). The GRI guidelines state that the purpose of a report is as follows:

"Sustainability reporting involves the measurement and publishing of the performance of an organisation with respect to the goal of sustainable development, as well as the accountability of this to internal and external stakeholders. Sustainability reporting is a broad term considered to be synonymous with other terms that are used to describe reporting on economic, environmental and social consequences."

WUR adheres to the GRI reporting guidelines in its reports. Reporting is done in accordance with the GRI "core" application level. A full overview of the GRI indicators and related data is included in the 2020 Sustainability Report.

The external auditor will provide a report on the accuracy of the financial statements. Reporting on sustainability has not been externally audited. Data collection and accuracy within WUR are preserved through internal audits and (ISO) certification.

2.12.3 Scope

With regards to the accountability for WUR's societal impact, the materiality analysis was leading in setting the limitations and scope of this report. In the analysis, relevant and material topics for WUR were determined on the basis of the 2019-2022 Strategic Plan. Through the Identification, Prioritisation and Validation steps, these topics were then assessed on the basis of their significance for WUR and stakeholders. This Annual Report focuses on these material topics. These topics form WUR's CSR agenda see Table 2.9 of section 2.3.3.

This report covers the 2020 financial year. Because the majority of the activities of WU and WR take place in the Netherlands, the sustainability reporting focuses on activities in the Netherlands.

3 Abridged Wageningen University & Research Annual Financial Report

3.1 Wageningen University

3.1.1 Result Development

In 2020, Wageningen University recorded a positive result of \in 20.5 million, which is an increase of \in 0.5 million in comparison to 2019. This result was better than was expected in the budget.

At Wageningen University, the impact of the coronavirus pandemic is estimated to have a net effect of approximately - \in 4 million. There are additional direct costs for online education, lower tuition fees, the once-off compensation for working from home and loss of income at Wageningen Academy, for example. The more indirect negative effects such as less turnover, extra costs due to delay in research and less leave taken, jointly estimated at approximately - \in 8 million, are offset by extra compensation for delay, lower general costs (energy, travel & accommodation), lower project-related costs and more prudent contracting policy, in total about + \in 8 million.

In 2020, Wageningen University significantly caught up in scaling up its personnel and facilities, causing expenses to increase by ≤ 20.1 million. Attracting sufficient personnel on a timely basis and realising the supporting facilities is a major challenge. For this reason, in the primary process, Wageningen University was unable to spend approximately ≤ 12 million in funding — neither at the department level nor at the corporate level. It is difficult to find qualified staff and recruitment takes time. This means that the workforce has not expanded in line with the regular increase in funding as a result of the growth in student numbers and the increase in indirect government and contract research funding.

| guidelines | | | |
|---|------|------|--|
| Operating result based on the Ministry of Education, Culture and Science 20.5 | | | |
| - Addition made to the appropriated reserve for project costs in later years | 2.7 | -0.2 | |
| - Incidental result | 10.2 | 6.3 | |
| - Operational result | -6.5 | -1.8 | |
| Central departments | | | |
| Departments | 14.1 | 15.7 | |
| | 2020 | 2019 | |

Table 3.1 Wageningen University results (in € millions)

The departments achieved a positive joint annual result of ≤ 14.1 million, which is a decrease of ≤ 1.6 million in comparison to 2019. All departments achieved a positive result. These positive results are mostly due to the abovementioned factors.

The operating result of the central departments amounted to ≤ 6.5 million. This is ≤ 4.7 million lower than in 2019. When establishing the budget, the Executive Board decided to provide additional funding to the organisation to encourage chair groups to recruit additional staff. This caused the central results of the departments to decrease.

The incidental results for the Executive Board consist of the result from the sale of Kortenoord (\in 12.1 million), impairments of buildings that are being demolished (- \in 1.1 million), additional depreciation (- \in 0.7 million), and demolition costs (- \in 0.1 million). In addition, the Executive Board and corporate staff processed a number of result items amounting to \in 2.7 million that will be offset by negative results over the coming years. This concerns the funding allocated in December 2020 on the

basis of the Van Rijn Committee Report and the additional funding for science and technology research (\in 1.3 million) to be spent in later years as well as the expenditures for internal projects which will be made in the coming years (\in 1.4 million). It was no longer possible to fully utilise the Van Rijn funding and the science and technology research funding in 2020. However, the annual reporting guidelines do require that this income be properly accounted for in the year of receipt in the income statement. The funds will be spent over the coming years, which then will produce a lower result. Wageningen University has formed an appropriated reserve for these funds.

As the guidelines prescribe, Wageningen University provides accounting for the government funding in the year in which it was received as income. Income related to project costs that will be incurred in later years is calculated as income in the reporting year and a write-down in later years. The distortion this causes is neutralised via the appropriated reserve. In accordance with this approach, €1.4 million of the result was added to this appropriated reserve in 2020.

3.1.2 Development of Turnover and Costs

Revenue in 2020 increased by \in 20.6 million. The basic funding (government funding excluding targeted subsidies and tuition fees) rose from \in 264.4 million to \in 281.1 million.

Effective from 1 January 2018, Wageningen University has been funded by the Ministry of Education, Culture and Science (OCW). During the "harmonisation" of Wageningen University's funding in 2019 in line with the OCW funding model, the "capping rule" was abolished. This capping rule, which was part of the funding methodology of the Ministry of Economic Affairs (EZ), stipulated that government funding for Wageningen University could not increase, nor decrease, by more than 2% annually. In addition to the cancellation of the capping rule, Wageningen University, in the context of this harmonisation, received additional resources in 2020 in accordance with earlier planning (approximately \in 3.4 million) in the fixed components of the funding to compensate for part of the arrears previously accumulated. Due to the higher input parameters – in this case the number of funded registered students, degrees, and PhD graduations – government funding increased by approx. \in 3.9 million.

In 2019, the Van Rijn Advisory Committee presented the "Wissels om" (switchover) Report. This report provides various recommendations concerning the funding of higher education. On the basis of this report, the 4TU in 2019 already received additional funding for science and technology education and, effective from 2020, various changes have been made to the OCW funding methodology. Compared to 2019, the additional government funding from Van Rijn for Wageningen University decreased by $\in 0.9$ million to $\in 3.6$ million in 2020. On the basis of the recommendations of "Van Rijn", a transfer also took place from secondary to primary funding. In 2020, the "SEO funds" (Stimulation of European Research) were added to the lump sum of the universities. For Wageningen University, this transfer was an amount of $\in 1.8$ million. The additional resources that will be made available in the context of the science/technology sector plan from 2019 onwards have increased by $\in 0.2$ million. The resources for the Quality Agreements also increased by $\in 0.8$ million. Finally, the compensation for increased wages and prices led to an adjustment of $\in 6.4$ million.

The income from work for third parties decreased by 6% from \notin 98.5 million to \notin 93.0 million. This income consists of programme research funding (research funding and targeted subsidies), which increased by 2% to \notin 33.7 million; co-funding projects and matching market funding, which remained equal at 18.9%; and turnover from contract research and top sectors, which decreased by 9% to \notin 40.4 million. The decreased turnover from the projects is due to the fact that fewer direct costs were incurred for the projects (- \notin 7.6 million).

In comparison to 2019, staff expenses increased by \leq 27.0 million to \leq 272.9 million. This is due to higher staffing levels (+ 250 FTE), \leq 18.2 million), 2.4% higher salary costs per FTE (\leq 5.7 million), and an increase of \leq 3.1 million in the other staff expenses. In 2019, the number of staff increased from 3,005 FTE to 3,255 FTE.

Income was $\in 8.4$ million higher than budgeted (including the sale of surplus real estate). This is partly caused by the increase in government funding ($\in 4.1$ million) and the higher income from the sale of surplus real estate ($\in 12.1$ million). The income from tuition fees were $\in 1.2$ million lower than budgeted due to lower student enrolment from non-EEA countries. Income from work for third parties was also $\in 6.4$ million lower than budgeted, other income excluding sales proceeds from fixed assets was $\in 1.0$ million higher than budgeted, and income from secondary activities was $\in 1.2$ million lower than budgeted.

Costs were \in 10.0 million lower than budgeted. The abovementioned factors in relation to the scalingup of staff and facilities have played an important role in this.

3.1.3 Development of Balance Sheet Items

WU's liquidity decreased from \in 114.2 million in 2020 to \in 104.2 million. The factors that affected this drop in liquidity are listed in Table 3.2

| Table 3.2 | Wageningen University liquidity ove | erview |
|-----------|-------------------------------------|--------|
|-----------|-------------------------------------|--------|

| | 2020 |
|--|-------|
| Result excl. participating interests | 20.5 |
| Cash flow from fixed assets (cash flow from investments less depreciation and sales) | -32.9 |
| Increase in short-term receivables | -2.1 |
| Increase in short-term debts | 7.1 |
| Increase in provisions | 1.1 |
| Decrease in long-term debt and increase in long-term receivables | -3.7 |
| Total | -10.0 |

The increase in fixed assets is caused by investments in land and buildings (\in 48.4 million, mostly for the third education building), equipment and inventory (\in 21.7 million), and intangible fixed assets (\in 3.0 million). The increase in short-term debts is due to the increase in paid advances. The total liquidity position of \in 114.2 million includes advances of \in 140.8 million, of which \in 8.8 million are funds to be passed on to partners. These funds to be passed on to partners were received due to Wageningen University being the lead party for a number of consortia. These funds will be passed on to partners in 2021.

WU's solvency as of 31 December 2020 was 53.1%. This was 52.3% on 31 December 2019.

Changes in the legal structure and capital stake

Spinterest BV was liquidated in 2020. Spinterest BV did not carry out any further activities in 2020. The figures of Spinterest BV will no longer be consolidated as of 2020.

3.1.4 Outlook for 2021

For 2021, Wageningen University expects to achieve an operational result (before income from exceptional valorisation) of $- \in 9.0$ million. The result will decrease sharply compared to 2020 due to the additional expenses in relation to the continually increasing number of students. The additional staff, which were recruited over the course of 2020, will be fully included in the budget for 2021. The effects of the latest developments in the coronavirus pandemic and the measures taken by the government (national education plan - *Nationaal Plan Onderwijs*) have not yet been included in the 2021 budget. On balance, the net effect of both developments may lead to the result developing less negatively.

Turnover is expected to increase to \notin 427.4 million in 2021. This \notin 22.5 million increase is caused by an increase in basic funding of \notin 13.7 million to a total of \notin 294.8 million and a decrease in research funding and contract research funding of \notin 12.7 million to a total of \notin 105.6 million. The other income and secondary activities will decrease by \notin 4.2 million to \notin 26.9 million.

Government funding will increase by ≤ 14.2 million to ≤ 256.1 million. Of this amount, ≤ 3.9 million is related to an increase in funding variables and ≤ 4.4 million is related to anticipated additional funding to cover wage and price increases that has not yet been received. The OCW has also made additional funding (≤ 2.8 million) available to partially offset the existing funding cap during the transition from LNV to OCW. The effect of the Van Rijn funding, the quality agreements and the Science & Technology sector plan totals ≤ 3.1 million.

Tuition fees will increase by €0.5 million to €38.7 million due to the decrease in student numbers from non-EEA countries. The total number of Bachelor's and Master's students will increase from 12,973 students in October 2020 to an estimated 12,988 students in October 2021.

Direct personnel costs will increase by $\in 11.1$ million to $\in 284.0$ million. This is caused by an increase in staffing levels by 244 FTE to a total of 3,499 FTE, a decline in other staff expenses by $\in 14.5$ million due to a decrease in the number of temporary employees and a 2.7% rise in average salary expenses due to increases and wage cost developments.

Liquidity will decrease by \in 54.2 million to \in 50.0 million. With a cash position of \in 50.0 million, the continuity of business operations in 2021 is guaranteed. However, should an additional need for liquidity arise, Wageningen University also has the option of requesting collegial funding from Wageningen Research or provide access to treasury banking.

Investments are budgeted at &68.0 million. This primarily involves investments in the third education building (&23.3 million), Dialogue Centre (&14.7 million), and thermal energy storage (TES) systems (&2.5 million). Facilities and Services will invest &17.4 million, &7.2 million of which will be reserved for IT hardware and &8.9 million for inventory for the third education building. Decentralised investments are budgeted at &8.4 million. Of this amount, Shared Research Facilities will invest &2.8 million into equipment and ATV will invest &2.8 million into laboratory equipment.

For a more detailed explanation of the development of the result in the coming four years, including the expectations of the non-budgeted effects of the coronavirus pandemic and the national plan for educational resources, please refer to the continuity section in the annual report.

3.1.5 Abridged Wageningen University Annual Financial Report

CONSOLIDATED BALANCE SHEET AFTER THE ALLOCATION OF THE NET RESULT

| | | 31-12-2020 | 31-12-2019 |
|------|-------------------------|------------|------------|
| | ASSETS | | |
| | FIXED ASSETS | | |
| (1) | Intangible fixed assets | 3,232 | 612 |
| (2) | Tangible fixed assets | 278,932 | 247,032 |
| (3) | Financial fixed assets | 2,914 | 463 |
| | Total fixed assets | 285,078 | 248,107 |
| | CURRENT ASSETS | | |
| (4) | Inventory | 5 | 52 |
| (5) | Receivables | 48,321 | 42,914 |
| (6) | Liquid assets | 104,198 | 114,208 |
| | Total current assets | 152,524 | 157,174 |
| | TOTAL ASSETS | 437,602 | 405,281 |
| | CAPITAL AND LIABILITIES | | |
| | EQUITY CAPITAL | | |
| | General reserve | 210,929 | 196,079 |
| | Statutory reserve | 2,896 | |
| | Designated reserve | 18,693 | 15,976 |
| (7) | EQUITY CAPITAL | 232,518 | 212,055 |
| (8) | PROVISIONS | 12,998 | 11,875 |
| (9) | LONG-TERM DEBT | 3,120 | 4,395 |
| (10) | SHORT-TERM DEBT | 188,966 | 176,956 |
| | TOTAL LIABILITIES | 437,602 | 405,281 |

CONSOLIDATED PROFIT AND LOSS STATEMENT

| | | Results for 2020 | Budget for 2020 | Results for 2019 |
|------|--|------------------|-----------------|------------------|
| (11) | INCOME | | | |
| | Direct Government Funding | 241,907 | 237,800 | 226,359 |
| | Tuition fees | 39,153 | 40,400 | 38,060 |
| | Research funding and targeted grants | 33,708 | 36,300 | 34,326 |
| | Co-funding and matching market revenue | 18,883 | 19,700 | 18,962 |
| | Top sectors | 2,844 | 3,000 | 2,456 |
| | Bilateral market | 37,594 | 40,400 | 42,708 |
| | Secondary activities | 14,679 | 15,900 | 16,456 |
| | Other income | 16,398 | 3,300 | 5,267 |
| | Total income | 405,166 | 396,800 | 384,594 |
| | EXPENDITURES | | | |
| (12) | Personnel costs | 272,914 | 261,200 | 245,927 |
| (13) | Depreciation | 26,339 | 22,600 | 22,768 |
| (14) | Accommodation costs | 24,858 | 23,100 | 23,301 |
| (15) | General costs | 28,418 | 43,800 | 35,432 |
| (16) | Specific costs | 32,149 | 44,000 | 37,182 |
| | Total expenses | 384,678 | 394,700 | 364,610 |
| | OPERATING RESULT | 20,488 | 2,100 | 19,984 |
| (17) | Financial income and expenditures | -53 | -100 | -122 |
| | RESULT FROM OPERATIONAL ACTIVITIES BEFORE TAX | 20,435 | 2,000 | 19,862 |
| | Taxation on operational activities | 0 | 0 | C |
| (18) | Result from participating interests | 28 | 0 | 156 |
| | RESULT FROM OPERATIONAL ACTIVITIES AFTER TAX | 20,463 | 2,000 | 20,018 |
| | Third-party share | 0 | 0 | C |
| | Exceptional income and expenditures | 0 | 0 | C |
| | | | | |

 Wageningen University has coordinated the layout of the profit and loss statement with Wageningen Research foundation. Table 21 contains the statement of income and expenses in accordance with the model of the Reporting Guidelines for Educational Institutions (Regeling Jaarverslaggeving Onderwijs). Table 22 contains the itemisation of the third-party contract research in accordance with the classification of the Reporting Guidelines for Educational Institutions.

CONSOLIDATED CASH FLOW STATEMENT

| | 2020 | 2019 |
|--|---------|---------|
| OPERATIONAL ACTIVITIES | | |
| Operating result | 20,488 | 19,985 |
| Adjustments for: | | |
| Sale of assets | -12,235 | |
| Depreciation and impairments | 26,339 | 22,768 |
| Changes in provisions | 1,123 | -669 |
| | 35,715 | 42,084 |
| Changes in working capital: | | |
| Change in inventory | 47 | 10 |
| Change in receivables | -2,157 | -241 |
| Changes in short-term debt | 7,120 | 16,744 |
| Cash flow from business operations | 40,725 | 58,597 |
| Interest received | 3 | 16 |
| interest paid | -56 | -138 |
| Cash flow from operational activities | 40,672 | 58,475 |
| INVESTMENT ACTIVITIES | | |
| nvestments in intangible assets | -2,972 | -57 |
| Divestments in intangible assets | 2 | 0 |
| nvestments in buildings and land (incl. WIU) | -43,542 | -17,719 |
| nvestments in other tangible assets | -21,706 | -15,362 |
| Divestments of tangible assets | 21,234 | 202 |
| nvestments in participating interests and | -8 | 0 |
| nembers' capital | | |
| Divestments of financial fixed assets | 10 | 192 |
| Cash flow from investment activities | -46,982 | -32,744 |
| INANCING ACTIVITIES | | |
| lewly acquired loans | 0 | 0 |
| Repayment of long-term debt | 0 | 0 |
| ncrease in long-term receivables | -2,425 | 0 |
| Changes to equalisation account | -1,275 | -381 |
| Cash flow from financing activities | -3,700 | -381 |
| CASH FLOW | -10,010 | 25,350 |
| CHANGE IN LIQUID ASSETS | | |
| Balance of liquid assets on 1 January | 114,208 | 88,858 |
| Balance of liquid assets on 31 December | 104,198 | 114,208 |
| Change in liquid assets | -10,010 | 25,350 |

3.1.6 Accounting Principles

General

The annual financial report was prepared and validated by the Executive Board on 19 April 2021 and approved by the Supervisory Board on 17 May 2021. The annual financial report was prepared in accordance with the below accounting principles. Any departure from these principles is stated alongside the relevant financial information.

The settlements and debt ratios between the various members of the group (which are referred to as inter-group payments) have been eliminated. The figures for the previous financial year are in accordance with the figures in the annual financial report of the relevant year. Variations may arise as a result of corrections, shifts between items or changes in the rounding-off method. Variances of relevant significance are indicated in the annual accounts.

General accounting principles for the preparation of the annual financial accounts

Wageningen University is part of a group that also comprises Wageningen University Holding B.V., Spinterest B.V. (until 22-12-2020), ISRIC Foundation and Expat Center Foundation, in accordance with RJ940.

Receivables and payables are stated at fair value plus transaction costs on initial recognition after which they are stated at amortised cost minus any necessary provision for uncollectible debts. The amortised cost generally matches the nominal value.

The amortised cost is the amount at which a financial asset or financial liability is stated in the balance sheet on initial recognition, minus principal repayments, increased or decreased by the cumulative amortisation calculated on the basis of the effective interest method of the difference between the initial amount and the instalment, and minus any write-offs (either direct or by making a provision) due to impairments or uncollectible debts.

Monetary assets and liabilities in foreign currencies are converted at the exchange rate on the balance sheet date.

Exchange rate differences are included in the profit and loss statement. Income and expenses in foreign currency are included in the profit and loss statement at the exchange rate on the date of receipt or payment.

The annual financial report was prepared in accordance with Regeling Jaarverslaggeving Onderwijs (annual reporting regulations for educational institutions), the Dutch Civil Code, Book 2, Title 9, and the Richtlijnen voor de Jaarverslaggeving (guidelines for annual reporting).

Use of estimates

The preparation of the annual financial accounts demands that the board draw conclusions and makes estimates and motivations that affect the accounting principles and reported value of fixed assets and obligations, as well as of income and expenditures. The actual outcome will deviate from these estimates. The estimates and underlying motivations are continually evaluated. Adjustments to estimates are implemented in the period during which the adjustment is made as well as the following periods that are affected by this adjustment. The principal items subject to estimates are:

- Valuation and life span of fixed assets
- Provisions for receivables and projects
- Provisions
- Claims

Consolidation

The consolidated reports incorporate the annual financial accounts of the institution, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management. The subsidiaries are legal entities directly or indirectly controlled by WU, given that the institution possesses the majority of the voting rights or can control the financial and

operational activities in some other manner. Also taken into account are potential voting rights that may be exercised directly on the balance sheet date.

The annual accounts of WU, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management are fully incorporated into the consolidated financial report. Third party shares with respect to the group capital and the group result are reported separately.

Table 3.3 Consolidated participating interests

| | Shareholder | Registered office | % 31-12-2019 | % 31-12-2020 |
|------------------------------------|-----------------------|----------------------|-----------------|-----------------|
| Wageningen University Holding B.V. | Wageningen University | Wageningen | 100 | 100 |
| ISRIC Foundation | n/a | Wageningen | n/a | n/a |
| Expat Center Foundation | n/a | Wageningen | n/a | n/a |

Table 3.4 Non-consolidated participating interests

| | Registered office | % 31-12-2019 | % 31-12-2020 |
|-----------------------------|----------------------|-----------------|-----------------|
| Ceradis B.V. | Wageningen | 2 | 2 |
| Bio-Prodict B.V. | Wageningen | 5 | 5 |
| Green Dino B.V. | Wageningen | 11 | 11 |
| KLV Professional Match B.V. | Wageningen | 2 | 2 |
| A-Mansia Biotech SA | Louvain-la-neuve | 9 | 9 |
| Innovation Industries | Amsterdam | 0 | 0 |
| Caribou Biosciences Inc. | Delaware | 0 | 0 |
| Plant Meat Makers B.V. | Wageningen | 5 | 5 |

Accounting policies for the valuation of assets and liabilities

Intangible fixed assets

Intangible fixed assets are valued at acquisition price or production price less cumulative amortisation and, if applicable, cumulative impairments. Development costs, patents and licenses, software, goodwill, and production rights are activated if the conditions established for them are met. Intangible fixed assets are valued at acquisition or production cost. Depreciation takes place on a linear basis over five years. Pursuant to statutory obligations, a statutory reserve is maintained for the capitalised amount of development costs. Write-offs as a result of permanent impairment, sale, loss, or discontinuation are listed separately.

Tangible fixed assets

Tangible fixed assets are valued at acquisition price or production cost minus accumulated depreciation. Depreciation is applied using the linear method on the basis of the estimated useful life and the residual value. Depreciation is proportionally applied in the purchase year. Tangible fixed assets under construction or in production are valued at the acquisition price or for the amount that has already been invoiced to the company by third parties. Investments of less than ξ 5,000 are charged directly to the profit and loss statement.

Table 3.5Depreciation periods

| Asset type | Linear depreciation |
|--|---------------------|
| | in years |
| Company property/Work in progress | None |
| Site layout and infrastructure | 30 years linear |
| Company buildings | |
| Shell | 60 |
| Fittings | 30 years linear |
| Greenhouses | 20 years linear |
| Fittings and furnishings/interior of company buildings | 15 years linear |
| Sheds, miscellaneous buildings/structures | 15 years linear |
| Machinery and equipment | |
| Office furniture/machines and equipment/inventory of restaurant facilities/fibre-optic | 10 years linear |
| network/other inventory | |
| Laboratory equipment/audio-visual equipment/vehicles/PR and information material | 5/8 years linear |
| ICT equipment including software (network hardware) | 5 years linear |
| ICT equipment including software (other hardware) | 3 years linear |
| Personal computers | 4 years linear |

Acquired investment subsidies and amounts from externally-financed projects are deducted from the capitalised amount in the year of purchase. Subsidies received for the purchase of assets required for the primary operations are shown as liabilities and are released during the useful life of the asset. Highly specialised equipment that can only be used for a specific project and that does not have any value beyond this project, is capitalised but is depreciated in its entirety over the potentially shorter duration of the project (in accordance with the accounting principles). This is because the economic life of this specialised equipment is equal to the project's duration.

The expenditures for major overhauls are included in the cost price of the assets as soon as these costs are incurred and comply with the capitalisation criteria. The book value of the components that are replaced is then considered as disposed and is charged to the profit and loss statement as a lump sum. All other maintenance costs are directly charged to the profit and loss statement.

The institution carries out an evaluation on each balance sheet date to determine whether there are indications that a fixed asset may be subject to an impairment. Should there be any such indications, then the realisable value of the asset is determined. If the realisable value of the individual asset cannot be determined, then the realisable value of the cash flow generating unit to which the asset belongs is determined. A write-down is applicable when the book value of an asset is higher than the realisable value, where the realisable value is higher than the market value and the business value.

When it is determined that a write-down that was included in the past no longer exists or has decreased, then the increased book value of the asset is set no higher than the original book value would have been without the application of the write-down of the asset. Fixed assets that are no longer usable for the primary operations are not depreciated. Write-offs as a result of permanent impairment, sale, loss or discontinuation are listed separately.

The proceeds from the sale of (education) buildings is used to fund new (education) buildings in the future.

Financial fixed assets

Receivables

Receivables from and loans to participating interests, as well as the other receivables provided, are initially recognized at fair value plus the directly attributable transaction costs and subsequently valued at amortised cost using the effective interest method. Income and expenses are recognised in the profit and loss statement as soon as the receivables are transferred to a third party or are subject to an impairment (or a reversal thereof) as well as via the amortisation process.

Participating interests and capital of members over whose business and financial policy the institution exerts a significant influence are valued at net asset value. This value is determined on the basis of

the group's accounting principles for the valuation and determination of the result. Participating interests and capital of members over whose business and financial policy the institution does not exert a significant influence are valued at acquisition cost. The valuation of these assets takes into account any permanent decline in value, where relevant.

Member certificates and member accounts at cooperatives are valued at the value determined by the cooperative on the balance sheet date.

Inventory

This item comprises the trading stock. The trading stock is valued in accordance with the FIFO method at the acquisition cost or production cost increased by a margin for the indirect costs. The value of unmarketable stock or stock with a lower market value is decreased accordingly.

Receivables and accrued assets

Receivables and accrued assets are stated at fair value plus transaction costs on initial recognition after which they are stated at amortised cost minus any necessary provision for uncollectible debts.

Project costs yet to be invoiced

The balance of projects in respect of third-party contract research results in a receivable or a debt on the balance sheet. The third-party contract research is valued at the actual costs incurred, consisting of the costs that are directly related to the project (such as direct personnel costs and the costs of the acquired equipment and inventory), the costs that are attributable to the project activities in general and that are allocatable to the project (including the cost of technical assistance and the overhead costs of the project activities), and other costs insofar as they are contractually reimbursed by the client, minus the provision for expected losses and invoiced instalments or received advances relating to the third-party contract research. Projects for which the prepaid expenses exceed the invoiced instalments/received advances are recorded under other receivables. Projects for which the instalments invoiced in advance/received advances exceed the prepaid expenses are recorded under short-term debts.

Liquid assets

Liquid assets are understood to mean cash and cash equivalents, the balances on bank accounts, bills of exchange and checks that are recognised at nominal value. Deposits are included under liquid assets if they are in fact immediately available — although this may be accompanied by loss of interest income.

Liquid assets that are unavailable or are expected to be unavailable for more than twelve months are classified as financial fixed assets.

Equity capital

Wageningen University does not distinguish between private and public capital.

General reserve

This reserve is credited with the operating result in any year in which the result is not allocated to a specific use.

- Designated reserve
 - Two designated reserves are formed within the equity capital at corporate level:
 - The innovation fund
 - reserve in relation to projects to be carried out in the future.
- Statutory reserve
 - A legal reserve is maintained equal to the book value of the capitalised development costs.

Provisions

The provisions are valued at nominal value, with the exception of the personnel provisions formed on the basis of RJ 271. The determination of the amount of the obligations accounts for future indexation and price increases. The amount of the provision recognised is the best estimate of the amount that will be required to settle the relevant obligations and losses on the balance sheet date.

Provisions are created for:

- legally enforceable obligations or actual obligations that exist on the balance sheet date;
- it is likely that the settlement of obligations will require an outflow of funds; and
- a reliable estimate can be made of the extent of those obligations.

Provision for WW and BW obligations

The provision for WW and BW obligations is determined as the cover required for the unemployment insurance (WW) and civil (BW) obligations on the balance sheet date and the expected future obligations in relation to personnel that have already left and personnel with a temporary employment contract.

Provision for WIA and ZW-flex

The provision for the Work and Income (Capacity for Work) Act (WIA) and Sickness Benefits Act (ZW-flex) obligations covers the obligations pursuant to these Acts as anticipated on the balance sheet date.

Other personnel provisions – service bonuses

The anticipated obligation arising from future service (anniversary) bonuses is determined on the basis of historical information and withdrawals are made on a realisation basis. The present value is determined on the basis of the prevailing market rate of interest for WU.

Other personnel provisions - pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (*middelloonsysteem*). The current coverage ratio decreased from 97.8% to 93.2% in 2020. The policy coverage (the average of the current coverage ratios across the last twelve months) decreased in 2020 from 95.8% to 87.6%. The Ministry of Social Affairs and Employment (SZW) has adjusted the limit for pension reduction from 104% to 90% due to exceptional circumstances. ABP applies this adjustment and will not lower pensions.

There was no obligation to make up any shortfall as a result of ABP's coverage ratio. This is why no provisions have been recognised.

Provisions for reorganisation expenses

This provision was formed to cover anticipated costs incurred as a result of decisions regarding current or intended reorganisations that have been made and announced within the organisation.

Provisions for product/contract risks

This provision covers the expected cost of loss-making contracts, guarantees and claims arising from services and products delivered to third parties.

Long-term debt

Long-term debt concerns liabilities that are due in more than one year from the end of the relevant financial year. On initial recognition of long-term debt, this is stated at fair value, less the directly attributable transaction costs.

The long-term debt is valued after the first valuation at the amortised cost price according to the effective interest method. Profit or loss is recognised in the income statement as soon as the payables are no longer recognised in the balance sheet, as well as through the amortisation process.

Short-term debt

Short-term debt concerns liabilities that are due within one year of the end of the relevant financial year. On initial recognition of short-term debt, this is stated at fair value, less the directly attributable transaction costs.

The short-term liabilities are valued after the first valuation at the amortised cost price according to the effective interest method. Profit or loss is recognised in the income statement as soon as the payables are no longer recognised in the balance sheet, as well as through the amortisation process.

Accounting principles to determine income and expenses

General

Income and expenditures are the proceeds and costs which can be allocated to the relevant financial year or activity, regardless of whether they have resulted in receipts and payments during the annual reporting period.

Income is recognised in the year in which the products were delivered or the services were provided to clients. Losses and risks arising before the end of the financial year are taken into account if they are known before the preparation of the annual financial report.

Direct government funding and other payments

Direct government funding is included as income in the year in which the funding is received. Components of direct government funding that can be considered to have been specifically allocated are added as income to the extent to which costs have been incurred for the activity in question. Other payments are included in the result in the year in which the project is carried out or the costs are incurred.

Tuition and course fees

The statutory tuition fees and institutional tuition fees are recognised in the accounts of the reporting year under tuition fees. The payments for courses for professionals are included under course fees.

Other government funding and grants

Government grants are initially recognised on the balance sheet as income received in advance as soon as there is a reasonable certainty that they will be received and that Wageningen University will meet the associated conditions. Subsidies to compensate for costs incurred by the group are systematically recorded as revenue in the statement of income and expenses in the same period in which the costs are incurred. Subsidies to compensate the group for the costs of an asset are systematically recorded in the statement of income and expenses during the asset's service life. If the proceeds are related to a specific activity, they are recognised as income in proportion to the activities performed.

Income from third-party contract research

Proceeds in respect of third-party contract research are recorded as income in the statement of income and expenses for an equal amount of incurred costs, insofar as these are contractually reimbursed by the client.

Costs

The costs are determined with due observance of the aforementioned accounting policies and allocated to the relevant reporting year. Foreseeable payables and possible losses that originate before the end of the financial year are taken into account if they became known before drawing up the annual financial report and the conditions for recognising provisions have been met.

Wages, salaries, and social security contributions are recognised in the profit and loss account on the basis of the terms of employment, insofar as they are owed to employees or the tax authority respectively.

Accounting principles for the preparation of the cash flow statement

The cash flow statement was prepared using the indirect method.

System changes

Not applicable.

Changes in accounting estimates

WU has adjusted the lifespan for greenhouses from 15 to 20 years. This extended depreciation period is based on information about the service life of greenhouses from the sector. The adjustment has no effect on the valuation of the existing greenhouses: it will only be used for newly built greenhouses. The depreciation period of Site layout and Infrastructure has been adjusted from 60 to 30 years, in accordance with the service life. This adjustment is only recognised for new investments as well.

3.1.7 Auditor's Report by the Independent Auditor

For the auditor's report drawn up by the independent auditor, we kindly refer to the Dutch version of the Annual Report 2020.

3.2 Wageningen Research Foundation

3.2.1 Result Development

Wageningen Research Foundation obtained a positive net result of \in 17.0 million in 2020. This result is \in 2.1 million higher than the net result for 2019 (\in 14.9 million). The pre-tax result from ordinary operational activities amounted to \in 22.2 million.

The lack of general and specific costs, such as travel and accommodation costs in conjunction with high productivity in the second half of the year (among other things due to more presence and relatively tight staffing for the revised portfolio), played a significant role in the result obtained. The impact of the coronavirus on the result cannot be established unambiguously. The net effect is estimated to be $+ \in 6$ million. On the one hand, there is extra work at ASG Diagnostics and lower general and specific costs (including energy costs and travel and accommodation costs) at all of WR ($+ \in 11$ million). On the other hand, the result is also suffering due to decreased turnover, in particular for courses and contract research, the additional direct expenditures in connection with the restrictive measures, and the one-off allowance for working from home ($\in -5$ million).

Table 3.6 Breakdown of the result of Wageningen Research Foundation (in € millions)

| | 2020 | 2019 |
|--|------|------|
| Result from institutes and primary process | 16.5 | 13.0 |
| Result from accommodations and internal WW/BW premiums incl. the cost of capital | 6.8 | 7.0 |
| Central departments: | | |
| Incidental | 0.3 | 1.0 |
| Operational | -1.2 | -1.6 |
| Wageningen Research operating result | 22.4 | 20.4 |
| Corporate tax | -5.4 | -5.3 |
| Deferred tax asset | 0.0 | 0.8 |
| Wageningen Research Net result | 17.0 | 14.9 |

The institutes achieved a positive joint annual result of ≤ 16.5 million, an increase of ≤ 3.5 million in comparison to 2019.

3.2.2 Development of Turnover and Costs

The turnover of 2020 was \leq 355.0 million, an increase of 3.2% as a result of growing demand. For 2019, the total turnover was \leq 344.0 million. The growth in research turnover (turnover minus secondary activities and other income) was 1.1%. Wageningen Research Foundation's largest client is the Ministry of Agriculture, Nature and Food Quality (LNV), which generates approximately 44% of the total turnover (51% of research turnover). LNV's research programme increased by \leq 5.7 million in comparison to 2019, to a total of \leq 154.8 million. Another important development was the \leq 13.4 million increase in turnover from the NVWA research programme as a result of the merger with NVWA in 2019.

In comparison to 2019, staff expenses increased by \in 15.5 million to \in 221.3 million. This increase can primarily be attributed to the increase in the number of FTEs (excluding interns) by 209.

3.2.3 Development of Balance Sheet Items

The liquid assets at the end of 2020 (\in 143.7 million) had increased by \in 14.5 million compared to 2019 (\in 129.2 million). The following are the factors that explain the increase:

Table 3.7 Wageningen Research Foundation liquidity development (in € millions)

| | 2020 |
|---|-------|
| Net result | +17.0 |
| Net decrease in fixed assets (investments minus depreciation and sales) | -9.0 |
| Increase in short-term debt and receivables | +15.2 |
| Decrease in provisions | -5.3 |
| Decrease in long-term debt and receivables | -3.3 |
| Result from participating interests | -0.1 |
| Total change in liquid assets | +14.5 |

The change in fixed assets consists of \in 19.4 million in building and inventory depreciation; investment expenditures (including participating interests and members' capital) to the amount of - \in 28.8 million; divestments in the amount of \in 0.4 million. The amount of the advances received, including funds to be paid to partners, amounted to \in 86.7 million on the balance sheet date. Due to the positive result, solvency rose to 60.6%. At year-end 2019, solvency was 60.1%.

Changes in the legal structure and capital stake

Stichting Akkerweb will be part of the group from 2020.

3.2.4 Outlook for 2021

WR estimates a positive result of +€3.0 million (after corporate income tax) for 2021 on the basis of the expectation that the current coronavirus effects and measures known at the time the budget was created would more or less continue in 2021. The expectation that the result would meet the budgetary target still seems justified, partly in view of the well-filled order book for 2021. But in the somewhat longer term, Wageningen Research does expect a possible reversal of fortune if clients experience financial difficulties. The longer-term expectation for the turnover that will be generated by the Ministry of Agriculture, Nature and Food Quality (LNV) is also uncertain. It will depend very much on how the government will cover the huge coronavirus-related expenditures in the future. However, recent developments are unlikely to render the domain of WR any less important. Commitment to healthy food, sustainable design of our food production systems, and our living environment will only become more important post-pandemic. Wageningen Research will use its own reserves to invest additional resources in research related to zoonoses. In that case WR will have a negative difference from the budgeted result for these expenses.

The total Wageningen Research turnover for 2021 is budgeted at \in 378.8 million, \in 17.4 million higher than the forecast for 2020. The largest part of this increase concerns the bilateral market (+ \in 8.6 million), followed by top sectors (+ \in 7.3 million) and programme funding (+ \in 6.0 million). The institutes are focused on obtaining more turnover from the business community, Dutch municipalities, and provinces and in doing so also achieving higher project margins. A conscious choice was also made to budget for extra capacity to be able to programme the expected additional resources from LNV and to reduce the NAPRO.

The cash flow from investment activities is budgeted at &36.9 million. The budgeted investments at the central level amount to &28.7 million. This mainly concerns investments in thermal energy storage (TES) on campus (&9.5 million), the circular renovation of Edelhertweg 1 for Plant Research (&5.2 million).

Investment expenditures are planned for WBVR for modifications to animal enclosures (\in 6.1 million) and the improvement of climate systems (\in 3.2 million). The decentralised investments are budgeted at \in 8.1 million, \in 2.7 million of which involve replacement investments by Plant Research and \in 2 million by Food Safety Research in laboratory equipment.

Wageningen Research expects a liquid assets balance for 2021 of ≤ 105.0 million. The budgeted decrease of the liquid assets is mostly due to the investment expenditures. At 60%, solvency in 2021 will remain the same as in 2020.

3.2.5 Abridged Wageningen Research Annual Financial Report

CONSOLIDATED BALANCE SHEET AFTER THE ALLOCATION OF THE NET RESULT

| | Balance sheet | 31-12-2020 | 31-12-2019 |
|------|-------------------------|------------|------------|
| | ASSETS | | |
| | FIXED ASSETS | | |
| (19) | Intangible fixed assets | 2,870 | 716 |
| (20) | Tangible fixed assets | 305,196 | 298,555 |
| (21) | Financial fixed assets | 36,129 | 39,724 |
| | Total fixed assets | 344,195 | 338,995 |
| | CURRENT ASSETS | | |
| (22) | Inventory | 3,351 | 4,007 |
| (23) | Receivables | 88,012 | 83,600 |
| (24) | Liquid assets | 143,740 | 129,162 |
| | Total current assets | 235,103 | 216,769 |
| | TOTAL ASSETS | 579,298 | 555,764 |
| | CAPITAL AND LIABILITIES | | |
| | EQUITY CAPITAL | | |
| | Issued capital | 0 | 0 |
| | General reserve | 0 | 0 |
| | Statutory reserve | 2,760 | 455 |
| | Other reserves | 341,703 | 333,547 |
| | Appropriated reserve | 6,500 | 0 |
| (25) | TOTAL EQUITY CAPITAL | 350,963 | 334,002 |
| | THIRD-PARTY SHARE | 0 | 0 |
| | GROUP CAPITAL | 350.963 | 334.002 |
| | EQUALISATION ACCOUNT | 0 | 0 |
| (26) | PROVISIONS | 15,828 | 21,103 |
| (27) | LONG-TERM DEBT | 34,020 | 41,152 |
| (28) | SHORT-TERM DEBT | 178,487 | 159,507 |
| | TOTAL LIABILITIES | 579,298 | 555,764 |

CONSOLIDATED PROFIT AND LOSS STATEMENT

| | | Results for 2020 | Results for 2019 |
|------|-------------------------------------|------------------|------------------|
| | INCOME | | |
| | Basic funding | 30,614 | 25,869 |
| | Programme funding | 99,717 | 93,295 |
| | Co-funding and subsidy market | 23,854 | 24,754 |
| | Top sectors | 63,451 | 60,419 |
| | Bilateral market | 88,261 | 98,821 |
| | Secondary activities | 44,071 | 35,875 |
| | Other income | 5,088 | 4,920 |
| (29) | Total income | 355,056 | 343,953 |
| | EXPENDITURES | | |
| (30) | Personnel costs | 221,342 | 205,805 |
| (31) | General costs | 59,587 | 64,679 |
| (32) | Specific costs | 48,178 | 50,499 |
| | Total expenses | 329,107 | 320,983 |
| | Other income and expenses | 0 | 0 |
| | OPERATING RESULT | 25,949 | 22,970 |
| (33) | Financial income and expenditures | -3,709 | -3,867 |
| | RESULT FROM OPERATIONAL ACTIVITIES | 22,240 | 19,103 |
| | BEFORE TAX | | |
| (34) | Taxation on operational activities | -5,402 | -4,491 |
| (35) | Result from participating interests | 127 | 243 |
| | RESULT FROM OPERATIONAL ACTIVITIES | 16,965 | 14,855 |
| | AFTER TAX | | |
| | Third-party share | 0 | 0 |
| | Exceptional income and expenditures | 0 | 0 |
| | NET RESULT | 16,965 | 14,855 |

CONSOLIDATED CASH FLOW STATEMENT

| | Results for 2020 | Results for 2019 |
|---|------------------|------------------|
| OPERATIONAL ACTIVITIES | | |
| Operating result | 25,949 | 22,970 |
| Adjustment for sale of assets | -1,174 | -1,154 |
| Depreciation and impairments | 19,368 | 18,891 |
| Changes in provisions | -5,275 | -4,187 |
| | 38,868 | 36,520 |
| Changes in inventory | 656 | -138 |
| Changes in receivables | -4,412 | 3,174 |
| Changes in short-term debt | 20,073 | 3,368 |
| Cash flow from business operations | 55,185 | 42,924 |
| Interest received | 120 | 59 |
| Interest paid | -3,829 | -3,926 |
| Income tax paid | -6,870 | -4,491 |
| Cash flow from operational activities | 44,606 | 34,566 |
| INVESTMENT ACTIVITIES | | |
| Investments in intangible assets | -2,409 | -498 |
| Investments in buildings and land (incl. WIU) | -18,990 | -9,834 |
| Investments in other tangible assets | -7,152 | -13,737 |
| Correction regarding investment invoices still to | 375 | 0 |
| be paid | | |
| Investments in participating interests and | -181 | -264 |
| members' capital | | |
| Divestments of fixed assets | 1,562 | 4,288 |
| Cash flow from investment activities | -26,795 | -20,045 |
| FINANCING ACTIVITIES | | |
| Change in long-term receivables from the LNV | 3,903 | 3,099 |
| Change in long-term debt to the LNV | -6,303 | -6,202 |
| Change in other long-term debt | -829 | 22 |
| Decrease in lease obligations | 0 | 0 |
| Change in equity capital | -4 | 0 |
| Change in third-party share | 0 | 0 |
| Cash flow from financing activities | -3,233 | -3,081 |
| CASH FLOW | 14,578 | 11,440 |
| CHANGE IN LIQUID ASSETS | | |
| Balance of liquid assets on 1 January | 129,162 | 117,722 |
| Balance of liquid assets on 31 December | 143,740 | 129,162 |
| Change in liquid assets | 14,578 | 11,440 |

3.2.6 Accounting Principles

General

The Wageningen Research Foundation has its registered office in Wageningen and is registered in the commercial register under number 09098104. The annual financial report was prepared and validated by the Executive Board on 19 April 2021 and approved by the Supervisory Board on 17 May 2021. The annual financial report was prepared in accordance with the below accounting principles. Any departure from these principles is stated alongside the relevant financial information.

The settlements and debt ratios between the various members of the group (which are referred to as inter-group payments) have been eliminated. The figures for the previous financial year are in accordance with the figures in the annual financial report of the relevant year. Variations may arise as a result of corrections, shifts between items or changes in the rounding-off method. Variances of relevant significance are indicated in the annual accounts.

General accounting principles for the preparation of the annual financial accounts

Wageningen Research Foundation, Wageningen Research Holding B.V. and a number of subsidiaries are grouped together.

Receivables and payables are stated at fair value plus transaction costs on initial recognition after which they are stated at amortised cost minus any necessary provision for uncollectible debts. The amortised cost generally matches the nominal value.

The amortised cost is the amount at which a financial asset or financial liability is stated in the balance sheet on initial recognition, minus principal repayments, increased or decreased by the cumulative amortisation calculated on the basis of the effective interest method of the difference between the initial amount and the instalment, and minus any write-offs (either direct or by making a provision) due to impairments or uncollectible debts.

Monetary assets and liabilities in foreign currencies are converted at the exchange rate on the balance sheet date.

Exchange rate differences are included in the profit and loss statement. Income and expenses in foreign currency are included in the profit and loss statement at the exchange rate on the date of receipt or payment.

The annual financial accounts are prepared in accordance with the Netherlands Civil Code, Book 2, Title 9, and the accounting standards issued by the Dutch Accounting Standards Board.

Use of estimates

The preparation of the annual financial accounts demands that the board draw conclusions and makes estimates and motivations that affect the accounting principles and reported value of fixed assets and obligations, as well as of income and expenditures. The actual outcome will deviate from these estimates. The estimates and underlying motivations are continually evaluated. Adjustments to estimates are implemented in the period during which the adjustment is made as well as the following periods that are affected by this adjustment. The principal items subject to estimates are:

- Valuation and life span of fixed assets;
- Provisions for receivables and projects;
- Provisions;
- Claims

Consolidation

The consolidated reports incorporate the annual financial accounts of WR, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management. The subsidiaries are legal entities directly or indirectly controlled by WR, given that the institution possesses the majority of the voting rights or can control the financial and operational

activities in some other manner. Also taken into account are potential voting rights that may be exercised directly on the balance sheet date.

The annual accounts of WR, its subsidiaries and other organisations over which the institution exercises control (pursuant to the actual situation) or central management are fully incorporated into the consolidated financial report. Third party shares with respect to the group capital and the group result are reported separately.

| | Shareholder | | Registered | % end of | % end of |
|------------------------------------|-------------|-------------|------------|----------|----------|
| | | declaration | office | 2019 | 2020 |
| Agri New ventures B.V. | WBG | Ν | Wageningen | 100% | 100% |
| Wageningen Research Holding B.V. | Wageningen | Ν | Wageningen | 100% | 100% |
| | Research | | | | |
| Exploitatiemaatschappij | WBG | Ν | Wageningen | 100% | 100% |
| Windmolenparken Lelystad B.V. | | | | | |
| Wageningen Business Generator B.V. | Holding | Ν | Wageningen | 100% | 100% |
| Windmolenpark Neushoorntocht B.V. | WBG | N | Wageningen | 100% | 100% |
| Windmolenpark Mammoethtocht B.V. | WBG | Ν | Wageningen | 100% | 100% |
| Stichting Akkerweb | n/a | Ν | Wageningen | n/a | n/a |

Table 3.8 Consolidated participating interests

Table 3.9 Non-consolidated participating interests valued at acquisition cost

| | Shareholder | Registered office | % end of 2019 | % end of 2020 |
|--|-------------|----------------------|---------------|---------------|
| Bfactory B.V. | WBG | Wageningen | 17% | 17% |
| Isolife B.V. | WBG | Wageningen | 5% | 5% |
| Telemetronics Biometry B.V. | WBG | Heteren | 4% | 4% |
| Wageningen Science & Technology Consulting | Holding | Beijing | 100% | 100% |
| Services Ltd. 1) | | | | |

 $^{\mbox{\tiny 1)}}$ * in connection with size, processed at acquisition price.

| | Shareholder | Registered office | % end of 2019 | % end of 2020 |
|----------------------------|-------------|----------------------|---------------|---------------|
| CoVaccine B.V. | WBG | Lelystad | 25% | 25% |
| Fresh Forward Holding B.V. | WBG | Wageningen | 49% | 49% |
| Knowhouse B.V. | WBG | Horst | 30% | 30% |
| VOF Oostwaardhoeve | ANV | Slootdorp | 50% | 50% |

ACCOUNTING POLICIES FOR THE VALUATION OF ASSETS AND LIABILITIES

Intangible fixed assets

Intangible fixed assets are valued at acquisition price or production price less cumulative amortisation and, if applicable, cumulative impairments. Development costs, patents and licenses, software, goodwill, and production rights are activated provided the conditions established for them are met. Intangible fixed assets are valued at acquisition or production cost. Depreciation takes place on a linear basis over five years. Pursuant to statutory obligations, a statutory reserve is maintained for the capitalised amount of development costs. Write-offs as a result of permanent impairment, sale, loss or discontinuation are listed separately.

Tangible fixed assets

Tangible fixed assets are valued at acquisition price or production cost minus accumulated depreciation. Depreciation is applied using the linear method on the basis of the estimated useful life and the residual value. Depreciation is proportionally applied in the purchase year. Tangible fixed

assets under construction or in production are valued at the acquisition price or for the amount that has already been invoiced to the company by third parties. Investments of less than \in 5,000 are charged directly to the profit and loss statement.

| Table 3.11 | Depreciation | periods |
|------------|--------------|---------|
|------------|--------------|---------|

| Asset type | Linear depreciation |
|---|---------------------|
| | in years |
| Company property/Work in progress | None |
| Site layout and infrastructure | 30 years linear |
| Company buildings | |
| Shell | 60 years linear |
| Finishings (limited to company building end date) | 30 years linear |
| Greenhouses | 20 years linear |
| Fittings and furnishings/interior of company buildings (limited to company building end date) | 15 years linear |
| Sheds, miscellaneous buildings/structures | 15 years linear |
| Machinery and equipment | |
| Office furniture/machines and equipment/inventory of restaurant facilities/fibre-optic | 10 years linear |
| network/other inventory | |
| Laboratory equipment/audio-visual equipment/vehicles/PR and information material | 5/8 years linear |
| ICT equipment including software (network hardware) | 5 years linear |
| ICT equipment including software (other hardware) | 3 years linear |
| Personal Computers | 4 years linear |

Acquired investment subsidies and amounts from externally-financed projects are deducted from the capitalised amount in the year of purchase. Subsidies received for the purchase of assets required for the primary operations are shown as liabilities and are released during the useful life of the asset.

Highly specialised equipment that can only be used for a specific project and that does not have any value beyond this project is capitalised, but is depreciated in its entirety over the potentially shorter duration of the project (in accordance with the accounting principles). This is because the economic life of this specialised equipment is equal to the project's duration. The demo greenhouses are an example of this and are depreciated over a period of five years.

The expenditures for major overhauls are included in the cost price of the assets as soon as these costs are incurred and comply with the capitalisation criteria. The book value of the components that are replaced is then considered as disposed and is charged to the profit and loss statement as a lump sum. All other maintenance costs are directly charged to the profit and loss statement.

The institution carries out an evaluation on each balance sheet date to determine whether there are indications that a fixed asset may be subject to an impairment. Should there be any such indications, then the realisable value of the asset is determined. If the realisable value of the individual asset cannot be determined, then the realisable value of the cash flow generating unit to which the asset belongs is determined. A write-down is applicable when the book value of an asset is higher than the realisable value, where the realisable value is higher than the market value and the business value.

When it is determined that an impairment that was included in the past no longer exists or has decreased, the increased book value of the asset is set to no higher than the original book value would have been had the impairment of the asset not been recognised.

Fixed assets that are no longer usable for the primary operations are not depreciated. Write-offs as a result of permanent impairment, sale, loss or discontinuation are listed separately.

Financial fixed assets

Deferred tax receivables

For the valuation and processing of deferred tax assets, reference is made to the separate section on taxation of the profit or loss.

Receivables

Receivables from and loans to participating interests, as well as the other receivables provided, are initially recognized at fair value plus the directly attributable transaction costs and subsequently valued at amortised cost using the effective interest method. Income and expenses are recognised in the profit and loss statement as soon as the receivables are transferred to a third party or are subject to an impairment (or a reversal thereof), as well as via the amortisation process.

Participating interests and capital of members over whose business and financial policy the institution exerts a significant influence are valued at net asset value. This value is determined on the basis of the group's accounting principles for the valuation and determination of the result. Participating interests and members' capital over whose business and financial policy the institution does not exert a significant influence are valued at acquisition cost. The valuation of these assets takes into account any permanent decline in value, where relevant. Member certificates and member accounts at cooperatives are valued at the value determined by the cooperative on the balance sheet date.

Inventory

This item is comprised of the trading stock, finished product, livestock and stock of harvested agricultural produce. The trading stock and finished product are valued in accordance with the FIFO method at the acquisition cost or production cost increased by a margin for indirect costs. The valuation of livestock and stock of harvested agricultural produce is based on market prices. The value of unmarketable stock or stock with a lower market value is decreased accordingly. On the basis of the average annual use in the last ten years, a provision is made for antisera that according to this calculation have been in stock longer than three years.

The stock of finished product is valued in accordance with the FIFO method at the acquisition cost or production cost increased by a margin for the indirect costs.

Receivables and accrued assets

Receivables and accrued assets are stated at fair value plus transaction costs on initial recognition after which they are stated at amortised cost minus any necessary provision for uncollectible debts.

Project costs yet to be invoiced

The balance of projects in respect of third-party contract research results in a receivable or a debt on the balance sheet. The third-party contract research is valued at the actual costs incurred, consisting of the costs that are directly related to the project (such as direct personnel costs and the costs of the acquired equipment and inventory), the costs that are attributable to the project activities in general and that are allocatable to the project (including the cost of technical assistance and the overhead costs of the project activities), and other costs insofar as they are contractually reimbursed by the client, minus the provision for expected losses and invoiced instalments or received advances relating to the third-party contract research. Projects for which the prepaid expenses exceed the invoiced instalments/received advances are recorded under other receivables. Projects for which the instalments invoiced in advance/received advances exceed the prepaid expenses are recorded under short-term debts.

Liquid assets

Liquid assets are understood to mean cash and cash equivalents, the balances on bank accounts, bills of exchange and checks that are recognised at nominal value. Deposits are included under liquid assets if they are in fact immediately available — although this may be accompanied by loss of interest income. Liquid assets that are unavailable or are expected to be unavailable for more than twelve months are classified as financial fixed assets.

Equity capital

Issued capital

The nominal value of issued and paid-in capital is included under this item.

- Statutory reserve
 The mandatory maintenance of a statutory reserve for research and development costs capitalised in the balance sheet.
- Appropriated reserve

Concerns a future use established by means of a decision of the Executive Board, without establishing any obligation to a third party in this context, be it legal or factual.

General reserve

This reserve is credited with the operating result in any year in which the result is not allocated to a specific use.

Third-party share

The share of third parties in a participating interest consolidated in full by the group is included in the "Third-party share" item in the annual financial report.

Facilities

The provisions are valued at nominal value, with the exception of the personnel provisions formed on the basis of RJ 271. The determination of the amount of the obligations accounts for future indexation and price increases. The amount of the provision recognised is the best estimate of the amount that will be required to settle the relevant obligations and losses on the balance sheet date. If the effect of the time value is material, the provisions are stated at cash value.

Provisions are created for:

- legally enforceable obligations or actual obligations that exist on the balance sheet date;
- it is likely that the settlement of obligations will require an outflow of funds; and
- a reliable estimate can be made of the extent of those obligations.

Provision for unemployment insurance obligations

The provision for WW and BW obligations is determined as the cover required for the unemployment insurance (WW) and civil (BW) obligations on the balance sheet date and the expected future obligations in relation to personnel that have already left and personnel with a temporary employment contract.

Provision for WGA/ZW-flex

The provision for the Resumption of Work for Partially Disabled Persons Act (WGA) and Sickness Benefits Act (ZW-flex) covers the WGA and ZW-flex obligations for which the organisation bears the risk as of 1 January 2017, as anticipated on the balance sheet date.

Other personnel provisions – service bonuses

The anticipated obligation arising from future service (anniversary) bonuses is determined on the basis of historical information and withdrawals are made on a realisation basis. The present value is determined on the basis of the prevailing market rate of interest for WR.

Other personnel provisions - pensions

The pension scheme for the whole of WUR was (compulsorily) placed with ABP. Pension accumulation takes place on the basis of the average earnings system (*middelloonsysteem*). The current coverage ratio decreased from 97.8% to 93.2% in 2020. The policy coverage (the average of the current coverage ratios across the last twelve months) decreased in 2020 from 95.8% to 87.6%. The Minister of Social Affairs and Employment (SZW) has adjusted the limit for pension reduction from 104% to 90% due to exceptional circumstances. ABP applies this adjustment and will not lower pensions.

There was no obligation to make up any shortfall as a result of ABP's coverage ratio. This is why no provisions have been made.

Provisions for reorganisation expenses

This provision was formed to cover anticipated costs incurred as a result of decisions regarding current or intended reorganisations that have been made and announced within the organisation.

Provisions for product/contract risks

This provision covers the expected cost of loss-making contracts, guarantees and claims arising from services and products delivered to third parties.

Long-term Debt

Long-term debt concerns liabilities that are due in more than one year from the end of the relevant financial year. On initial recognition of long-term debt, this is stated at fair value, less the directly attributable transaction costs.

The long-term debt is valued after the first valuation at the amortised cost price according to the effective interest method. Profit or loss is recognised in the income statement as soon as the payables are no longer recognised in the balance sheet, as well as through the amortisation process.

Short-term debt

Short-term debt concerns liabilities that are due within one year from the end of the relevant financial year. On initial recognition of short-term debt, this is stated at fair value, less the directly attributable transaction costs.

The short-term liabilities are valued after the first valuation at the amortised cost price according to the effective interest method. Profit or loss is recognised in the income statement as soon as the payables are no longer recognised in the balance sheet, as well as through the amortisation process.

ACCOUNTING PRINCIPLES TO DETERMINE INCOME AND EXPENSES

General

Income and expenditures are the proceeds and costs which can be allocated to the relevant financial year or activity, regardless of whether they have resulted in receipts and payments during the annual reporting period.

Income is recognised in the year in which the products were delivered or the services were provided to clients. Losses and risks arising before the end of the financial year are taken into account if they are known before the preparation of the annual financial accounts.

The income from contract research is determined on the basis of the direct costs, including a supplement for indirect costs to a maximum of the rate to be paid by the finance provider. Results are calculated in proportion to the progress of the project.

Revenue from the Ministry of Agriculture, Nature and Food Quality (LNV) falling under the ministry's funding regulation is determined on the basis of the direct costs, including a supplement for indirect costs. The margin for indirect costs is determined once a year in accordance with the prevailing system for calculating the margin. Results are calculated in proportion to the progress of the project.

Taxation

Taxation on the profits includes the corporate tax (payable and deductible) for the entire financial year. The payable and deductible corporate income tax for the financial year is the corporate income tax expected to be payable for the taxable profit in the financial year, taking into account the fiscal legislation and facilities, calculated on the basis of tax rates set on the reporting date, and any corrections to the taxes owed for prior years, such as fiscally compensable losses from prior financial years.

Furthermore, WR has made a provision for a deferred tax asset, based on the difference between the valuations for tax and commercial purposes of tangible fixed assets (company buildings in particular) at the time of the introduction of the liability to pay tax. Since the period within which taxable profits

at Wageningen Research can be considered probable is relatively short, in part due to the lack of a profit motive over the long-term, the deferred tax is calculated for a period of five years.

Costs

The costs are determined with due observance of the aforementioned accounting policies and allocated to the relevant reporting year. Foreseeable payables and possible losses that originate before the end of the financial year are taken into account if they became known before drawing up the annual financial report and the conditions for recognising provisions have been met.

Wages, salaries, and social security contributions are recognised in the profit and loss account on the basis of the terms of employment, insofar as they are owed to employees or the tax authority respectively.

ACCOUNTING PRINCIPLES FOR THE PREPARATION OF THE CASH FLOW STATEMENT

The cash flow statement was prepared using the indirect method.

SYSTEM CHANGES

Not applicable.

CHANGES IN ACCOUNTING ESTIMATES

WR has adjusted the lifespan for greenhouses from 15 to 20 years. This extended depreciation period is based on information about the service life of greenhouses from the sector. The adjustment has no effect on the valuation of the existing greenhouses: it will only be used for newly built greenhouses. The depreciation period of Site layout and Infrastructure has been adjusted from 60 to 30 years, in accordance with the service life. This adjustment is only recognised for new investments as well.

3.2.7 Auditor's Report by the Independent Auditor

For the auditor's report drawn up by the independent auditor, we kindly refer to the Dutch version of the Annual Report 2020.

Appendix 1 Education at Wageningen University

Table B1.1 List of Bachelor's and Master's programmes, 2020-2021

| Bachelor's | Master's |
|---|--|
| WO Development Studies | |
| Internationale Ontwikkelingsstudies (International | International Development Studies |
| Development Studies) | |
| WO Health Sciences | |
| Gezondheid en Maatschappij (Health and Society) | |
| WO Leisure and Tourism | |
| Tourism (joint degree) | Tourism, Society and Environment |
| WO Environmental Sciences | |
| Environmental Sciences | Environmental Sciences |
| | Urban Environmental Management |
| WO Earth Sciences | |
| Soil, Water, Atmosphere | Earth and Environment |
| WO Management Studies Group | |
| Bedrijfs- en Consumentenwetenschappen (Management and | Management, Economics and Consumer Studies |
| Consumer Studies) | |
| WO Communication Science | |
| Communicatie en Life Sciences (Communication and Life | Communication, Health and Life Sciences |
| Sciences) | |
| WO Chemistry | |
| Moleculaire levenswetenschappen (Molecular Life Sciences) | Molecular Life Sciences |
| WO Life Sciences and Natural Resources | |
| Agrotechnologie (Biosystems Engineering) | Animal Sciences |
| Biotechnologie (Biotechnology) | Aquaculture and Marine Resource Management |
| Bos- en Natuurbeheer (Forest and Nature Conservation) | Bioinformatics |
| Animal Sciences | Biosystems Engineering |
| International Land and Water Management | Biotechnology |
| Landschapsarchitectuur en Ruimtelijke Planning (Landscape | Climate Studies |
| Architecture and Planning) | Development and Rural Innovation |
| Food Technology | Food Quality Management |
| Plantenwetenschappen (Plant Sciences) | Food Safety |
| Voeding en Gezondheid (Nutrition and Health) | Food Technology |
| | Forest and Nature Conservation |
| | Geo-information Science |
| | International Land- and Water Management |
| | Landscape Architecture and Planning (MLP) |
| | Nutrition and Health |
| | Organic Agriculture |
| | Plant Biotechnology |
| | Plant Sciences |
| | Water Technology (joint degree) |
| WO Biology | |
| Biologie (Biology) | Biology |
| WED Economics Group 1 | |
| Economie en Beleid (Economics and Governance) | |
| New deg | ree programmes, not yet assigned to a visitation cluster |
| | Metropolitan Analysis, Design and Engineering (joint |
| | degree) |
| | 5 / |

Table B1.2 Number of enrolled students at Wageningen University by type of enrolment and genderon 1 October 2020

| Type of Enrolment | F | irst-year | | A | All enrolments | | | |
|---------------------------------|-------|-----------|-------|-------|----------------|--------|--|--|
| | Male | Female | Total | Male | Female | Total | | |
| Students | 1,350 | 1,866 | 3,216 | 5,690 | 7,283 | 12,973 | | |
| Other enrolments: | | | | | | | | |
| Contract education participants | 9 | 7 | 16 | 16 | 13 | 29 | | |
| Second enrolment students | 81 | 152 | 233 | 91 | 167 | 258 | | |
| Erasmus double degree | | | | | | | | |
| Erasmus students | 3 | 8 | 11 | 4 | 10 | 14 | | |
| Exchange students Landscape | | | | | | | | |
| Architecture and Planning (BLP) | | | | 1 | | 1 | | |
| Total | 1,443 | 2,033 | 3,476 | 5,802 | 7,473 | 13,275 | | |

Table B1.3 Number of students, first-year and total, at Wageningen University by study phase and gender on 1 October 2020

| Types of Enrolment | F | irst-year | | All students | | | |
|--------------------|-------|-----------|-------|--------------|--------|--------|--|
| | Male | Female | Total | Male | Female | Total | |
| BSc | 755 | 994 | 1,749 | 2,763 | 3,274 | 6,037 | |
| MSc | 595 | 872 | 1,467 | 2,927 | 4,009 | 6,936 | |
| Total | 1,350 | 1,866 | 3,216 | 5,690 | 7,283 | 12,973 | |

Table B1.4 Number of Bachelor's students at Wageningen University by programme and gender on1 October 2020

| Programme | | First-year | | All students | | | |
|---|------|------------|-------|--------------|--------|-------|--|
| | Male | Female | Total | Male | Female | Total | |
| Animal Sciences (BAS) | 34 | 109 | 143 | 110 | 331 | 441 | |
| Agrotechnologie (BAT) | 32 | 13 | 45 | 142 | 33 | 175 | |
| Business and Consumer Studies (BBC) | 69 | 72 | 141 | 264 | 245 | 509 | |
| Biology (BBI) | 89 | 81 | 170 | 319 | 289 | 608 | |
| Forest and Nature conservation (BBN) | 57 | 47 | 104 | 181 | 146 | 327 | |
| Biotechnology (BBT) | 52 | 29 | 81 | 219 | 98 | 317 | |
| Communications and Life Sciences (BCL) | 8 | 33 | 41 | 27 | 82 | 109 | |
| Economics and Policy (BEB) | 22 | 9 | 31 | 122 | 51 | 173 | |
| Environmental Sciences (BES) | 39 | 84 | 123 | 124 | 211 | 335 | |
| Food Technology (BFT) | 58 | 64 | 122 | 214 | 300 | 514 | |
| Health and Society (BGM) | 9 | 40 | 49 | 20 | 156 | 176 | |
| International Land and Water Management (BIL) | 44 | 38 | 82 | 182 | 111 | 293 | |
| International Development Studies (BIN) | 13 | 57 | 70 | 52 | 197 | 249 | |
| Landscape Architecture and Spatial Planning (BLP) | 63 | 43 | 106 | 194 | 150 | 344 | |
| Molecular Life Sciences (BML) | 39 | 34 | 73 | 158 | 114 | 272 | |
| Plant Sciences (BPW) | 44 | 45 | 89 | 183 | 132 | 315 | |
| Soil, Water, Atmosphere (BSW) | 38 | 26 | 64 | 150 | 110 | 260 | |
| Tourism (joint degree) (BTO) | 17 | 24 | 41 | 42 | 82 | 124 | |
| Food and Health (BVG) | 28 | 146 | 174 | 60 | 436 | 496 | |
| Total number of enrolled students | 755 | 994 | 1,749 | 2,763 | 3,274 | 6,037 | |

| Programme | | First-year | | All students | | | | |
|--|------|------------|-------|--------------|--------|-------|--|--|
| | Male | Female | Total | Male | Female | Tota | | |
| Aquaculture and Marine Resource Management (MAM) | 33 | 18 | 51 | 97 | 66 | 163 | | |
| Animal Sciences (MAS) | 28 | 46 | 74 | 108 | 269 | 377 | | |
| Biosystems Engineering (MBE) | 20 | 5 | 25 | 113 | 24 | 137 | | |
| Bioinformatics (MBF) | 17 | 12 | 29 | 64 | 42 | 106 | | |
| Biology (MBI) | 15 | 23 | 38 | 152 | 148 | 300 | | |
| Biobased Sciences (MBS) | 16 | 7 | 23 | 65 | 28 | 93 | | |
| Biotechnology (BBT) | 35 | 30 | 65 | 240 | 164 | 404 | | |
| Communication, Health and Life Sciences (MCH) | 1 | 13 | 14 | 17 | 126 | 143 | | |
| Climate Studies (MCL) | 14 | 23 | 37 | 72 | 93 | 165 | | |
| Development and Rural Innovation (MDR) | 3 | 10 | 13 | 18 | 48 | 66 | | |
| Earth and Environment (MEE) | 4 | 12 | 16 | 121 | 92 | 213 | | |
| Environmental Sciences (MES) | 59 | 77 | 136 | 169 | 241 | 410 | | |
| Forest and Nature Conservation (MFN) | 43 | 55 | 98 | 175 | 206 | 381 | | |
| Food Quality Management (MFQ) | 5 | 16 | 21 | 32 | 76 | 108 | | |
| Food Safety (MFS) | 7 | 24 | 31 | 37 | 106 | 143 | | |
| Food Technology (MFT) | 41 | 95 | 136 | 226 | 439 | 665 | | |
| Geo-information Science (MGI) | 19 | 14 | 33 | 90 | 52 | 142 | | |
| International Development Studies (MID) | 19 | 61 | 80 | 73 | 246 | 319 | | |
| International Land and Water Management (MIL) | 6 | 9 | 15 | 90 | 90 | 180 | | |
| Landscape Architecture and Planning (MLP) | 8 | 8 | 16 | 59 | 76 | 135 | | |
| Metropolitan Analysis, Design and Engineering (joint degree) (MMD) | 27 | 29 | 56 | 68 | 60 | 128 | | |
| Management, Economics and Consumer Studies (MME) | 20 | 12 | 32 | 171 | 177 | 348 | | |
| Molecular Life Sciences (MML) | 5 | 3 | 8 | 83 | 54 | 137 | | |
| Nutrition and Health (MNH) | 12 | 95 | 107 | 72 | 488 | 560 | | |
| Organic Agriculture (MOA) | 28 | 39 | 67 | 85 | 133 | 218 | | |
| Plant Biotechnology (MPB) | 13 | 25 | 38 | 80 | 73 | 153 | | |
| Plant Sciences (MPS) | 63 | 59 | 122 | 245 | 219 | 464 | | |
| Tourism, Society and Environment (MTO) | 4 | 26 | 30 | 19 | 69 | 88 | | |
| Urban Environmental Management (MUE) | 24 | 22 | 46 | 74 | 91 | 165 | | |
| Water Technology (joint degree) (MWT) | 6 | 4 | 10 | 12 | 13 | 25 | | |
| Total number of enrolled students | 595 | 872 | 1,467 | 2,927 | 4,009 | 6,936 | | |

Table B1.5 Number of Master's students, first-year and total, at Wageningen University byprogramme and gender on 1 October 2020

| Programme | Programme Class of 2016 | | | | Cl | lass of 201 | Class of 2018 | | |
|-----------------|-------------------------|---------|---------|---------|-------|-------------|---------------|-------|-------------|
| | Ν | | % | | N | % | <i>'</i> o | N | % |
| | | After 2 | After 3 | After 4 | | After 2 | After 3 | | After 2 yrs |
| | | yrs | yrs | yrs | | yrs | yrs | | |
| MAM | 43 | 33 | 74 | 88 | 34 | 41 | 71 | 34 | 26 |
| MAS | 137 | 45 | 84 | 88 | 171 | 46 | 81 | 152 | 31 |
| MBE | 29 | 21 | 86 | 97 | 45 | 49 | 87 | 45 | 29 |
| MBF | 20 | 30 | 80 | 85 | 28 | 50 | 82 | 37 | 27 |
| MBI | 92 | 27 | 77 | 87 | 90 | 21 | 69 | 86 | 23 |
| MBS | | | | | | | | 14 | 14 |
| MBT | 158 | 49 | 80 | 88 | 141 | 38 | 83 | 146 | 33 |
| МСН | 67 | 40 | 69 | 84 | 64 | 41 | 80 | 63 | 25 |
| MCL | 25 | 44 | 68 | 80 | 39 | 26 | 74 | 35 | 3 |
| MDR | 31 | 39 | 74 | 87 | 21 | 43 | 76 | 31 | 19 |
| MEE | 75 | 24 | 76 | 83 | 67 | 39 | 75 | 70 | 17 |
| MES | 137 | 69 | 86 | 91 | 147 | 61 | 86 | 145 | 40 |
| MFN | 98 | 40 | 73 | 83 | 117 | 35 | 74 | 109 | 25 |
| MFQ | 40 | 48 | 73 | 78 | 39 | 49 | 82 | 45 | 53 |
| MFS | 91 | 48 | 78 | 85 | 66 | 41 | 79 | 62 | 42 |
| MFT | 237 | 53 | 86 | 92 | 232 | 48 | 88 | 279 | 47 |
| MGI | 44 | 27 | 84 | 84 | 48 | 31 | 77 | 52 | 23 |
| MID | 73 | 8 | 66 | 78 | 88 | 18 | 64 | 112 | 8 |
| MIL | 47 | 38 | 83 | 89 | 48 | 29 | 73 | 49 | 24 |
| MLP | 35 | 11 | 49 | 77 | 47 | 15 | 49 | 41 | 15 |
| MMD | | | | | 17 | 35 | 76 | 39 | 18 |
| MME | 126 | 40 | 85 | 94 | 129 | 50 | 81 | 147 | 40 |
| MML | 37 | 43 | 78 | 89 | 49 | 35 | 88 | 48 | 31 |
| MNH | 182 | 46 | 84 | 91 | 183 | 35 | 78 | 146 | 31 |
| MOA | 69 | 46 | 78 | 84 | 87 | 53 | 77 | 84 | 35 |
| МРВ | 56 | 30 | 80 | 88 | 51 | 35 | 75 | 56 | 34 |
| MPS | 137 | 50 | 82 | 86 | 150 | 52 | 85 | 135 | 42 |
| МТО | 21 | 48 | 86 | 90 | 23 | 43 | 70 | 24 | 42 |
| MUE | 49 | 57 | 86 | 94 | 45 | 56 | 87 | 41 | 34 |
| MWT | 20 | 65 | 85 | 85 | 18 | 89 | 94 | 18 | 78 |
| | | | | | | | | | |
| Total for all | 2,176 | 43 | 80 | 88 | 2,284 | 42 | 79 | 2,345 | 32 |
| programmes | 2,170 | CF. | 00 | 00 | 2,204 | 72 | / 9 | 2,343 | 52 |
| Total including | | | | | | | | | |
| programme | 2,176 | 44 | 82 | 90 | 2,284 | 42 | 80 | 2,345 | 33 |
| transfers | | | | | | | | | |

| Table B1.6 | Success rate of the MSc programmes | for the starting class of 2016-2017 to 2018-2019 |
|------------|-------------------------------------|--|
| | Success face of the fise programmes | |

| Table B1.7 Success rate of the BSc programmes on the basis of re-enrolments in the second year |
|---|
| (N t+2015-2016) for the starting class of 2017-2018 to 1 (N and N t+1 in absolute numbers, after |
| x year in %) |

| Programme | _ | Cla | ss of 20 | 15 | | | Class o | f 2016 | | Cla | ss of 20 | 17 |
|-----------------|-------|-------|----------|-------|-------|-------|---------|--------|-------|-------|----------|-------|
| | Ν | | | % | | Ν | 1 | 9 | 6 | P | ł | % |
| | | t+1 | After | After | After | | t+1 | After | After | N | N t+1 | After |
| | | | 3 yrs | 4 yrs | 5 yrs | | | 3 yrs | 4 yrs | | | 3 yrs |
| | | | | | | | | | yr | | | |
| BAS | 82 | 70 | 51 | 76 | 83 | 82 | 68 | 43 | 72 | 99 | 80 | 34 |
| BAT | 29 | 27 | 26 | 78 | 89 | 39 | 31 | 39 | 58 | 41 | 40 | 30 |
| BBC | 168 | 160 | 29 | 81 | 90 | 162 | 148 | 38 | 74 | 139 | 121 | 37 |
| BBI | 133 | 109 | 40 | 71 | 84 | 156 | 134 | 28 | 74 | 149 | 119 | 19 |
| BBN | 58 | 48 | 35 | 65 | 67 | 68 | 57 | 30 | 77 | 83 | 69 | 20 |
| BBT | 108 | 85 | 40 | 69 | 75 | 130 | 102 | 50 | 73 | 89 | 78 | 32 |
| BCL | 13 | 9 | 22 | 56 | 89 | 24 | 23 | 22 | 70 | 27 | 25 | 52 |
| BEB | 44 | 37 | 16 | 70 | 81 | 51 | 46 | 22 | 65 | 63 | 51 | 20 |
| BES | 35 | 30 | 37 | 67 | 0 | 55 | 50 | 50 | 78 | 60 | 47 | 53 |
| BFT | 136 | 119 | 58 | 88 | 91 | 149 | 135 | 48 | 89 | 172 | 147 | 48 |
| BGM | 80 | 68 | 54 | 84 | 85 | 62 | 55 | 51 | 89 | 56 | 47 | 68 |
| BIL | 65 | 55 | 15 | 64 | 82 | 79 | 70 | 31 | 80 | 74 | 60 | 33 |
| BIN | 81 | 71 | 38 | 82 | 86 | 86 | 79 | 41 | 76 | 86 | 73 | 36 |
| BLP | 55 | 51 | 29 | 65 | 82 | 60 | 53 | 30 | 70 | 74 | 60 | 30 |
| BML | 92 | 72 | 35 | 68 | 82 | 84 | 66 | 35 | 62 | 74 | 68 | 32 |
| BPW | 66 | 57 | 42 | 81 | 86 | 59 | 53 | 45 | 87 | 89 | 77 | 42 |
| BSW | 66 | 62 | 31 | 74 | 90 | 74 | 67 | 30 | 79 | 68 | 56 | 38 |
| вто | 22 | 20 | 70 | 75 | 85 | 29 | 28 | 71 | 82 | 39 | 32 | 69 |
| BVG | 138 | 129 | 37 | 80 | 92 | 149 | 138 | 51 | 88 | 155 | 142 | 51 |
| | | | | | | | | | | | | |
| Total for all | 1 474 | 1 270 | | 76 | 05 | 1 500 | 1 402 | 40 | | 1 627 | 1 202 | |
| programmes | 1,471 | 1,279 | 38 | 76 | 85 | 1,598 | 1,403 | 40 | 77 | 1,037 | 1,392 | 38 |
| Total including | | | | | | | | | | | | |
| programme | 1,471 | 1,340 | 37 | 74 | 84 | 1,598 | 1,469 | 39 | 75 | 1,637 | 1,467 | 36 |
| transfers | | | | | | | | | | | | |

Appendix 2 Knowledge valorisation indicators

1. Indicators for the VSNU domain "People"

1.1 Research into entrepreneurship

Table B2.1 Percentage of MSc graduates who find employment per sector

| | 2018 | 2019 | 2020 |
|--|------|------|------|
| Business community 1) | 19% | 23% | 21% |
| Business services 2) | 10% | 12% | 14% |
| Government ³⁾ | 12% | 8% | 8% |
| Other non-academic sectors ⁴⁾ | 39% | 40% | 41 |
| Universities 5) | 20% | 17% | 16% |

Source: National Alumni Survey.

1) Industry, trade, transport.

2) Information and communication, financial services, legal services, human resources, press and information, other business services.

3) Relevance to government.

4) Research institutes, universities of applied sciences, other education sectors, hospitals (including academic medical centres), health and wellbeing institutions, other healthcare, other sectors.

5) Academic universities (not including academic medical centres).

1.2 Entrepreneurship

Table B2.2 Entrepreneurship education; number of students per course

| Course code | Course name | 2017/2018 | 2018-2019 | 2019-2020 |
|-------------|------------------------------------|-----------|-----------|-----------|
| CPT-22806 | Innovation Management and | 96 | | 58 |
| | Transdisciplinary Design | | 72 | |
| BMO-51306 | Economics of Science and | 29 | | 24 |
| | Technology | | 30 | |
| BMO-35306 | Principles of Entrepreneurship | 70 | 67 | 82 |
| | Sub-total of minor courses | 195 | 169 | 164 |
| BMO-56806 | Business Cases Agri-Food | 67 | | 50 |
| | Entrepreneurship | | 45 | |
| ELS-51306 | Competence Management for | 23 | | 17 |
| | Building Entrepreneurial Teams | | 15 | |
| ELS-66100 | Entrepreneurial Skills | 33 | 58 | 44 |
| BMO-55806 | Entrepreneurship and Innovation in | 12 | 25 | 27 |
| | Emerging Economies | | | |
| YMS-31803 | Entrepreneurial Skills 1 | 18 | 38 | 35 |
| YMS-31903 | Entrepreneurial Skills 2 | 18 | 38 | 34 |
| ELS-66700 | Pursuing and Realising | 66 | | 51 |
| | Entrepreneurial Projects | | 72 | |
| BMO-23406 | New Venture Creation: from Idea to | 39 | | 48 |
| | Business Plan | | 32 | |
| BMO-33806 | Circular Entrepreneurship: Co- | 40 | | 49 |
| | creating the circular economy | | 40 | |
| BMO-53806 | Business and Society | 14 | 12 | 6 |
| | Sub-total of other courses | 330 | 375 | 361 |
| | TOTAL | 525 | 544 | 525 |

1.3 Lifelong Learning

Table B2.3 Courses for professionals

| Wageningen Academy (WU) | 2018 | 2019 | 2020 |
|---|-------|--------|-------|
| Number of open registrations | 1,030 | 1,047 | 566 |
| Number of open registrations for courses | 40 | 43 | 27 |
| Number of course participants in in-company courses | 992 | 805 | 76 |
| Number of in-company courses | 36 | 21 | 4 |
| | | | |
| WCDI (WR) | 2018 | 2019 | 2020 |
| Course participants open registrations | 840 | 968 | 784 |
| Number of courses given | 31 | 35 | 34 |
| Number of completed course days* | | 12,225 | 5,465 |
| | | | |

*Number of course days \boldsymbol{x} number of students.

2 Indicators for the VSNU domain "Results"

2.1 Patents

Table B2.4 Number of new patent applications for Wageningen University & Research and total active patent families in portfolio

| | 2018 | 2019 | 2020 | Total active patent families in Wageningen |
|---------------------------|------|------|------|--|
| | | | | University & Research portfolio |
| WU | 12 | 8 | 16 | 64 |
| WR | 10 | 5 | 4 | 72 |
| Wageningen University & | 22 | 13 | 19* | 133* |
| Research new applications | | | | |

* Due to joint WU/WR applications.

2.2 Licences

Table B2.5 Number of licenses for patents, breeds, models and materials in 2020

| | Number of |
|--|-----------|
| | licenses |
| WU | 19 |
| WR | 126 |
| Total for Wageningen University & Research | 145 |

2.3 Entrepreneurship

Table B2.6 Number of new spin-offs and student or staff startups

| | 2018 | 2019 | 2020 |
|---------------------|------|------|------|
| Number of spin-offs | 1 | 4 | 3 |
| Number of startups | 7 | 3 | 7 |

2.4 Client satisfaction and knowledge utilisation Wageningen Research

Table B2.7 Customer satisfaction in 2020

| Customer satisfaction | Number | Score | Total | Final score |
|-----------------------------|--------|-------|-------|-------------|
| Very satisfied | 41 | 10 | 410 | |
| Satisfied | 65 | 8 | 520 | |
| Neutral | 12 | 6 | 72 | |
| Dissatisfied | 2 | 4 | 8 | |
| Very dissatisfied | 0 | 2 | 0 | |
| Total number of respondents | 120 | | 1,010 | 8.4 |

Table B2.8 Knowledge utilisation in 2020

| Assessment of project results | Percentage |
|-------------------------------|------------|
| Useful | 96% |
| Not useful | 2% |
| No comment | 2% |

Of these, the project results were used for:

| Knowledge utilisation | Percentage |
|---------------------------|------------|
| New/renewed product | 15.6% |
| New/renewed process | 8.4% |
| Policy formation | 24.7% |
| Strategic decision-making | 13.0% |
| Legal obligation | 4.5% |
| Basic knowledge | 16.2% |
| Follow-up research | 12.3% |
| Not yet known | 5.2% |

3 Indicators for the VSNU domain "Collaboration"

3.1 Collaboration

Table B2.9 Number of completed research projects for the benefit of societal, non-affluentorganisations

| Initiative | Target Group | Number of completed | Number of | Number of | Number of |
|--------------|---------------|----------------------|-------------|------------------|--------------|
| | | research projects in | students | WU/WR | external |
| | | 2020 | involved | employees | stakeholders |
| | | | (Bachelor's | involved | involved in |
| | | | and | (including | projects |
| | | | Master's) | project leaders) | |
| Science Shop | Societal | 17 | 169 | 46 | 62 |
| | organisations | | | | |

| Table B2.10 | Number of student projects carried out in response to requests from various societal |
|--------------|--|
| stakeholders | |

| Initiative | Target Group | Number of student | Number of | Number of WU/WR |
|------------------------------|------------------------|-----------------------|---------------|-----------------|
| | | projects conducted in | students | employees |
| | | 2020 | involved | involved in |
| | | | (Bachelor's | supervision |
| | | | and Master's) | |
| Education Project | SMEs & startups | 90 | | |
| Services | Multinationals | 32 | | |
| (Society Based Education) | PPS consortia | 4 | | |
| | Relevance to | 15 | 1,795 | 438 |
| | government | | | |
| | Societal organisations | 50 | | |
| | Knowledge institutes | 26 | | |
| | Other | 27 | | |

| Table B2.11 | Contribution to other education: number of pupils and teachers reached, number of |
|---------------|---|
| Wageningen Un | iversity employees involved and teaching product selection |

| Initiative | Target Group | Number of pupils in activities | Number of lecturers in activities | Number of WU employees involved | Total selection of teaching materials | Online Websites |
|--|------------------------------------|--------------------------------------|---|---------------------------------------|--|--------------------|
| Smaaklessen support point & EU Schoolfruit - Curriculum - Smaaklessen | Primary education | 376,000 | 18,800 | 6 | 7 | n.a. |
| EU school fruit and vegetables programme | Primary education | 527,600 | 24,000 | 6 | 4 | n.a. |
| Science Hub | Primary education | 29,604 | 1,346 | 14 | 17 | 19,582 |
| Food Valley network VO- HO | Secondary education (senior) | 21,604 | 3,676 | 39 | 50 | 101,307 |
| Wageningen Youth Institute | secondary education | 577 | 216 | 8 | 6 | 6,263 |

Table B2.12Capacity utilisation of the Shared Research Facilities equipment portfolio as well asthe share of external companies and institutions

| Shared Research Facilities equipment portfolio | 2020 |
|--|------|
| Average utilisation (%) | 55% |
| Of which from external users (%) | 13% |
| Number of external users | 43 |

Table B2.13 Number of temporary exchanges/secondments with the business community

| | 2018 | 2019 | 2020 |
|--|------|------|------|
| Number of WUR employee secondments with the business | 9 | 9 | 8 |
| community | | | |

3.2 Funds

Table B2.14Wageningen University & Research turnover from the business community (in
€ millions)

| | 2018 | 2019 | 2020 |
|--|------|------|------|
| WU | | | |
| Business community contribution to top sector research | 0.0 | 0.0 | 0.0 |
| Contract research for the business community | 15.9 | 17.0 | 14.2 |
| Total business community contribution to research at WU | 15.9 | 17.0 | 14.2 |
| WR | | | |
| Business community contribution to top sector research | 10.9 | 14.1 | 17.1 |
| Contract research for the business community | 47.4 | 47.6 | 42.7 |
| Total business community contribution to research at WR | 58.3 | 61.6 | 59.8 |
| TOTAL BUSINESS COMMUNITY CONTRIBUTION TO RESEARCH at Wageningen University & Research | 74.2 | 79.0 | 74.0 |

Table B2.15Wageningen University & Research turnover from EU grant programmes (in
€ millions)

| Total EU Turnover Wageningen University & Research | 35.7 | 37.1 | 36.0 |
|--|------|------|------|
| WR | 20.3 | 20.5 | 19.0 |
| WU | 15.4 | 16.6 | 17.0 |
| | 2018 | 2019 | 2020 |

3.3 Publications

Table B2.16 Number of public-private Wageningen University & Research co-publications

| | 2018 | 2019 | 2020 |
|--------------------------------|-------|-------|-------|
| Total publications including: | 2,966 | 3,043 | 3,363 |
| Corporate (business community) | 213 | 279 | 273 |
| Academic | 2,755 | 2,805 | 3,110 |
| Government | 870 | 1,159 | 1,289 |
| Medical | 55 | 68 | 96 |
| Other | 273 | 100 | 169 |

Source: Scopus, Elsevier B.V. All rights reserved. SciVal $^{\ensuremath{\texttt{®}}}.$

| Table B2.17 | Number of professional publications, publications for the general public, other |
|--------------|---|
| publications | |

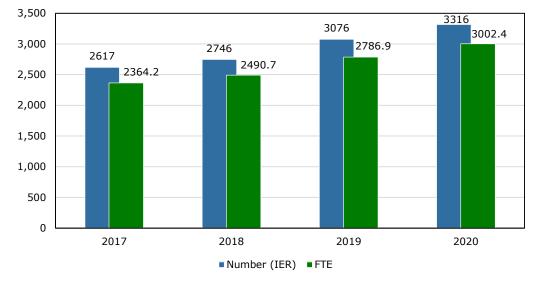
| Type of publication | WU | | | | WR | | |
|--|------|------|------|------|------|------|--|
| | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 | |
| PROFESSIONAL PUBLICATIONS | | | | | | | |
| a. Journal articles | 90 | 99 | 103 | 171 | 206 | 242 | |
| b. Books | 2 | 7 | 2 | 4 | 19 | 6 | |
| c. Book chapters | 24 | 10 | 49 | 19 | 8 | 28 | |
| d. Annotations | 0 | 0 | 0 | 0 | 0 | 0 | |
| e. Conference papers | 1 | 5 | 4 | 0 | 2 | 6 | |
| f. Protocols | 0 | 0 | 0 | 0 | 0 | 0 | |
| g. Reports | 164 | 151 | 184 | 692 | 676 | 745 | |
| PUBLICATIONS FOR THE GENERAL PUBLIC | | | | | | | |
| a. Books | 0 | 0 | 0 | 0 | 0 | 0 | |
| b. Book chapters | 1 | 0 | 4 | 0 | 1 | 0 | |
| c. Articles in newspapers/magazines/journals | 2 | 30 | 9 | 3 | 9 | 6 | |
| OTHER PUBLICATIONS | | | | | | | |
| a. Book reviews | 10 | 10 | 13 | 0 | 1 | 1 | |
| b. Book editorships | 19 | 17 | 21 | 2 | 5 | 8 | |
| c. Journal editorships | 36 | 29 | 55 | 1 | 3 | 2 | |
| d. Inaugural speeches | 2 | 2 | 1 | 0 | 1 | 0 | |
| e. Abstracts | 275 | 336 | 160 | 141 | 137 | 55 | |
| f. Designs | 0 | 0 | 1 | 0 | 0 | 1 | |
| g. TV or radio appearances | 24 | 57 | 51 | 36 | 50 | 25 | |

© 2017 Elsevier B.V. All rights reserved. SciVal ® is a registered trademark of Reed Elsevier Properties S.A., used under license.

Appendix 3 Corporate Social Responsibility Report

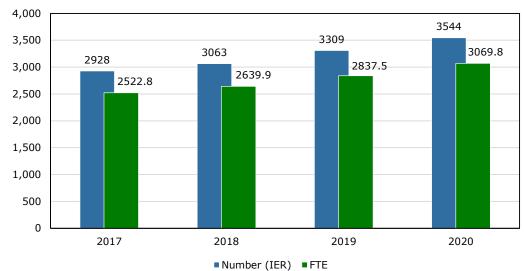
The Wageningen University & Research (WUR) Corporate Social Responsibility Report contains information about the total staff at WUR, such as the total number of employees, the relationship between permanent and temporary staff, the number of full-time and part-time workers, data on target groups, and information on sick leave.

We faced a global coronavirus pandemic in March 2020. Many new employees were unable to travel to the Netherlands from their home countries and employment contracts were postponed due to limited opportunities for workplace orientation or due to the temporary suspension of work activities. Nevertheless, the number of employees working at WUR in 2020 has again increased significantly. This increase was 340 Individual Employment Relationships (IER) at the Wageningen Research (WR) Foundation, an increase of almost 10%, while the increase at Wageningen University (WU) was 235 IER, more than 7%.



WR staff on 31-12-2020 in IER and FTE

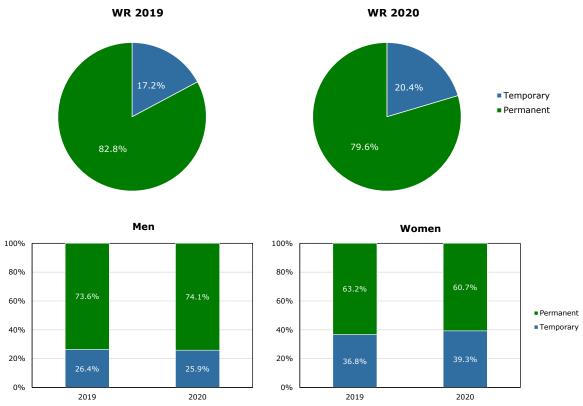
Figure B3.1 WR staff in IER and FTE



WU staff on 31-12-2019 in IER and FTE

Figure B3.2 WU staff in IER and FTE

The increase in the number of employment contracts also had an impact on the proportion of temporary/permanent employees, age distribution, and employment structures at WUR.



Proportion of temporary and permanent employees

Figure B3.3 Temporary/permanent ratio at WR and WU plus men/women ratio temporary/permanent

The percentage of temporary employment contracts at both WR and WU increased by 3.2% and 2.3% respectively due to the increase in the number of employees in 2020. The percentage of temporary employment contracts among men in particular has increased by 2.7%, while among women the increase is 0.5%.

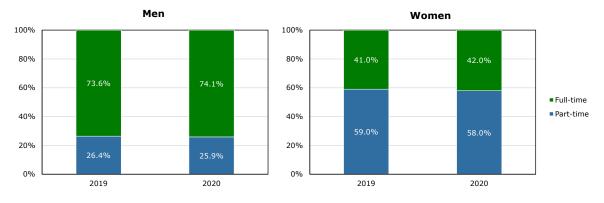


Figure B3.4 Full-time/part-time WUR men/women ratio

The percentage of full-time employees has increased for both men and women by 0.5% and 1.0% respectively. However, the majority of men still work full-time, while the reverse is true for women.

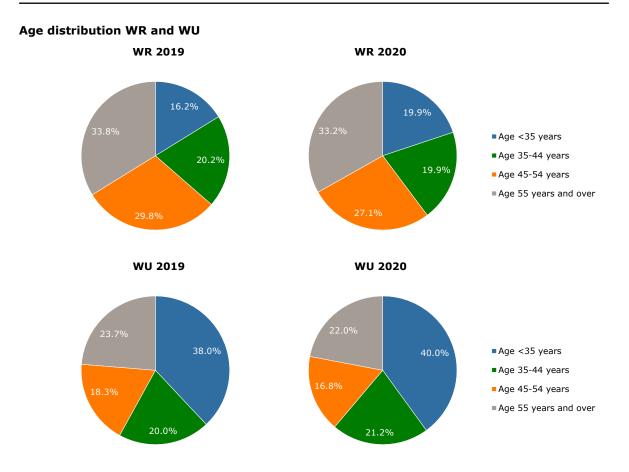


Figure B3.5 Age distribution WR and WU

Figure B3.5 shows that the increase in the number of employees at WR is mainly caused by the growth of the group of employees in the age category up to 35 years. This increase amounted to 3.7% in 2020. However, the number of employees in the 45-54 age category fell by a considerable 2.7%. The increase in the number of employees at WU also mainly concerned the age category up to 35 years, by 2%. However, the group of employees in the 35-44 age category also increased, by 1.2%. There was a decrease of 1.5% in the 45 to 54 category and 1.7% in the 55 and over category. More than 61% of WU's employees are under the age of 45. The ratio is exactly the reverse at WR, with over 60% of employees aged over 45.



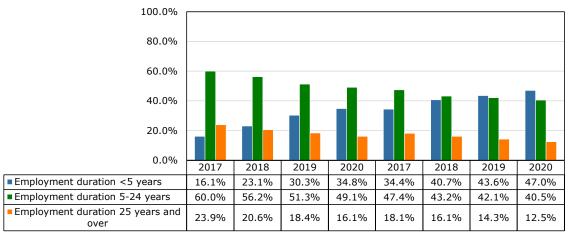
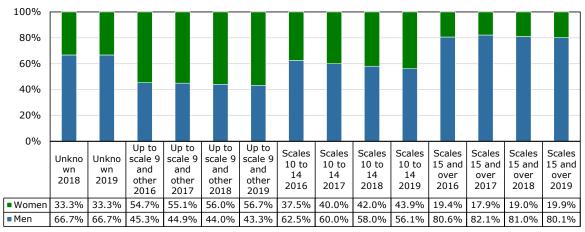


Figure B3.6 Years of employment at WR and WU

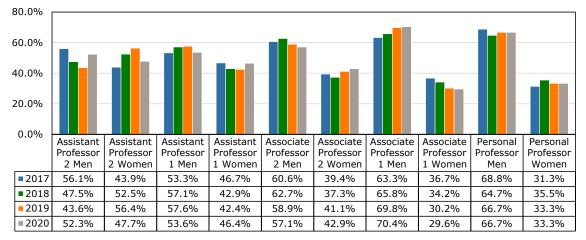
Figure B3.6 also clearly shows the influence of the large number of new employees. 34.8% of employees at WR have been employed for less than five years, while this was only 16.1% in 2017. WU shows a similar but less extreme trend. The percentage of employment contracts shorter than five years was 47% at WU in 2020, compared to 34.4% in 2017. The high number of short-term employment contracts at WU can be explained by the large number of PhD candidates and postdoctoral researchers.



WU salary scale men/women

Figure B3.7 WU salary scale men/women up to Grade 9 and PhD candidates

The ratio of men to women among the various salary scales at WU has remained practically unchanged over the past three years.



Tenure Track - Male/Female ratio per job category

Figure B3.8 Men/women ratio per job category

The percentage of men recruited into tenure track for the position of Assistant Professor 2 increased by 8.7% to 52.3% in 2020. This brings the percentage of women in tenure track back below 50% for the first time since 2017. The percentage of women in the Associate Professor 1 position increased somewhat, by 4% to 46.43%. The men/women ratio in the position of Associate Professor 2 also changed due to an increase in the percentage of women by 1.8%. The percentage of women in the Associate Professor 1 and Personal Professor positions remained more or less unchanged.

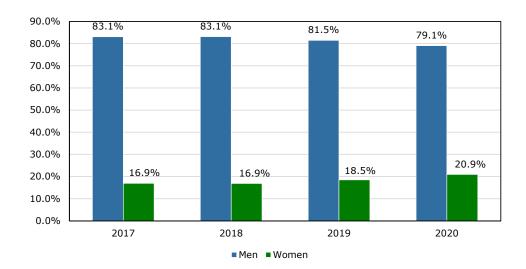
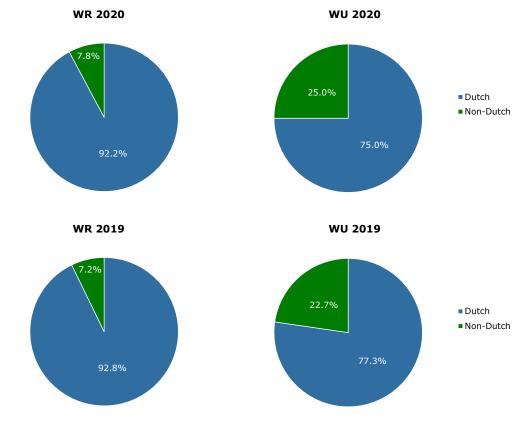
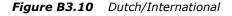


Figure B3.9 Men/women ratio WU professors

In order to achieve a gender balance, the recruitment of female professors is actively promoted, among other things. This has resulted in a steady growth of the percentage of women in this job category in recent years. The percentage of women in this job category also increased by 2.4% to 20.9% in 2020.



Internationalisation



In addition to the work done to improve gender diversity, efforts have also been made in the area of recruiting more international employees due to the limited international diversity in the current staff. In 2020, this resulted in an increase in the percentage of international WU employees by 2.3% to

25%. At WR, the percentage of international employees is limited, although it slightly increased by 0.6% to 7.8%.

Sick leave at WR and WU

| Sickness absence 2015-2018 excluding pregnancy | 2017 | 2018 | 2019 | 2020 |
|--|-------|-------|-------|-------|
| Sickness absence percentage incl. absences > 1 year | 3.9 | 4.1 | 4.5 | 3.6 |
| Sickness absence percentage excl. absences > 1 year | 3.2 | 3.2 | 3.4 | 3.1 |
| Average duration of absence (calendar days) | 16.3 | 18.4 | 17.9 | 27.1 |
| Absence frequency (%) | 0.9 | 1.0 | 0.9 | 0.7 |
| Staff without absenteeism due to illness (%) | 52 | 48.8 | 52.5 | 60.1 |
| Number of individual cases of absence through illness* | 5,070 | 5,562 | 5,803 | 4,357 |
| *Only those instances that began during the reporting period | | | | |

| Sick leave percentage per age group | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------------------------|------|------|------|------|------|------|------|
| < 25 years | 1.4% | 0.7% | 1.0% | 1.7% | 1.6% | 1.8% | 1.6% |
| 25 - 34 years | 2.2% | 2.2% | 2.1% | 2.2% | 3.3% | 3.6% | 2.7% |
| 35 – 44 years | 2.7% | 2.4% | 3.1% | 3.4% | 3.3% | 4.2% | 3.3% |
| 45 – 54 years | 3.3% | 3.4% | 3.8% | 4.2% | 4.2% | 4.3% | 3.6% |
| 55+ years | 4.0% | 4.2% | 4.6% | 5.2% | 5.3% | 5.8% | 4.8% |

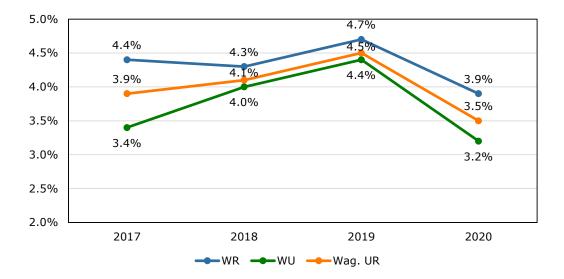


Figure B3.11 Sick leave

In contrast to the rising trend in sick leave figures in recent years, there was a notable drop in sick leave in 2020. The decrease is mainly due to the fact that there were less people calling in sick. However, the average duration of sick leave increased.

The special circumstances due to the coronavirus pandemic can certainly be blamed for this change in the overall trend, but there is no clear explanation for this sharp decline. The change in trend does not fit in with the national situation either; in fact, there was a sharp increase in sick leave in 2020. It could be that people working from home usually continued to work (fully or partially) even though they were ill, and therefore did not call in sick. In particular, the switch from in-person education to remote education and adjustments within the research department have meant that everything was done to keep the organisation going. The decline in sickness absence was observed across all salary scales and at both Wageningen Research Foundation and Wageningen University.

Appendix 4 Glossary

| Limitations | The scope of reporting, namely where the organisation has set the boundaries of the activities reported on. The scope determines which information is consolidated in the report. As well as what |
|-----------------------|---|
| | information is included regarding activities in the supply chain that could be of particular interest to |
| | users, but over which the organisation may have limited or no control. |
| Dialogue with | The entirety of interactions between an organisation and its stakeholders. This is not limited to |
| stakeholders | physical or virtual meetings specifically organised for that purpose. |
| Governance | The entirety of regulations for managing an organisation and the monitoring of their proper |
| | implementation. On the one hand, governance involves the relationships between shareholders, |
| | supervisors, management, and other stakeholders. On the other hand, governance also has an |
| | internal definition which includes management and control, internal control measures, and division |
| | of authority and responsibilities. |
| Social aspects of | Social aspects of entrepreneurship which are identified when looking at businesses from a broader |
| entrepreneurship | perspective than the traditional financial perspective. These include economic, environmental, and |
| | social aspects. It is used here as a synonym for Corporate Social Responsibility or sustainable |
| | business. |
| Societal information | All information related to the social aspects of business. |
| Societal results | The performance of an organisation with regard to the social aspects of business. |
| Societal reporting | External information on the organisation's policies and results with regard to the social aspects of |
| | business. Societal reporting is a generic term for typically non-financial information published in |
| | sustainability reports, CSR reports, or integrated in the annual report by the organisation in order to |
| | satisfy stakeholders' comprehensive information requirements. |
| Material topics | The topics most relevant to a specific organisation that, as such, are eligible for inclusion in societal |
| | reporting. A topic is more relevant, and therefore more material, when the organisation has a |
| | significant impact in that area. Topics that satisfy stakeholders' comprehensive information |
| | requirements and which could be decisive to stakeholders' decision making and considerations with |
| | regard to the organisation must also be considered material. |
| Performance indicator | A key figure used by the organisation with regard to a specific topic in order to monitor its |
| | development as well as to measure the organisation's progress and account for its results. |
| Scope | The range of reporting, namely the entirety of topics reported on. The scope of reporting concerns |
| | the organisation's choices regarding whether or not to report on specific topics. |
| Stakeholders | Internal or external individuals or parties who may reasonably expect the organisation to take their |
| | legitimate interests and expectations into account. |
| Value creation | An organisation's business operations require various forms of capital to or from which value can be |
| | added or detracted. An organisation creates economic, environmental, and social value for its |
| | stakeholders. Value creation refers to the process to which the organisation owes its existence. |
| Value chains | An organisation is active in a chain of activities leading to the production and delivery of products |
| | and/or services which are sold, used, and discarded by end users. For some organisations, activities |
| | in the value chain progress both "upstream", such as the activities of suppliers, and "downstream", |
| | such as the use of products and/or services. The hallmark of a value chain is the addition and |
| | detraction of value at various places and moments due to the activities of the various players in the |
| | chain. |

Colophon

Wageningen University & Research, June 2021 Droevendaalsesteeg 4, 6708 PB Wageningen Postbox 9101, 6700 HB Wageningen www.wur.eu

Contact Annet Blanken Wageningen University & Research T (0317) 48 24 66 E annet.blanken@wur.nl

Editing Tekstcorrectie Groenewoud

Layout content MediaCenter B.V. Rotterdam

Design & image research cover Wageningen University & Research, Communication Services

Photography Elisabeth Aardema / Shutterstock.com (back cover right) Anna den Hartog (p23) Lens Hitam / Shutterstock.com (back cover left) Anne Reinke (p61) Eric Scholten (front cover) Petra Siebelink(p71)

Printing MediaCenter B.V. Rotterdam



The mission of Wageningen University & Research is "To explore the potential of nature to improve the quality of life". Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 6,800 employees (6,000 fte) and 12,900 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.